1926

19260520	May 20, 1926: President Calvin Coolidge signed the Air Commerce Act of 1926 into law. The act instructed the Secretary of Commerce to foster air commerce; designate and establish airways; establish, operate, and maintain aids to air navigation (but not airports); arrange for research and development to improve such aids; license pilots; issue airworthiness certificates for aircraft and major aircraft components; and investigate accidents. (See Introduction.)
19260523	May 23, 1926: Western Air Express (WAE) became one of the first U.S. airlines to offer regular passenger service, flying from Los Angeles to Salt Lake City via Las Vegas. WAE had begun flying on Apr 17 as the fourth carrier to begin operations under a new air mail contract system that became the major source of income for the era's small but growing airline industry (see Jun 3, 1926).
	Over twelve years earlier, the St. Petersburg-Tampa Airboat Line had offered the world's first regularly scheduled airline service using heavier-than-air craft. This enterprise lasted for only the first three months of 1914. On Mar 1, 1925, T. Claude Ryan's Los Angeles-San Diego Air Line had begun the first scheduled passenger service operated wholly over the U.S. mainland and throughout the year.
19260603	Jun 3, 1926: Amended legislation introduced a more workable method of paying airlines for carrying mail. The Air Mail Act of Feb 2, 1925, commonly known as the Kelly Act, had provided for transportation of mail on the basis of contracts between the Post Office Department and individual air carriers, a system that was to prove a great boon to America's fledgling airlines. Under the original Kelly Act, however, the carrier's compensation was computed as a percentage of the actual postage affixed to the mail carried. Since this computation proved cumbersome, the 1926 amendment substituted a procedure under which the airlines were paid by the pound for mail carried. (See May 17, 1928.)
19260611	Jun 11, 1926: The Ford Trimotor made its first flight. The famous "Tin Goose" was a high-wing monoplane with all-metal construction and a corrugated skin. The original 4-AT model seated eight passengers, later increased to twelve, and the improved 5-AT seated up to thirteen passengers. The Trimotor became a workhorse for U.S. airlines and remained in production until 1933.
19260702	Jul 2, 1926: A drop of tree seeds over a burned area in Hawaii on this date was the first recorded instance of reforesting by airplane.
19260703	Jul 3, 1926: A congressional joint resolution authorized the President to detail officers of the Army Air Corps to the Commerce Department to help in promoting civil aviation, provided the details did not exceed one year.

19260716 Jul 16, 1926: The Philadelphia Rapid Transit Company inaugurated the first daily passenger air service between Philadelphia and Washington, D.C., in connection with the celebration of the 150th anniversary of Declaration of Independence. Both passengers and mail were carried on a schedule of three trips in each direction daily, using three-engine Fokker monoplanes seating 10 passengers. The flying time was approximately 1 hour 30 minutes each way, and the passenger fare was $15 one way and $25 roundtrip. The service lasted for five months.

19260811 Aug 11, 1926: William P. MacCracken, Jr., took office as the first Assistant Secretary of Commerce for Aeronautics (see Oct 1, 1929). He thus became the first head of the Aeronautics Branch, created in the Department of Commerce by Secretary Herbert Hoover to carry out the Secretary's responsibilities under the Air Commerce Act of 1926. MacCracken, who had assisted in drafting that act, brought to the position experience as a World War I Army pilot, as chairman of the American Bar Association's committee on aviation law, and as general counsel of National Air Transport, a contract mail carrier he helped organize in 1925.

With the appointment of MacCracken as its chief, the organization of the Aeronautics Branch proceeded rapidly. Secretary Hoover believed that the duties imposed by the Air Commerce Act should be carried out by existing Department of Commerce components. Although five principal units made up the Aeronautics Branch, which ranked as a bureau, only two were structurally part of the new Branch--the Air Regulations Division and the Air Information Division. The other three units followed directions from the Branch concerning work to be undertaken, but received detailed guidance and administrative support from other bureau-level components of the Department. Thus, the Airways Division was organized within the Bureau of Lighthouses, the Aeronautical Research Division within the Bureau of Standards, and the Air Mapping Section within the Coast and Geodetic Survey.

19261001 Oct 1, 1926: Northwest Airways began service as a contract mail carrier. The company began passenger service the following year, and expanded its routes in the late twenties and early thirties, changing its name to Northwest Airlines on Apr 16, 1934. Further expansion included routes to Asia, beginning in the 1940s, and for a time the carrier used the name Northwest Orient Airlines.

19261115 Nov 15, 1926: The Post Office invited bids from private operators to take over the transcontinental air mail route in two sections: San Francisco-Chicago and Chicago-New York. Although no satisfactory bids were received for the Chicago-New York route, the contract for the San Francisco-Chicago route went to the organizers of Boeing Air Transport on Jan 29, 1927. After new biding, the Post Office on Apr 3, 1927, announced the award of the Chicago-New York route to the newly formed National Air Transport. (See Aug 31, 1927.)

19261116 Nov 16, 1926: Dr. Louis Hopewell Bauer became the first Medical Director of the Aeronautics Branch. A major in the Medical Corps at the time of his appointment, Dr. Bauer had spent more than half of his 13- year Army career in the Air Service. (See Feb 28, 1927.)

19261207	Dec 7, 1926: The Aeronautics Branch made its first official airworthiness inspection of an American aircraft when Inspector Ralph Lockwood tested a Stinson Detroiter before its delivery to Canadian Air Express.
19261207	Dec 7, 1926: The first airway light beacon erected by the Aeronautics Branch began operation. The beacon was located 15 miles northeast of Moline, Ill., on the Chicago-Dallas air mail route. By Jun 30, 1927, there were 4,121 miles of lighted airways, including 2,041 miles on the transcontinental airway that had been previously lighted by the Post Office Department. (See Apr 1973.)
19261218	Dec 18, 1926: The first issue of Domestic Air News, the Aeronautics Branch official publication, appeared. (See Jul 1, 1929.)
	The regulations required all aircraft engaged in interstate or foreign commerce to be licensed and marked with an assigned identification number. Pilots of licensed aircraft were required to hold private or commercial licenses. Commercial pilots were classed as either transport or industrial. Mechanics repairing aircraft engaged in air commerce were required to secure either engine or airplane mechanic licenses, or both. Owners, pilots, and mechanics affected had until Mar 1 (later extended to May 1), 1927, to place their applications on file. Pending action on these applications by the Aeronautics Branch, those applying by the specified date could continue operating as previously until Jul 1, 1927. Failure to apply as required was punishable by a $500 fine. The regulations also prescribed operational and air traffic safety rules. (See Mar 22, 1927.)
19261231	Dec 31, 1926: The first Air Commerce Regulations of the Aeronautics Branch, Department of Commerce, became effective. Promulgated under provisions of the Air Commerce Act of 1926, these regulations resulted from many conferences between the Aeronautics Branch and pilots, operators, manufacturers, the Army, the Navy, and the Post Office Department.

1927

19270228 Feb 28, 1927: Domestic Air News published a list of 57 physicians qualified to give medical examinations for pilot licenses. Scattered over the United States, these physicians (soon to be known as aviation medical examiners) had been selected and qualified by Aeronautics Branch Medical Director Louis H. Bauer. By Oct 1, 1927, the number of qualified physicians had grown to 188, and additional appointees were added from time to time. Besides these civilian medical examiners, all Army and Navy flight surgeons were qualified ex officio to give airman medical examinations. (See Jun 1, 1945.)

19270322 Mar 22, 1927: The first general amendments to the Air Commerce Regulations took effect (see Dec 31, 1926). Among the many mandated changes were the addition of a limited commercial pilot license classification to the existing categories of transport, industrial, and private. The new category permitted pilots to carry passengers within a ten mile radius of their base while building up flight time for a transport license.

The amendments altered the original system under which the identification numbers for licensed aircraft would be preceded by the letter “C” (commercial), “S” (state), or “P” (private). The “P” designation was now dropped and “X” (experimental) was added. The regulations also required the identification number of an aircraft engaged in foreign air commerce be preceded by the letter "N" (denoting U.S. registry in accordance with a 1919 international convention). The “N” was optional at this time for other licensed aircraft. Later, the identification numbers of all U.S. licensed aircraft began with “N”, followed by numbers and/or letters under systems that varied as the registration process evolved.

19270329 Mar 29, 1927: The Aeronautics Branch issued Aircraft Type Certificate No. 1 to the Buhl Airster C-A3, a three-place open biplane. The plane had an empty weight of 1,686 pounds and its engine had a horsepower rating of 200. By the end of fiscal year 1927, the total of aircraft type certificates issued had reached nine. The rate of type certification then progressively increased. By the end of fiscal year 1928, the total had reached 47; by the end of fiscal 1929, 170; by Jan 15, 1930, 287.

19270406

Apr 6, 1927: William P. MacCracken, Jr., Assistant Secretary of Commerce for Aeronautics, received Pilot License No. 1, a private pilot license, from the Aeronautics Branch. MacCracken thus became the first person to obtain a pilot license from a civilian agency of the U.S. Government. (During World War I, the Joint Army and Navy Board on Aeronautic Cognizance had issued flying licenses to civilian individuals and companies. The Board acted under the authority of a Presidential proclamation, issued on Feb 28, 1918, which described the program as a wartime security measure; however, the proclamation remained in effect until Jul 31, 1919, more than eight months after the Armistice.) Before accepting License No. 1, MacCracken had offered this honor to Orville Wright, promising to waive the fee and examination. Wright declined because he no longer flew and did not think he needed a Federal license to show that he had been the first man to fly. Like Secretary Hoover, Wright believed MacCracken should receive License No. 1. (See Aug 19, 1940.)

19270430

Apr 30, 1927: The Aeronautics Branch announced that it had recently acquired three aircraft: two Buhl Airsters (open cockpit) and one Stinson-Detroiter (cabin plane). The Branch planned to add one Wright Travel Air (open cockpit) and one Fairchild FC-1A (cabin plane).

19270521

May 20-21, 1927: Charles A. Lindbergh, a former air mail pilot, made the first nonstop solo flight across the Atlantic in an airplane, a Ryan monoplane dubbed the Spirit of St. Louis. He flew the 3,610 miles from Roosevelt Field, Long Island, N.Y., to Le Bourget Field, Paris, France, in 33 hours 29 minutes.

Lindbergh's feat provided a strong stimulus to U.S. aviation, and made him a world hero whose fame overshadowed earlier Atlantic crossings by air. The first transatlantic flight had been made in stages on May 16-27, 1919, from Newfoundland to Lisbon, via the Azores, by a U.S. Navy Curtiss NC-4 seaplane, flown by a six-man crew commanded by Albert C. Read. That same year, on Jun 14-15, Royal Air Force pilots John Alcock and Arthur Whitten Brown crossed the Atlantic nonstop from Newfoundland to Ireland in a Vickers Vimy. The following month, another Royal Air Force crew, commanded by G. H. Scott, flew the airship R-34 from Scotland to New York (Jul 2-6), then returned to England (Jul 9-13). Between Jul 30 and Aug 31, 1924, two U.S. Army Douglas World Cruiser seaplanes (manned by Lowell H. Smith, Leslie P. Arnold, Erik H. Nelson, and John Harding), flew from England to Labrador during the course of history's first round-the-world flight. Three other aircraft with multiple crew members had also crossed the Atlantic before Lindbergh's "Lone Eagle" flight.

19270605

Jun 4-5, 1927: Charles A. Levine, a New York businessman, became the first person to cross the Atlantic by airplane as a passenger when he flew nonstop between New York and Germany in a Bellanca monoplane piloted by Clarence Chamberlin, whom he had sponsored.

19270625	Jun 25, 1927: Construction of the Propeller Research Tunnel was completed at the Langley Memorial Aeronautical Laboratory of the National Advisory Committee for Aeronautics (NACA). The largest research facility of its kind up to that time, the wind tunnel could accommodate the entire fuselage of a full-sized airplane, making it possible to conduct aerodynamic tests on full-scale fuselages, propellers, and other airplane parts. The facility, which was to make great contributions to aeronautical development (see Nov 1928), was part of a series of wind tunnels. NACA had begun operating its first wind tunnel on Jun 11, 1920. Later developments included a refrigerated tunnel, which NACA placed in operation in 1928 for study of icing on wings and propellers. In the spring of 1931, NACA began operating a Full Scale Tunnel large enough to test the performance of actual aircraft.
19270629	Jun 28-29, 1927: Army lieutenants A. F. Hegenberger and L. J. Maitland made the first nonstop flight between the U.S. mainland and Hawaii, taking off from Oakland, Calif., in a Fokker three-engine monoplane.
19270630	Jun 30, 1927: The Aeronautics Branch issued Transport License No. 199 to Phoebe Fairgrave Omlie, probably the first woman to obtain a pilot license from a civilian agency of the U.S. government. (Other American women had previously received pilot licenses from the Joint Army and Navy Board on Aeronautic Cognizance, which issued civilian flying licenses during 1918-19, as well as from organizations such as the Federation Aeronautique Internationale.) The Aeronautics Branch also issued one of the early aircraft and engine mechanic's licenses to Omlie.
19270630	Jun 30, 1927: The Aeronautics Branch announced that its first airways strip map was available for purchase: Moline, Ill., to Kansas City, Mo.
19270701	Jul 1, 1927: Frank Gates Gardner of Norfolk, Va., received the first Federal aircraft mechanic license.
19270701	Jul 1, 1927: The Secretary of Commerce appointed Clarence M. Young as Director of Aeronautics to administer the Aeronautics Branch under the general supervision of the Assistant Secretary for Aeronautics. A lawyer from Des Moines, Iowa, Young had served as a pilot on the Italian front in World War I and was later active in civil aeronautics. (See Oct 1, 1929.)
19270701	Jul 1, 1927: The transcontinental airway was transferred to the Department of Commerce from the Post Office Department. Extending from New York to San Francisco, the airway was 2,612 miles long, with 2,041 miles lighted (see Jan 29, 1929). Its facilities included 92 intermediate landing fields, 101 electric beacons, and 417 acetylene beacons. Also included were 17 radio stations (see Mar 1, 1960). Personnel involved in the transfer included 45 radio operators, 14 maintenance mechanics, and 84 caretakers. At the same time, the Post Office relinquished air mail operations along the western section--Chicago to San Francisco--of the transcontinental route to Boeing Air Transport.

19270704	Jul 4, 1927: The Lockheed Vega first flew. The single-engine, high-wing monoplane seating up to six passengers marked an important step toward the low-drag designs with which U.S. manufacturers were to revolutionize airliners in the 1930s. The Vega went into passenger service on Sep 17, 1928, with International Airlines.
19270831	Aug 31, 1927: The Post Office Department turned over operation of its last air mail route, New York to Chicago, to National Air Transport (see Nov 15, 1926). Private operators under contract to the Post Office Department now conducted the entire service, a system that promoted the growth of the airline industry.
19270901	Sep 1, 1927: American Railway Express and major airlines began air cargo express operations. Referring to the importance of this event, the Cleveland Plain Dealer wrote that though it was "much less spectacular than the long transoceanic flights, the beginning of real commercial aviation is, from the practical point of view, the most worthy development of all."
19271019	Oct 19, 1927: Pan American Airways began its operations with an air mail flight between the United States and Cuba, accomplished with a rented plane to meet a contract deadline. The company began regular air mail service between Key West and Havana on Oct 28, and scheduled passenger service on the route on Jan 16, 1928.
19271031	Oct 1927: The International Radio Convention met in Washington, D.C. During sessions that lasted into November, the conferees secured international agreements on the use of certain frequencies by aircraft and airway control stations. As a result, it was necessary to reassign frequencies to the Airways Division of the Aeronautics Branch and to other U.S. Government agencies. The Aeronautics Branch assisted the Interdepartmental Radio Advisory Committee in making these reassignments.

1928

19280115 Jan 15, 1928: The Aeronautics Branch published a list of newly licensed pilots that included James Herman Banning as holder of a limited commercial license. Banning was the first known African American to receive a Federal pilot license. The first Federal transport pilot license issued to an African American is believed to have been received by C. Alfred “Chief” Anderson in 1932.

Black aviators had been active in the United States as early as the years preceding World War I, an era when nearly all pilots were unlicensed. The first African American to receive a pilot certificate of any type was probably Eugene Bullard, who was licensed by the French air corps in 1917 and served as a combat pilot. In 1921, Bessie Coleman became the first African American to receive a pilot's certificate from the Federation Aeronautique Internationale, an international organization based in Paris.

19280131 Jan 31, 1928: The Aeronautics Branch's Domestic Air News reported an early instance of airplane noise nuisance. The proprietor of the Cackle Corner Poultry Farm, Garrettsville, Ohio, complained to the Postmaster General that low-flying planes were disrupting egg production. The Postmaster General forwarded the letter to National Air Transport, Inc., the private company operating the New York-Chicago air mail route, suggesting it make a special effort to maintain altitude over Garrettsville.

19280308 Mar 8, 1928: The Foreign Air Mail Act expanded the U.S. Post Office's role in international mail by giving it new authority to award contracts for periods of up to ten years for transport of mail to foreign countries and U.S. insular possessions.

19280320 Mar 20, 1928: The Department of Commerce announced the award of contracts for equipment that included 12 new radio stations capable keeping pilots advised of changes in weather conditions while they were in flight. At that time, the Department was operating 17 radio stations that had been received when it assumed responsibility for the transcontinental airway (see Jul 1, 1927). Known as Airway Radio Stations under Commerce, the facilities served as gathering points for data on weather and flights for use in preflight briefings for pilots. The stations transmitted this information along the airways by radiotelegraphy. (Soon, however, teletypewriter communications via ground lines began to be used for this purpose: see Jul 1, 1928) During Jan 1929, the Department reported that three stations were now broadcasting hourly voice weather reports to aircraft in flight. When necessary for safety, the stations also accepted messages from operating companies and transmitted them to pilots aloft. By Jun 30, 1929, 11 new standard stations had replaced older stations with obsolete arc-type equipment, and new radio equipment was installed at nine other locations. All these stations transmitted scheduled voice broadcasts. By mid-1933, there were 68 radio communication stations, and a growing number of pilots were able to send as well as receive transmissions. At the end of the following year, radio-equipped aircraft flying the airways included 326 with two-way radio and 449 with receiving sets only.

19280328	Mar 28, 1928: Assistant Secretary of Commerce MacCracken called a special conference of representatives of the Army Air Corps, Navy Bureau of Aeronautics, Weather Bureau, Bureau of Standards, and the National Advisory Committee for Aeronautics to study the causes and prevention of ice formation on aircraft, and to discuss the possible development of an instrument to indicate when ice forms on an aircraft in flight.
19280413	Apr 12-13, 1928: Hermann Koehl, a German, and James Fitzmaurice, an Irishman, accompanied by one passenger, made the first nonstop east-to-west crossing of the Atlantic by airplane, flying from Ireland to a crash landing on Greenly Island, Labrador, in the Junkers W-33L Bremen.
19280421	Apr 15-21, 1928: George Hubert Wilkins, an Australian explorer, and Carl Ben Eielson, an American pilot, made the first flight across the Arctic in a heavier-than-air craft, flying from Point Barrow, Alaska, to Spitsbergen, Norway, in a Lockheed Vega. Later in the year, Wilkins and Eielson flew the same Vega along the eastern coast of the Antarctic Peninsula, earning the distinction of being the first to operate an airplane in Antarctica.
19280501	May 1, 1928: Pitcairn Aviation began operations along the Atlantic seaboard as a contract mail-hauler. The airline inaugurated passenger operations between New York and Washington on Aug 18, 1930, under the name Eastern Air Transport. The growing carrier acquired New York Airways in 1931 and Luddington Air Lines in 1933, and later took the name Eastern Air Lines in 1934. Eastern subsequently absorbed Colonial Airlines in 1956 and Mackey Air Lines in 1967.
19280516	May 16, 1928: Transcontinental Air Transport (TAT) came into being. Backed by powerful financial groups that allied manufacturers with operating airlines, TAT was unusual for its time in giving priority to passenger service rather than mail. The airline was popularly known as the "Lindbergh Line" because of its association with the famous aviator. (See Jul 7, 1929, and July 19, 1930.)
19280517	May 17, 1928: Another amendment to the Air Mail Act of 1925 (see Jun 3, 1926) provided that air carriers that had operated satisfactorily on mail routes for two years could exchange their contracts for "air mail route certificates" for a period not to exceed 10 years. The amendment protected the investment of the airlines in the equipment necessary for carrying out their original contracts since the life of that equipment was considerably longer than the life of those contracts. At this time, mail contracts provided virtually the only profitable form of airline operation. (See Apr 29, 1930.)
19280609	May 31-Jun 9, 1928: Australian pilots Charles E. Kingsford-Smith and Charles T. P. Ulm, accompanied by a navigator and a radioman, both Americans, made the first transpacific crossing by air. They flew from Oakland, Calif., to Brisbane, Australia, with stopovers at Hawaii and the Fiji Islands, in a modified Fokker F.VII.
19280611	Jun 11, 1928: Friedrich Stamer made the first rocket-powered piloted flight, in a tailless glider, at Wasserkuppe, Germany. Takeoff was assisted by an elastic launching rope. The craft traveled approximately one mile.

19280618	Jun 17-18, 1928: Wilmer Stultz piloted a pontoon-equipped Fokker from Newfoundland to Wales on the first nonstop transatlantic flight by a seaplane. He was accompanied by a mechanic and by Amelia Earhart, the first woman transatlantic air passenger.
19280620	Jun 20, 1928: Braniff Air Lines began operations. Organized by brothers Thomas and Paul Braniff, the airline carried passengers between Tulsa and Oklahoma City. The brothers soon sold their airline, but later organized Braniff Airways, which began operations on Nov 13, 1930, in the same region. After expanding and acquiring Latin American routes, the company changed its name to Braniff International Airways on Jun 4, 1948.
19280630	Jun 30, 1928: During the quarter that ended on this date, the Commerce Department's Aeronautics Branch established a five-member Aircraft Accident Board to investigate and analyze civil aircraft accidents with a view to determining and eliminating their causes.
19280630	Jun 30, 1928: During fiscal 1928, which ended on this date, the Commerce Department succeeded in developing a practical radio navigation beacon system. Two series of flight tests were conducted on the New York-Cleveland airway between Jul 1927 and Feb 1928. During fiscal 1929, the Aeronautics Branch standardized a type of four-course radio range system in which pilots listened to aural signals to determine if they were on course. By Jun 30, 1929, the Branch was able to report that seven of these standard radio beacons were in operation, providing a continuous radio-marked course from Omaha to New York and from Key West to Havana. The Branch stepped up installation of four-course radio ranges in the early 1930s. This type of facility became the standard civil air navigation aid, and retained that status until after World War II (see Calendar year 1952 and Sep 5, 1974).
19280701	Jul 1, 1928: The Commerce Department began using teletype machines to transmit aviation weather information. Among the first airport stations to receive teletypes were those at Hadley Field, N.J., Cleveland, Ohio, Chicago, Ill., and Concord, Calif. Those units were all connected with the central office at Washington, D.C., from which data were exchanged for all locations. By Oct 1938, the teletype weather communications system had been extended to a total of 21,790 miles, covering all 48 states except Maine, New Hampshire, and South Dakota.
19280801	Aug 1, 1928: As a first step toward promoting uniform state aeronautical legislation consistent with Federal law, the Aeronautics Branch issued Aeronautics Bulletin No. 18 reviewing the characteristics of various state statutes and setting forth suggested drafts of required laws. At this time, 20 states had no aeronautical legislation. (See Dec 16, 1930.)

19280915	Sep 15, 1928: The Aeronautics Branch published civil aviation accident statistics for the first half of 1928. There was a total of 390 accidents, of which 34 occurred in scheduled flying, 69 in student instruction, 17 in experimental operations, and 270 in miscellaneous flying. Assigned causes blamed pilot error for 43.29 percent of the accidents, engine failure for 16.59 percent, weather for 10.23 percent, and airport or terrain for 8.72 percent. There was a total of 153 fatalities and 276 injuries. Only six of the fatalities occurred in scheduled flying.
19280918	Sep 18, 1928: The Graf Zeppelin, the most successful rigid airship ever built, first flew. By the time it was retired in 1937, this craft had flown more than a million miles, spent 16,000 hours in the air, and carried 13,100 passengers.
19280919	Sep 19, 1928: The Packard Motor Car Company flight tested the first diesel engine to power heavier-than-air craft. Diesel aircraft engines seemed promising but proved too heavy, and interest in their development waned during the 1930s.
19281031	Oct 31, 1928: Statistics published by the Aeronautics Branch indicated that of the 3,659 pilots holding active licenses, nine states and the District of Columbia accounted for 2,343: California, 633; New York, 347; Illinois, 216; Michigan, 194; Ohio and Pennsylvania, 180 each; Texas, 176; District of Columbia, 161; Missouri, 150; and Virginia, 105. Of the overall total, 2,426 (66.3 percent) were transport pilots, 385 (10.5 percent) limited commercial, 63 (l.7 percent) industrial, and 785 (21.5 percent) private. One year previously, transport pilots had accounted for 85 percent of the total. The reduced percentage was due to the faster growth of private flying.
19281130	Nov 1928: Fred E. Weick, an aerodynamicist at the Langley Memorial Aeronautical Laboratory, described in National Advisory Committee for Aeronautics (NACA) Technical Note No. 301 the testing of long-chord cowling that significantly reduced drag, the retarding force acting on an airplane moving in air. Unlike conventional cowlings of that period, which covered the crankcase and the lower portion of the cylinders, the NACA cowl totally enclosed the engine. In actual flight tests, a Curtiss AT-5A trainer equipped with NACA's cowling increased its maximum speed from 118 to 137 mph--the equivalent of providing the aircraft with 83 additional horsepower without an added expenditure in fuel. The NACA cowl had a very positive effect on airline economics when its appeared on the modern transports of the early 1930s.
19281204	Dec 4, 1928: The Aeronautics Branch issued regulations covering the entry and clearance of aircraft carrying foreign cargo and passengers into the United States. The rules became effective Feb 1, 1929.

19281214	Dec 12-14, 1928: The International Civil Aeronautics Conference held sessions in Washington, D.C. The President had suggested the conference, and Congress had authorized it by a joint resolution. The 441 participants included 77 official and 39 unofficial delegates from foreign countries. The conference provided an opportunity to exchange views on problems pertaining to aircraft in international commerce, and the program included presentations on a variety of aviation topics. Another purpose was to commemorate the 25th anniversary of the first flight of the Wright brothers. Orville Wright was guest of honor, and the membership of the conference attended ceremonies at Kitty Hawk, N.C., on the Dec 17 anniversary.
19281219	Dec 19, 1928: Harold F. Pitcairn made the first autogyro flight in the United States at Willow Grove, Pa. Designed by Spain's Juan de la Cierva, the rotary-wing aircraft obtained its support in flight from a rotor turned by the air forces resulting from its motion. Propulsion came from a conventional engine and airscrew. On Feb 12, 1931, the Detroit News placed the first order for a commercial autogyro in the United States, the Pitcairn PC A-2. The Aeronautics Branch type-certificated the plane on Apr 2, 1931, and Pitcairn's Autogyro Company of America built 51 autogyros in 1931.

1929

19290114	Jan 14, 1929: The Commerce Department's Aeronautics Branch received the Aero Club of America Trophy for 1928 for its outstanding development of airways and air navigation facilities. Robert J. Collier had established the award, first presented in 1912, to honor the previous year's most outstanding contribution to U.S. aeronautics or astronautics. In 1922, the Aero Club of America was incorporated as the National Aeronautic Association (NAA), which assumed administration of the award and renamed it the Robert J. Collier Trophy in 1944.
19290129	Jan 29, 1929: The Airways Division of the Department of Commerce turned on Beacon #25 at Miriam, Nevada, on the San Francisco-Salt Lake City Airway, completing the lighting of the transcontinental airway by closing the final twenty mile unlighted gap. (See Jul 1, 1927.)
19290204	Feb 4, 1929: The Aeronautics Branch established a Field Service Section which assumed certain duties performed by the former Airport Section, including assistance to municipalities and other organizations desiring to establish or improve airports. Five airport specialists, including the section chief, toured the U.S. to inspect sites, confer with officials, and address civic groups. The creation of the Field Service Section was part of a general reorganization of the Division of Airports and Aeronautic Information, formerly known as the Information Division, during fiscal 1929. (See Nov 1929.)
19290221	Feb 21, 1929: Colonel Charles A. Lindbergh was appointed Technical Adviser to the Aeronautics Branch, Department of Commerce.
19290228	Feb 28, 1929: The Air Commerce Act was amended to provide for Federal licensing of flying schools. Instructors were divided into two classes, flying and ground, each of which was rated separately. Regulations were promulgated in April and went into effect in June 1929.
19290302	Mar 2, 1929: Domestic Air News reported that Pan American-Grace Airways (Panagra) successfully bid to carry air mail three times weekly from Cristobal, C.Z., to Santiago, Chile, the longest designated air mail route in the world. Created on Jan 25, 1929, Panagra was jointly controlled by Pan American Airway's holding company and the W.R. Grace shipping company of New York. Its bid of $1.80 per mile, plus $0.90 per pound per thousand miles, was not the lowest submitted. Postmaster General Harry S. New explained, however, that the lowest bidder was not equipped to carry out the contract, and failure in the project would harm the prestige of U.S. aeronautical enterprise.
19290304	Mar 4, 1929: Herbert C. Hoover became President, succeeding Calvin Coolidge.
19290509	May 9, 1929: An Interdepartmental Committee on Airways was established to study and pass on applications for extension of civil airways in the United States. Totaling six members, the committee consisted of three representatives each from the Post Office and Commerce Departments.

19290617	Jun 17, 1929: Delta Air Service made its first passenger flight, with a six-passenger Travel Air, from Dallas, Tex., to Monroe, La. As it broadened its passenger operations, the company (which originated as an aerial crop dusting operation, the Huff Daland Dusters) changed its name to Delta Air Corporation and then, in 1945, to Delta Air Lines. On May 1, 1953, Chicago and Southern Airlines merged into Delta.
19290630	Jun 30, 1929: During the fiscal year that ended on this date, the Airways Division of the Commerce Department's Bureau of Lighthouses established an office at Fort Worth, Tex., under an airways engineer, for maintenance of aeronautical aids on certain specified airways. A similar office had previously been established at Salt Lake City during fiscal 1927. These were the only two organizations concerned exclusively with the maintenance of aeronautical aides. For the remainder of the nation's airways, maintenance of facilities was apportioned among the Third, Sixth, Tenth, Twelfth, Seventeenth, and Eighteenth Lighthouse Districts. Although part of the Bureau of Lighthouses, these organizations received pertinent directions from the Aeronautics Branch (see Aug 11, 1926, and Jul 1, 1933).
	Also during this fiscal year, the field organization of the Inspection Service of the Aeronautics Branch was reduced from eleven to nine districts, each under the direction of a supervising aeronautical inspector. The headquarters of the numbered districts were located at Garden City, N.Y.; Camden, N.J.; Atlanta, Ga.; Detroit, Mich.; Chicago, Ill.; Kansas City, Mo.; Dallas, Tex.; Oakland, Calif.; and Los Angeles, Calif.
19290701	Jul 1, 1929: The first issue of the Air Commerce Bulletin, the official journal of the Aeronautics Branch, was published, superseding the Domestic Air News. (See Dec 18, 1926, and Jan 15, 1940.)
19290707	Jul 7, 1929: Transcontinental Air Transport inaugurated 48-hour coast-to-coast passenger transportation service, with air travel by day and rail travel by night. Charles A. Lindbergh flew the first plane over the route. (See May 16, 1928, and Oct 25, 1930.)
19290829	Aug 8-29, 1929: The Graf Zeppelin made the first round-the-world flight by a rigid airship, leaving from and returning to Lakehurst, N.J., in 21 days 7 hours 34 minutes. This was the second round-the-world flight; two U.S. Army Douglas World Cruisers had first performed the feat during Apr 6-Sep 28, 1924. (See Jun 23-Jul 1, 1931.)
19290901	Sep 1, 1929: New regulations affecting transport pilots became effective, stating that a pilot "may operate any type licensed aircraft but shall not carry persons or property for hire in licensed aircraft other than those specified on his license." A later amendment, effective Feb 8, 1930, required transport and limited commercial pilots carrying passengers to have special authority from the Department of Commerce.

19290924	Sep 24, 1929: At Mitchel Field, N.Y., Army Lt. James H. Doolittle became the first pilot to use only instrument guidance to take off, fly a set course, and land. Doolittle received directional guidance from a radio range course aligned with the airport runway, while radio marker beacons indicated his distance from the runway. He relied on a sensitive altimeter to determine his altitude, and controlled the attitude of his aircraft with guidance from a directional gyro and an artificial horizon. Doolittle made the flight as part of research he conducted for the Daniel Guggenheim Fund for the Promotion of Aeronautics, with cooperation from the Bureau of Standards, the Aeronautics Branch of the Department of Commerce, and other organizations. He flew in a hooded cockpit, but was accompanied by a check pilot who could have intervened in an emergency. On May 9, 1932, Capt. A. F. Hegenberger flew without a check pilot to make the first blind solo flight on instruments only, at Dayton, Ohio.
19291001	Oct 1, 1929: William P. MacCracken, Jr., resigned as Assistant Secretary of Commerce for Aeronautics and was succeeded by Clarence M. Young (see Jul 1, 1927), who had been serving as Director of Aeronautics. (See May 23, 1933.)
19291001	Oct 1, 1929: Allocation of radio frequencies by the Federal Radio Commission cleared the way for air transport companies to develop a communications network supplementing Federal facilities. At the close of the year some major transport lines were maintaining two-way voice communication with their planes in flight. (See Dec 2, 1929.)
19291001	Oct 1, 1929: The Aeronautics Branch issued a set of "Uniform Field Rules" for air traffic control that were recommended for adoption by states, counties, cities, and other agencies operating airports.
19291010	Oct 10, 1929: The Aeronautics Branch inaugurated position-reporting service for planes flying the Federal airways.
19291021	Oct 21, 1929: Colonial Flying Service and the Scully Walton Ambulance Company of New York, N.Y., inaugurated an Air Ambulance Service.
	The Depression's impact on the budget of the Aeronautics Branch was not immediate. To get underway in fiscal 1927, the Branch had received $550,000, and this was increased to $3,791,500 in fiscal 1928 and $5,575,400 in fiscal 1929. The increases continued after the Depression began: fiscal 1930, $6,676,320; fiscal 1931, $9,208,030; and fiscal 1932, $10,362,300.
	The economizing ax fell in fiscal 1933, when Congress reduced the Aeronautics Branch allocation to $8,533,500. For fiscal 1934, the Branch received only $7,660,780., and this was cut still further by the Bureau of the Budget, which limited actual expenditures to $5,172,500--the smallest of the Depression budgets for aeronautic activities. The nation had passed the lowest point of the Depression in March 1933, however, and the budgets of Bureau of Air Commerce--as the Aeronautics Branch was renamed on Jul 1, 1934--began a rising trend that lasted into World War II. (See Jul 1, 1937).

19291024	Oct 24, 1929: A stock market convulsion gripped Wall Street. The initial crash was followed by another severe break on Oct 29, and by a continuing slide that heralded the onset of the Great Depression. Aviation stocks, as others, were strongly affected.
19291129	Nov 28-29, 1929: Richard E. Byrd, with pilot Bernt Balchen and two other crew members, became the first to fly over the South Pole, operating a Ford Trimotor from the U.S. base at Little America. Earlier, on May 9, 1926, Byrd and Floyd Bennett had made a flight credited as the first over the North Pole, in a Fokker F.VII.
19291130	Nov 1929: As a result of increased activities, Assistant Secretary of Commerce for Aeronautics Clarence Young reorganized the Aeronautics Branch. He abolished the position of Director of Aeronautics and divided the principal functions of the Branch among three executives who reported directly to the Assistant Secretary and, under his chairmanship, constituted the executive board of the Branch. These three officials were: the Director of Air Regulation, whose responsibilities included the Inspection Service and the Licensing Division, as well as the Engine Testing Section; the Chief Engineer of the Airways Division; and the Director Aeronautic Development, whose responsibilities included the Aeronautic Information Division and the Aeronautics Research Division. The Director of Aeronautic Development also gave direction to special research committees, the Airways Mapping Section, and the Airport Section, which on Dec 2, 1929, took over the duties of the Field Service Section established ten months earlier. (See Feb 4, 1929.)
19291202	Dec 2, 1929: Fifteen air carriers pooled $100,000.00 to set up the not-for-profit organization, Aeronautical Radio, Inc. (ARINC), to serve as the single coordinator of aeronautical communications for the air transport industry, using a common network of ground stations.
19291220	Dec 20, 1929: Pan American Airways placed orders for the Sikorsky S-40, a large four-engined flying boat. These were the first airplanes that Pan American christened "Clipper," the subsequent trade mark name of the airline's planes.

1930

19300116 Jan 16, 1930: Frank Whittle, a British Royal Air Force officer and engineer, received a patent for his design of a turbojet aircraft engine. Manufacture of an experimental version of the engine began in 1936. On May 15, 1941, the Gloster E28/39, a British turbojet powered by a Whittle W/X jet engine, made its first official flight, at Cranwell, England. However, this first Allied jet flight came nearly two years after Germany had accomplished the feat. On Aug 27, 1939, the first air-breathing jet flight of an aircraft had occurred, accomplished by a German Heinkel He 178 aircraft with a jet engine by designed by Hans von Ohain.

19300125 Jan 25, 1930: American Airways was formed out of a group of carriers that had operated separately under the Aviation Corporation (AVCO), a holding company chartered on Mar 3, 1929. American Airways changed its name to American Airlines on Apr 11, 1934.

19300125 Jan 25, 1930: An amendment to the Air Commerce Regulations set 500 feet as the minimum altitude at which aircraft might fly, except when landing and taking off.

19300201 Feb 1, 1930: The Daniel Guggenheim Fund for the Promotion of Aeronautics terminated its activities. Established in Jan 1926 to support the development of American aviation in its formative years, the fund had promoted aeronautical education, subsidized research projects, and assisted efforts to develop commercial aircraft. Daniel Guggenheim intended that the fund be closed when private enterprise would find it "practicable and profitable to carry on."

19300215 Feb 15, 1930: The Aeronautics Branch announced that it had issued the first rating under the Airport Rating Regulations to the municipal airport at Pontiac, Mich. The airport received the highest possible rating, A-1-A. The designation system enabled pilots to know at a glance what facilities to expect at any of the rated airports, which the Branch inspected in response to voluntary applications by airport operators. The program was part of the Aeronautics Branch’s efforts to encourage airport development through promotional activites, disseminating technical and statistical information, and giving expert advice to municipalities.

19300326 Mar 26, 1930: The Aeronautics Branch issued the first two approved repair station certificates to Boeing Air Transport of Oakland, Calif., and National Air Transport of Chicago, Ill. The certificate entitled a station to repair only aircraft of types for which it was adequately equipped. Previously, anyone making repairs on licensed aircraft had been obliged to submit to the Branch detailed drawings of the repairs made and, in some cases, a stress analysis. By mid-1931, the Aeronautics Branch had certificated forty-eight repair stations.

19300429	Apr 29, 1930: The Watres Act further amended the Air Mail Act of 1925 (see May 17, 1928), replacing the weight basis for computing compensation to air carriers with a space-mile formula. The new act gave the Postmaster General very broad regulatory control over route locations, route consolidations and extensions, contract bidding conditions, service conditions, equipment and personnel accounts, and compensation. (See May 19, 1930.)
19300505	May 5, 1930: The Post Office Department, hoping to stimulate air passenger traffic, issued an order calling for the installation of at least two passenger seats in each mail plane operated by day.
19300515	May 15, 1930: In regulations effective on this date, the Department of Commerce required airlines to obtain a certificate of authority to operate if they engaged in interstate passenger service. To qualify, an airline was required to demonstrate that it possessed aircraft that were properly equipped and maintained, a sufficient number of qualified airmen, and an adequate ground organization for the services provided. The routes served were required to possess such air navigation facilities as the Department deemed necessary for safe and reliable operations. Airlines were required to apply for the certificate by Jul 15, a deadline later extended to Aug 15, 1930.
19300515	May 15, 1930: Boeing Air Transport inaugurated the first airline stewardess service. The first stewardess was a registered nurse, Ellen E. Church, who has been described as the first female crew member aboard a commercial airliner.
19300519	May 19, 1930: Postmaster General Walter Folger Brown held the first of a series of meetings with representatives of the large commercial airlines to discuss air mail routes to be awarded under the Watres Act (see Apr 29, 1930). All but two of the twenty-two air mail contracts awarded under the act went to airlines in attendance at the meetings, which were subsequently attacked as "spoils conferences." (See Feb 9, 1934.)
19300620	Jun 20, 1930: Aeronautics Branch certificated its first glider, the Detroit Gull, Model G-1.
19300701	Jul 1, 1930: Rules governing the use of intermediate landing fields and a parachute supplement to the Air Commerce Regulations went into effect.
19300719	Jul 19, 1930: Incorporation action took place as a first step in the merger of Transcontinental Air Transport and Western Air Express to form Transcontinental and Western Air (TWA), which later changed its name to Trans World Airlines on May 17, 1950. Western Air Express, meanwhile, had retained its corporate identity on some routes and evolved into Western Airlines, a name it adopted in 1941.
19300910	Sep 10, 1930: The Taylor E-2 Cub made its first flight. This design evolved into the famous Piper Cub, which was introduced in 1938 and became one of the world's most popular general aviation airplanes.

19301025	Oct 25, 1930: The first all-air transcontinental through passenger service to link coastal cities began. Aircraft of Transcontinental and Western Air took off simultaneously from Newark Airport, serving New York, and from Los Angeles. On Oct 15, the American Airways system had begun to offer all-air service between Atlanta and Los Angeles.
19301216	Dec 16, 1930: The Aeronautics Branch opened the National Conference on Uniform Aeronautic Regulatory Laws. Representatives from 45 states, Washington, D.C., Puerto Rico, and the Philippine Islands attended the two-day meeting to discuss uniformity of air regulations. (See Aug 1, 1928, and Mar 23, 1933.)
19301231	Dec 31, 1930: Airworthiness regulations for aircraft components and accessories became effective.
19301231	Calendar year, 1930: By this year, Cleveland Municipal Airport had established radio control of airport traffic. In the next five years approximately 20 cities followed Cleveland's lead.

1931

19310212	Feb 12, 1931: The Department of Commerce placed the radio range beacon at Medicine Bow, Wyo., into continuous operation, completing the directional radio marking of the entire route from San Francisco to New York.
19310212	Feb 12, 1931: An amendment to existing regulations covering interstate airline operations required a copilot on all aircraft flying a schedule of five or more hours with eight or more passengers. (See Oct 1, 1931.)
19310220	Feb 20, 1931: The Senate ratified the Havana Convention in which 21 Western Hemisphere nations guaranteed the right of innocent passage of aircraft without discrimination. The Convention formulated the rules for international air navigation between the contracting states relating to the marking of aircraft, landing facilities, prohibited transport, competency of airmen, and the right of each country to prescribe the route to be flown over its territory. The Convention had been prepared at the Pan American Convention on Civil Aviation at Havana, Cuba, in February 1928.
19310331	Mar 31, 1931: A Fokker F-10A operated by Transcontinental and Western Air (TWA) crashed near Bazaar, Kans. The accident killed all eight persons aboard, including Notre Dame football coach Knute Rockne. After an investigation disclosed defective wing construction, the Aeronautics Branch took the F-10A out of passenger service on May 4. Although most of the grounded planes eventually returned to service, the loss of public confidence and the costly periodic inspection required by the Aeronautics Branch led to the demise of the once popular airplane.
19310630	Jun 30, 1931: During the fiscal year that ended on this date, the Aeronautics Branch established an Engineering Section branch office at Los Angeles to expedite the examination and approval of aircraft types. The office was created to allow owners and manufacturers in the West the same opportunity for contact with engineering officials as the main office in Washington provided east of the Rockies.
19310701	Jun 23-Jul 1, 1931: With Harold Gatty as navigator, Wiley Post piloted a Lockhead Vega dubbed Winnie Mae around the world, flying from Roosevelt Field, N.Y., and back with eight stopovers. Post's course took him near the Arctic Circle, and his distance of 15,447 miles was too short to qualify as a roundthe-world flight as defined by the Federation Aeronautique Internationale. His time of 8 days 15 hours 51 minutes was nevertheless far below the record set by the Graf Zepplin (see Aug 8-29, 1929), and he received great popular acclaim. During Jul 15-22, 1933, Post flew Winnie Mae in what is often regarded as the first solo flight around the world. He traveled from Floyd Bennett Field, N.Y. and back in 7 days 18 hours 49 minutes, following a course similar to his 1931 trip. (See Jul 10-14, 1938.)

19310701	Jul 1, 1931: United Air Lines was formally established as a management company coordinating four component air carriers that had already begun operating as a single entity. United was one of domestic aviation's "Big Four," which also included Eastern Air Transport, American Airways, and Transcontinental and Western Air (TWA).
19310727	Jul 27, 1931: A convention of "Key Men" involved in organizing the Air Line Pilots Association (ALPA) voted for affiliation with the American Federation of Labor. On Aug 10, the AF of L formally granted affiliation to ALPA, which became the largest union representing airline pilots. ALPA's presidents and the dates of their election were: David L. Behncke, 1931; Clarence N. Sayen, 1952; Charles H. Ruby, 1962; John J. O'Donnell, 1970; Henry A. Duffy, 1982; and J. Randolph Babbitt, 1990.
19310829	Aug 29, 1931: Tests begun this day and continued through Apr 8, 1932, showed that transmission of weather maps over the teletypewriter circuits of the Federal Airways System was practicable. Using an experimental circuit, the Aeronautics Branch tested equipment and procedures by sending maps three times daily from compilers in Cleveland and Kansas City to facilities in New York, Washington, and Chicago. Map transmission required equipment that printed on pages rather than on the usual tape, but page-type and tape-type machines could operate on the same circuits. On Dec 1, 1932, the Aeronautics Branch inaugurated regular transmission of U.S. Weather Bureau weather maps via teletypewriter circuits to 78 U.S. air terminals. Six times daily, the service provided a complete weather map of the United States, divided into three sections.
19310905	Sep 5, 1931: The first instrument landing by a system incorporating a glide path was made at College Park, Md. The glide path was achieved by aligning an inclined radio beam with the runway, providing a path approximating the gliding angle of an airplane. (See Sep 24, 1929.)
19311001	Oct 1, 1931: The Department of Commerce promulgated a regulation prescribing a cockpit crew complement of two, a pilot and copilot, on all scheduled air transports capable of carrying fifteen or more passengers or having a gross takeoff weight of 15,000 pounds or more. (See Feb 12, 1931, and Nov 1, 1937.)
19311005	Oct 3-5, 1931: Clyde E. Pangborn and Hugh Herndon, Jr., made the first nonstop transpacific flight, as well as the first nonstop flight between Japan and the United States, in a Bellanca Pacemaker. The two men took off from Samushiro Beach, 300 miles north of Tokyo, and landed at Wenatchee, Wash., covering 4,448 miles in 41 hours 13 minutes.
19311130	Nov 1931: The Aeronautics Branch established a branch office of its medical section at Kansas City, Mo., to keep medical examiners of the Middle Western states in close touch with Commerce Department policies on medical requirements and examinations.

1932

19320101	Jan 1, 1932: The first Air Commerce Regulations governing gliders and gliding became effective.
19320516	May 16, 1932: The official Air Commerce Bulletin published a rule providing for a new scheduled air transport pilot rating. Those receiving the rating had to demonstrate their ability to use airway navigation aids and to fly specified manuevers guided entirely by instruments. Effective Jan 1, 1933, the Aeronautics Branch required the new rating for all pilots on scheduled interstate passenger service. To meet this deadline, 330 pilots obtained the rating by the end of 1932. Fifty years later, on Dec 31, 1982, the estimated number of certificated airline transport pilots was 73,741.
19320522	May 21-22, 1932: Amelia Earhart became the first woman to make a solo crossing of the Atlantic by airplane, flying from Harbor Grace, Newfoundland, to Londonderry, Northern Ireland, in a Lockheed Vega.
19320630	Jun 30, 1932: During the fiscal year that ended this date, the first two installations of a new type of radio marker beacon were completed and placed in experimental operation --one at Archbold, Ohio, and one at Sidney, Neb. Sixteen others were ready for installation. Known as class B radio markers, or as radio landing ranges, these new radio marker beacons had 50-watt transmitters equipped with loop antennas, which permitted operation as short-range radio range beacons. They were also equipped for telephone as well as for automatic code transmission. In contrast to the Class A, 7.5-watt sets, which had a voice range of 5 to 10 miles, the 50-watt sets had a range of 30 to 40 miles. Class B marker beacons serve primarily to mark intermediate landing fields and to furnish, upon request, information on landing and weather conditions.
19320702	Jul 2, 1932: Franklin D. Roosevelt became the first U.S. presidential candidate to fly when he chartered a Ford Trimotor from Albany to Chicago to address the Democratic National Convention. (See Jan 14, 1943.)
19321231	Calendar Year 1932: The Aeronautics Branch created the first formal system for the flight inspection of U.S. airway navigation aids by assigning six pilots to regular airway patrol duty. Operating from Airway Patrol Headquarters offices in six widely dispersed cities, the pilots were each responsible for 3,000-3,500 miles of airway. The early flight inspection fleet is believed to have included five Bellanca Pacemakers, a Curtiss-Wright Sedan-15, several Stearman C-3Bs, and three Stinson SM-8As. Beginning in 1937, the remaining five aircraft of this original fleet were replaced by Stinson SR-8B Reliants and some SR-9E Reliants. (See Calendar Year 1940.)

1933

19330208	Feb 8, 1933: The Boeing 247 first flew. Often considered the first modern airliner, this single-wing airplane of all-metal construction was powered by two Pratt & Whitney Wasp air-cooled radial engines. It had a gross takeoff weight of 12,650 points and accommodated 10 passengers. The Aeronautics Branch type-certificated the plane on Mar 16, 1933, and it entered scheduled airline service on Mar 30, 1933.
19330301	Mar 1, 1933: At the Newark Municipal Airport, N.J., the Aeronautics Branch demonstrated a radio system that it had developed for the blind landing of aircraft. The Branch made the system available for service testing by aircraft equipped with the necessary radio receivers. Later that month, Aeronautics Branch pilot James L. Kinney completed the first cross-country test of an all instrument flight and landing when he arrived at Newark from College Park, Md. Kinney was accompanied by Harry Diamond, a Bureau of Standards scientist who helped develop the instrument landing system, and William LaViolette, a radio technician. (See Sep 13, 1934.)
19330302	Mar 2, 1933: A regulatory amendment announced on this date increased the solo flying time required for a private pilot's license from 10 to 50 hours. Holders of private pilot licenses had until Jun 1, 1933, to meet the new requirement. The amendment also abolished grade of industrial pilot and created the new grade of solo pilot. Students with 10 hours of flying time who passed specified tests could qualify for this grade. (See Aug 15, 1933).
19330304	Mar 4, 1933: Franklin D. Roosevelt became President, succeeding Herbert C. Hoover.
19330323	Mar 23, 1933: Enactment of legislation by the State of Georgia meant that all of the 48 States had laws dealing with aeronautics (see Aug 1, 1928, and Mar 1946). Georgia's new law included a requirement that all airmen and aircraft operating within the state have Federal licenses. This provision was included in most, but not all, of the other state aeronautical laws (see Dec 1, 1941).
19330328	Mar 28, 1933: The Aeronautics Branch gave permission to aircraft engine manufacturers to conduct endurance tests on their own equipment. Before this date, manufacturers seeking a type certificate for new engines had to ship them to the Bureau of Standards, in Washington, D.C., for endurance testing.
19330330	Mar 30, 1933: The Sikorsky S-42, a four-engine flying boat designed for Pan American Airways, made its first flight. The S-42, which entered scheduled service on Aug 16, 1934, weighed over 20 tons, and could carry 32 passengers and a full load for a distance of 750 miles. (See Apr 28, 1937.)
19330523	May 23, 1933: Clarence M. Young resigned as Assistant Secretary of Commerce for Aeronautics, effective Jun 15. (See Jun 10, 1933.)

19330610	Jun 10, 1933: President Roosevelt issued an order changing the designation and broadening the duties of the Commerce Department's Assistant Secretary for Aeronautics, effective 61 days from this date. The position was given the simpler title of Assistant Secretary of Commerce and made responsible for bureaus dealing with surface transportation as well as air transportation. A second Assistant Secretary had charge of bureaus dealing with trade and industry.
	On Jun 15, the position of Director of Aeronautics became head of the Aeronautics Branch. (For earlier use of this same title, see entries for Jul 1, 1927, and Nov 1929.) The Director was to be assisted by three new Assistant Directors in charge of the divisions of Air Regulation, Airways, and Aeronautic Development.
	On Jun 16, the President announced the appointment of Ewing Y. Mitchell to be the Assistant Secretary of Commerce responsible for transportation, and also named the three Assistant Directors of Aeronautics. The Director of Aeronautics position remained vacant until Sep 19, 1933 (see that date).
19330630	Jun 30, 1933: During the fiscal year that ended this date, substitution began of a new T-L antenna for the old loop antenna used to transmit radio range beacon signals to guide airmen flying through conditions of poor visibility. The new antenna satisfactorily disposed of the problem of night errors associated with the loop antenna. By the fiscal year's end, six of the T-L antennas were in operation, 38 were about to be placed in service, and equipment was available for installation at six additional sites.
	Remote control of radio aids to air navigation also began during the fiscal year. Heretofore, operators of such aids were located on the premises of each radio facility. Since the facilities were far removed from the air terminals, owing to the hazard radio towers posed to aircraft, the operators seldom came into personal contact with the people they served. Installation of remote control enabled them to be located in the teletypewriter station, operating airways radio broadcasting stations and the radio beacon transmitters by means of a dial switch and leased telephone lines. This centralization of control and close contact with the flying public promoted efficiency and reduced operating and maintenance costs.
	By the end of Jun 1933, three remote control installations had been completed. The equipment for 63 additional stations had been purchased and delivered for installation.
19330701	Jul 1, 1933: The Commerce Department's Aeronautics Branch assumed sole responsibility for constructing and maintaining airways, ending the arrangement under which the Airways Division was structurally part of the Bureau of Lighthouses. Under the Aeronautics Branch, the number of districts in which this function was organized was reduced from eight to six.

19330701	Jul 1, 1933: The Douglas DC-1, a forerunner of the famed DC-3, made its first flight. Transcontinental and Western Air (TWA) purchased the only one of these monoplanes built by Douglas. The DC-2, an improved version of the DC-1, made its maiden flight on May 11, 1934, and promptly went into service with TWA. CAA type-certificated the plane on Jun 29, 1934.
19330815	Aug 15, 1933: The Aeronautics Branch announced the abolition of solo pilot licenses and gave the solo flying privileges of that license to student pilots. The change was part of the Branch's response to curtailed appropriations. (See Sep 15, 1933.)
	The Aeronautics Branch also announced that it now required airlines to make detailed reports of all forced landings experienced on interstate scheduled passenger flights. Previously airlines had been requested only to report the number of forced landings.
19330831	Aug 1933: The first practical variable-pitch propeller, developed by Frank W. Caldwell of Hamilton Standard Propeller Company in 1930, was introduced into airline service, on a Curtiss Condor biplane. The new propeller improved the propulsive efficiency of modern aircraft with highly supercharged engines, giving them more thrust than a fixed-pitch propeller when taking off and permitting adjustment to a more efficient setting for flight at different altitudes and speeds.
19330915	Sep 15, 1933: The Aeronautics Branch announced in the Air Commerce Bulletin a streamlining plan for the Air Regulation Service aimed at saving $500,000. in the current fiscal year. The plan: reduced the number of inspection districts from nine to eight; cut personnel in the Service by fifteen percent; generally required applicants to travel to inspection locations as opposed to inspectors travelling from airport to airport; placed fourteen Department of Commerce aircraft in storage; closed an aircraft maintenance base; and completely segregated airline inspection, licensing, and regulation services. The Aeronautics Branch also announced that the wattage of rotating beacon lights would be cut in half for an annual savings of about $75,000.
19330919	Sep 19, 1933: President Roosevelt appointed Eugene L. Vidal head of the Aeronautics Branch with the title of Director of Aeronautics (see Jun 10, 1933). Vidal was educated at the University of South Dakota and at West Point. Graduating from the latter institution in 1918, he served in the Army Corps of Engineers for two years before transferring to the Air Service and becoming a pilot. In 1926 he resigned his commission to take a position with a commercial aviation company. He continued in commercial aviation until he joined the Aeronautics Branch as Assistant Director of Aeronautics for Air Regulation in June 1933 (see Feb 28, 1937).
	With Vidal's appointment as Director, the post of Assistant Director for Aeronautic Development was abolished and the number of Assistant Directors was reduced to two: the Assistant Director for Air Navigation and the Assistant Director for Air Regulation. All the principal functions of the Branch were divided between these two officials. Only the Administrative Section and the Aeronautic Information Section reported directly to the Director.

19331024	Oct 24, 1933: In an unprecedented feat for air transports, a Douglas DC-2 and a Boeing 247D finished second and third in a field of twenty in the MacRobertson International Air Race. The 18,500 pound DC-2 negotiated the course from Mildenhall, England, to Melbourne, Australia, in 90 hours 13 minutes. It finished 19 hours 41 minutes behind the first place finisher, a de Havilland DH-88 Comet, a long-range twin-engine racer designed expressly for the competition. Even more remarkable, the Douglas carried three revenue passengers and 900 pounds of mail and made 18 stops along a doglegged course approximately 1,000 miles longer than that flown by the Comet. The superiority of American transports over those of British or European manufacture was demonstrated by advanced design features such as NACA cowls, all-metal stressed-skin construction, light-alloy fuselage, a single low wing, retractable landing gear, and variable pitch propellers.
19331108	Nov 8, 1933: Director of Aeronautics Vidal announced a plan to make low-priced aircraft available for widespread private ownership. Vidal followed his announcement with a survey that indicated strong consumer interest in a plane priced at about $700. On Dec 28, the Public Works Administration (PWA) announced that $500,000 had been set aside for the development of such an airplane. U.S. aircraft manufacturers denounced the plan as unrealistic, however, and the PWA funds never materialized. The "Poor Man's Airplane" project collapsed, but the Department of Commerce continued to promote development of affordable aircraft. (See Jul 19, 1934.)
19331124	Nov 24, 1933: The Aeronautics Branch announced an airport development program to be undertaken in cooperation with the Civil Works Administration. Since one purpose of the program was to provide work immediately to the unemployed, the Branch urged municipalities wishing to acquire landing fields to apply within the next two weeks. (See Apr 15, 1934.)
19331207	Dec 7, 1933: Regulatory amendments effective this date included a provision that persons under 21 years of age were required to obtain the consent of parents or guardians before receiving any type of pilot license (see May 1, 1967). The amendments also created a new amateur pilot license requiring only 25 hours of solo flying time, compared to 50 hours then needed for a private license. The new grade, which was subsequently discontinued, was intended for personal and pleasure flying.
19331220	Dec 20, 1933: The Martin M-130 made its first flight. CAA type-certificated this four-engine, transoceanic flying boat designed for Pan American Airways, on Oct 9, 1935. The aircraft began service with Pan American on Nov 22, 1935.

1934

19340206 Feb 6, 1934: A new Inter-Departmental Advisory Committee on Aviation met to study the establishment of a uniform Federal aviation policy. The Committee consisted of representatives of the Departments of Commerce, War, Navy, and the Post Office, plus the Interstate Commerce Commission.

19340209 Feb 9, 1934: Postmaster General James A. Farley, carrying out the wishes of President Roosevelt, announced the cancellation of all existing air mail contracts, effective midnight, Feb 19, 1934. His action followed disclosures made by a special Senate investigating committee chaired by Senator Hugo L. Black (D-Ala.) and investigations made by Farley himself. The general basis for cancellation of the air mail contracts was the charge that competitive bidding had been bypassed and contract awards had been made as a result of collusion in a series of conferences of operators with Postmaster General Walter Folger Brown (see May 19, 1930). The following day, noting that the air mail contracts had been canceled and that the continuing need for air mail service had created an emergency, President Roosevelt issued an Executive order directing the Secretary of War to make available the planes and pilots necessary to carry the air mail during the emergency. In response to the President's Executive Order, the Army Air Corps began carrying the air mail when the contracts expired. (See Mar 10, 1934.)

19340223 Feb 23, 1934: The Lockheed Electra L-10 first flew. On Aug 10, the Bureau of Air Commerce type-certificated the aircraft, which featured twin fins and rudders. Scheduled airline service with the L-10 began on Aug 11, 1934.

19340310 Mar 10, 1934: President Roosevelt ordered temporary curtailment of air mail service by the Army Air Corps (see Feb 9, 1934) after accidents had taken the lives of ten Army fliers, four on the mail routes and six in related flying (training exercises and ferrying personnel). On Mar 19, the Air Corps resumed carrying the mail on reduced schedules. On May 8, mail service by commercial air companies began again on certain routes. Pending new air mail legislation, the companies operated under temporary, three-month contracts, renewable for three months (see Jun 12, 1934). The Air Corps's participation was phased out, and its last scheduled mail flight was Jun 1, 1934.

19340326 Mar 26, 1934: Senator Pat McCarran (D-Nev.), a member of the Black Committee (see Feb 9, 1934), introduced a Senate bill (S. 3187) as a substitute for the bill that was to become the Air Mail Act of 1934 (see Jun 12, 1934). McCarran's bill, defeated in the Senate, provided for the creation of a "Federal Aviation Commission" to carry out the economic regulation of scheduled air carrier operations. The bill had no provision to repeal any existing laws and none relating to air safety. (See Jan 21, 1935.) This was the first of a series of bills Senator McCarran was to introduce to create an independent aviation regulatory agency. His efforts, along with those of Representative Clarence Lea (D-Calif.) in the House (see Jan 31, 1935) and others, finally bore fruit in the Civil Aeronautics Act of 1938.

19340415	Apr 15, 1934: Airport development with Federal aid was transferred to the Federal Emergency Relief Administration for completion of projects started under the Civil Works Administration. (See Nov 24, 1933.)
19340417	Apr 17, 1934: As a result of recent developments connected with flying the air mail (see Mar 10, 1934), the Secretary of War appointed the Baker Committee to report on "the operation of the Army Air Corps and the adequacy and efficiency of its technical flying equipment and training for the performance of its mission in peace and in war." Named for its chairman, former Secretary of War Newton D. Baker, the committee was composed of six civilian and five military members. It was directed to include in its report a study of the proper relationship between the Army and civil aviation. (See Jul 18, 1934.)
	* Contracts were to be awarded for an initial period of one year; if the contractor performed satisfactorily during that time, the contract could be extended indefinitely. Existing three-month contracts could be extended by the Postmaster General for a period or periods not exceeding a total extension of nine months (see Mar 10, 1934, and Aug 14, 1935).
	* The Interstate Commerce Commission was brought into the administration of air law for the first time. The Commission was required to fix fair and reasonable rates of compensation for each route, within the upper limit prescribed in the act, which linked rates to airplane miles, with a sliding scale of increases based on load. Rates were to be reviewed at least annually. The commission had authority upon 60 days notice and hearing to terminate any contract that had been extended beyond the initial period.
	* The Postmaster General and the Interstate Commerce Commission were authorized to regulate the accounting practices of the carriers.
	* Air mail contractors were prohibited, after Dec 31, 1934, from holding an interest in any other aviation enterprise except landing fields and appurtenances thereto. Conversely, other aviation enterprises were prohibited from holding any interest in air mail contracts.
	* Contractors were prohibited from employing any person in a managerial capacity who had entered into any unlawful combination to prevent air mail bidding. Each bidder for a contract was required to furnish the Postmaster General a list of all stockholders owning more that 5 percent of the bidder's capital stock, a financial statement, and, in the case of a corporation, the original amount paid to the corporation for its stock.
	* The Secretary of Commerce was to specify the speed, load capacity, and safety features of equipment to be used on each air mail route, and to regulate the hours and benefits of pilots and mechanics.
	* The President was authorized to appoint a commission of five members "for the purpose of making an immediate study and survey and to report to Congress not later than Feb 1, 1935, its recommendations of a broad policy covering all phases of aviation and the relation of the United States thereto." (See Jul 11, 1934.)

	* The National Labor Board's Decision 83, which, among other things, set a maximum flying time of 85 hours per month for airline pilots, was imposed on air mail carriers. The Board had handed down Decision 83 on May 10, 1934, but its provisions had not possessed the force of law. Later, the Civil Aeronautics Act of 1938 applied Decision 83 to all interstate air carriers. (See Apr 29, 1942).
19340612	Jun 12, 1934: The President signed the Air Mail Act of 1934 into law (see Feb 9, 1934). The principal provisions were:
19340619	Jun 19, 1934: An amendment to the Air Commerce Act of 1926 gave the Aeronautics Branch stronger authority to investigate civil aircraft accidents. The amendment empowered the Secretary of Commerce or his representative to subpoena witnesses to testify or produce documentary evidence at public hearings into the causes of such accidents. If the accident involved a fatality or serious injury, the Secretary was required to issue a statement of the probable cause. In other cases, issuance of such a statement was left to the Secretary's discretion. The amendment also gave the Secretary additional safety-rulemaking powers. (See Oct 1, 1934.)
19340701	Jul 1, 1934: The name of the Aeronautics Branch was changed to Bureau of Air Commerce. At the same time, the title of the Director of Aeronautics was changed to Director of Air Commerce. The new name more accurately reflected the duties of the organization, which enjoyed the status of a bureau but had not been so designated. Also by this date there were no longer any major aeronautical functions that were structurally part of other Commerce Department bureaus.
19340711	Jul 11, 1934: The Federal Aviation Commission, appointed by President Roosevelt in accordance with section 20 of the Air Mail Act of 1934 (see June 12, 1934), held its first meeting. The members were: Clark Howell, editor in chief of the Atlanta Constitution and a member of the National Transportation Committee of 1932; Edward P. Warner, a leading aeronautical engineer and the former first Assistant Secretary of the Navy for Aeronautics; Albert J. Berres, a labor relations expert; Jerome C. Hunsaker, a former naval officer with executive experience in civil aviation business enterprises; and Franklin K. Lane, a lawyer with both Army and Navy aviation experience. The Commission's Secretary was J. Carroll Cone, Director of Air Regulation, Bureau of Air Commerce. The Commission's assignment was to make "an immediate study and survey" and to recommend "a broad policy covering all phases of aviation and the relation of the United States thereto." (See Jan 22, 1935.)
19340715	Jul 15, 1934: The Southwest Division of Varney Speed Lines began operations, flying a mail route between Pueblo, Col., and El Paso, Tex. The organization later evolved into Continental Air Lines, a name that it adopted on Jul 1, 1937.
19340718	Jul 18, 1934: The Baker Committee (see Apr 17, 1934), having taken the testimony of 105 witnesses, visited various aviation centers, and received 536 communications from Air Corps officers, filed its report. The Committee found that the United States surpassed other countries in "general," commercial, and naval aviation, but that U.S. military aviation needed financial support. Practically all deficiencies in Air Corps armament, equipment, and munitions, the Committee found, were traceable to lack of funds.

	Considering the aviation industry essential to national defense, the committee recommended that the Federal government refrain from competition with private industry. It further recommended that in addition to purchase by open competitive bids, purchase by design competition and by negotiation should be lawful. Moreover, since the committee believed that commercial equipment and methods would continue to lead the way, it recommended that the Air Corps take steps to keep abreast of and adopt the latest such equipment and methods and that Army cargo and transport planes be converted or developed from commercial types. It also recommended that Army pilots be trained to use the national airways.
19340719	Jul 19, 1934: The Bureau of Air Commerce announced the creation of a Development Section to conduct and promote work on new types of aircraft, engines, and accessories, with specialization in the development of a low-priced airplane for general public use (see Nov 8, 1933). The new section reported directly to the Director of Air Commerce.
19340731	Jul 1934: The Bureau of Air Commerce designated the first full-time aeronautical inspector for permanent duty in Alaska. Heretofore, Department of Commerce responsibilities in Alaska under the Air Commerce Act had been accomplished in the course of an annual visit by an inspector. The duties of the inspector included examination of airmen and aircraft for licensing, enforcement of airline regulations and air traffic rules, inspection of flying schools, rating of airports, and all other matters under the jurisdiction of the Department of Commerce. An important part of these duties was to cooperate closely with the territorial government in seeking to develop airports and stimulate interest in flying.
19340905	Sep 5, 1934: Wiley Post, the first pilot to use a successful pressure suit, reached about 40,000 feet over Chicago. Although this flight did not set a new altitude record, Post demonstrated the future of pressurized flying with this and later stratospheric operations.
19340913	Sep 13, 1934: Following a conclusive demonstration of an Army Air Corps blind-landing system, the Bureau of Air Commerce adopted that system as its standard. The demonstration marked the conclusion of eleven months work by the Bureau in which it tested various systems and modifications for blind landing using a Ford tri-motor transport. (See Mar 1, 1933, and May 2, 1940.)
19341001	Oct 1, 1934: Revised safety requirements for airlines became effective. The revision resulted from an amendment to the Air Commerce Act of 1926, effective in Jun 1934, which strengthened and made more explicit the authority of the Secretary of Commerce to prescribe safety regulations.
	The new provisions included the requirement for airline pilots to use multi-engine aircraft capable of operating with one engine not functioning when flying at night or over terrain not readily permitting emergency landings. Instrument or “blind” flying was permitted only for multi-engine airliners equipped with two-way radio.

	The rules also required every airline to set up its system in operating divisions, with each division's operating procedure subject to the approval of the Bureau of Air Commerce. The divisions were to have approved operations manuals dealing with such safety matters as minimum altitudes of flight over specific airways, minimum ceiling for landing at specific airports, procedures for takeoff in the event of forced landing, and weather minimums for specific routes.
	New flight duty time limitations for airline pilots included a maximum of 100 hours per month. This was lower than the previous 110 hour monthly maximum and closer to the 85 hours required by law for pilots of air mail carriers (see Jun 12, 1934). Other provisions included a requirement that dispatching procedures and personnel receive Department of Commerce approval.
19341015	Oct 15, 1934: The National Airline System, later known as National Airlines, began operations as a Florida intrastate carrier. National's transformation into a trunk airline began in 1944, when the Civil Aeronautics Board awarded it authority to serve the New York/Florida market.

1935

19350101	Jan 1, 1935: The Bureau of Air Commerce announced a new policy for the classification of airports, under which only those airports serving scheduled interstate airlines would be examined for compliance with its requirements.
19350112	Jan 11-12, 1935: Amelia Earhart took off in a Lockheed Vega from Honolulu and landed in Oakland, Calif., 18 hours 15 minutes later--making the first solo flight from Hawaii to the U.S. mainland.
19350121	Jan 21, 1935: After closely following the work of the Federal Aviation Commission (see Jul 11, 1934, and Jan 22, 1935), Senator Pat McCarran (D-Nev.) introduced a bill (S. 1932) to create a Civil Aeronautics Commission to regulate the economic phases of both scheduled air transportation and aircraft operations in furtherance of a business. Safety regulation of civil aviation would also be turned over to this commission, but the Secretary of Commerce would retain his duties under existing law with regard to airways and air navigation facilities. (See Jun 7, 1935.)
19350122	Jan 22, 1935: The Bureau of Air Commerce appointed an inspector in South America to renew licenses for U.S. airmen and aircraft of U.S. registry.
19350122	Jan 22, 1935: The Federal Aviation Commission (see Jul 11, 1934) submitted its report to the President, recommending the establishment of an independent Air Commerce Commission that would eventually be absorbed, along with agencies regulating other forms of transportation, into an overall transportation agency. The commission also suggested that Congress empower the Department of Commerce to install lights and other navigational aids at selected airports, and recommended that Congress ban holding-company operations and other monopolistic practices in the aeronautical industry. On Jan 31, 1935, in forwarding the report to the Congress, President Roosevelt said he was unable to concur in the commission's recommendation for creating what he called a "temporary" Air Commerce Commission. Until a permanent transportation agency was created, the President said the needs of air transportation could be well served by a division of the Interstate Commerce Commission. Congressman Clarence Lea (D-Calif.) introduced legislation to enact the commission's recommendations, but the bill died in 1936.
19350212	Feb 12, 1935: The U.S. Navy's rigid airship Macon crashed at sea off the California coast. This crash, coupled with the loss of the Macon's sister ship, the Akron, two years earlier, ended U.S. interest in rigid airship development.

19350506 May 6, 1935: A Transcontinental and Western Air (TWA) DC-2 crashed near Atlanta, Mo., killing five of the eight persons aboard. Senator Bronson M. Cutting (R-N.Mex.) was among the fatalities. A Bureau of Air Commerce report cited the accident's causes as the U.S. Weather Bureau's failure to predict hazardous weather and misjudgments by the pilot and TWA ground personnel. In June 1936, however, a committee chaired by Sen. Royal S. Copeland (D-N.Y.) issued a report alleging that the tragedy was caused by malfunctioning navigational aides and voicing other criticisms of the Bureau of Air Commerce. The controversy gave impetus to legislative efforts that eventuated in the Civil Aeronautics Act of 1938. (See Jun 23, 1938.)

19350607 Jun 7, 1935: In recommending extension of the Emergency Railroad Transportation Act to Congress, President Roosevelt repeated his views on the regulation of aviation (see Jan 22, 1935). "Air transportation," he wrote, "should be brought into a proper relation to other forms of transportation by subjecting it to regulation by the same agency." He said it was his hope "that the Interstate Commerce Commission may, with the addition of the new duties that I have indicated, ultimately become a Federal Transportation Commission with comprehensive powers." This reorganization, he believed, should not be delayed beyond the second session of the 74th Congress, or 1936. On Jun 10, in an effort to carry out President Roosevelt's wishes, Senator Pat McCarran (D-Nev.) introduced a new bill to replace the one he had introduced on Jan 21. The revised proposal placed all regulatory authority in the Interstate Commerce Commission. During hearings, considerable interdepartmental differences of opinion came to light, particularly between the Commerce and Post Office Departments and the Interstate Commerce Commission. After being rewritten, the bill was reported out of committee, but failed to reach a vote on the floor of the Senate and died with the adjournment of the 74th Congress in 1936.

19350619 Jun 19, 1935: Gathering at the invitation of the Department of Commerce, a group of governmental and industry representatives formed the Radio Technical Committee for Aeronautics (RTCA). The Department had organized the meeting to address a need for coordination of research in the development of aeronautical radio. The new RTCA agreed to launch a continuing study of radio problems affecting air navigation. It began by forming subcommittees to consider such issues as reducing rain static interference and allocating frequencies.

As it evolved, RTCA made two changes to its name. On Jan 15, 1942, the group adopted a constitution and changed the word "Committee" to "Commission." On Nov 14, 1991, the organization became a non-profit corporation and shortened its name to RTCA, Inc.

19350620 Jun 20, 1935: President Roosevelt ordered the creation of the Interdepartmental Committee on Civil International Aviation to gather information and make recommendations pertaining to civil international aviation. The committee was terminated upon the creation of the Civil Aeronautics Authority on Aug 22, 1938.

19350625	Jun 25, 1935: The first flight of the Breguet-Dorand Gyroplane, an aircraft with two rotors mounted one above the other, took place in France. The Gyroplane is sometimes cited as the first true helicopter, but its achievements were surpassed by Germany's Focke-Achgelis Fa-61. Often considered the first practical helicopter, the Fa-61 first flew on Jun 26, 1936, and went on to set many records. During 1937, it made the first helicopter flight of over one hour.
19350627	Jun 27, 1935: The Supreme Court of the United States handed down its ruling in the case of Rathbun (Humphrey's Executor) v. United States--a ruling that was to have a direct effect on the structure of the Civil Aeronautics Authority (see Jun 23, 1938). The Court held that President Roosevelt had exceeded his power in dismissing William E. Humphrey, a Republican member of the Federal Trade Commission, without assigning a statutory cause. The decision was based on the Court's finding that the FTC, since it included quasi-legislative functions among its responsibilities, was a creature of Congress; therefore, Congress had been within its powers in specifying by law the basis for removal of appointees. This decision was in contrast to that in the case of Myers v. United States (1926), in which the Court had upheld President Wilson's dismissal of a postmaster on the ground that the latter was an agent of the presidential power. (See Jan 12, 1937.)
19350723	Jul 23, 1935: Britain's Defense Research Committee received a key report on technology that became known as radar (radio detecting and ranging). By the time World War II began, Britain had established a chain of radar stations and equipped British aircraft with a device called IFF (identification, friend or foe) to help the radar stations distinguish British from hostile aircraft. (See Jun 30, 1945.)
19350814	Aug 14, 1935: An amendment to the Air Mail Act of 1934 (see Jun 12, 1934) became law, permitting the Postmaster General to award air mail contracts for a three-year period. The amendment also authorized moderate increases in route mileage, which had been frozen at 25,000 miles in the 1934 act to prevent extension abuses.
19350815	Aug 15, 1935: Pioneer aviator Wiley Post and humorist Will Rogers were killed when an aircraft piloted by Post -- a hybrid, pontoon-equipped Lockheed Orion-Explorer -- plunged into a lagoon on takeoff, 16 miles north of Point Barrow, Alaska.
19350829	Aug 29, 1935: The Bureau of Air Commerce began discharging its responsibilities in the Works Progress Administration airport development program, providing technical advice and recommendations on all projects submitted. On Oct 1, the Bureau announced the appointment of seven regional supervisors and thirteen district advisors to oversee the assistance work, which came under the general supervision of the chief of the permanent Airport, Marking, and Mapping Section.
19350905	Sep 5, 1935: Simultaneous transmission of radio beacon signals and voice was first put into regular service at Pittsburgh, Pa. (See Jul 1, 1937.)

19351101	Nov 1, 1935: Due to increased air traffic, Bureau of Air Commerce director Eugene Vidal ordered all airway users, except airline operators, to refrain temporarily from making instrument flights within 25 miles of the center line of a radio beam or within 25 miles of an air carrier airport. (See Nov 12-14, 1935.)
19351114	Nov 12-14, 1935: Representatives of all segments of the aviation community, except manufacturers, met at the Commerce Building in Washington, D.C., with Bureau of Air Commerce officials to discuss airway traffic control. Although the conferees agreed that the Bureau should establish a uniform system of air traffic control, a lack of funding prevented it from assuming control. Director of Air Commerce Vidal convinced the airline operators to establish airway traffic control immediately and promised that in 90 to 120 days the Bureau of Air Commerce would take over the operations. (See Mar 24, 1936.) On Nov 15, Vidal approved an interairline air traffic agreement between carriers flying the Chicago-Cleveland-Newark airway. He also relaxed the general ban on instrument flying by private fliers (see Nov 1, 1935). Those pilots could now fly by instruments if they filed a flight plan with the Bureau of Air Commerce and with at least one airline flying over the route they planned to use.
19351129	Nov 22-29, 1935: Pan American Airway's China Clipper made the first transpacific airmail flight from San Francisco to Honolulu, Midway, Wake, Guam, and Manila. (See Oct 21, 1936.)
19351201	Dec 1, 1935: A consortium of airline companies organized and manned the first airway traffic control center at Newark, N.J. It provided information to airline pilots on the whereabouts of planes other than their own in the Newark vicinity during weather conditions requiring instrument flying. Two additional centers, similarly organized and staffed, opened several months later: Chicago in Apr 1936, Cleveland in Jun 1936. (See Jul 6, 1936, and Nov 12-14, 1935.)
19351217	Dec 17, 1935: The Douglas DC-3 first flew. One of the most successful aircraft in history, the DC-3 was the first plane that allowed airlines to begin basing their profits squarely on passenger service rather than on carrying mail. The Bureau of Air Commerce certificated this aircraft on May 21, 1936, and American Airlines became the first to place it in service (using the berth-equipped DST version) on Jun 25, 1936. By 1942, the DC-3 represented 80 percent of the U.S. airline fleet. When production of the DC-3 and its modifications ended in 1945, 10,926 aircraft had been built, 803 as commercial airliners, and the rest as military versions (called C-47 in the U.S. Army, R4D in the U.S. Navy, Dakota or Dakota I by the British).

1936

19360103 Jan 3, 1936: Executives of scheduled U.S. airlines met in Chicago to form the Air Transport Association of America as a separate trade association for air carriers. Until the end of 1935, the founding airlines had belonged to the Aeronautical Chamber of Commerce (see Calendar Year 1945). The new Association's first president was Edgar S. Gorrell, whose effective lobbying was soon to play an important role in the passage of the Civil Aeronautics Act (see Jun 23, 1938). Gorrell served until 1945, and was succeded by: Emory S. Land, 1946-53; Earl D. Johnson, 1954-55; Harold L. Pearson, 1955; Stuart E. Tipton, 1955-72; Paul R. Ignatius, 1972-84; Norman J. Phillion, 1985; William S. Bolger, 1986-88; Robert J. Aaronson, 1989-92; and James E. Landry, who began serving in 1992.

19360324 Mar 24, 1936: At a meeting before a subcommittee of the House Appropriations Committee to ask for supplemental funds, Director of Air Commerce Eugene L. Vidal, convinced the committee of the necessity for the Federal Government to take over Air Traffic Control. Vidal succeeded in ultimately obtaining $175,000 for the takeover of three existing control centers early in fiscal 1937. (See Jul 6, 1936).

19360410 Apr 10, 1936: The President signed legislation that extended the jurisdiction of the Railway Labor Act to airline employees. The act guaranteed the right of collective bargaining and provided mechanisms, such as mediation and arbitration, for settling labor-management issues. It also provided for investigation of representation disputes and for certification of employee organizations as representatives of crafts or classes of carrier employees.

19360509 May 9, 1936: The German rigid airship Hindenburg moored at Lakehurst, N.J., after a nonstop transatlantic passage of 61 hours 38 minutes from Fiedrichshafen, Germany. The flight marked the inauguration of regularly scheduled transatlantic air service. The Hindenburg, which had first flown two months earlier, on Mar 4, made ten roundtrips between Germany and the United States during her 1936 season, carrying 1,021 passengers across the North Atlantic. (See May 6, 1937.)

19360606 Jun 6, 1936: The Socony-Vacuum Oil Company began using the catalytic cracking method to produce aviation gasoline, a step forward in the technology of aviation fuel production.

19360706 Jul 6, 1936: Federal air traffic control began as the Bureau of Air Commerce took over operation of the three airway traffic control centers at Newark, Chicago, and Cleveland. Up to this time, these centers had been operated by private airline companies (see Dec 1, 1935). The centers were placed under Earl F. Ward, whose appointment as Supervisor, Airway Traffic Control, had been announced on Mar 6, 1936. Ward reported to the chief of the Airline Inspection Service within the Air Regulation Division. When the Bureau assumed control of the centers, it hired fifteen center employees to become the original Federal corps of airway controllers.

19360815	Aug 15, 1936: Bureau of Air Commerce regulations governing instrument flight became effective. Under the new rules, all civil pilots desiring to fly intentionally by instruments over a civil airway were required to have an instrument rating and a Federally licensed aircraft equipped with two-way radio and approved instrument flying equipment. Pilots were required to file a flight plan if they intended to fly by instruments or along a civil airway when visibility was less than one mile. At this time, almost all general aviation pilots lacked instrument ratings and equipment for instrument flying. During bad weather, therefore, the new rules generally kept them off airways used by air carriers.
19360910	Sep 10, 1936: Deutsche Luft Hansa's twin-engine Dornier Do.18 flying boat Zephyr alighted offshore of Port Washington, N.Y., after a flight of 22 hours 18 minutes from Horta in the Azores, where it had been catapulted from the deck of a depot ship. This was the first of a series of German survey flights for possible transatlantic air mail service. The Germans continued such experimental flights into 1938.
19360930	Sep 30, 1936: Three reporters left New York City to journey around the world as passengers. Herbert R. Ekins, who made all major links by air, arrived back in 18 days, 14 hours, 56 minutes. Dorothy Kilgallen and Leo Kieran made surface connections that included a sea voyage from Hong Kong to Manila. Keiran's time of 24 days, 14 hours, 20 minutes was 1 hour 45 minutes slower than Gilgallen's, but he claimed to be the only one of the three who used only regular transportation available to all citizens.
19361019	Oct 19, 1936: The Bureau of Air Commerce commissioned the Detroit air route traffic control center on this date, followed by the Pittsburgh center on Nov 16.
19361021	Oct 21, 1936: Pan American Airways initiated regular weekly transpacific passenger service as the Hawaii Clipper took of from Almeda, near San Francisco, arriving at Manila on Oct 27. (See Nov 22-29, 1935, and Apr 28, 1937.)
19361101	Nov 1, 1936: Central Airlines and Pennsylvania Airlines merged to form Pennsylvania-Central Airlines. The company changed its name to Capital Airlines on Apr 21, 1948. (See Jun 1, 1961.)
19361231	Calendar year, 1936: For the first time in their history, U.S. domestic airlines carried a million or more passengers (l,042,042) in scheduled air operations in a single year.

1937

19370112 Jan 12, 1937: Franklin Roosevelt submitted to Congress the Report of the President's Committee on Administrative Management, popularly known as the Brownlow Report, named after chairman Louis Brownlow, a public administration expert. The committee had examined the proliferation of Federal boards, commissions, and agencies that operated independently of the President's executive powers, and constituted a "fourth branch of Government." The committee had no quarrel with the Congress's intent in creating these agencies--they were needed to perform quasi-legislative and quasi-judicial functions. But the committee did take exception to the fact that these agencies also exercised executive or administrative powers that, in its opinion, properly belonged to the President. The committee recommended that those entities be placed within executive departments and divided into judicial and administrative sections. The judicial section would be independent of executive branch control; the administrative section, however, would be headed by a chief directly responsible to a member of the President's cabinet. The Brownlow Report had a profound influence on the organizational structure of the Civil Aeronautics Authority, as set forth in Civil Aeronautics Act of 1938 (see Jun 23, 1938).

19370228 Feb 28, 1937: Eugene L. Vidal announced his resignation as Director of Air Commerce. He was succeeded the following day by Fred D. Fagg, Jr. Fagg came to the Bureau of Air Commerce as an authority on aviation law. In 1929 he had founded the Air Law Institute at Northwestern University, and since then he had been its director in addition to editing or helping to edit its publication, the Journal of Air Law. Before his appointment as Director of Air Commerce, Fagg had served as consulting expert to the Department of Commerce on revision of the air commerce regulations, as an advisor to the Copeland Senate committee on aircraft safety, and as one of the advisers to the Federal Aviation Commission (see Jul 11, 1934). He was a member of the Illinois Aeronautics Commission, secretary of the National Association of State Aviation Officials, and a member of the American Section, International Technical Committee of Aerial Legal Experts. (See Apr 16, 1938.)

19370301 Mar 1, 1937: The Bureau of Air Commerce commissioned the Los Angeles air route traffic control center on this date, followed by the Washington (D.C.) center on Apr 1 and the Oakland center on May 15.

19370428 Apr 28, 1937: The Pan American Hong Kong Clipper, a Sikorsky S-42B flying boat, arrived at Hong Kong from Manila. Linking with the existing Pan Am route from San Francisco to Manila, this new service completed the first commercial airline route from the United States to a point close to the Asian mainland. (See Oct 21, 1936.)

19370429	Apr 29, 1937: The Commerce Department announced a new plan of organization for the Bureau of Air Commerce. The reorganization placed all activities under the Director of Air Commerce, assisted by an Assistant Director, with supervision over seven principal divisions: Airways Engineering; Airways Operation; Safety and Planning; Administrative; Information and Statistics; Certificate and Inspection; and Regulation and Enforcement. A Policy Board composed of top Bureau officials and a Technical Assistant and an Advisory Board of representatives of aviation interests assisted the Director. A second Assistant Director position was added during fiscal 1938.
19370506	May 6, 1937: The German airship Hindenburg burst into flames while mooring at Lakehurst, N.J., the U.S. terminal for its regular transatlantic service, killing 35 of the 97 persons aboard. The tragedy signaled the end of serious efforts to use rigid airships in commercial air transportation.
19370507	May 7, 1937: The first flight by a fully pressurized airplane, the Lockheed XC-35, occurred. The Army used the plane, a modified Electra, to test equipment and material for use in high altitude operations. A few aircraft prior to the XC-35 had been fitted with experimental pressure cabins, but none of the earlier models flew successfully.
19370528	May 28, 1937: National Aviation Day occurred for the first time, on a one-time basis, pursuant to a Presidential proclamation issued in accordance with Public Resolution No. 32, 75th Congress, approved May 25, 1937. May 28 was selected because it marked the 20th anniversary of the decision to design what later became known as the Liberty engine, the principal U.S. contribution to aeronautics during World War I. (See Aug 19, 1939.)
19370616	Jun 16, 1937: Commercial passenger service was inaugurated reciprocally between New York and Bermuda by Pan American Airways, using the Sikorsky S.42B flying boat Bermuda Clipper, and by Imperial Airways, using the Short S.23 flying boat Cavalier. This was the first scheduled airplane service over a segment of the North Atlantic.
19370701	Jul 1, 1937: The Bureau of Air Commerce launched a two-year comprehensive airways modernization and extension program, allocating five million dollars to modernize the existing airways, and $2 million to extend the airways system. Under the program, the Bureau converted the existing airway broadcast and radio range stations to the simultaneous system of transmission in which a pilot could receive radio range signals and radiotelephone information on weather conditions at the same time. By the end of fiscal 1938, six simultaneous-transmission stations had been completed, with the remaining 159 scheduled for completion at the rate of 12 to 15 per month. (See Sep 5, 1935, and May 1, 1939.) This program followed a period of several years during which stringent curtailment of funds had brought development of the nation's airways to a virtual standstill.
19370702	Jul 2, 1937: A Lockheed Electra 10E carrying navigator Fred J. Noonan and famed pilot Amelia Earhart was reported overdue at Howland Island in the Pacific, a stop on an eastward trip planned as the first flight to follow an equatorial path around the globe. A massive search failed to locate the aircraft, and theories as to its fate abound.

19370823 Aug 23, 1937: At the Army's Wright Field, Dayton, Ohio, the first wholly automatic landing was made by Capt. Carl J. Crane, the system's inventor, Capt. George Holloman, pilot, and Mr. Raymond K. Stout, project engineer. The landing was made without intervention from the human pilot or from the ground.

19370915 Sep 15, 1937: President Roosevelt appointed an Interdepartmental Committee on Civil Aviation Legislation to review for the executive branch legislation proposed for the economic regulation of the air carrier industry and make recommendations (see Jun 7, 1935). Representatives from the State, Treasury, War, Navy, Post Office, and Commerce Departments served on the committee. On Jan 4, 1938, the committee incorporated the result of its hearings and deliberations in a proposed bill. That bill underwent various modifications and became in large part the basis of the Senate and House bills sponsored by Senator Pat McCarran (D-Nev.) and Congressman Clarence F. Lea (D-Calif.). Early in 1938, President Roosevelt informed McCarran and Lea that he had changed his mind concerning regulation of air commerce by the Interstate Commerce Commission (see Jan 31 and Jun 7, 1935) and now favored the idea of a separate commission to regulate all phases of civil aeronautics. These moves by the President and the two members of Congress were key events in the several years of efforts to obtain legislation providing for all or part of the regulation of civil aeronautics to be performed by the Interstate Commerce Commission or a new independent agency. Between Mar 26, 1934, when McCarran introduced his first bill for such a purpose, until the passage of the Civil Aeronautics Act, more than 30 bills dealing with this subject had been introduced in Congress, and many of these bills had more than one version as a result of modification during hearings. The act, as it finally emerged from Congress, embraced the contributions of many persons and represented many compromises. (See Jun 23, 1938.)

19371101 Nov 1, 1937: A Department of Commerce rule went into effect that required scheduled air carriers to employ a copilot on multi-engine aircraft with retractable landing gear or wing flaps, and on single-engine aircraft incorporating both retractable landing gear and wing flaps. It also required a copilot in scheduled service during instrument flying and during flights that exceeded a certain duration. (See Oct 1, 1931 and Jul 8, 1940.)

19371101 Nov 1, 1937: The main part of the Civil Air Regulations (CARs), representing a thorough revision and codification of the Air Commerce Regulations, went into effect. Classification of the regulations into parts and sections numbered by an expansible decimal system began at this time.

	The need for this revision and codification had become quite urgent. Since 1926, various individuals within the Aeronautics Branch, the Bureau of Air Commerce, or the Department of Commerce had issued regulations without any system for clearance through a central office. As a result, there was no convenient or standard compilation; sometimes, regulations could be found only in Departmental or Bureau correspondence. Moreover, the enforceability of most of the regulations was open to question in case of contest because most of them had been issued by persons other than the Secretary of Commerce, the official designated in the Air Commerce Act. The staff of the Bureau of Air Commerce and its predecessor, the Aeronautics Branch, were well aware of the situation but too burdened with routine duties to exert the major effort required to correct it.
	Finally, through the interest of Colonel J. Monroe Johnson, Assistant Secretary of Commerce, the Bureau invited two consulting experts from Northwestern University to undertake the task of revision. Fred D. Fagg, Jr., and John H. Wigmore, Dean Emeritus of Northwestern's School of Law, began the work in Jul 1936. When Fagg became Director of Air Commerce on Mar 1, 1937, he was replaced by Howard C. Knotts, Editor in Chief of the Journal of Air Law. (See Mar 22, 1927, and Oct 18, 1960.)
19371231	Calendar year, 1937: Reciprocal air transport service across the North Atlantic was the subject of an exchange-of-notes agreement consummated between the governments of the United Kingdom, Canada, the Irish Free State, and the United States. Provision was made for the British and American air carriers to operate the service, each participating carrier to fly not more than two round trips per week. (See May 19, 1939.)

1938

19380101 Jan 1, 1938: An Airport Traffic Control Section was created in the Airways Operation Division of the Bureau of Air Commerce. The new section was to standardize airport control tower equipment, operation techniques, and personnel. Forty airport control tower operators had been certificated by Jun 30, 1938.

19380416 Apr 16, 1938: Denis Mulligan became Director of Air Commerce, succeeding Fred D. Fagg, Jr. (see Feb 28, 1937), who had resigned the previous day. Mulligan brought to this position broad experience in aviation, business, and law. A 1924 graduate of West Point, he qualified as an Army Air Corps pilot and observer. After resigning from the Army, he was active in insurance work, commercial aviation, and admiralty law. He joined the Bureau of Air Commerce in 1934 as chief of the Enforcement Section, became Chief of the Regulations and Enforcement Division, and in Oct 1937 became the Bureau's Assistant Director. Mulligan resigned as the last Director of the Bureau on Aug 21, 1938, the day before the Civil Aeronautics Act became operative. (See Jul 7, 1938.)

19380607 Jun 7, 1938: The Boeing 314 first flew. On Jan 25, 1939, the Civil Aeronautics Authority type-certificated the aircraft, and the airliner entered service with Pan American Airways on May 20, 1939. Made to the specification of Pan American for transoceanic travel, the four-engine flying boat had a gross empty weight of 50,286 pounds and a maximum carrying capacity of 74 passengers and 10 crew members. In 1939, the 314 became the largest production airplane in regular scheduled service in the world.

To perform the quasi-legislative and quasi-judicial functions of safety and economic regulation, the law created a five-member entity designated the Civil Aeronautics Authority, the same term used to describe the agency as a whole. The law also established an Administrator of the Authority, who was independent of the five-member Authority and had responsibility for the executive and operational functions of the agency. Finally, an Air Safety Board of three members operated independently within the agency and had quasi-judicial powers for investigating accidents, determining their probable cause, and making recommendations for accident prevention.

The President appointed all nine of these officials with the concurrence of the Senate. The Administrator, as the agent of the presidential power, could be removed by the President at will, the others only for cause.

	As assigned to the five-member Authority, safety regulation functions were essentially those previously performed by the Bureau of Air Commerce, but revised and enlarged. Economic regulation was made much more comprehensive and thorough than that authorized by the Air Mail Act of 1934 (see Jun 12, 1934). The Authority was given regulatory powers applying to: air mail rates; airline rates, fares, and routes; and the business practices of airlines--the last involving inspection or regulation of such matters as accounts, records, consolidations, mergers, or other forms of control, and methods of competition. Interstate air carriers were required to obtain from the Authority a certificate of public convenience and necessity permitting them to operate over specified routes.
	The Administrator's functions under the law were the encouragement of civil aeronautics and commerce, establishment of civil airways, provision and technical improvement of air navigation facilities, and the protection and regulation of air traffic along the airways. Airports were not excluded from the facilities that the Administrator could establish and maintain, as they had been under the Air Commerce Act; however, the Administrator was prohibited from acquiring any airport by purchase or condemnation. The law directed the Administrator to make a field survey of the existing system of airports and to present definite recommendations by Feb 1, 1939, on whether and how the Federal government should participate in the development, operation, or maintenance of a national system of airports. (See Sep 14, 1938.)
19380623	Jun 23, 1938: President Roosevelt signed the Civil Aeronautics Act of 1938 into law. Most of its provisions, however, were to become effective 60 days later (see Aug 22, 1938). The law created a new kind of Federal agency--one designed, in the light of the Brownlow Report (see Jan 12, 1937) and court decisions (see June 27, 1935), to keep its functions as the agent of Congress distinct from its functions as the agent of the President. This new Civil Aeronautics Authority was composed of three elements.
19380630	Jun 30, 1938: During the fiscal year that ended this date, the Department of Commerce established teletype network Schedule B connecting airway traffic control centers with airway communication stations and with military airbases. By the end of the year this teletype network comprised approximately 10,000 miles of circuits. Prior to this time, the airway traffic control centers were served by only a party-line telephone circuit connecting the center with the local airline radio ground stations, the control tower, and the Department of Commerce radio range stations. Control of airway traffic was limited to aircraft that were in communication with the radio stations operating at the same location as the airway traffic control center.

	Establishment of the Schedule B network permitted teletype transmission of flight data independently of the increasing load of weather data being transmitted on Schedule A circuits. It became apparent, however, that improved telephone communication was also needed for airway traffic control. By the end of fiscal 1940, the government had leased 1,760 miles of private-line telephone circuits connecting airway traffic control centers and other facilities. By 1942, there were 29,124 miles of these “interphone circuits” in operation.
19380701	Jul 1, 1938: The Bureau of Air Commerce created a new field organization that decentralized administrative authority. The Bureau abolished the nine general inspection districts and the six airway districts and consolidated their functions into seven regional offices headquartered at Kansas City (Mo.), Los Angeles, Newark, Atlanta, Chicago, Fort Worth, and Seattle. Each region was placed under the general direction of a regional manager responsible for a host of matters that had previously been the province of Washington officials. The reorganization was in line with the recommendations of the President's Committee on Administrative Management, headed by Louis Brownlow (Jan 1, 1937), which had urged the decentralization of the Washington departments along geographical lines and the creation of regional units to cover all parts of the United States to carry out "more and more of the administrative work." In that way, the committee stated, government would be brought closer to the people. When the Civil Aeronautics Authority began operations it retained the Bureau's newly decentralized field organization. (See Aug 1, 1941.)
19380707	Jul 7, 1938: President Roosevelt named the five members of the Civil Aeronautics Authority (see Jun 29, 1938). The Chairman was to be Edward J. Noble, a Connecticut industrialist who had long had an interest in aviation and was one of the first private owners of an autogyro. The other members were Grant Mason, Harllee Branch, Oswald Ryan, and Robert H. Hinckley. (See Apr 12, 1939.)
	On the same day, the President named Clinton M. Hester, of Montana, as the first Administrator of the Civil Aeronautics Authority. A veteran public servant, Hester was in his 20th year of Federal service in Washington. He had previously served in six different agencies and was, at the time of this appointment, assistant general counsel of the Department of the Treasury. He did not formally begin his new duties until Aug 22, 1938, the effective date of the Civil Aeronautics Act. (See Jul 11, 1940.)
19380711	Jul 11, 1938: The British Empire led the world in miles covered by air route operations (80,000), according to an annual report on civil aviation published this date. The runner-up was the United States, with 63,000 miles. France had 38,750; Germany, 31,900; Italy, 19,450; and Holland, 19,000.
19380714	Jul 10-14, 1938: With a crew of four, Howard Hughes flew a Lockheed L-14 around the world from Floyd Bennett Field, N.Y., and back with stops at Paris, Moscow, Omsk, Yakutsk, Fairbanks, and Minneapolis. This celebrated flight of 14,824 miles took 3 days 19 hours, about half the time achieved by Wiley Post over a similar course in 1934 (see entry for Jun 23-Jul 1, 1931).

19380717	Jul 17, 1938: Douglas Corrigan took off from Floyd Bennett Field, N.Y., on a 28-hour solo flight to Dublin, Ireland. The pilot had failed to receive clearance for a transatlantic flight, and his persistent claim that he had intended to fly to California earned him the sobriquet “Wrong Way” Corrigan.
19380729	Jul 29, 1938: Pan American's Hawaii Clipper disappeared between Guam and Manila, and searchers failed to find a trace of the aircraft. The frequency of transpacific service was reduced as a result of the clipper’s loss.
19380822	Aug 22, 1938: The Civil Aeronautics Act of 1938 became operative (see Jun 23, 1938). To implement the act, the Bureau of Air Commerce was transferred from the Department of Commerce, and the Bureau of Air Mail from the Interstate Commerce Commission to the Civil Aeronautics Authority.
19380927	Sep 27, 1938: The Civil Aeronautics Authority announced that President Roosevelt had approved its recommendation for the immediate construction of a close-in airport to serve the District of Columbia--the Washington National Airport. Expected to serve as a model for the rest of the nation, the new airport would be located at Gravelly Point on the Potomac River. The site of approximately 750 acres would include 500 acres of "made" land from dry fill and dredging. The project was to begin immediately and was scheduled for completion by the end of 1940. (See Jun 16, 1941.)
19381227	Dec 27, 1938: President Roosevelt announced an experimental Civilian Pilot Training Program involving 330 pilots and 13 colleges and supported by National Youth Administration funds. (See Jun 27, 1939.)
19381231	Dec 31, 1938: The Boeing 307 Stratoliner, the first airliner with a pressurized cabin, made its initial flight. Derived from the B-17 bomber, this long-range transport had four engines and a carrying capacity of 33 passengers. CAA type-certificated the aircraft on Mar 13, 1940, and on Jul 8, 1940, it entered scheduled service with Transcontinental and Western Air. Besides the prototype, which was lost in a crash, Boeing built only 9 Stratoliners: 5 for TWA, 3 for Pan American, and 1 for Howard Hughes.

1939

19390301 Mar 1, 1939: The Civil Aeronautics Authority commissioned the Fort Worth air route traffic control center on this date, the Salt Lake City center on Apr 1, the St. Louis center on May 1, and the Atlanta center on Oct 1.

19390323 Mar 23, 1939: The Civil Aeronautics Authority submitted to Congress its final report on a detailed nationwide survey of airports mandated by the Civil Aeronautics Act of 1938. The report indicated that the number of municipal and commercial airports had increased from 823 at the end of 1927 to 1,833 at the end of 1938, and that Federal relief programs had been responsible for most airport development since 1933.

The Authority recommended that the development and maintenance of an adequate system of airports (including seaplane bases) should be recognized as a matter of national concern and a proper object of Federal expenditure. Currently, the Authority believed that airports should receive $100 million of regular public-works or work-relief funds, as well as $25 million to increase the Federal share of joint Federal-local projects. Important airport projects should also be eligible for special funding in the form of grants to state authorities. Plans for the location and development of any airports benefiting from a Federal contribution should be approved by the Federal agency responsible for civil airways. The Federal government should not contribute to the cost of maintaining non-Federal airports; however, the Civil Aeronautics Authority might, as funds permitted, assume the cost of operating airport lighting equipment or other air navigation facilities as a part of the cost of operating the Federal airway system.

19390412 Apr 12, 1939: President Roosevelt named Robert H. Hinckley of Utah, to be Chairman of the Civil Aeronautics Authority. He succeeded Edward J. Noble (see Jul 7, 1938), who resigned to become Executive Assistant to the Secretary of Commerce. Hinckley was serving as an original member of the Authority at the time of his appointment to the chairmanship. Previously, he had been Assistant Administrator of the Works Progress Administration and had been in charge of WPA activities in the West. Hinckley was Chairman of the Civil Aeronautics Authority at the time of the reorganization of Jun 30, 1940 (see that date). He became Assistant Secretary of Commerce for Air on Jul 8, 1940, and served in that post until Jul 1, 1942.

19390418	Apr 18, 1939: The minimum age requirement for a private pilot's license was increased from 16 to 18 years. The rule change resulted from a protracted campaign by the father of Edward Mallinckrodt. In 1932, the 16-year-old Mallinckrodt took a friend on a flight that ended in an accident costing both their lives. The young man's parents had been unaware that their son possessed a pilot's license, since parental consent was not then required for pilot applicants (see Dec 7, 1933). The elder Mallinckrodt failed to convince the Department of Commerce that the age requirement should be raised to 18. Eventually, however, he enlisted the support of CAA board member Oswald Ryan, who pushed the reform through the Authority. The change prevented 16- and 17-year-olds from carrying passengers, but they could still qualify as students and fly solo. (See Jul 1, 1945.)
19390430	Apr 1939: The National Institute of Municipal Law Officers issued the first model Airport Zoning Act, prepared with CAA assistance, to encourage enactment of such legislation by state governments. By Nov 1944, when a fifth revision of the Model Act was published, 12 states and one territory had passed similar acts. (See Sep 1, 1946.)
19390501	May 1, 1939: The Civil Aeronautics Authority completed a $7 million airways modernization and improvement program begun Jul 1, 1937. The Federal Airways System now covered 25,500 miles and included a total of 231 radio range stations, 100 ultra-high-frequency cone-of-silence markers, and 21 ultrahigh-frequency fan markers. The program also involved modernization of all the full-power radio ranges to permit simultaneous voice and range broadcasts. (See Jul 1, 1937.)
19390509	May 9, 1939: Dale E. White and Chauncey E. Spencer took off in a Lincoln-Paige biplane from Harlem Airport in Oak Lawn, Ill., on a flight to Washington, D.C., as part of a campaign for inclusion of African Americans in aviation training programs. A number of black colleges were subsequently selected as participants in the Civilian Pilot Training Program (see Jun 27, 1939).
19390515	May 15, 1939: The Aircraft Owners and Pilots Association (AOPA), an organization devoted to the interests of general aviation, was founded. C. Townsend Ludington became the association's first president. The first major organization of its kind, AOPA would assume in the years to come a large voice in aviation affairs.
19390519	May 19, 1939: The Civil Aeronautics Authority announced issuance of a certificate of public convenience and necessity to Pan American Airways authorizing transatlantic air transport service of two round trips per week. Before any passengers were to be carried, Pan American was required to complete a minimum of five trips as proving flights (see Jun 28, 1939); however, Pan American began the first regular transatlantic airplane mail service on May 20.

19390529	May 29, 1939: CAA's Indianapolis Experimental Station opened with the mission of seeking improvements in ultra-high-frequency radio ranges, transmitters, receivers, instrument landing systems, airport lighting methods, and other air navigation aids. Located on a landing area contiguous with the municipal airport, the station was made available by the city of Indianapolis through a long-term lease arrangement. Its facilities included a hangar, laboratory, and shop building constructed in accordance with the Authority's specifications.
19390627	Jun 27, 1939: President Roosevelt signed the Civilian Pilot Training Act of 1939 into law. The act authorized the Civil Aeronautics Authority to conduct a program for the training of civilian pilots through educational institutions and to prescribe pertinent regulations with the objective of providing sufficient training to prepare a student for a private pilot certificate. The act authorized $5,675,000 to be appropriated for the program during fiscal years 1939 and 1940, and specified that thereafter the appropriation should not exceed $7 million for any one fiscal year. The act was to expire on Jul 1, 1944. On the basis of this legislation, CAA's program for the 1939-1940 school year called for training 11,000 civilian pilots, although considerably fewer were actually trained the first year. (See May 16, 1940, and Dec 12, 1941). In what proved to be an important development for African Americans in aviation, the act contained a provision introduced by Representative Everett M. Dirksen (R-Ill.) stipulating that "none of the benefits of training or programs shall be denied on account of race, creed, or color."
19390628	Jun 28, 1939: Pan American Airways inaugurated the first regularly scheduled transatlantic passenger airline service by heavier-than-air craft (see May 19, 1939). A Boeing 314 flying boat made the flight from New York to the Azores, Lisbon, and Marseilles. Pan American opened passenger service between New York and Southhampton, England, on Jul 8. The outbreak of World War II in Europe soon forced curtailment of these routes, and by Oct 3, 1939, only the New York to Lisbon portion was operating. (See Jun 1, 1945.)
19390706	Jul 6, 1939: Eastern Air Lines began the world’s first scheduled air mail service by a rotary winged aircraft, using a Kellet autogyro to fly from the roof of the Philadelphia Post Office to the airport at Camden, N.J. This experimental service lasted about one year. (See Oct 1, 1947.)
19390819	Aug 19, 1939: National Aviation Day occurred for the first time on a continuing basis. In 1937, President Roosevelt had designated May 28 as National Aviation Day for that year only (see that date). No day had been designation in 1938. In a proclamation dated Jul 25, 1939, President Franklin Roosevelt applied this designation to Aug 19, 1939, and to Aug 19 of each succeeding year, in honor of Orville Wright's birthdate. The proclamation was issued pursuant to Public Resolution No. 14, 76th Congress, approved May 11, 1939 (53 Stat. 739).
19390901	Sep 1, 1939: Germany invaded Poland, beginning World War II. (See Dec 7, 1941.)

19391130	Nov 30, 1939: CAA issued Private Pilot's License No. 93258 to Major Dwight D. Eisenhower, U.S. Army (Infantry), at Fort Lewis, Wash. He had begun his flight training while on the staff of General Douglas MacArthur in the Philippines. Although he let his license expire, Eisenhower became the first Chief Executive to have held an airplane pilot's license.
19391202	Dec 2, 1939: New York Municipal Airport - La Guardia Field opened for commercial traffic on the improved site of the former Glenn H. Curtiss Airport at North Beach, Long Island, N.Y. The facility was renamed La Guardia Airport in 1947.
19391204	Dec 4, 1939: At the direction of President Roosevelt, the Bureau of the Budget's Division of Administrative Management began a study of the organization of the Civil Aeronautics Authority. The Bureau reported its findings to the President the following spring. Roosevelt approved the Bureau's recommendations and transmitted them as Reorganization Plans III and IV to Congress in April, 1940, under the Reorganization Act of 1939. The plans would take effect 60 days after the President submitted them to Congress unless the House of Representatives and Senate passed a concurrent resolution stating that Congress did not approve the reorganization.
	Plan III involved the transfer of certain functions from the Authority to the Administrator. Plan IV included: combining the Authority and Air Safety Board into a new Civil Aeronautics Board with authority to prescribe and revise safety rules and to suspend or rescind the certificates of carriers and airmen; and transferring the Administrator to the Department of Commerce. While Plan III encountered no opposition in Congress, Plan IV attracted strong criticism and was voted down in the House. Ultimately, however, the Senate approved the plan on May 14, 1940, by a 46-34 vote. (See Jun 30, 1940.)
19391231	Calendar year, 1939: Extension of airways radio facilities into Alaska got underway.

1940

19400101	Jan 1, 1940: The Civil Aeronautics Authority assumed operation of communication stations at Anchorage and Fairbanks, Alaska.
19400115	Jan 15, 1940: The first issue of the official Civil Aeronautics Journal appeared, superseding Air Commerce Bulletin (see Jul 1, 1929). The publication was retitled CAA Journal on Aug 15, 1944. (See July 20, 1952.)
19400209	Feb 9, 1940: A CAA order established a system under which qualified private persons were designated as flight examiners and empowered to conduct flight tests and written examinations for private pilot certificates. This permitted CAA inspectors to "spot check" trainees rather than examine each applicant. Such delegation of authority to private individuals was new (with the exception of the medical examiner program: see Feb 28, 1927), and it began a trend. Another step in CAA's growing use of designees was an order on Dec 17, 1940, authorizing the appointment of representatives to perform certain regulatory functions regarding the manufacture of military aircraft for export. On Aug 1, 1941, CAA announced the appointment of its first 50 aircraft inspection representatives to facilitate clearance of civil airplanes for flight after they had been repaired. As the United States entered World War II, a CAA order of Dec 8, 1941, gave broad authority to the Director, Safety Regulation, to designate persons outside of the agency to make examinations, tests, inspections, or reports. (See Jan 15, 1946.)
19400216	Feb 16, 1940: Radio station WSY, the Civil Aeronautics Authority's first overseas and foreign airways communications station (OFACS) began regular operations. Capable of two-way radio communications with aircraft flying the Atlantic Ocean, the powerful facility could also communicate with various points in Europe, Bermuda, and Newfoundland. The station's high-frequency transmitting equipment, located at Bayville, Long Island, initially included four 4-kilowatt transmitters and two 400-watt transmitters. The receiving equipment was spread over 600 acres at Barnegat Light, N.J. A CAA office at La Guardia Field operated both receivers and transmitters by remote control. During World War II, the station proved extremely valuable to U.S. ferrying operations over the North Atlantic. WSY set the pattern for the establishment during the war years of similar overseas communications stations at San Franciso, Seattle, Miami, New Orleans, Anchorage, Honolulu, San Juan, and Balboa, Canal Zone.
19400414	Apr 14, 1940: The first Air Corps detachment assigned to Alaska arrived at Fairbanks.
19400502	May 2, 1940: President Roosevelt gave final approval for development of a version of the instrument landing system (ILS) favored by CAA. Deployment of the system was delayed, however, by continued disagreements with the military and by World War II defense priorites. ILS did not become available for civil airliners until after the war.

19400513	May 13, 1940: The VS-300, precursor of today's fully mature helicopter, made its first free flight, at Stratford, Conn. As designer Igor I. Sikorsky continued to improve the aircraft, which employed a single main rotor, it set records that included a world flight endurance record of over 1 hour, 32 minutes on May 6, 1941. The VS-300's first flight in its final configuration took place on Dec 8, 1941.
19400516	May 16, 1940: President Roosevelt called for the production of 50,000 airplanes a year. Since there were only about 30,000 pilots in the country, CAA subsequently announced that it would expand the Civilian Pilot Training Program to provide pilots for the increased number of planes. In 1940, the CPTP graduated 9,885 pilots, and in the 18 months before the United States entered the war, the number of pilots in the country rose from 31,000 to over 100,000, primarily throught the CPTP. (See Jun 27, 1939, and Dec 12, 1941.)
19400620	Jun 20, 1940: Pan American inaugurated regular air mail service between Seattle and Juneau, Alaska, with a Sikorsky S-42 flight via Ketchikan. Passenger service began on Jun 24.
19400630	Jun 30, 1940: The reorganization of the Civil Aeronautics Authority, under President Roosevelt's Reorganization Plans III and IV, went into effect. The President's announced purpose was to clarify the relations of the Civil Aeronautics Authority's Administrator and its five-member board (which was designated the Civil Aeronautics Authority, the same term used to describe the agency as a whole). The new legislation divided the responsibility of regulating civil aviation between two new organizations.
	The five-man board was transferred to the Department of Commerce and renamed the Civil Aeronautics Board (CAB). The Air Safety Board was abolished and its accident-investigating functions assigned to the new CAB. Though the CAB was to report to Congress and the President through the Secretary of Commerce, it was to exercise its functions of safety rulemaking, adjudication, investigation, and airline economic regulation, independently of the Secretary.
	The Administrator, with the new title Administrator of Civil Aeronautics, was also transferred to the Department of Commerce, and placed under the supervision of the Secretary. The Administrator's functions now included those initially assigned to him by the Civil Aeronautics Act (see Jun 23, 1938), plus certain safety-regulating duties the Authority had delegated to him after appointing him Supervisor of the Bureau of Safety Regulation in the Authority. These safety regulating duties did not involve rulemaking or the power to suspend or revoke certificates. To deal with his changed responsibilities, the Administrator informally placed an interim organizational scheme in effect on Aug 24. Eighteen units reported directly to him: the Management Planning Section; the Personnel Section; Washington National Airport; the Federal Airways Service; the Certificate and Inspection Division; the Civilian Pilot Training Division; the Legal (Compliance) Division; the Aviation Medical Division; the Information and Statistics Division; the Administrative Division; a Coordinator of Field Activities; and the seven regional managers. Subsequent modifications of this structure included the creation on Nov 1 of an Executive Officer position to handle internal managerial activities (see Dec 4, 1939 and May 15, 1945).

	On Aug 29, Department of Commerce Order 52 designated the functions of the Administrator as the Civil Aeronautics Administration. The Civil Aeronautics Authority continued to exist on paper as an entity embracing the CAB and the Civil Aeronautics Administration, but it performed no functions as the Authority.
19400708	Jul 8, 1940: TWA employed the first flight engineer in U.S. scheduled domestic passenger service, on the Boeing 307B Stratoliner. The flight engineer took over system support functions, including the operation of the pressurization system, from the pilots. (See Nov 1, 1937 and Jul 10, 1945.)
19400711	Jul 11, 1940: The Senate confirmed Col. Donald H. Connolly, U.S. Army, as the first Administrator of Civil Aeronautics, following President Roosevelt's reorganization of the Civil Aeronautics Authority. Clinton M. Hester, who had served as the Administrator in the Authority (see Jul 7, 1938), had resigned to enter private law practice.
	Educated at the University of California and at West Point, from which he graduated in 1910, Connolly had served in the Corps of Engineers since leaving the Military Academy. He had had previous executive experience in civilian government as Director of the Civil Works Administration in Los Angeles in 1934 and as Administrator of the Works Progress Administration for Southern California from 1935 to 1939. During the year and a half immediately preceding his assignment to CAA, he had commanded the Second Engineers, U.S. Army. (See Jul 20, 1942.)
19400712	Jul 12, 1940: A Pan American Boeing 314 left San Francisco for Aukland, beginning service between the United States and New Zealand for air mail. Passenger service began Sep 13, 1940.
19400819	Aug 19, 1940: CAA presented Orville Wright honorary Pilot Certificate No. 1 during a National Aviation Day ceremony dedicating the Wright Memorial at Dayton, Ohio. (See Apr 6, 1927.)
19400831	Aug 31, 1940: a Pennsylvania-Central Airlines DC-3 crashed into a ridge near Lovettsville, Va., killing all 25 persons aboard, including Sen. Ernest Lundeen (Farmer-Laborite, Minn.). The Civil Aeronautics Board cited the probable cause as disabling of the crew by a severe lightning discharge near the aircraft. The crash ended an unprecedented 17 fatality-free months for U.S. domestic scheduled air carriers, who flew 1.4 billion passenger-miles during the period. (See Dec 31, 1970.)
19401001	Oct 1, 1940: CAA commissioned the Seattle air route traffic control center on this date, followed by the Cincinnati center on Nov 11.
19401004	Oct 4, 1940: The Commerce Department's new Aeronautical Advisory Council concluded its first meeting on this date. A permanent body to consult with Commerce officials on aviation policy, the Council included members from all sections of the country and all phases of civil aviation.

	In fiscal year 1941, Congress allocated funds for developments at 193 sites in the United States and its possessions. To expedite results, CAA made cooperative arrangements with the Work Projects Administration (WPA) and the War and Navy Departments, since these agencies performed the actual construction in many cases. The total expenditure for the DLAND program was ultimately $383 million for 535 airports. After WPA aid to other agencies was suspended on Feb 1, 1943, the continuation of some of the DLAND projects came into question. In January 1944, however, an amendment to a war appropriations bill provided money to complete about 30 airports left unfinished by the WPA. Under that program, the Development of Civil Landing Areas (DCLA), CAA spent $9.5 million on 29 airports.
19401009	Oct 9, 1940: In the first appropriation made directly to CAA for airport development, Congress appropriated $40 million for the construction, improvement, and repair of up to 250 public airports determined to be necessary for national defense. Under this Development of Landing Areas for National Defense (DLAND) program, the Administrator of Civil Aeronautics had responsibility for qualifying airports with the approval of a board composed of the Secretaries of War, Navy, and Commerce.
19401217	Dec 17, 1940: The first annual observance of Pan American Aviation Day took place in accordance with legislation enacted on Oct 10 (see Dec 17, 1963).
19401223	Dec 23, 1940: United Air Lines began what was probably the first all-freight service by a U.S. airline, supplementing its regular service with a daily all-cargo flight westbound from New York to Chicago. This experiment in freight service ended May 31, 1941. (See Aug 12, 1949.)
19401231	Calendar Year 1940: CAA obtained the first of 15 Cessna T-50 Bobcats, which became the agency's primary flight inspection aircraft during World War II. The T-50s were retired after the war, when CAA began receiving surplus Beech 18s and DC-3s. (See Calendar Year 1932 and Oct 6, 1956.)

1941

19410131 Jan 1941: CAA established a Standardization Center at Houston, Tex., to promote uniformity in the agency's inspection and instruction methods and in examinations for all types of pilot certificates. The Center provided mandatory refresher courses for all flight and inspecting personnel, as well as required classes for new employees before they went to their regular post of duty. With the outbreak of war, the center expanded its regular program to instruct multi-engine pilots for ferrying duty with the Army Air Forces. It later also trained flight officers and Link Trainer instructors.

19410407 Apr 7, 1941: The War Department-sponsored Interdepartmental Air Traffic Control Board began operations on this date. The IATCB included representatives of the Army, Navy, CAA, and CAB, and became an important coordinating agency for the location of military air installations. Forerunner to the later Air Coordinating Committee (see Mar 27, 1945), IATCB helped evolve many of the procedures for the control and regulation of air traffic used during the war. The Board was abolished on May 31, 1946.

19410501 May 1, 1941: CAA announced that six new airports in Alaska currently under construction or scheduled to begin would each have at least one usable runway by the following winter. The new airports (at Juneau, Cordova, Boundary, Big Delta, West Ruby, and Nome) were part of the Development of Landing Areas for National Defense program (see Oct 9, 1940). They would double Alaska's available airport facilities and radio aids to flying.

19410501 May 1, 1941: After successful tests during the previous year, CAA's first ultra-high-frequency radio range system opened for scheduled airline use on the New York-Chicago airway. The airway was the first link in the eventual conversion of the entire 35,000 miles of Federal airways from intermediate to ultra-high frequencies. U.S. involvement in World War II, however, delayed immediate expansion of the system because the Army took over all available equipment for these frequencies. In 1944, incorporating wartime radio advances, CAA began testing an improved, static-free, very high frequency omnidirectional radio range (VOR) at its Experimental Station in Indianapolis. Using the new system, a pilot could remain on course by watching a dial on his instrument panel instead of listening to the signal from the four-course aural range. The new range also sent signals in all directions from the station, instead of merely four courses as with the low frequency range. (See Calendar Year 1947.)

19410616 Jun 16, 1941: CAA officially opened Washington National Airport for full-time operations. By the end of the year, almost 300,000 passengers had enplaned or deplaned at the airport, and scheduled air carrier operations reached a high of 192 daily in the month of September. Spectator interest was very high, and by the first of December over 2,225,000 persons had visited the airport.

19410731	Jul 1941: Lt. H. A. Boushey, Army Air Forces, made the first successful jet-assisted takeoff (jato) in the United States, at March Field, Calif., in an Ercoupe with pressed-powder-propellant jato rockets developed by the California Institute of Technology.
19410801	Aug 1, 1941: CAA added a new region, the Eighth to its organizational structure. The region covered the territory of Alaska, with headquarters at Anchorage. Prior to this time, direction for aeronautical activities in Alaska had been provided partly by the Seventh Regional Office in Seattle, and partly by CAA's Bureau of Federal Airways in Washington, D.C. (See Jun 1, 1938.)
19410818	Aug 18, 1941: President Roosevelt announced that Pan American Airways would operate an air ferry service to fly aircraft, cargo, and passengers to the African continent in support of the Allied war effort. At the President's direction, CAA on Sep 10 granted temporary authority to Pan American to operate the ferry service, flying from Miami, Fla., via Puerto Rico and Brazil, to Liberia and Nigeria. The rights would expire in 5 years, or 6 months after the Secretary of War notified CAA that the service was no longer required.
19410825	Aug 25, 1941: President Roosevelt signed the First Supplemental National Defense Appropriation Act carrying a budget item of $12,186,000 for CAA to construct, operate, and maintain airport traffic control towers. A procedure, worked out earlier in the year and incorporated into the Appropriation Bill, required the Secretaries of War and Navy to certify a list of airports as essential to national defense before CAA could assume control of the towers. According to a CAA-Army-Navy agreement, the CAA airport traffic controller had full charge of tower operations, except in event of military emergency. The initial appropriation provided funds for the control of 39 control towers, while additional congressional funding was required to cover any additional towers recommended by the Army and Navy for CAA control.
	The following day, CAA released the list of 39 locations where CAA would assume jurisdiction over traffic activities. CAA anticipated that the transfer of operations would become effective Jan 1, 1942. (See Nov 1, 1941.)
19410930	Sep 1941: Following evaluation of British jet engine development, the U.S. Army Air Forces decided to produce a Whittle-type jet engine. (See Jan 15, 1930, and Oct 1, 1942.)

19411101	Nov 1, 1941: CAA began operating airport traffic control towers. (Prior to this time, towers were operated by local airport authorities, except at CAA-managed National Airport.) By Nov 15, the Agency controlled towers at Albuquerque, N.Mex.; Atlanta, Ga.; Charlotte, N.C.; Floyd Bennett Field, N.Y.; Orlando, Fla.; Portland, Ore.; Salt Lake City, Ut.; and Savannah, Ga. CAA was to take over control of towers at 19 additional airports in Jan 1942, and at 12 other fields in Apr 1942. The total of wartime CAA-operated towers reached a peak of 115 during fiscal year 1944. As the military need for use of civil airports began to gradually decline in 1945, the War and Navy Department funds underwriting CAA's airport activities decreased. The Agency returned some towers to local jurisdiction, and in a few cases accepted municipal reimbursement for the service. In fiscal year 1947, Congress replaced the military support with the first of many direct appropriations for CAA airport traffic tower control. (See Aug 25, 1941).
19411201	Dec 1, 1941: President Roosevelt ordered the creation of the Civil Air Patrol (CAP) as a division of the Office of Civilian Defense. In 1943 the President transferred the CAP to the War Department as an auxiliary of the Army Air Forces.
19411201	Dec 1, 1941: Beginning on this date, all U.S. pilots and aircraft using the nation’s airspace were required to be Federally certificated. (Up to this time, lack of pertinent legislation in certain states had allowed uncertificated U.S. pilots and aircraft to operate so long as they stayed within state borders and did not enter a Federal civil airway.) Alien pilots could operate a foreign aircraft in U.S. airspace if they possessed a valid certificate issued by the country in which the aircraft was registered, if there was a reciprocity arrangement between the United States and that country, and if CAB had issued a permit for such operation.
19411207	Dec 7, 1941: The Japanese attacked Hawaii and the Philippines. The following day the U.S. Congress declared a state of war with Japan. On Dec 11, Germany and Italy declared war on the United States.
19411207	Dec 7, 1941: CAA commissioned the Boston air route traffic control center on this date, followed by the Jacksonville center on Dec 15. (See Dec 18, 1941.)
19411212	Dec 12, 1941: President Roosevelt signed Executive Order 8974, transforming the Civilian Pilot Training Program into a wartime program. Henceforth, the CPTP would be "exclusively devoted to the procurement and training of men for ultimate service as military pilots, or for correlated non-military activities." (See May 16, 1940, and Dec 7, 1942.)
19411213	Dec 13, 1941: The President directed the Secretary of Commerce "to exercise his control and jurisdiction over civil aviation in accordance with requirements for the successful prosecution of the war, as may be requested by the Secretary of War." The Executive order also authorized the latter "to take possession and assume control of any civil aviation system, or systems, or any part thereof, to the extent necessary for the successful prosecution of the war."

19411218	Dec 18, 1941: The Secretary of War requested that long-range CAA projects for commissioning air route traffic control centers and completing the interphone and teletype network "be expedited to the fullest extent possible in the interest of National Defense." By mid Mar 1942, CAA had established seven new centers: Memphis, Jan 15; Kansas City, Feb 1; San Antonio, Feb 15; Denver and Albuquerque, Mar 1; and Great Falls and Minneapolis, Mar 15. (See Appendix V for listing of all ARTCC commissionings.)
19411231	Calendar year, 1941: CAA's first Inter-American Aviation Training Program began as part of the national defense effort. By the end of the fourth program, completed after the close of hostilities, 894 Latin Americans had received training in aeronautical sciences, including 365 pilots, 386 mechanics, and 99 airways technicians. (See Jul 16, 1947.)
19411231	Calendar Year, 1941: Oscar Holmes, the first known African American to become a Federal air traffic controller, joined CAA.

1942

19420106	Jan 6, 1942: Pan American Airways Pacific Clipper landed at New York, the first commercial airplane to circle the globe, exclusive of the continental United States. The aircraft had left San Francisco on Dec 2, 1941, and was operating in the South Pacific when the Pearl Harbor attack forced it to return to home territory by flying west.
19420214	Feb 14, 1942: The Douglas DC-4 Skymaster made its initial flight, thereafter becoming prominent in a generation of four-engine U.S. transports that advanced long-haul air travel. The plane was a scaled-down version of a prototype developed in 1939. The DC-4 carried a crew of six and up to forty-two passengers. Unlike the Boeing 307 and 307B, it did not have a pressurized cabin. The DC-4 entered military transport service with the military designation of C-54.
19420321	Spring, 1942: CAA Experimental Station in Indianapolis flight tested a stall-warning indicator for general aviation aircraft. The agency believed that some minor modifications in construction were desirable before a marketable device would be available. (See Feb 25, 1947.)
19420429	Apr 29, 1942: Reflecting wartime requirements, an amendment to the Civil Aeronautics Act increased the maximum permissible monthly number of flying hours of airline pilots to 100. The former monthly limit for had been 85 hours (see Jun 12, 1934). This lower maximum was later reinstated by congressional action on Jul 25, 1947.
19420516	May 16, 1942: Congress enacted legislation aimed at regulating air freight forwarders. The act prohibited such forwarders from establishing, or the Civil Aeronautics Board from approving, joint rates with common carriers subject to the Interstate Commerce Act.
19420630	Fiscal year, 1942: CAA began a test program to develop a means of preventing damage to aircraft windshields from collision with birds in flight.
	Stanton had received a B.S. degree from Tufts College in 1917, and had served as a World War I aviator with the 122d Aero Squadron, U.S. Army. His civil aviation career began in 1918, when he was employed in the air mail operations of the U.S. Post Office Department. After leaving the U.S. Air Mail Service in 1923, he became executive officer of the National Aeronautic Association, and later worked for the U.S. Corps of Engineers and in private engineering firms. In 1927 he joined the Aeronautics Branch of the Department of Commerce as an airplane and engine inspector, transferring soon afterward to the Airways Division. He served continuously with the Branch and its successor organizations until becoming CAA Deputy Administrator, the post he held at the time of his appointment as Administrator. (See Sep 23, 1944.)

19420720	Jul 20, 1942: Charles I. Stanton was sworn in as Administrator of Civil Aeronautics. Nominated on May 27, he had been Acting Administrator since the Jan 15 resignation of Brig. Gen. Donald H. Connolly (see Jul 11, 1940). Connolly had resigned to serve on the staff of Lt. Gen. Henry H. Arnold, Chief of the Army Air Forces. As Military Director of Civil Aviation, Connolly coordinated all civil aviation activities with the program of the Army Air Forces.
19420818	Aug 18-20, 1942: Letters from the Acting Secretary of War and the Secretary of the Navy to the Secretary of Commerce formalized the decision that CAA would perform its war support functions in a civilian status.
19420914	Sep 14, 1942: To meet the increased tempo of military requirements, CAA established a Pacific Islands Office at Honolulu under the general supervision of the Sixth Region, headquartered at Los Angeles.
19421001	Oct 1, 1942: Robert Stanley piloted the initial flight of the first U.S. jet-propelled aircraft, the Bell XP-59A Airacomet, at Muroc, Calif. The aircraft was powered by two I-A engines developed by General Electric from the Whittle design. (See Sep 1941.)
19421022	Oct 22, 1942: Westinghouse Electric began development of two 19A axial-flow turbojet powerplants, the first practical jet engine wholly American in design.
19421201	Dec 1, 1942: CAA commissioned the airport traffic control tower at Anchorage, Alaska.
19421207	Dec 7, 1942: CAA's Civilian Pilot Training Program became the CAA War Training Service, a redesignation that recognized changes in progress for some time to gear the program more closely to the needs of the armed services (see Dec 12, 1941). Beginning Jul 1, 1942, and lasting until the following Dec 15, training under the program was given only to members of the inactive reserve of either the Army Air Forces or the Naval Reserve. On Dec 15, 1942, the Navy placed its trainees under the program on active duty. The Army took this step in the summer of 1943. In all, some 300,000 pilots were trained in the War Training Service phase of the program, which lasted until Jun 30, 1944, for the Army and until Aug 4, 1944, for the Navy.
19421231	Calendar year, 1942: At the request of the War Department, the Civil Aeronautics Administration assisted the Signal Corps in stepped-up efforts to set up worldwide airways for Air Transport Command operations. High priority was initially assigned to extending the Northeast Airway and establishing the Crimson Airway to guide the mounting flow of military aircraft to the British Isles. Before the African invasion, CAA engineers installed radio communications and air navigation facilities at nine large air bases in South America and Africa on the Southeast Airway. Radio ranges and other facilities also carried military airways services to Pacific battlefields--southwest to Australia and north from Seattle to Attu. In response to Army and Navy requests, CAA had established by the end of 1945 facilities at some 200 locations outside the United States at a total cost of $38 million, exclusive of the DLAND airport program.

1943

19430109	Jan 9, 1943: The Lockheed C-69 first flew. After the war, this four-engine, military transport was converted into a successful commercial airliner, the L-049 Constellation. In Dec 1945, CAA type-certificated the Constellation, which entered commercial passenger service on Jan 14, 1946, with Pan American. Model L-649, the first version manufactured entirely for civil use, carried 60 passengers and had a range of over 3,000 miles with 8 tons of payload. On Nov 26, 1968, a Western Air Lines "Connie" completed the type's last scheduled airline flight in North America.
19430111	Jan 11, 1943: Franklin D. Roosevelt became the first U.S. President to fly while holding office when he took off from Miami, Fla., aboard Pan American's Dixie Clipper. On Jan 14, Roosevelt arrived in French Morocco to attend the Casablanca Conference. (See Jul 2, 1932.)
19430201	Feb 1, 1943: CAA inaugurated an expanded flight advisory service at all air route traffic control centers. The centers originated advisories on weather changes and hazardous conditions, and airway communication stations relayed this information to nonscheduled pilots. The service provided these pilots with some of the assistance that airline pilots received from their dispatchers. In Jul 1943, CAA's communication stations also began a flight communications service. When contacting pilots by radio, communicators were instructed to volunteer information on important weather changes or inoperative facilities along their route.
19431003	Oct 3, 1943: The National Advisory Committee for Aeronautics' Lewis Flight Propulsion Laboratory completed the first U.S.-built afterburner for jet engines.
19431201	Dec 1943: National Advisory Committee for Aeronautics researcher John Stack conceived the rocket aircraft research program to investigate the flight characteristics of aircraft flying faster than the speed of sound. A NACA proposal to service representatives the following spring led ultimately to the X-1 research airplane project.
19431231	Calendar Year, 1943: By the end of the year, CAA had established, as a matter of military necessity, the nucleus of a complete air traffic control system in Alaska. CAA commissioned the airport traffic control tower at Fairbanks on Feb 1, the air route traffic control center at Ladd Field (Fairbanks) Oct 14, and a similar center at Anchorage on Sep 15. The U.S. Weather Bureau began operations at Merrill Field, Anchorage, on Feb 4.

1944

19440115	Jan 15, 1944: CAA commissioned the Honolulu air route traffic control center on this date, followed by the Miami center on Aug 16.
19440501	May 1, 1944: In United States v. Drumm, a U.S. District Court found that Andrew D. Drumm, Jr., had repeatedly violated Parts 60.30 and 60.31 of the Civil Air Regulations (CARs) by piloting a civil aircraft without a valid pilot certificate and flying an aircraft lacking an airworthiness certificate. Drumm maintained that the CARs did not apply to him since he did not fly on civil airways or over restricted areas. He further contended that the Civil Aeronautics Board had exceeded its statutory authority by promulgating Parts 60.30 and 60.31. The judge found these arguments without merit, upholding Federal authority to certificate every pilot and aircraft using U.S. airspace.
19440515	May 15, 1944: CAA announced that it had trained 1,536 men of the Armed Forces in air traffic control work: 605 Army and 628 Navy enlisted control tower operators and 303 Army flight control officers.
19440711	Jul 11, 1944: CAB issued a report concluding that an experiment in providing short-haul and local scheduled air service should be conducted. The experiment involved the establishment of a new airline category, known as "feeder" or "local service" carriers. On Aug 1, 1945, Essair (later known as Pioneer Air Lines until merged into Continental on Apr 1, 1955) became the first airline to fly under the new classification, operating with a temporary certificate. Not until May 19, 1955, did legislation provide for permanent certification of local service carriers. (Later legislation extended permanent certification in 1956 to local service carriers in Alaska and Hawaii and in 1957 to certain carriers operating between Alaska and the United States.) In 1970, the local service category included nine airlines carrying 27 million passengers annually. By that time, the local service airlines had begun referring to themselves as "regionals," a term later adopted by the commuter airlines (see Jul 1, 1969) and also used by CAB as part of a system that categorized airlines by their revenue levels (see Oct 2, 1980).
19440821	Aug 21, 1944: CAA established a Ninth Region with headquarters at Honolulu. The new office had jurisdiction over the territory of Hawaii and the Pacific Ocean area not within the boundaries of the Eighth Regional Office in Alaska.
19440910	Sep 10, 1944: The first airplane designed in World War II exclusively to carry cargo, the C-82, was successfully test-flown at the Fairchild aircraft plant in Hagerstown, Md. Fairchild manufactured 220 planes for the Air Force before discontinuing production in 1948.
19440923	Sep 23, 1944: Theodore P. Wright was sworn in as Administrator of Civil Aeronautics. Nominated on Aug 22, Wright succeeded Charles I. Stanton (see Jul 20, 1942), who submitted his resignation on Aug 18 and, on its acceptance, reverted to his former position of Deputy Administrator.

	Wright was educated at Lombard College and the Massachusetts Institute of Technology. He was commissioned in the Naval Reserve Flying Corps in 1918, and was superintendent of naval aircraft construction for the New York district during 1921, his last year of naval service. He then joined the Curtiss Aeroplane and Motor Corporation (later renamed the Curtiss-Wright Corporation) as executive engineer. During his subsequent tenure as chief engineer, the firm produced a number of outstanding aircraft types. In World War II, Wright served with the Advisory Commission for the Council of National Defense as Assistant Chief of the Aircraft Branch of the Office of Production Management (later WPB), and as Director of the Aircraft Resources Control Office of the Aircraft Production Board. He published extensively on topics related to aircraft manufacturing. (See Jun 1, 1948.)
19441031	Oct 1944: CAA issued the first edition of its Statistical Handbook of Civil Aviation, a one volume compilation of essential civil aviation statistics, later superseded by the FAA Statistical Handbook of Aviation.
19441128	Nov 28, 1944: CAA submitted to Congress a National Airport Plan proposing Federal and state support for airport improvements needed for a forecast increase in civil aviation. The plan was based on cooperative studies that the agency had carried out with local governmental or private interests seeking assistance in postwar airport planning. Its publication helped to stimulate the introduction of congressional bills on airport development. (See May 13, 1946).
19441207	Nov 1-Dec 7, 1944: The International Civil Aviation Conference met in Chicago, attended by representatives of 52 countries. The conference agreed upon the Convention on International Civil Aviation, known as the Chicago Convention. Rejecting the "blue skies" doctrine and reaffirming the principle of national sovereignty in airspace, this agreement laid the groundwork for the first truly global organization for civil aviation--the Provisional International Civil Aviation Organization (PICAO)--and created machinery to assure uniform standards and practices for flight safety and operations. (See Jun 6, 1945)

1945

19450111	Jan 11, 1945: Administrator Theodore P. Wright of the Civil Aeronautics Administration announced the formation of an Advisory Committee on Non-Scheduled Flying, composed of representatives from the aviation industry and the private flyer sector, to assist CAA in planning for increased postwar private flying.
19450327	Mar 27, 1945: An interdepartmental memorandum between the State, War, Navy, and Commerce Departments set up an Air Coordinating Committee (ACC) for the purpose of achieving an integrated and coordinated Federal aviation policy. In May 1946, the ACC established an airspace subcommittee to carry on the work of the Interdepartmental Air Traffic Control Board (IATCB), which had functioned during the war to resolve civil-military airspace-use problems. On Sep 19, 1946, the President formally chartered the ACC. Membership now included the State, War, Navy, Post Office, and Commerce Departments, the Civil Aeronautics Board, and the Bureau of the Budget (nonvoting member), although subsequent executive orders made changes in the ACC's membership from time to time until the committee was abolished in Oct 1960.
19450412	Apr 12, 1945: President Franklin D. Roosevelt died suddenly at Warm Springs, Ga. Vice President Harry S Truman took the oath as President.
19450419	Apr 19, 1945: Forty-one airlines from twenty-five nations created a voluntary organization, the International Air Transport Association (IATA), at Havana, Cuba, to prevent airlines from practicing unethical methods of setting rates and schedules. Other international airlines subsequently joined the association. IATA succeeded the International Air Traffic Association, which had been formed at The Hague in 1919.
19450508	May 8, 1945: President Truman proclaimed the end of the war in Europe.
19450512	May 12, 1945: CAA announced the iniation of tests to determine the radius of interference from low- and high-frequency radio stations on radio reception by airplanes. The tests were considered highly important because of their general applicability to the airport construction program being considered by Congress.

19450515	May 15, 1945: Effective this date, CAA Administrative Order No. 34 formalized the first steps of an extensive reorganization intended "to meet urgent problems, domestic and foreign, of postwar expansion of civil aviation." The revised organizational structure redesignated the Federal Airways and Safety Regulation Services as "offices" and established an Office of Airports and an Office of Field Operations. Assistant administrators directed the Washington program offices, and a regional adminstrator replaced the regional manager in supervising each of the nine regions. Based on a concept of decentralized administration, the new pattern of organization placed responsibility upon the regional administrators for the executive direction of CAA programs in their respective regions. The role of the Washington office involved "establishing the broad over-all plans, general policies, and standardization of equipment and procedures." (See Nov 3, 1948, and Jun 2, 1949.)
19450601	Jun 1, 1945: Effective this date, CAA permitted the physical examination for private and student pilots to be made by any registered physician. (See Feb 28, 1927, and Jun 15, 1960.)
19450601	Jun 1, 1945: Ending a monopoly by Pan American Airways, CAB granted three U.S. airlines the authority to serve North Atlantic routes to Europe. The three were Pan American, Transcontinental & Western Air (TWA), and American Export Airlines. On the same day, CAB approved American Airlines' acquisition of the control of American Export. (See Jun 28, 1939, and Oct 24, 1945.)
19450606	Jun 6, 1945: Representatives from 26 countries created the Provisional International Civil Aviation Organization (PICAO). (See Nov 1-Dec 7, 1944, and Apr 4, 1947.)
19450629	Jun 29, 1945: CAA announced that it was conducting extensive tests of six different types of airport approach lighting systems under development at its Experimental Station at the Indianapolis Municipal Airport.
19450630	Jun 30, 1945: During the fiscal year that ended on this date, CAA began development work on adapting radar to civil aviation at the Indianapolis Experimental Station, using equipment supplied by the Armed Forces. (See Jul 23, 1935 and May 24, 1946.)
	CAA drafted comprehensive proposals for revision of the Civil Air Regulations and submitted them to the Civil Aeronautics Board. The Board was engaged in revising safety regulations to reflect wartime advances in aviation.
	CAA also resumed its air marking program, suspended during the war because of security restrictions. The Agency installed markers at 66 points in N.C., Conn., Tex., Ill., Pa., Ohio, and Wash. during the fiscal year.
19450701	Jul 1, 1945: CAA reduced the minimum age requirement for a private pilot license from 18 to 17 years. Application for a student pilot certificate could be made at age 16. Any applicant under age 21 was required to submit the written consent of a parent or guardian. At the same time, CAA also lowered the flying time necessary for a private license from 43 to 40 hours for conventional planes and 30 to 27 hours for nonspin type planes. (See April 18, 1939, and May 1, 1967.)

19450703	Jul 3, 1945: CAA created the new position of private pilot examiner to meet the anticipated flood of postwar demands for private pilot examinations.
19450710	Jul 10, 1945: The Civil Aeronautics Board adopted a rule requiring a flight engineer on certain international flights. (See Jul 8, 1940 and Feb 15, 1946.)
19450716	Jul 16, 1945: The United States Government exploded the first atomic device at Alamogordo, N. Mex.
19450728	Jul 28, 1945: Flying in fog over New York City, a U.S. Army Air Forces B-25 bomber crashed into the Empire State Building, causing the deaths all three persons on the plane and eleven in the building.
19450806	Aug 6, 1945: The United States dropped an atomic bomb on Hiroshima, Japan, followed by a second on Nagasaki on Aug 9. These attacks, and the Soviet declaration of war against Japan on Aug 8, led to Japan's surrender on Aug 14 and the end of World War II. As a result of the war, a total of 1,961 men and 70 women, representing nearly 20 percent of CAA's personnel, left the agency during 1939-45 to serve in the Armed Forces.
19450920	Sep 20, 1945: The first turboprop-powered aircraft flight was completed in Britain by a Gloster Meteor experimentally equipped with Rolls-Royce Trent engines.
19451001	Oct 1, 1945: CAA commissioned the New Orleans air route traffic control center.
19451024	Oct 24, 1945: A DC-4 operated by American Export Airlines landed at Hurn Airfield, England, after a flight from New York, inaugurating the first scheduled landplane commercial service between North America and Europe. (Pan American had earlier begun the first regular seaplane transatlantic service: see Jun 28, 1939.) After beginning the new service, American Export adopted the name American Overseas Airlines on Nov 10, 1945. (See Jun 1, 1945, and Sep 25, 1950.)
19451231	Dec 31, 1945: Dr. Luis W. Alvarez received the 1945 Collier Trophy for his outstanding initiative in the conception of the Ground Controlled Approach (GCA) system and his contribution to its use for the safe landing of aircraft. The Armed Forces had introduced the system during World War II. After the conflict, some urged GCA's use by civil aviation, while CAA continued to favor the Instrument Landing System (ILS). (See May 2, 1940, Mar 30, 1947, and Apr 3, 1947.)
19451231	Calendar Year, 1945: The principle trade association of U.S. aviation manufacturers adopted the name Aircraft Industries Association of America, or AIA. (It had previously been known as the Aeronautical Chamber of Commerce of America (ACCA), founded in Dec 1921. ACCA itself had been preceded by the Aircraft Manufacturers Association, founded in 1917 and later known as the Manufacturers Aircraft Association.) In 1959, AIA changed its name again to the Aerospace Industries Association of America, reflecting a membership broadened to include manufacturers of space-related products.

1946

19460115	Jan 15, 1946: CAA announced streamlined inspection procedures intended to prevent bottlenecks in the extensive civilian aircraft production underway. The new procedures provided for appointment from the industry of designated manufacturing inspection representatives and designated aircraft maintenance inspectors. CAA's increasing use of designees included other regulatory areas. By Jun 30, 1948, 9,965 representatives of the Office of Aviation Safety were in the designee program, including 2,050 commercial aviation medical examiners, 6,222 airman rating examiners, and 1,693 aircraft service representatives. (See Feb 9, 1940, and Nov 25, 1947.)
19460129	Jan 29, 1946: CAA Administrator T. P. Wright received the Daniel Guggenheim Medal for 1945 for notable achievement in the advancement of aeronautics.
19460201	Feb 1, 1946: Association of Aviation Underwriters announced a 30 percent rate reduction in personal accident insurance for domestic airline passengers.
19460211	Feb 11, 1946: The United States and Great Britain signed the Bermuda Agreement, an Air Service Agreement for the operation of commercial air services, which set a pattern for the conclusion of subsequent bilateral civil aviation treaties by the United States. (See Jul 23, 1977.)
19460215	Feb 15, 1946: The Lockheed L-049 Constellation went into U.S. domestic passenger service. Designed for a three-man crew, the Constellation had a separate panel and side-facing seat for a flight engineer. (See Jul 10, 1945 and Feb 21, 1947.)
19460228	Feb 28, 1946: The Civil Aeronautics Board approved for one year, beginning on this date, the rate-setting machinery of the International Air Transport Association (IATA). The approval was later extended.
19460304	Mar 4, 1946: The first of a continuing series of international regional air navigation planning meetings sponsored by the Provisional International Civil Aviation Organization began at Dublin, Ireland, to determine standard operating procedures for North Atlantic air services. This meeting was followed by similar meetings in the other nine regions of the world. By Apr 1949, an initial meeting had been held in all ICAO regions.
19460315	Mar 15, 1946: CAA announced the selection of Will Rogers Field, Oklahoma City, Okla., for the location of its new aeronautical center for training and maintenance. The agency immdiately relocated the Standardization Center (Houston), the general aircraft maintenance base for the Midwest, and the Signals Division School, and planned eventually to move all Federal airways schools and similar Agency activities to this central location. Oklahoma City had agreed to build an administration building and two new hangars for CAA's use.

19460321	Mar 21, 1946: The Army Air Forces, the Navy's Bureau of Aeronautics, CAA, the National Advisory Committee for Aeronautics (NACA), and the aircraft industry formulated a National Aeronautical Research Policy. Promulgated largely to clarify the relationships of NACA with other research and development agencies, the policy statement charged NACA with responsibility for "research in the aeronautical sciences," the military services with "the evaluation of military aircraft and equipment and the exploration of possible military applications of research results," CAA with "expediting the practical use in civil aeronautics of newly developed aircraft and equipment," and the aircraft industry with "application of research results in the design and development of improved aircraft equipment, both civil and military."
19460329	Mar 29, 1946: Executive Order 9709 authorized the Department of Commerce to take over and operate the 200 air navigation facilities in 68 foreign countries installed during the war for military purposes. This interim arrangement was later extended to include Alaska. A previous order in Dec 1945 had transferred responsibility for air navigation facilities and functions in Iran from the War Department to CAA.
19460331	Mar 1946: Agreement on certain principles governing Federal-state relationships in aviation law enforcement resulted from meetings of CAA, CAB, and Department of Justice representatives with the National Association of State Aviation Officials. The conferees agreed that CAA would continue to enforce regulations concerning airworthiness of aircraft, competency of airmen, operating standards, and air traffic rules, with the states cooperating in administering punishment for the reckless operation of aircraft in their jurisdictions. States could adopt and enforce their own safety regulations if they were not in conflict with Federal rules (see Dec 13, 1956). It was also agreed that states could require registration of aircraft provided that the fee was moderate and would be in full substitution for any state, county, and municipal property taxes on the aircraft. State registration of pilots would be permitted if the fee was nominal. CAA reaffirmed its position that it was the states' function to license airports (see May 21, 1970).
19460401	Apr 1, 1946: CAA assumed custody from the Army of the files and records relating to instrument approach procedures, and became responsible for processing and approving standardized instrument approach procedures for all civil airports under CAA's jurisdiction. (See May 1, 1945.)
19460401	Apr 1, 1946: Standards for the Control of Instrument Flight Rule Traffic, a manual approved by the operations executives of the Army Air Forces, Navy, Coast Guard, and CAA, became effective. Its adoption recognized the need for common procedures in the control of civil-military air traffic.
19460424	Apr 24, 1946: Winged Cargo, Inc. began the first glider commercial freight service, using a DC-3 to tow a Waco glider. The flight took off from Philadelphia and made stops at Miami, Havana, and San Juan.

19460430	Apr 1946: CAA began biweekly publication of a new Airman's Guide, consolidating into one comprehensive volume for private and commercial pilots information formerly issued in three separate publications. This publication contained current and standard data on communications and navigational aids, airport facilities, air traffic control procedures, airspace hazards, and other information needed to plan and conduct safe flights. (See Dec 10, 1964.)
19460508	May 8, 1946: The Bell Aircraft Corporation's Model 47 became the first helicopter to receive a CAA airworthiness type certificate, authorizing mass production.
19460513	May 13, 1946: President Truman signed the Federal Airport Act establishing the Federal-aid airport program (FAAP), the first peacetime program of financial aid aimed exclusively at promoting development of the nation's civil airports. Sen. Pat McCarran (D-Nev.) and Rep. Clarence F. Lea (D-Calif.) had introduced the legislation. The Act authorized appropriations of $500 million for the contiguous United States and $20 million for Alaska and Hawaii over a period of seven years, beginning Jul 1, 1946. Federal allotments were to be matched by local funds. For fiscal year 1947, Congress appropriated $45 million for construction and nearly $3 million for preliminary planning and surveys. (See Appednix VIII and Oct 8, 1946.)
19460524	May 24, 1946: The Civil Aeronautics Administration gave an initial demonstration of the first radar-equipped control tower for civilian flying atop the agency's Experimental Station at Indianapolis Municipal Airport. Raytheon had built the basic radar equipment for the Navy, and the company's engineers directed modifications at Indianapolis that included improvements lately developed for that service. Among these were an improved search antenna and a feature that eliminated ground clutter by permitting only moving targets to appear on the screen. (See Jun 30, 1945.)
19460527	May 27, 1946: The U.S. Supreme Court ruled in Causby v. United States that flights over private land represent the taking of an air easement if they are "so low and so frequent as to be a direct and immediate interference with the enjoyment and use of the land." Causby owned a small chicken farm near a municipal airport used by military aircraft that passed over his property at an altitude below 100 feet. The noise from these flights frightened the chickens, caused a drop in production, and eventually forced Causby to close down his chicken-raising operation. The Court found that the United States had taken an air easement over Causby's property that interfered with its normal use. Causby's Fifth Amendment rights had been violated, it held, because his property had been put to public use without just compensation. (See Dec 13, 1956, and Mar 5, 1962.)
19460531	May 31, 1946: CAA announced that production certificates would be handled by the regional offices rather than from Washington to speed issuance to aircraft manufacturers.
19460609	Jun 9, 1946: CAA regional offices, rather than Washington headquarters, became the approving authority for flying schools, repair stations, ground schools, mechanic schools, and parachute lofts. The increasing number of applications for CAA aircraft and airman certificates had made this further decentralization of CAA services necessary.

19460611	Jun 11, 1946: The Administrative Procedure Act became law, prescribing more uniform and publicized procedures for executive agencies to use in rulemaking, adjudicatory proceedings, and similar administrative actions. Federal agencies engaged in rulemaking were required to publish a notice of proposed rulemaking (NPRM) in the Federal Register, unless this would be “impracticable, unnecessary, or contrary to the public interest.”. The notice must include: a statement of the time, place, and nature of the public rulemaking proceedings; a reference to the authority under which the rule was proposed; and the substance of the proposed rule. After publishing the NPRM, the rulemaking agency was to give interested persons an opportunity to submit written comments on the proposed rule. The act also made every executive agency action for which no adequate court remedy was provided subject to review by an appropriate national court.
19460629	Jun 29, 1946: The Douglas DC-6 made its first flight, and CAA certificated the plane nine months later. The DC-6 entered U.S. domestic passenger service on Apr 27, 1947. The aircraft, the first Douglas plane with a pressurized cabin, could seat approximately 50 passengers.
19460630	Jun 30, 1946: CAA announced the opening of its first two regional medical offices at Santa Monica, Calif., and New York, N.Y. The Agency planned to open a third office in Fort Worth, Tex., in July.
19460710	Jul 10, 1946: The Civil Aeronautics Administration announced plans to establish nine new foreign offices during the next year. The locations selected included Paris, London, Cairo, Shanghai, Sidney, and Mexico City. CAA stations already existed at Lima, Rio de Janeiro, and Balboa (C.Z.).
19460711	Jul 11, 1946: CAA grounded the Lockheed L-049 Constellation immediately following a crash that killed four of the five crew members of a TWA plane near the airline's training base at Reading, Pa. This was the most recent in a series of accidents involving fires in the Constellation's engines. CAA ordered modifications, mainly to the plane's electrical system and power plants, and the 58 grounded aircraft returned to service on Aug 24.
19460715	Jul 15, 1946: CAA Administrator T. P. Wright invited the National Advisory Committee for Aeronautics (NACA), the Air Transport Association, and the Aircraft Industries Association to participate in a joint attack on the problem of aircraft engine noise, which "threatens to undermine aviation progress." Earlier he had recommended to NACA, in which he served as vice chairman, that consideration be given to research directed at reduction of airplane noise levels. Largely as a result of this recommendation, NACA's Langley Laboratory initiated a research project to investigate propagation of noise from light airplanes.
19460801	Aug 1, 1946: A British civil aviation bill was approved, giving the monopoly of British scheduled air services to three state-owned corporations. In addition to the already existing British Overseas Airways Corporation, the British European Airways Corporation, and the British South American Airways Corporation were established.

19460802	Aug 2, 1946: An act of Congress established the National Air Museum under the Smithsonian Institution. In 1976, the name changed to National Air and Space Museum.
19460808	Aug 8, 1946: An amendment to the Civil Aeronautics Act facilitated the participation of the Weather Bureau in international meteorology and gave the Bureau the responsibility of acting as a clearinghouse for research in aeronautical meteorology. The Bureau was also charged with providing for the collection and dissemination of weather observations made by pilots in flight. (See Sep 15, 1950.)
19460815	Aug 15, 1946: For the first time, CAA began charging for certain of its services. The agency began requiring a fee of $5 for registering and recording aircraft titles, with an additional fee of $5 for recordations involving liens or other encumbrances. CAA charged $5 for certificating parachute lofts and $10 for certificating flying and ground schools, mechanic schools, and repair stations. On May 1, 1947 the Agency lowered the aircraft title recording fee to $4.
19460901	Sep 1, 1946: The National Association of State Aviation Officials (NASAO) published a model State Aeronautical Commission (or Department) Act incorporating changes suggested by CAA. In October, NASAO approved in principle a CAA redraft of the Model Municipal Airport Act, originally issued by NASO in 1944. The model airport act was intended to promote uniform state legislation enabling cities and other political subdivisions to build and operate airports and to obtain aid under the Federal Airport Act. NASAO had also previously approved a model State Airport Zoning Act (see Apr 1939).
19460906	Sep 6, 1946: The United States and Brazil signed an air transportation agreement, the first such agreement to be made with a South American country.
19460915	Sep 15, 1946: CAA required all nonscheduled air carriers to apply for an operating certificate by this date, when a new Civil Air Regulations Part 42 governing this category of operator became effective. The nonscheduled carriers had also been required to file a registration statement and financial/traffic report with CAB by Sep 3. The actions introduced greater oversight of the “nonskeds,” charter operators that offered transport services on an irregular basis. The nonskeds had grown in number and importance due to the post-war availability of surplus aircraft and ex-military pilots. Although now required to have a CAA safety certificate, the nonskeds continued to operate without certification under CAB’s system of economic regulation. Effective Jun 10, 1947, CAB created the category of noncertificated irregular air carriers as a new designation for the nonskeds. The irregular carriers were divided into two classes according to the size of their aircraft, with those using heavier planes subject to greater economic reporting requirements. (See Nov 15, 1955.)
19461001	Oct 1, 1946: CAA commissioned the El Paso air route traffic control center.

19461008	Oct 8, 1946: CAA announced the opening of 44 new district offices for the administration of the Federal-aid airport program (FAAP). Of these, 43 were located within the United States and one in Puerto Rico. CAA also established Airport branches in its regional offices at Honolulu and Anchorage. (See May 13, 1946 and Jan 9, 1947.)
19461023	Oct 10-23, 1946: At the request of the Provisional International Civil Aviation Organization (PICAO), representatives of 60 foreign countries attended demonstrations of U.S. air navigation and air traffic control equipment and techniques at CAA's Technical Development and Evaluation Center at Indianapolis. These detailed demonstrations helped influence the decision, taken later by the delegates at Montreal, to recommend acceptance of the systems and techniques proposed by the United States as international standards.
19461122	Nov 22, 1946: CAA Administator Wright and CAB Chairman James M. Landis established a CAA-CAB Committee, a six-man group created to facilitate coordination between the two bodies.
19461123	Nov 23, 1946: The Martin 2-0-2 made its first flight. On Aug 13, 1947, CAA type-certificated the aircraft, a two-engine transport designed for the short-haul passenger market. The airplane entered service a year later with Northwest Airlines. The Martin was the first airliner to operate on postwar passenger routes that had not seen service during World War II.
19461130	Nov 1946: CAA activated air traffic control over the North Atlantic in conjunction with the establishment of the North Atlantic Region of ICAO. The agency's New York oceanic air traffic control center assumed control of that portion of the North Atlantic Region assigned to the United States, assisted by oceanic ARTCC sectors established in Boston, Washington, and Jacksonville. During the previous fiscal year, CAA had already assumed responsibility for certain Atlantic and Pacific oceanic air traffic control services formerly provided at the request of the Army.

1947

19470109	Jan 9, 1947: Regulations governing the administration of the Federal Airport Act received final approval, and two days later CAA announced the 1947 construction program, listing 800 airports for either construction or improvement. Published in February, the first National Airport Plan under the program contained a three-year forecast of requirements involving 4,431 locations. Twin Falls, Idaho, became the first community to receive a grant when, on May 7, the CAA Administrator signed papers for the construction of a class 3 airport at a cost of about $647,000, of which $384,000 was in Federal funds. (See May 13, 1946, Jun 30, 1954, and Appendix VII.)
19470221	Feb 21, 1947: The Air Line Pilots Association adopted a resolution providing that all four-engine aircraft be required to carry a flight engineer. (See Feb 15, 1946 and Jun 15, 1947.)
19470225	Feb 25, 1947: CAA demonstrated a new stall warning instrument which it had developed. (See Spring 1942.)
19470315	Mar 15, 1947: CAA established, "in the interest of safety in air commerce," airport traffic control zones having radii of three or five miles. In addition to cancellations of airport approach zones, the Agency redesignated a large number of civil airways.
19470327	Mar 27, 1947: Figures released by the CAB indicated the strong U.S. position in transatlantic air transport. Three American airlines--Pan American, American Overseas, and Trans Continental and Western Air (TWA)--had made 84 percent of the flights and carried 86 percent of the passengers on transatlantic routes during the preceding year.
19470330	Mar 30, 1947: CAA Administrator T. P. Wright announced that he had lowered ceilings and visibility requirement for airlines using the instrument landing system, known as ILS (see May 2, 1940, and Jul 11, 1947). Scheduled airlines with the proper equipment and training in use of the ILS could now make straight in approaches when the ceiling was 100 feet below the present minimim (400 feet at most airports) and with visibility one-quarter less than present regulations required (generally one mile). After an airline had six months of satisfactory experience with the ILS, its ceiling minimum might be dropped another 100 feet and permissable visibility reduced another one-quarter mile. CAA had no plans to reduce ceilings below 200 feet or visibility below one-half mile. On Nov 1, Braniff became the first airline to receive permission to lower its ceiling minimum to 200 feet and one-half mile visibility. (See Oct 2, 1964.)
19470403	Apr 3, 1947: CAA began in service testing of GCA (ground controlled approach) radar systems at Washington National and Chicago Municipal Airports. This modified radar precision landing equipment had been developed for military use, loaned to CAA by the Army Air Forces, and installed by the Airborne Instrument Laboratory of the Air Transport Association. New York's La Guardia Airport received similar equipment later in the year. (See Dec 31, 1945, and Apr 9, 1947.)

	Another operational service test, started about the same time at Washington National Airport, involved a microwave early-warning radar (MEW), one of the best long-range sets developed during the war. A joint CAA/Army Air Forces undertaking, this test aimed at developing effective means of coordinating MEW data and information from ATC flight progress boards.
19470404	Apr 4, 1947: The Convention on International Civil Aviation came into force after being ratified by 26 countries. (Among these was the United States, which had ratified the Convention on Aug 9, 1946.) The Convention had been drawn up at a conference in Chicago over two years before (see Nov 1-Dec 7, 1944). The fact that it was now in force officially created the International Civil Aviation Organization (ICAO) to succeed its temporary predecessor, PICAO (see Jun 6, 1945). The first General Assembly of ICAO was held in Montreal during May 6-28.
19470404	Apr 4, 1947: CAB certificated Piedmont Airlines as a local service carrier. The airline, whose original routes ran along the Piedmont-Appalachia area, began operations on Feb 20, 1948. Piedmont expanded steadily during the succeeding decades, then grew rapidly after airline deregulation was introduced in the late 1970s. (See Oct 30, 1987.)
19470408	Apr 8, 1947: American Overseas Airlines obtained rights for commercial service to Finland, the first U.S. route to the Soviet sphere in Europe.
19470409	Apr 9, 1947: CAA granted its first approval of the Air Forces' Ground Control Approach (GCA) radar device for commercial planes, authorizing its use by Pan American Airways at Gander, Newfoundland. (See Apr 3, 1947, and Jul 11, 1947.)
19470513	May 13, 1947: Dr. Lewis H. Bauer, a pioneer in aviation medicine who had served as the first medical director of the Aeronautics Branch (1926-1930), received the Theodore C. Lyster award for "outstanding achievement in the general field of aviation medicine," becoming the first person to receive that prestigious award. The award was established in honor of Brig. Gen. Theodore C. Lyster, the first Chief Surgeon of the Aviation Section of the Signal Corps, U.S. Army, a man generally considered to have been "the father of aviation medicine in America."
19470612	Jun 12, 1947: At the request of the Air Coordinating Committee, the Radio Technical Commission for Aeronautics established a special committee (SC-31) to study and develop recommendations for the safe control of expanding air traffic. This action followed acceptance by the ACC of an Air Transport Association report on the same problem. (See Feb 17, 1948.)

19470615 Jun 15, 1947: President Harry S Truman appointed a Special Board of Inquiry on Air Safety, headed by CAB Chairman James M. Landis. The action followed a series of three DC-4 airline accidents that claimed the unpredecented total of 145 lives between May 29 and Jun 13, 1947. On Aug 15, Landis suggested that the Civil Aeronautics Board immediately hold hearings on airline crew complement to determine whether a flight engineer was required on all four-engine air transports in scheduled domestic passenger service. Between Oct 6-8, CAB held such hearings, and as a result, in April, 1948, adopted the so-called 80,000- pound rule. Effective Dec 2, 1948, (subsequently extended to Mar 31, 1949), all airplanes certificated for a maximum takeoff weight of more than 80,000 pounds were required to carry an airman holding a flight engineer's certificate. Airmen with a pilot's or a mechanic's background could qualify for the certificate. By the end of 1949, the airlines had divided into three groups in implementing the rule. Pan American, Eastern, TWA, American, Chicago & Southern, Continental, National, Northwest, and Western used people with mechanical backgrounds as flight engineers. Braniff, Capital, Delta, Northeast, and Panagra employed pilots. United Air Lines used both pilots and mechanics. (See Feb 21, 1947 and Oct 24, 1955.)

19470617 Jun 17, 1947: Pan American Airways inaugurated round-the-world scheduled passenger service, exclusive of the continental United States, as a Lockheed Constellation took off from New York and flew eastward on a route that led to San Francisco. The gap in the circle between San Francisco and New York could not be closed because of a provision in Pan Am's certificate excluding domestic service. (See Jan 14, 1958.)

19470624 Jun 24, 1947: A reported sighting of "flying saucers" near Mt. Ranier, Wash., began widespread interest in unidentified flying objects (UFOs) among the American public. In 1948, the Air Force began gathering data on UFO reports under its Project Blue Book. In 1969, a study sponsored by the Air Force rejected the theory that UFOs were extraterrestial visitors, and Blue Book was discontinued on Dec 17 of that year.

19470630 Jun 30, 1947: During the fiscal year ending on this date, the U.S. Army Air Forces inaugurated a military flight communications system, which relieved CAA of responsibility for handling the majority of Army flight plans under visual flight rules and reporting arrivals on the civil communications system. CAA's handling of communications relating to flights under instrument flight rules remained unchanged.

In view of the trend toward larger and more complex aircraft, CAA completed plans regarding certification of three new classes of flight personnel: flight radio operators, flight navigators, and flight engineers.

CAA also installed the first high-powered, low-frequency, long-range navigation facility, on Nantucket Island, Mass., using temporary radio equipment. Construction materials and 300-foot towers had been procured for this and similar facilities to be built at: San Juan, P.R.; Omaha, Neb.; San Francisco, Calif.; and Honolulu, Hawaii.

19470630	Jun 1947: Fifty students from the Philippine Republic began training at the Aeronautical Training Center at Oklahoma City under the Philippine Rehabilitation Act. Courses of instruction included air traffic control, airways communications, and airways facilities maintenance. Under the same legislation, CAA also opened an office in the Philipines during 1947 to aid that nation in establishing airway aids.
19470708	Jul 8, 1947: The prototype Boeing 377 Stratocruiser first flew. The 377, an outgrowth of the military B29 Superfortress and the C-97 military transport, received its CAA type-certificate on Sep 3, 1948, and first saw service with Pan American World Airways on Apr 1, 1949. The plane had a spiral staircase leading down to a first class lounge in the lower fuselage. It could carry approximately 100 passengers or could be converted into a sleeper plane with 28 full-sized Pullman berths.
19470711	Jul 11, 1947: The House Subcommittee of the Committee on Interstate and Foreign Commerce, chaired by Representative Carl Hinshaw (R-Calif.), submitted a report recommending creation of a single instrument landing system to safely and economically serve the requirements of both commerce and national defense simultaneously. Addressing the controversy regarding the merits of CAA's Instrument Landing System, known (ILS) and the military's Ground Control Approach (GCA) system, the committee recommended that CAA stop installation of additional ILS equipment. The committee suggested further that the United States proceed with the development of an instrument landing system satisfactory for fully automatic landing, and that the most modern GCA be installed at selected airports. Congress endorsed the report through its Aviation Policy Board in Mar 1948, and recommended, through the Board, that the "single system" program be undertaken.
	Meanwhile, on Jul 15, 1947, CAA Administrator Theodore Wright had announced a new civil-military instrument landing system policy. ILS would remain the primary CAA landing aid, but the agency would supplement ILS at busy airports with an element of GCA designated precision approach radar (PAR), along with airport surveillance radar. The Air Force, however, would still rely primarily on GCA, using ILS for heavy planes and as a backup to GCA. (See Mar 30, 1947, and Feb 4, 1949.)
19470716	Jul 16, 1947: CAA announced a program under which Latin American aviation leaders would come to the United States to study both the governmental and private phases of the nation's aviation industry. The effort was closely related to the continuing Inter-American Aviation Training Program (see Calendar Year 1941).

19470718	Jul 18, 1947: President Truman established a temporary Air Policy Commission, chaired by Thomas K. Fineletter of New York, to assist in formulating an integrated aviation policy. On Dec 27, 1947, the commission submitted its report, Survival in the Air Age, to the President. Released to the public on Jan 13, 1948, the report recommended immediate action to increase the military air arm and suggested major changes in the organization of civil aviation agencies. The Commission recommended the creation of a Department of Civil Aviation and a Department of Industry and Trade, both headed by Secretaries reporting directly to the Secretary of Commerce. CAA functions plus the Civil Aeronautics Board's responsibility for safety regulations were to be vested in the new aviation department, and CAB's responsibilities would be narrowed primarily to rate and route decisions. An Air Safety Board would be established with responsibility for accident investigations. The CAB and the Safety Board would be independent, but placed within the Civil Aviation Department for housekeeping. The report further proposed that a Government Aircraft Development Corporation be set up within the Department of Civil Aviation to encourage the development of a suitable cargo aircraft, and recommended that a decision be made as to whether military or civil air authorities should have responsibility for the future development of a common system of air navigation.
19470725	Jul 25, 1947: President Truman approved the National Security Act, which provided for the unification of U.S. Armed Forces, including an Air Force coequal with the Army and Navy, under a new Department of Defense.
19470730	Jul 30, 1947: The President signed Public Law 289, an amendment to the Surplus Property Act of 1944, to help speed the conversion to civil use of airports, airport facilities, and aviation equipment no longer needed by the military. Recognizing that maintenance of the airports would require substantial funds, the law authorized transfer of surplus property to develop sources of revenue from non-aviation businesses at such airports.
19470825	Aug 25, 1947: CAA announced that survey flights would begin on Sep 8 for "Skyway One," a pair of 40- mile-wide paths from Washington to Los Angeles that were to be dotted liberally with air markers to encourage cross-country contact flights by private pilots. Sponsored by a government and civic committee, the project was intended to serve as a model for other such skyways. During 1948, CAA designated a "Skyway No. 2" with terminals at Seattle, Wash., and Boston, Mass.
19470901	Sep 1947: CAA took over the maintenance and operation of airport facilities at Midway, Wake, and Guam, which became part of the Federal airways and links in the air routes over the Pacific. Pan American Airways had operated the airports at Wake and Guam after military authorities had relinquished them after the war. (See Mar 29, 1950.)
19471001	Oct 1, 1947: Los Angeles Airways began the world's first regularly scheduled mail service by helicopter (as distinct from autogyro service: see Jul 6, 1939). The carrier operated Sikorsky S-51s within a radius of roughly 50 miles of Los Angeles International Airport. (See Jul 9, 1953.)

19471008	Oct 8, 1947: New air traffic rules resulting from a revision of Part 60 of the Civil Air Regulations went into effect. Besides substantially altering visual flight rules, the new regulations made some changes in instrument flight rules operations. One section of the regulation set up rules for water operation of aircraft and others applied specifically to helicopter flight rules.
19471011	Oct 11, 1947: Trans-Texas Airways began operations as a local service carrier. The airline at first served routes within Texas, reached outside the state in 1953, and acquired routes to Mexico in 1966. It adopted the name Texas International Airlines following a change of ownership in 1968.
19471011	Oct 11, 1947: Representatives of 42 nations signed a convention in Washington, D.C., establishing the World Meteorological Organization (WMO), which superseded the International Meteorological Organization. A focal point for international efforts toward such goals as common technical standards and a worldwide meteorological network, WMO became a specialized agency of the United Nations in Dec 1951.
19471014	Oct 14, 1947: Maj. Charles E. Yeager, USAF, piloting the Bell X-l rocket-propelled research aircraft at Muroc, Calif., became the first pilot to exceed the speed of sound in level flight.
19471024	Oct 24, 1947: In-flight fire caused the crash of a United Air Lines DC-6 at Bryce Canyon, Utah, with the loss of all 52 persons aboard. On Nov 11, another in-flight fire caused an American Airlines DC-6 to make an emergency landing at Gallup, N.M. Immediately following this second incident, the three airlines using DC-6 aircraft voluntarily withdrew them from service. The CAB determined that the fires had been caused by fuel leaking into the cabin heater system through an air intake scoop. After the problem had been remedied, the DC-6 returned to service in Mar 1948.
19471103	Nov 3, 1947: A commission of the International Civil Aviation Organization met in Geneva to consider proposals for a multilateral civil aviation agreement to replace the existing system of bilateral agreements by which traffic rights for scheduled commercial air services were established. Differing views concerning the so-called Fifth Freedom--the privilege of picking up or discharging in a second nation cargo destined to or coming from the territory of a third nation---prevented the commission from concluding any agreement. It recommended, however, that the subject be studied further.
19471125	Nov 25, 1947: CAB published a regulatory amendment permitting CAA to use a Technical Standard Order (TSO) system to facilitate aircraft production. After consultation with industry, CAA would publish TSOs setting specifications for aviation appliances, materials, parts, and processes. Manufacturers need no longer receive CAA type certification for items covered by TSOs. Instead, the manufacturers themselves could certify that their product met the TSO specifications. (See Jan 15, 1946, and Sep 29, 1950.)

19471217	Dec 17, 1947: A prototype of the Boeing B-47 Stratojet made its maiden flight. Designed for the War Department as a bomber, the aircraft had thin swept wings and six externally mounted jet engines. The B-47A entered service with the Air Force in May 1951. The Air Force retired the last B-47 operated as a bomber on Feb 11, 1966, but B-47s continued in service as weather reconnaissance and research aircraft.
19471231	Calendar year, 1947: CAA commissioned the first very high frequency omnidirectional radio ranges (VORs). During 1946, the agency had applied wartime technology on an experimental basis when it converted eight radio range stations on the New York and Chicago airway to VOR omnirange stations (see May 1, 1941). As a result of those tests, CAA adopted the VHF omnirange for standard use and began general installation of the new system in 1947. (See Oct 15-21, 1950.)

1948

19480116 Jan 16, 1948: The Airport Operators Council was established as an association of operators of U.S. commercial airports. In 1967, the association added the word "International" to its name to reflect a broadened membership. Later, in 1991, the Airport Operators Council International merged with the International Civil Airports Association to form a federation with headquarters in Geneva and six regional affiliates. The new organization adopted the name Airports Association Council International, later becoming simply the Airports Council International (ACI). One of ACI's six affiliates was a Washington-based organization representing members in the United States, Canada, and Bermuda. This regional organization adopted the name Airports Council International--North America on Jan 1, 1993.

19480130 Jan 30, 1948: Orville Wright died at age 76. His brother Wilbur had died of typhoid 36 years earlier, at age 45.

19480217 Feb 17, 1948: The Executive Committee of the Radio Technical Commission for Aeronautics (RTCA) accepted a special committee report on air traffic control (see Jun 12, 1947). Prepared by top government-industry representatives and technicians in the field of aeronautical telecommunications, the report outlined "interim" and "target" requirements for a common military-civil air traffic control system. In its recommendations for the transition period, the special committee recommended implementation of very high frequency omnidirectional ranges (VORs) and distance measuring equipment (DME). The plan called for the ultimate development of reliable all-weather navigation and landing aids, integrated into an ultramodern airways traffic control system. The report's recommendations were accepted by Congress and all major users of the airspace. The RTCA received the 1949 Collier Trophy for these efforts. (See Dec 1949.)

19480301 Mar 1, 1948: The Congressional Aviation Policy Board (Brewster Board) released its report. Established pursuant to Public Law 80-287 on Jul 30, 1947, the Board was to study the current and future needs of American aviation. In its report, the commission concluded "that a strong, stable, and modern civil aviation component is essential" to national security. The report formulated nearly 100 recommendations relating to military and civil aviation, aircraft manufacturing, research and development, and government organization. Realizing the airways system of the country was near the saturation point even for the existing fleet of 1,000 airliners, the board endosed rapid implementation of the RTCA SC-31 program as a first priority step toward the establishment of a common civil-military system . (See Feb 17, 1948.)

19480401 Apr 1, 1948: CAA assumed administrative control of the Landing Aids Experimental Station at Arcata, Calif. The station was a joint civil-military, government-industry facility concerned primarily with testing equipment and techniques for bad-weather landings.

19480415	Apr 15, 1948: CAA conducted flight demonstrations at Washington National Airport with four types of aircraft equipped with crosswind landing gear developed by the agency through contracts with industry. CAA hoped that availability of the castered gear would encourage wider use of single-strip airports, substantially reducing the large landing areas required for multidirectional runways. On Oct 15, 1949, CAA's official journal reported that, as a result of further tests, the agency had approved a new component for DC-3s equipped with a cross-wind undercarriage. CAA stated that planes so equipped could land directly across a wind as high as 40 mph, and hence provide more regular airline service to single-strip airports.
19480501	May 1, 1948: The Air Force, Navy, Coast Guard, and CAA officially adopted a revised edition of an Apr 1, 1946, Army-Navy-Civil (ANC) Manual on air traffic control procedures designed to standardize ATC procedures.
19480523	May 23, 1948: The Secretaries of Defense and Commerce announced preliminary agreement to set up an Air Navigation Development Board (ANDB). The action resulted from a six-month study by the Research and Development Board of the National Military Establishment. In October and November, the two secretaries signed a charter of agreement concerning the Board, and the Secretary of Commerce formalized its creation with an order dated Jan 19, 1949. The ANDB's mission was to formulate a unified program of research and development of "aids for a common national system of air navigation and air traffic control" that would serve both civil and nontactical military aviation but be capable of integration with any air defense system established. The Board was also charged with supervising research and development projects for the common system. While the ANDB investigated the best technology for the common system, CAA continued deployment of VORs, and the Navy continued development of its tactical air navigation system (TACAN), which it had begun to develop in 1947. Military exigencies brought on by the Korean War in 1950 resulted in a deemphasis of common system development and an acceleration of TACAN development. (See Jan 1954 and Oct 29, 1957.)
19480528	May 28, 1948: The President approved legislation directing CAA to construct and operate public airports at or near Anchorage and Fairbanks "adequate for the needs of air-transportation services and air commerce of the United States serving the territory of Alaska and foreign countries by way of points within the territory of Alaska." The act also authorized the Administrator to provide for facilities, roads, and services necessary to the operation of the airports. The two airports opened for commercial service in 1951, initially using temporary terminal buildings. The state of Alaska assumed responsibility for operating the two facilities in 1960.

19480601	Jun 1, 1948: Delos W. Rentzel became CAA Administrator. He succeeded Theodore P. Wright (see Sep 23, 1944), who had submitted his resignation on Jan 11. Before his appointment, Rentzel had served as president of Aeronautical Radio, Inc., from 1943 to 1948, and for 12 years prior to that he had been director of communications for American Airlines. During World War II, he served as a consultant to the Secretary of War on navigational aids and to the Secretary of the Navy on Pacific routes. He was educated at Texas A. & M., where he studied electrical engineering. (See Oct 4, 1950.)
19480601	Jun 1, 1948: Limited operations began at a major new airport built on the site of Idlewild golf course at Jamaica, N.Y. Regular commercial operations started on Jul 1. The facility was dedicated on Jul 31 as New York International Airport, but was unofficially known as Idlewild. (See Dec 24, 1963.)
19480616	Jun 16, 1948: The International Aviation Facilities Act became law. It authorized the CAA Administrator to improve air navigation facilities abroad and to train foreign nationals to operate such facilities whenever it benefited U.S. air carriers. The act gave the Administrator responsibility for maintaining a record of deficiencies in aviation facilities used by U.S.-flag carriers and to plan appropriate programs for their correction.
19480619	Jun 16 and 19, 1948: President Truman signed two amendments to the Civil Aeronautics Act of 1938 to encourage the financing of aircraft purchases. The first limited the liability of owners not actually exercising control over the operations of the aircraft; the second provided a system for the recording of liens on aircraft engines and spare parts used by air carriers.
19480624	Jun 24, 1948: The Soviet Union stopped rail and road traffic between Berlin and the West. The Western Powers began airlifting vital supplies to the beleaguered city. The following month, at the request of the Air Force, CAA dispatched an initial group of 20 volunteer air traffic controllers to Frankfurt and Berlin for duty in the airlift operation. CAA also provided VHF air navigation aids. The Berlin blockade was officially lifted on May 12, 1949.
19480629	Jun 29, 1948: The President approved legislation that authorized and funded a training program for air traffic control tower operators. It also empowered the CAA Administrator to conduct studies and research to determine the most desirable qualifications for such operators. (See Calendar Year 1968.)
19480630	Jun 30, 1948: The Bell Telephone Laboratories made the first public demonstration of the point contact transistor, developed by two Bell scientists, John Bardeen and Walter Brattain. The background of this achievement included work by another Bell scientist, William Shockley, who in 1951 invented a simpler and improved amplifying device, the junction transistor. Great advances in electronics resulted from the introduction of the transistor, which virtually replaced the vacuum tube.

19480701	Jul 1, 1948: New amendments to the Civil Aeronautics Act of 1938 became effective which authorized CAB to delegate to the CAA Administrator certain of its safety rulemaking and accident investigating functions; removed the restriction that air navigation facilities be established only on airports and along civil airways; and redefined and clarified a number of administrative and investigative responsibilities of the Administrator.
19480729	Jul 29, 1948: Approval of a CAA mission to Venezuela brought the number operating in South America to four. In order of their establishment, they included missions to Peru, Colombia, Bolivia, and Venezuela.
19480801	Aug 1, 1948: The Secretary of Defense issued an order abolishing the 32-year-old Aeronautical Board, composed at the time of three members each of the Air Force and Navy and one Army member. Its functions were transferred to the Munitions Board and the Research and Development Board.
19480829	Aug 29, 1948: A Northwest Airlines Martin 2-0-2 crashed near Winona, Minn., with the loss of all 37 persons aboard. The accident showed structural problems with the wings, and all 2-0-2s were withdrawn from service. After extensive modification, they returned to service on September 1, 1950, with the designation 2-0-2A, but airline confidence in the model had been weakened.
19480913	Sep 13, 1948: To speed certification of aircraft and aircraft parts, CAA announced that type certificates would be issued in its nine regions rather than at headquarters in Washington, D.C.
19481103	Nov 3, 1948: CAA announced that Wallace Clark and Company, a management consultant firm, would conduct an impartial survey of the agency's management practices. Submitted in Mar 1949, the study concluded that the Administrator was involved in too much routine contact with subordinates. Results of the study included a reduction in the number of officials reporting directly to the Administrator. (See Jun 2, 1949.)
19481122	Nov 22, 1948: The Wright brothers' Kitty Hawk airplane, the Flyer I, arrived at the Smithsonian Institution after 20 years in the South Kensington Museum, London.
19481130	Nov 30, 1948: The Curtiss-Wright Corporation demonstrated its new reversible-pitch propellers, which permitted a DC-4 transport to make a controlled descent from 15,000 to 1,000 feet in 1 minute 22 seconds.
19481201	Dec 1, 1948: CAA commissioned the San Juan air route traffic control center.
19481207	Dec 7, 1948: The American Federation of Labor chartered the Flight Engineers International Association (FEIA), comprised largely of flight engineers with backgrounds in mechanics. Flight engineers had originally sought to join the Air Line Pilots Association, but had been rebuffed by the pilots. Eventually, FEIA representated flight engineers at eight major U.S. airlines.

19481228	Dec 28, 1948: CAA ordered a complete end to racial segregation at Washington National Airport following a Department of Justice opinion that the Administrator had authority to issue such a ruling notwithstanding the apparent incorporation of the Virginia segregation statute in the Federal law governing the airport.
19481229	Dec 29, 1948: CAA revealed details of a U.S.-U.K. agreement based on previous action by the International Civil Aviation Organization (ICAO). The United Kingdom agreed to install an airway and traffic control system similar to that then in use in the United States. The United States would procure four low-frequency radio ranges to supplement the three already operating in the British Isles, and assist in installing the facilities as requested.
19481231	Calendar year, 1948: CAA type-certificated the Allison model 400-C-4 jet engine this year, the first jet engine to receive CAA approval for commercial transport operations.

1949

19490111	Jan 11, 1949: The Civil Aeronautics Board granted a certificate of convenience and necessity as a local service carrier to All American Airways, which had been founded in 1937 as All American Aviation. Beginning operations under its new certificate on Mar 7, All American served the northeastern United States. On Jan 1, 1953, the carrier changed its name to Allegheny Airlines. It subsequently absorbed Lake Central Airlines on Jul 1, 1968, and Mohawk Airlines on Apr 12, 1972. (See Oct 28, 1979.)
19490204	Feb 4, 1949: CAA granted authorization for commercial planes to use ground control approach (GCA) radar as a "primary aid" for bad-weather landings. (See Apr 9, 1947.)
19490225	Feb 25, 1949: The U.S. and Greek Governments concluded an agreement that provided for a civil aviation mission to Greece under the sponsorship of the Economic Cooperation Administration. The thirteen CAA specialists named to the mission left for Greece in April to aid in the establishment, maintenance, and operation of civil aviation facilities. CAA team also was to train Greek personnel in the operation and maintenance of the facilities, which were to provide at least minimum requirements for safe international air transportation.
19490301	Mar 1, 1949: The Hoover Commission (Commission on Organization of the Executive Branch of the Government) submitted to Congress its recommendations concerning reorganization of the Commerce Department. Disagreeing with the suggestion of its task force that a new Department of Transportation be created, the Commission recommended grouping within the Commerce Department all major nonregulatory transportation activities of the Federal government. The report visualized replacing CAA with a Bureau of Civil Aviation having the authority to promulgate and enforce all air safety rules, while the Civil Aeronautics Board exercised only review responsibility with respect to such rules. It also recommended that the aeronautical research function as well as the National Advisory Committee for Aeronautics (NACA) be brought into the proposed Bureau of Civil Aviation. (See Feb 9, 1950.)
19490302	Feb 26-Mar 2, 1949: The Lucky Lady II, a USAF Boeing B-50 commanded by Capt. James Gallagher, made the first nonstop round-the-world flight, covering 23,452 miles in 94 hours 1 minute. The aircraft, which took off from and returned to Carswell Air Force Base, in Fort Worth, Tex., was refueled in flight four times. (See Dec 23, 1986.)
19490330	Mar 30, 1949: The President approved legislation providing for construction of a permanent radar defense network for the United States.
19490404	Apr 4, 1949: The North Atlantic Treaty was signed by the U.S. Secretary of State and the Foreign Ministers of Britain, Belgium, Canada, Denmark, France, Holland, Iceland, Italy, Luxembourg, Norway, and Portugal. Article 5 of the treaty specified that "an armed attack against any one or more of them in Europe or North America shall be considered an attack against them all."

19490518	May 18, 1949: New York's first helicopter station began operating at pier 41 on the East River.
19490531	May 31, 1949: Earl F. Ward died at age 56. An American Airlines executive, Ward organized the nation's first air traffic control center (see Dec 1, 1935). In Mar 1936, he joined the Commerce Department as Supervisor, Airway Traffic Control, and during the next year became head of the new Airways Operations Division. Ward played an important part in conceiving and organizing the early en route traffic control system. At the time of his death, he was assisting in aviation planning in Chicago on behalf of the Civil Aeronautics Administration.
19490602	The principle headquarters offices now were: Federal Airways (building, maintaining, and operating the air navigation and air traffic control system); Airports (the Federal Aid Airport Program and airport advisory services); Aviation Safety (airworthiness, airman competency, medical certification, flight operations, and other safety issues); Technical Development (development and testing of air navigation devices and other aviation products); General Counsel (legal affairs); Aviation Information (information, publications, and audio-visual services); and Aviation Development (a recently formed office bringing together the developmental functions of aviation education, air marking, personal flying promotion, and flight information). The Office of Field Operations was abolished. A new International Region, with headquarters in Washington, was given responsibility for CAA's international affairs and missions abroad. The reorganization also involved a sharper delineation of the responsibilities of the Administrator's "special" and "program" staff officials.
19490602	Jun 2, 1949: Administrator D. W. Rentzel announced completion of a CAA reorganization begun in May 15, 1945 (see that date). The change was intended to centralize policy control to assure uniformity, while allowing technical supervision of programs to continue in the field. The Administrator was now assisted by two deputies, one charged with general supervision of personnel, budget, and management functions. The other deputy coordinated the activities of Washington offices in planning all programs and evaluating their implementation in the field. Additional steps to insure a closely knit organization included establishment of a staff school where technical personnel would receive uniform training in administrative procedures, and placement of Washington representatives on regional boards for approving new types of aircraft.
19490630	May 1-Jun 30, 1949: Operation Blackjack, a joint Air Defense Command/CAA training exercise, was conducted in the northeastern part of the United States to develop effective procedures for separating "unfriendly bombers" from normal air traffic moving in the area.
19490731	Jul 1949: CAA inaugurated the first direct radiotelephone communications service between aircraft and an Air Route Traffic Control Center at the Chicago ARTCC. Extension of this capability to all ARTCCs was completed in 1955.

19490812	Aug 12, 1949: Effective this date, CAB awarded experimental five-year certificates authorizing scheduled all-freight operations to four airlines: Slick Airways, the Flying Tiger Line, U.S. Airlines, and Airnews. The four were among the few independent freight lines that had survived a rate war with the scheduled air carriers. In the long term, the most successful of them proved to be the Flying Tiger Line, which had been formed on Jul 25, 1945, by veterans of the American Volunteer Group that had served in Asia under Gen. Claire Chennault.
19490923	Sep 23, 1949: President Truman announced that within recent weeks the Soviet Union had succeeded in exploding a nuclear device.
19491031	Oct 1949: CAA issued to Compania Mexicana de Aviacion, Mexico City, the first certificate authorizing a foreign repair station to perform work on U.S. aircraft. The authority to issue foreign repair station certificates was provided by Civil Air Regulations Amendment 52-1, which became effective Mar 10, 1949. By Jun 30, 1952, CAA had certificated 17 foreign repair stations.
19491101	Nov 1, 1949: An Eastern Airlines Douglas DC-4 and a Lockheed P-38 collided on final approach to Washington National Airport as the P-38 overtook the airliner. All 55 people aboard the air carrier died, a higher toll than in any previous U.S. air accident. The fatalities included Congressman George J. Bates (R-Mass.) and former Congressman Michael J. Kennedy (D-N.Y.). The P-38, a twin-engine fighter had been recently purchased for delivery to the Bolivian government. Its pilot, a Bolivian citizen on a familiarization flight, survived. CAB's report cited the probable cause of the accident as the P-38 pilot's execution of a straight-in final approach without proper clearance and without exercising the necessary vigilance.
	Six weeks later, on Dec 12, Washington National was the scene of another fatal accident when a Capital Airlines DC-3 carrying 20 passengers and a crew of three stalled during approach and crashed into the Potomac River, killing the pilot, copilot, and four passengers.
19491125	Nov 25, 1949: CAA's Administrator enunciated the "single runway policy" covering the use of Federal matching funds in the Federal-aid airport program. In substance, the new policy stated additional runways that provided only wind coverage or conveniences without increasing traffic capacity were not of sufficient value to justify the cost of construction. (See Jan 9, 1947.)

19491231	Dec 1949: The Air Coordinating Committee authorized the establishment, under its Air Traffic Control and Navigation Panel, of a full-time special working group to develop a specific and detailed transitional "common system" based on the recommendations of the RTCA SC-31 report (see Feb 17, 1948). The group included operational and technical specialists representing both government and industry and both civil and military aviation. During the week of Oct 22, 1950, at Wright-Patterson Air Force Base, the group conducted an operational demonstration of the air traffic principles recommended for use during the transitional period. Its report, Air Traffic Control and the National Security, completed in Dec 1950, recommended that radar be put into immediate use for monitoring and expediting air traffic control in terminal areas.
19491231	Calendar year, 1949: The Brookings Institution issued a study entitled National Transportation Policy, a study that was an outgrowth of the participation of authors Charles L. Dearing and Wilfred Owen in the activities of the Hoover Commission (see Mar 1, 1949). The report recommended that Congress establish four offices for the water, highway, aviation, and railroad modes and a Transport Regulatory Commission that would take over the rate setting and other economic regulatory functions of the Civil Aeronautics Board, the Maritime Commission, and the Interstate Commerce Commission. The study also recommended against an independent accident investigation board. (See Oct 15, 1966)

1950

19500103	Jan 3, 1950: Pan American Airways changed its name to Pan American World Airways. Nine days later, on Jan 12, the company completed its round-the-world radio-telephone communications system, which the Civil Aeronautics Administration had approved for air-ground operations. This long-term project for conversion from code to voice involved 19,687 miles of voice radio link and 32 high-frequency ground stations.
19500209	Feb 9, 1950: A CAA Program Planning Staff report recommended that Congress establish a government corporation to operate Washington National Airport and any other Federal airport established in the Washington, D.C. area in the future. The recommendation, first put forward a year earlier by the Hoover Commission, died only to be revived more than three decades later. (See Jan 29, 1971, and Oct 30, 1986.)
19500309	Mar 9, 1950: CAA awarded its largest contract in history for the purchase of 450 distance-measuring equipment (DME) ground stations. The $4,210,750 contract to the Hazeltine Electronics Corporation included spare parts.
19500318	Mar 18, 1950: President Truman approved legislation (Public Law 463) authorizing the Secretary of the Interior to acquire, construct, operate, and maintain public airports near national parks and monuments in cooperation with local government agencies and with the assistance of CAA in accordance with the Federal Airport Act (see May 13, 1946).
19500329	Mar 29, 1950: CAA announced that it would close its facilities at Midway Island on May 1 due to the Navy's decision to withdraw from the island. (See Sep 1947.)
19500506	May 6, 1950: To improve communications between CAA and the general aviation community, Administrator Rentzel established an Aviation Development Advisory Committee. The Director of CAA's Office of Aviation Development served as executive secretary of the Committee, which consisted of 12 qualified private citizens representing manufacturers, users, and others interested in the utilization of aircraft for personal, agricultural, and other non-air-carrier purposes.
19500515	May 15, 1950: A conference between British aviation officials and representatives of CAA and Civil Aeronautics Board opened in Washington to seek agreement on a number of technical problems related to airworthiness and certification requirements. (See Feb 10, 1953.)

19500524	May 24, 1950: Reorganization Plan No. 5 became effective. The plan, one of a number put into effect under the Reorganization Act of 1949, stemmed in part from recommendations of the Hoover Commission (see Mar 1, 1949). It transferred to the direct control of the Secretary of Commerce all functions of all agencies and officers within his Department except those of CAB and certain similar agencies having rulemaking and adjudicatory powers. The Secretary redelegated to the CAA Administrator those functions affected by the reorganization. (See Mar 30, 1953.) Reorganization Plan No. 13 also became effective this date, transferring to the Chairman of CAB executive and administrative functions formerly held by the entire Board.
19500625	Jun 25, 1950: North Korean forces launched an invasion of South Korea. Two days later, President Truman announced that he had ordered the U.S. Air Force to assist South Korea, beginning U.S. involvement in the war.
19500711	Jul 11, 1950: The air forces of the United States and Canada concluded a two-day conference on which they agreed to the erection of the Pinetree radar network on Canadian soil. Also on Jul 11, CAA and the U.S. Air Force formed the Air Defense Planning Board to plan for civil participation in air defense.
19500801	Aug 1, 1950: CAA commissioned the Wake Island air route traffic control center.
19500803	Aug 3, 1950: Legislation enacted on this date provided criminal sanctions for knowing and willful display of false or misleading marks as to an aircraft's nationality or registration.
19500808	Aug 8, 1950: To help CAA personnel keep pace with swift advances in aeronautical science, Congress enacted legislation allowing the Secretary of Commerce to detail agency personnel for advanced training at civilian or other institutions or at schools which the Secretary operated.
19500808	Aug 8, 1950: Following field tests, CAA consolidated airport traffic control towers and airway communications stations at 16 smaller airports in the continental United States. The agency subsequently expanded the program, reaching a peak of 84 combined station-towers in 1958. (See Nov 30, 1981.)
19500907	Sep 7, 1950: President Truman approved Public Law 762, which directed the Secretary of Commerce "to construct, protect, operate, improve, and maintain" a second public airport for the Washington, D.C., area. The act authorized appropriations not to exceed $14 million (see Jul 11, 1958), and Congress subsequently authorized $1 million to launch the project. By the end of 1951, 1,046 of the required 4,570 acres had been purchased at Burke, Va. When local opposition to the project developed, Congress refused to appropriate additional funds. Further studies were made in the 1953-1955 period. (See Dec 1955.)

19500909	Sep 9, 1950: Amendments to the Civil Aeronautics Act allowed the Secretary of Commerce and CAB, as directed by the President, to develop and implement a plan for security control of air traffic when U.S. security was endangered, while permitting the maximum flow of air traffic. The Secretary was authorized to establish security zones in the airspace and, in consultation with CAB and the Departments of Defense and State, prohibit or restrict flights which could not be effectively identified, located and controlled with available facilities. (See Dec 20, 1950.)
19500915	Sep 15, 1950: CAA and the U.S. Weather Bureau issued a Memorandum of Understanding delineating responsibilities for weather and communications services carried out cooperatively by the two organizations. (See Aug 2, 1965.)
19500925	Sep 25, 1950: Overruling the Civil Aeronautics Board, President Truman permitted the merger of American Overseas Airlines into Pan American World Airways. (See Oct 24, 1945.)
19500929	Sep 29, 1950: President Truman signed an amendment to the Civil Aeronautics Act authorizing the Secretary of Commerce and the CAA Administrator to delegate to qualified private persons the authority to perform examinations, tests, and inspections and to issue certificates under the Act's Title VI (Safety Regulations). As the House report covering this legislation noted, the great postwar increase in civil aircraft and pilots had already caused CAA to enlarge its designee program in recent years. Using the provisions of the new legislation, CAA placed new delegation option procedures in effect on Nov 3, 1951 for small aircraft weighing no more than 5,000 lb. and carrying no more than five persons. Under these procedures, manufacturers of such aircraft could choose to apply for authority to submit information that would serve as the basis for CAA certification. On Nov 2, 1956, the delegation option procedures were revised to include aircraft and gliders weighing less than 12,500 lb., as well as small aircraft engines and propellers. (See Nov 25, 1947, and Oct 8, 1965.)
19500930	Sep 30, 1950: The Prototype Aircraft Act (Public Law 867) declared that congressional policy was to promote the development of improved transport aircraft, particularly those that were turbine-powered, especially adapted to economical cargo operations, or suitable for feeder-lines. The act authorized appropriations of up to $12.5 million for a five-year period. The Secretary of Commerce was directed to consult with interested government, labor, and industry groups in carrying out the act, and the Prototype Aircraft Advisory Committee was accordingly established in December.
19501004	Oct 4, 1950: Donald W. Nyrop became Administrator of Civil Aeronautics. He succeeded Delos W. Rentzel (see Jun 1, 1948), who had submitted his resignation on Sep 18 to become Chairman of the Civil Aeronautics Board. Nyrop was Deputy Administrator when nominated to be CAA Administrator, and had previous service in the General Counsel's office of both CAA and CAB. He received his B.A. degree from Doane College in 1934, and a law degree from George Washington University in 1939. (See May 18, 1951.)

19501021	Oct 15-21, 1950: During this seven-day period, CAA put into operation the first omnirange (VOR) airways (see Calendar Year 1947). Although 271 omniranges had already been commissioned in different parts of the United States, this marked the initial designation of a chain of these ranges as a controlled airway. The new routes, approximately 4,380 miles long, linked such major terminals as Kansas City, Denver, Albuquerque, El Paso, Omaha, and Oklahoma City. (Jun 1, 1952.) During fiscal year 1951, CAA began enhancing the VOR airways with distance measuring equipment (DME) to assist in low visibility approaches.
19501031	Oct 1950: The U.S. Air Force announced a program to replace all its piston-engine fighter aircraft in Europe with jets.
19501220	Dec 20, 1950: Executive Order No. 10197, prepared and issued this date at the request of the Department of Defense, directed the Secretary of Commerce to exercise security control over aircraft in flight. Subsequent regulations promulgated by the CAA Administrator under delegation from the Secretary of Commerce made mandatory the filing of flight plans for aircraft entering or flying within designated air defense identification zones (ADIZs) over and adjoining the continental United States. A system for voluntary filing of plans for flights within ADIZs had been in effect previously. (See Sep 9, 1950, and Jun 1952.)
19501231	Dec 1950: Langley Aeronautical Laboratory made a worldwide analysis of atmospheric turbulence and gusts on the basis of data obtained from NACA-developed recorders carried on commercial airliners on transpacific and South American routes.
19501231	Calendar year, 1950: CAA began the installation of mechanical interlock devices in areas with high-density traffic. Developed by CAA, the new push button system eliminated most of the verbal coordination formerly required between the air traffic control center and the airport tower in assigning flight altitudes during IFR conditions.

1951

19510121	Jan 21, 1951: CAA created an Office of Aviation Defense Requirements to administer priorities and allocations for civil aviation under the Defense Production Act of 1950. The immediate task of the new office was to handle Defense Order rating authorizations for new air carrier aircraft and for necessary spare parts and equipment to keep U.S. and allied foreign carriers in operation during the Korean emergency.
19510228	Feb 28, 1951: A U.S.-Canadian memorandum of agreement concluded on this date simplified notification procedures for private and non-scheduled aircraft flights from Canada to the United States. The United States negotiated a similar agreement with Mexico in Feb 1952. Effective May 15, 1953, an expansion of the agreement with Canada made transborder flight notification service available to pilots flying in either direction across the border.
19510331	Mar 1951: Pratt & Whitney began flight tests of its new 10,000-pound thrust J57 jet engine, which eventually powered the B-52, YB-60, F-l00, F-l0l, YF-l05A, KC-135, Boeing 707, F4D, and A3D, as well as the Snark missile.
19510421	Apr 21, 1951: The experimental Chase XC-123A, powered by four J47 turbojet engines, made its first flight. Designed as a troop and cargo transport for the Air Force, the XC-123A was fitted with four turbojet engines, installed as pairs in pods.
19510518	May 18, 1951: Charles F. Horne became Administrator of Civil Aeronautics. He succeeded Donald W. Nyrop (see Oct 4, 1950), who became Chairman of the Civil Aeronautics Board on this same day. (Nyrop had submitted his resignation from the CAA post on Mar 18.)
19510518	Horne, a regular Navy officer, graduated from the U.S. Naval Academy in 1926 and received an M.S. degree in communications and electronics from Harvard in 1935. On loan from the Navy, he became Acting Director of CAA's Airways Division in 1949. From 1950 to 1953, he served as vice chairman of the Radio Technical Commission for Aeronautics. Horne went on the retired list of the Navy in May 1951 as a Rear Admiral. (See Apr 27, 1953.)
19510531	May 31, 1951: Roosevelt Field, on Long Island, N.Y., closed. The facility had opened 40 years previously and had subsequently been named for Quentin Roosevelt, a son of Theodore Roosevelt killed in World War I. Lindbergh took off from this field in 1927 for his epochal flight to Paris, and other famous aviators who used it included Richard E. Byrd, Clarence Chamberlin, and Amelia Earhart. The 250-acre site eventually became the home of the Roosevelt Shopping Center.

19510614	Jun 14, 1951: A new Title XIII of the Civil Aeronautics Act authorized the Secretary of Commerce to provide war risk insurance to U.S. air carriers when such insurance could not be obtained commercially on reasonable terms and conditions. Under the Federal Aviation Act of 1958, the war risk insurance program remained with the Secretary of Commerce rather than becoming a function of the new Federal Aviation Agency (FAA). In 1967, the program was transferred from Commerce to the new Secretary of Transportation, who delegated the function to FAA. Under the program, FAA maintained a premium standby insurance plan that would make aviation war risk insurance available at the outbreak of war to civil aircraft engaged in operations deemed in the national interest. The program also included non-premium war risk insurance for aircraft under contract to the Departments of Defense and State or committed to Defense for emergency use. (See Jul 31, 1970.)
19510627	Jun 27, 1951: CAA demonstrated the Ag-1, the first airplane designed exclusively for agricultural use. The Personal Aircraft Research Center at Texas A. & M. College constructed the plane under CAA contract.
19510630	Jun 30, 1951: During fiscal year 1951, which ended on this date, CAA assisted the Federal Civil Defense Administration (FCDA) in formulating plans for the use of civil aircraft in civil defense. In cooperation with FCDA and the National Association of State Aviation Officials, CAA distributed a suggested uniform State Plan for Civil Aviation Mobilization and Civil Defense.
19510710	Jul 10, 1951: Negotiations aimed at ending the Korean conflict began. Fighting continued, however, and hostilities were not formally ended until the signing of an armistice in Panmunjom on Jul 27, 1953.
19510726	Jul 26, 1951: The three U.S. armed services agreed to the establishment of Project Lincoln, a study of the air defense program by the Massachusetts Institute of Technology. (See Apr 10, 1953.)
19510911	Sep 11, 1951: The National Security Resources Board completed its air transport mobilization survey. Developed by a large group of aviation leaders from government and industry, the program outlined requirements for rapid mobilization of the U.S. air transport industry in the event of expanded war. (See Dec 15, 1951.)
19511010	Oct 10, 1951: The President approved the Mutual Security Act of 1951 to maintain security and promote foreign policy by furnishing military, economic, and technical assistance to friendly nations in the interest of international peace and security. The plan included a number of aviation assistance programs. The Mutual Security Act of 1952 continued the Mutual Security Agency, established to administer the act, until Aug 1, 1953, when its functions were transferred to the Foreign Operations Administration. The State Department's International Cooperation Commission and the Department of Defense assumed FOA's responsibilities on Jun 30, 1955.
19511112	Nov 12, 1951: Pursuant to Executive Order 10219 (Feb 28), the Department of Commerce established the Defense Air Transportation Administration to plan and direct the mobilization of U.S. civil aviation resources for effective utilization in the event of war.

19511210	Dec 10, 1951: The Kaman K-225, the world's first turbine-powered helicopter, made its initial flight. The Kaman Aircraft Corporation had developed the K-225 under contract for the U.S. Navy.
19511215	Dec 15, 1951: The Secretaries of Commerce and Defense signed the Civil Reserve Air Fleet Plan. The plan, developed in consultation with the airlines, stipulated that the airlines would provide ninety-one aircraft to the Military Air Transport Service within forty-eight hours of notification. An additional 271 aircraft were to be provided 30 days later. The plan was the result of an executive order issued by President Truman on Mar 2, 1951, which, in part, authorized the Secretary of Commerce to transfer or assign civil air carriers to the Department of Defense during mobilization.
19511231	Calendar year, 1951: CAA placed the first nine DME (distance-measuring equipment) ground transponders in experimental operation along the Chicago-New York airway.
19511231	For the first time in U.S. history, air passenger-miles flown (10,679,281,000) exceeded passenger-miles traveled in Pullman cars (10,224,718,000)
19511231	CAA heart specialist Dr. J. E. Smith developed the ballistocardiograph, a machine that made the electrocardiograph more effective in detecting heart abnormalities.

1952

19520105	Jan 5, 1952: Using Douglas DC-6As, Pan American World Airways inaugurated the first all-cargo air service across the North Atlantic.
19520107	Jan 7, 1952: CAA inaugurated radar departure control procedures at the Washington air route traffic control center. Use of radar for approach began Jul 1, 1952.
19520203	Feb 3, 1952: CAA put into effect a plan to consolidate aviation safety functions under one chief in each of its seven continental regions and to reorganize the Washington Office of Aviation Safety. Under development for more than a year, the program was intended to achieve better coordination between CAA's field services and the public and the industry. Designed also to keep pace with rapid changes in technology, the reorganization placed air carrier and general aviation specialists in separate groups.
19520220	Feb 20, 1952: President Truman established a temporary Airport Commission under the chairmanship of James H. Doolittle, with CAA Administrator C. F. Horne and J. C. Hunsaker of NACA as members. The action responded to a series of crashes, due to varied causes, in the New York-New Jersey metropolitan area. These events had raised residents' fears and prompted authorities to close Newark Airport temporarily:
	* On Dec 16, 1951, a Miami Airlines C-46 crashed in Elizabeth, N.J., shortly after takeoff from Newark, killing all 56 people on board.
	* On Jan 14, 1952, a Northeast Airlines Convair 240 approaching La Guardia Airport crashed into Flushing Bay with no fatalities.
	* On Jan 22, 1952, an American Airlines Convair 240 crashed in Elizabeth, killing seven people on the ground and all 23 in the airplane.
	* On Feb 10, 1952, a National Airlines DC-6 crashed in Elizabeth after taking off from Newark, killing four people on the ground and 29 of the 63 persons on the airplane.
	Truman asked the Commission to restudy the nation's policy on airport location and use, considering the well-being of people living near airports, as well as national defense requirements and the economic importance of a progressive and efficient aviation industry. The Commission was also instructed to take into account: (1) the Federal, State, and local investment in existing civil and military airports and the factors affecting the utility of airports to adjacent communities; (2) governmental actions to lessen hazards surrounding existing civil and military airports; (3) assignment of newly activated military units to existing airports, with particular regard for potential hazards to the communities involved; (4) site selection for new civil and military airports and the factors affecting relocation of existing airports; (5) joint civil/military use of airports; and (6) legislation and appropriations necessary to carrying out appropriate policy. (See May 16, 1952.)

19520305	Mar 5, 1952: CAA commissioned the Norfolk air route traffic control center.
19520401	Apr 1, 1952: All CAA facilities began using a new phonetic alphabet replacing the familiar "Able-BakerCharlie." Recently adopted by the International Civil Aviation Organization, the new alphabet used words with almost the same pronunciation in all languages.
19520501	May 1, 1952: The first tourist class air service over the North Atlantic began, in accordance with an agreement between eleven International Air Transport Association member airlines that had been announced on Dec 5 of the previous year.
19520502	May 2, 1952: The British Overseas Airways Corporation (BOAC) inaugurated the first scheduled air service with turbojet airliners, de Havilland Comet I's, operating between London and Johannesburg. (See Jan 10, 1954.)
19520516	May 16, 1952: The Airport Commission forwarded its report, The Airport and Its Neighbors, to the President. Calling for greater Federal and local support of airport development, the report made 25 specific recommendations for improvements, including integrated municipal and airport planning, effective zoning laws, positive air traffic control, Federal certification of airports, preferential runways and flight patterns, and development of helicopters for civil use.
19520531	May 1952: J. B. "Doc" Hartranft, Jr., was named president of the Aircraft Owners and Pilots Association (AOPA). He had served as general manager of the organization since its founding in 1939, and succeeded the original president, C. Townsend Ludington. With AOPA vice president Max Karant, Hartranft would become a vigorous advocate in behalf of general aviation in the face of growing airspace demands from commercial and military aviation. After Hartranft's retirement in May 1977, John L. Baker became AOPA president, and was in turn succeeded by Phil Boyer in 1991.
19520601	Jun 1, 1952: Forty-five thousand miles of very-high-frequency (omnirange) airways, referred to as "Victor" airways, were put in operation. Like the then existing 70,000 miles of Federally maintained low-frequency airways, the "Victor" routes were 10 statute miles in width. (See Oct 15-21, 1950 and Jun 29, 1961.)
19520617	Jun 17, 1952: The Council of the International Civil Aviation Organization (ICAO) adopted a recommendation that, pending development of a more suitable form of speech, English should be used as a universal language in aeronautical radiotelephony and should be available for communications involving international air services. This recommended practice, which became applicable on Apr 1, 1953, was contained in an amendment to Annex 10 of the Convention on International Civil Aviation (Vol. II, Section 5.2.1.1.2).

19520630	Jun 1952: The U.S. Air Force and the Civil Aeronautics Administration worked out an agreement under which 11 CAA air route traffic control centers would furnish appropriate air defense units with flight movement data on aircraft penetrating or operating within air defense identification zones (ADIZs). This agreement followed tests conducted by experimental aircraft movement identification sections (AMIS) established at the Boston and Seattle ARTCC centers. (See Dec 20, 1950, and Dec 1, 1955.)
19520701	Jul 1, 1952: All CAA facilities and services were scheduled to begin using knots and nautical miles on this date, establishing a single military-civilian standard measurement for speed and distance used in air navigation. The change had been announced in the CAA Journal on Aug 15, 1950.
19520715	Jul 15, 1952: The Secretaries of Defense and Commerce approved a plan for the security control of air traffic (SCAT) during various defense warning conditions. Adopted by the Joint Chiefs of Staff in collaboration with representatives of civil aviation groups, the plan aimed at permitting the maximum of civilian and military flying consistent with national defense requirements. (See Jul 20, 1957.)
19520720	Jul 20, 1952: Because of a curtailment of operating funds, CAA ceased publication of its CAA Journal. (See Jan 15, 1940.)
19520731	Jul 15-31, 1952: Two USAF Sikorsky H-19 helicopters made the first transatlantic helicopter flight, flying from Westover Field near Boston to Prestwick, Scotland, with stopovers in Maine, Labrador (for 10 days), Greenland, and Iceland. (See May 31-Jun 1, 1967.)
19520831	Aug 1952: CAA established a hemisphere headquarters for technical cooperation in the field of civil aviation in Panama City, Panama. This office acted as a pool of technical talent to assist Latin American countries participating in civil aviation development projects under the Point Four program, and supplemented the work of CAA missions in Colombia, Bolivia, Ecuador, Panama, Costa Rica, and Honduras.
19521020	Oct 20, 1952: Pan American World Airways announced its order for three British jet airliners, de Havilland Comet IIIs, to be delivered in 1956. (See Oct 13, 1955.)
19521101	Nov 1, 1952: The U.S. exploded the first hydrogen bomb on Eniwetok Island. On Aug 20, 1953, the U.S.S.R. announced it had tested an H-bomb "within the last few days."
19521204	Dec 4, 1952: CAA Administrator C. F. Horne established a Turbine-Powered Transportation Evaluation Team to: (1) assure uniformity in the handling of turbine-powered transport certification projects between regions and for all manufacturers, (2) make its members unquestioned authorities in this field by intensively supplementing their past specialized training, and (3) make the team a central source of information on turbine-powered transport developments through maintaining contact with manufacturers, the military, experimental laboratories, foreign governments, and other appropriate bodies. After studies and discussions with more than 400 specialists in government and industry, the team completed a comprehensive report at the end of the following year.

19521231 Calendar year, 1952: CAA began its program of decommissioning the low and medium frequency four-course radio ranges, and replacing them with the very high frequency omnidirectional ranges. (See Jun 30, 1928, and Sep 5, 1974.)

1953

19530120	Jan 20, 1953: A specially recruited team of Italian-speaking CAA air traffic control experts left for Italy to assist that country in improving the operation of its airways.
19530120	Jan 20, 1953: Dwight D. Eisenhower became President, succeeding Harry S Truman.
19530210	Feb 10, 1953: CAA and British aircraft experts concluded extensive discussions of technical problems relating to airworthiness certification of turbine-powered transports. The meetings, termed "exploratory," sought eventual agreement on standards for U.S. certification of the airworthiness of jet transports, such as the British Comet. (See May 15, 1950.)
19530228	Feb 1953: The American Medical Association authorized the American Board of Preventive Medicine to establish aviation medicine as a distinct specialty and to grant certification for those physicians properly qualified.
19530330	Mar 30, 1953: The Commerce Department's Office of Transportation was abolished and its function thereafter focused directly in the Office of the Under Secretary for Transportation. (See May 24, 1950.)
19530410	Apr 10, 1953: The U.S. Air Force decided to proceed with the production of SAGE (Semiautomatic Ground Environment), an electronic defense system developed by MIT's Lincoln Laboratory. (See Jul 10, 1956.)
19530418	Apr 18, 1953: The first turboprop airliner, the Vickers V-701 Viscount, entered scheduled passenger service with British European Airways. On Jul 26, 1955, Capital Airlines introduced the British-made plane on its Washington-Chicago route. The Viscount was the first turboprop-powered aircraft to be used in U.S. scheduled service.
19530427	Apr 27, 1953: Frederick B. Lee was sworn in as CAA Administrator. He succeeded Charles F. Horne (see May 18, 1951), who resigned on Mar 6, 1953, because of the change in administration following President Eisenhower's election. Lee received his A.B. degree from Stanford in 1928 and a law degree from Harvard in 1931. A naval aviator in World War II, he rose to the rank of commander, authored a manual for naval flight instructors, and supervised training in night fighters and torpedo units. He joined CAA in 1946 as Program Planning Officer, was made executive assistant to the Administrator in Jan 1947, and became Deputy Administrator the same year. He was still Deputy Administrator when nominated on Mar 11, 1953, to be Administrator. (See Dec 8, 1955.)
19530601	Jun 1, 1953: Under the provisions of the Reorganization Act of 1949, President Eisenhower submitted Reorganization Plan No. 10 to the Congress. The plan provided for the separate payment of airline subsidies and fees by the Post Office Department for transportation of mail; such subsidies and fees had previously been paid as a lump sum by the Post Office. The plan went into effect Oct 1, 1953.

19530701	Jul 1, 1953: CAA moved its medical research function to the Civil Aeromedical Research Laboratory (CAMRL), established on the campus of the Ohio State University School of Medicine. On Jun 30, 1958, CAMRL moved back to the Aeronautical Center in Oklahoma City, by order of CAA Administrator James T. Pyle.
19530709	Jul 9, 1953: New York Airways became the first scheduled passenger helicopter air carrier to operate in the United States. (See Oct 1, 1947.)
19530831	Aug 1953: The first operational installation of a transmissometer, an electronic device for measuring visibility, was completed at Washington National Airport. The transmissometer was developed by the National Bureau of Standards, purchased and installed by the Weather Bureau, and used by CAA control tower operators to provide pilots with accurate information on visibility changes.
19530901	Sep 1, 1953: The Belgian airline Sabena opened the first international helicopter services, from Brussels to Rotterdam, Lille, and Maastricht.
19531001	Oct 1, 1953: CAA made extensive changes in its field organization, reducing the continental regions, excluding Alaska, from seven to four . . . . During the following year, the agency revamped its Washington headquarters organization. (See Aug 17, 1954.)
19531231	Calendar year, 1953: A study made of changes in the air carrier fleet between Jun 1950 and Jun 1953 indicated that while the number of aircraft had increased by 17 percent, the available lift capacity had increased by 42 percent, representing an annual gain of a billion ton-miles.

1954

19540101 Jan 1, 1954: Effective this date the Civil Aeronautics Board delegated to the Civil Aeronautics Administration responsibility for the investigation of accidents involving small airplanes. The Board retained its responsibility for investigating accidents involving fixed-wing aircraft of over 12,500 pounds, aircraft used in Alaskan air carrier operations, and helicopters or non-fixed-wing aircraft.

19540110 Jan 10, 1954: A British Overseas Airways Corporation (BOAC) de Havilland Comet I jetliner fell into the Mediterranean Sea with the loss of all 35 on board. BOAC temporarily suspended Comet operations after the accident, but resumed them on Mar 23. On Apr 8, a second Comet I crashed into the Mediterranean, killing all 21 occupants. Comet services were discontinued again when the Minister of Transport and Civil Aviation withdrew the jet transport's airworthiness certificate. On Feb 11, 1955, a Court of Inquiry into the two accidents announced that testing had revealed that the aircraft's fuselage shell was prematurely vulnerable to metal fatigue. De Havilland engineers subsequently corrected the deficiencies, but the setback helped American manufacturers to overtake the British in the commercial jetliner race. (See May 2, 1952, and Dec 20, 1957.)

19540131 Jan 1954: The Air Navigation Development Board (ANDB) was reconstituted with members from higher levels of Government (see May 23, 1948). The revised Board, chaired by Donald A. Quarles, Assistant Secretary of Defense (R. & D.), included: an Under Secretary of Commerce for Transportation; Assistant Secretary of the Navy for Air; Assistant Secretary of the Air Force (R. & D.); and a Special Assistant to the Secretary of the Army (see Oct 29, 1957). During its first meeting, the ANDB established a committee to study the military tactical air navigation system (TACAN) and the civilian very high frequency omnidirectional range/distance measuring equipment (VOR/DME) to determine which system offered the most benefits for the development of a common system of air navigation (see Jan 14, 1955). The committee consisted of representatives from all the military agencies, the Departments of Commerce and Defense, the National Business Aircraft Association, and the Aircraft Owners and Pilots Association, and was chaired by Milton W. Arnold of the Air Transport Association.

19540225 Feb 25, 1954: The delegates to the International Civil Aviation Organization (ICAO) conference in Paris signed a new agreement on the maintenance of North Atlantic weather stations. After Jul 1, 1954, the number of weather stations would be reduced from 10 to 9 and weather ships from 25 to 21.

19540331 Mar 1954: A team of CAA experts arrived in Formosa (Taiwan) to assist the Nationalist Chinese Government in developing omnirange air routes and in training Chinese personnel to operate and maintain the airways system. Although other CAA missions already operated under Foreign Operations Administration auspices in Bolivia, Chile, Colombia, Costa Rica, Ecuador, Greece, Honduras, Italy, Panama, and Turkey, this was the first CAA group to be assigned to the Far East under the FOA's Technical Cooperation Program.

19540501	May 1, 1954: The Air Coordinating Committee submitted its study on Civil Air Policy in response to a Presidential request of Sep 23, 1953, for a comprehensive review of U.S. policies in the primary areas of aviation interest in consultation with appropriate industry, local government, and private aviation groups. The committee's report covered a variety of topics and recommended the development of a single national common civil-military system of air navigation and air traffic control. On May 26, 1954, the President approved the report "as a guide in the future consideration of questions related to the subject of civil aviation and in making appropriate recommendations to Congress."
19540630	Jun 30, 1954: During fiscal year 1954, which ended on this date, the Eisenhower Administration’s retrenchment cut CAA's budget to $115.9 million, $20 million less than the agency received in fiscal 1953 and the lowest amount since 1949. The reduction was achieved by eliminating 1,500 positions, discontinuing control tower operations at airports with light commercial traffic, decommissioning nonessential communications stations, and curtailing services to private fliers.
	Congress appropriated no new funds for the Federal-aid airport program during fiscal 1954, but work proceeded on projects already funded. CAA reviewed and revised its policies toward future grants, concluding that they should concentrate on airports important from an overall national aviation standpoint. Federal funds should be used primarily for improvements contributing directly to safety and efficiency of aviation operations and to national defense, and improvements to airport terminal buildings should be excluded. An appropriation of $22 million reactivated the program for fiscal 1955. (See Jan 9, 1947, and Aug 3, 1955.)
19540712	Jul 12, 1954: CAA and the Air Force announced the completion of plans for CAA to operate radar approach control centers (RAPCONs) at 18 military bases, to serve both civil and military traffic. The first joint RAPCON had been commissioned at MacDill Air Force Base, Tampa, on Apr 4, 1954.
19540731	Jul 1954: CAA launched an Aviation Incentive Movement (AIM) designed to stimulate interest in aeronautics among precollege students. Prompted by CAA's concern over the shortage of engineers and other trained aeronautics personnel, AIM proposed to equip grade schools with aviation displays, conduct a series of nationwide clinics and competitions in the building and flying of model airplanes, and award flight or technical-training scholarships. Budgetary restraints limited the program to a modest effort. (See Sep 30, 1964.)
19540802	Aug 2, 1954: The Convair XFY-1, an experimental VTOL aircraft, made the first free vertical takeoff and landing by a fixed wing aircraft at Moffett NAS, Calif.
19540806	Aug 6, 1954: CAB announced the signing of an agreement with Norway, Sweden, and Denmark for the operation of an air route by U.S. and Scandinavian airlines between Los Angeles and Scandinavia via Greenland.

19540817	Aug 17, 1954: Administrator Frederick B. Lee placed in effect a reorganization of CAA (see Jun 2, 1949). He established a position of Assistant Administrator for Operations in the Office of the Administrator to exercise direct supervision over the Office of Airports, Office of Federal Airways, Office of Aviation Safety, and the Washington National Airport. The administrative staff offices were placed under an Assistant Administrator for Administration, also responsible for supervising the Aeronautical Center. An Assistant Administrator for Program Coordination (later redesignated Assistant Administrator for Planning, Research, and Development) supervised the Technical Development and Evaluation Center. The line of authority was officially defined as running through the program directors to the regional administrators. Effective Jan 1, 1955, Lee gave the program directors authority to take individual personnel actions involving professional or technical employees in any grade level at headquarters or in the field. (See Sep 4, 1956.)
19540901	Sep 1, 1954: CAA commissioned the Indianapolis air route traffic control center.
19541231	Dec 1954: CAA and the Air Force launched a program to accelerate the certification of Air Force air traffic controllers and promote greater standardization of air traffic control techniques for both civil and military operations. Under the plan, CAA delegated for one year to each group commander of the USAF Airways and Air Communications Service authority to administer CAA written examinations for control tower operators.

1955

19550114 Jan 14, 1955: The VORTAC Committee of the Air Navigation Development Board (ANDB) reported its inability to reach a unanimous decision to resolve the TACAN/VOR-DME controversy (see Jan 1954). Despite the split report of its committee, the ANDB favored development of TACAN. On Feb 8, however, the ANDB issued a press release stating that TACAN was under consideration to replace VOR-DME, the civil system in operation. This was the first public announcement of the TACAN/VOR-DME controversy, and it sparked a series of hearings in public and executive session by the Transportation and Communications Subcommittee of the House Committee on Interstate and Foreign Commerce. (See Aug 30, 1956.)

19550314 Mar 14, 1955: The first type-certification board meeting to be held in connection with the certification of a foreign-built aircraft under U.S. regulations met in Washington. Representatives of the Royal Netherlands Aircraft Factories, having applied for a U.S. type certificate on its Fokker F-27, met with the CAA engineering staff for preliminary discussions. Previous certification negotiations, such as those involving the British-built Viscount, had focused on U.S. acceptance of certification by the country of manufacture.

19550315 Mar 15, 1955: CAA commissioned the first of 15 very high frequency omnidirectional radio ranges (VORs) planned for Southeast and South Asia at Manila International Airport. Additional VORs programmed by CAA along routes followed by U.S.-flag carriers included 3 ranges for Formosa, 1 in Bangkok, and 10 for India.

19550503 May 3, 1955: Preliminary plans were announced for sending CAA specialists to assist Pakistan in developing its airways system under an agreement between Pakistan and the U.S. Foreign Operations Administration.

19550504 May 4, 1955: President Eisenhower, acting through the Director of the Bureau of the Budget, requested William Barclay Harding to serve as a consultant to study long-range needs for aviation facilities and aids. On Dec 31, 1955, Harding's Aviation Facilities Study Group submitted its report to the Director of the Bureau of the Budget. Concluding that the need to improve air traffic management had already reached critical proportions, the group recommended that an individual of national reputation, responsible directly to the President, be appointed to provide full time leadership in developing a program for solving the complex technical and organizational problems facing the government and the aviation industry. On Feb 10, 1956, following approval of the Harding Committee recommendations, President Eisenhower named Edward P. Curtis his Special Assistant for Aviation Facilities Planning. Curtis was to direct and coordinate "a long-range study of the Nation's [aviation facility] requirements," to develop "a comprehensive plan for meeting in the most effective and economical manner the needs disclosed by the study," and "to formulate legislative, organizational, administrative and budgetary recommendations to implement the comprehensive plan." (See Apr 11, 1957.)

19550505	May 5, 1955: An agreement between the United States and Canada provided for the construction and operation of a new distant early warning (DEW) radar defense line in northern Canada.
19550803	Aug 3, 1955: President Eisenhower signed Public Law 211, making major changes in the Federal-aid airport program and removing the 1958 time limit prescribed by the original act, as amended in 1950. The changes established a four-year program which placed the total funding for fiscal 1956 at $62.5 million and provided $63 million for each of the fiscal years 1957-59. The law also made all types and sizes of airports eligible for aid, included development of airport buildings as eligible items, and provided that funds apportioned yearly to States under an area population formula would remain available for two years. (See Jun 30, 1954, Oct 18, 1955, and and Jan 21, 1959.)
19551013	Oct 13, 1955: The aviation industry learned that Pan American World Airways had placed the first order for jet airliners to be produced in the United States, ordering both the Boeing 707 and Douglas DC-8. (See Oct 20, 1952.)
19551018	Oct 18, 1955: CAA announced new policies regarding airport grants in a booklet entitled "Federal-Aid Airport Program Policies and Procedures." Airports were to be considered eligible for matching Federal funds on the basis of the actual or potential aeronautical need of the community rather than, as previously, according to a level of activity equivalent to 3,000 annually enplaned passengers or 30 based aircraft. Airport terminal buildings, and any other buildings (except hangars) that were necessary to serve the public, were eligible for Federal aid. Federal funds could also be used to share the cost of automobile parking areas required for users of the airport. (See Aug 3, 1955, and Jan 21, 1959.)
19551024	Oct 24, 1955: United Airlines' flight engineers went on strike, due to the carrier's decision to require all future flight engineers to possess a pilot's certificate. After 51 days, the strike was broken when pilots belonging to the Air Line Pilots Association crossed the picket lines of the flight engineers union to occupy the seats vacated by the strikers. (See Jun 15, 1947 and Nov 8-14, 1956.)
19551030	Oct 30, 1955: The first commercial flights began at the new O'Hare Field, Chicago International Airport, which had been under construction since 1949. The facility was named for Lt. Commander Edward H. O'Hare, who won the Medal of Honor as a naval aviator in World War II. Subsequent years saw major improvements at the site, and the expanded Chicago-O'Hare International Airport was dedicated on Mar 23, 1963.
19551101	Nov 1, 1955: A bomb destroyed a United Air Lines Douglas DC-6B airliner after it took off from Denver, Colo., killing all 44 people on board. The Federal Bureau of Investigation later arrested J. G. Graham, who had taken out a large life insurance policy on his mother, a passenger on the ill-fated aircraft. Graham was subsequently convicted and sentenced to death.

19551115 Nov 15, 1955: The Civil Aeronautics Board gave the new name of supplemental air carriers to those charter operators previously designated large irregular carriers (see Sep 15, 1946). At the same time, the Board granted an interim exemption allowing the supplementals to offer, in addition to charter flights, a limited number of flights for which tickets or freight services were sold individually. The Board granted this interim exemption pending determination as to which operators would ultimately receive this operating authority. (See Jan 29, 1959.)

19551201 Dec 1, 1955: Major changes in the structure of the U.S. air defense identification zones (ADIZs) became effective, superseding substantial changes already established on Jan 15, 1953. Increased military capability made it possible to revise the structure in such a way as to exempt a substantial volume of flying from ADIZ requirements. Rules governing the security of air traffic were eased further on Jan 1, 1957. (See Jun 1952 and Apr 1, 1959.)

19551208 Dec 8, 1955: CAA Administrator Frederick Lee resigned after months of widening personal and policy differences with the Secretary and Under Secretary of Commerce (see spring 1956). The President accepted his resignation two days later. On Dec 12, 1955, Charles J. Lowen took the oath as Lee's successor. With Congress not in session, President Eisenhower had given Lowen an interim appointment on Dec 9.

A 1938 graduate of the University of Colorado, Lowen had worked in aviation sales and service until 1942, then served during World War II with the Air Transport Command. His experience after the war included three years as an executive with Capital Airlines and a period as Director of Aviation for Denver, as well as positions unrelated to aviation. He joined CAA as a consultant in May 1955 and became Deputy Administrator in July.

Lowen underwent surgery for cancer in May 1956, shortly before the Senate confirmed him as Administrator on Jun 6, and he died on Sep 5 of that same year. (See Feb 11, 1957.)

19551220 Dec 20, 1955: The Douglas DC-7C first flew. On May 15, 1956, CAA type-certificated the four engine, propeller-driven aircraft. Dubbed the "Seven Seas," the transport was able to fly nonstop between the United States and many European cities and had a maximum capacity of 99 passengers. The plane entered scheduled airline service with Pan American World Airways on Jun 1, 1956.

19551221 Dec 21, 1955: CAA and the Air Force announced an agreement under which CAA would for the first time use USAF Air Defense Command radar for civil air traffic control. Under the arrangement, CAA used information from the Air Defense Command radar at the Olathe, Kan., Naval Air Station to maintain approach control at nearby airports. CAA commissioned the facility for this use on Jan 15, 1957.

19551231	Dec 1955: Following Senate hearings in July on a second public airport for Washington, CAA reiterated its earlier position that the Maryland site occupied by Andrews Air Force Base would be the best location, but again recommended Burke, Va., as the next best alternative. A request for $34.7 million to complete the Burke project was turned down when strong opposition to that site continued at Senate hearings in July 1956. (See Sep 7, 1950, & Aug 1957.)
19551231	Dec 1955: The Civil Aeronautics Administration released its first five-year plan (1957-1961) for the expansion and modernization of the Federal airways system.
19551231	Calendar year, 1955: Bendix Aviation Corporation began manufacturing a transistorized automatic pilot for commercial and military sales. Prototype testing of the equipment had occurred the previous year on a B-25 flying laboratory. Automatic pilots had been installed previously in aircraft as accessory equipment, but the Bendix equipment was the first completely transistorized automatic flight control system designed for high performance aircraft.
19551231	For the first time on record, water sprayed from an airplane put out a forest fire. The plane completely supressed a blaze covering 50 acres on a steep slope near Wenatchee, Wash.

1956

19560111	Jan 11, 1956: Civil Aeronautics Administration officials convoked the first CAA jet age symposium as an initial step toward planning for the introduction of jets in civil operations. On Apr 20, CAA established a Jet Age Planning Group to work with industry and Government on potential civil jet transport problems.
19560220	Feb 20, 1956: CAA and the Air Force announced a joint study under Air Navigation Development Board auspices to evaluate the use of Air Defense Command (ADC) radar for civil air traffic control purposes. The evaluation included use of a microwave link to remote radar information between an ADC installation at Rockville, Ind., and the CAA ARTCC at Indianapolis, a distance of some 50 miles. This was the first use of a microwave link to transfer radar information between distant points for air traffic control. (See Nov 16, 1956.)
19560223	Feb 23, 1956: The Civil Aeronautics Board, noting the increasing frequency of near-collisions in the air and wishing to gain more information about such incidents, adopted Special Civil Air Regulation No. SR-416, which granted immunity from disciplinary proceedings to pilots reporting near misses. The identity of the pilot or other person making the report would be held in confidence by the Board. In cases where information about a violation of Civil Air Regulations was obtained by other means, however, the fact that the violation was voluntarily reported would not preclude enforcement, disciplinary, or remedial proceedings on the basis of such other information. In an attempt to gather information on near misses, some airlines had previously started their own anonymous reporting programs, but that effort had failed because pilots feared possible Federal disciplinary action. The CAB grant of immunity was intended to overcome this problem. (See Jul 10, 1959.)
19560321	Spring, 1956: The Senate Aviation Subcommittee, chaired by A. S. "Mike" Monroney (D-Okla.), held hearings relating to the resignation under fire of CAA Administrator Frederick Lee (see Dec 8, 1955) and to the larger allegation of the neglect of CAA by the Department of Commerce.
19560331	Mar 31, 1956: The Air Traffic Control Association (ATCA) was established as a nonprofit professional organization to promote the advancement of air traffic control. Originally composed only of controllers, ATCA broadened its membership to include governmental agencies, private companies, and other individuals and organizations worldwide.
19560527	May 27, 1956: The Sud-Aviation SE 210 Caravelle made its first flight. The first short-haul jet plane to go into general use, the Caravelle's rear-mounted engine configuration set a design trend for jet transports.

19560625	Jun 25, 1956: Its interest kindled by the Harding Report (see May 4, 1955), the Legal and Monetary Affairs Subcommittee of the House Committee on Government Operations, chaired by Rep. Robert H. Mollohan (D.-W.Va.), began extensive hearings on the Federal role in aviation. The hearings centered on: the adequacy of the Federal-aid airport program; problems in air traffic control and air navigational aids, with particular reference to the TACAN/VOR-DME controversy (see Aug 30, 1956); the effect of introducing commercial jets; the organization for aviation matters within the executive branch; the operational efficiency of CAA, including the effectiveness of its five-year program; and the problem of joint military and civil use of airports.
19560630	Jun 30, 1956: A Trans World Airlines Super Constellation and a United Air Lines DC-7 collided over the Grand Canyon, Ariz., killing all 128 occupants of the two airplanes. The collision occurred while the transports were flying under visual flight rules (VFR) in uncongested airspace.
	The accident dramatizing the fact that, even though U.S. air traffic had more than doubled since the end of World War II, little had been done to expand the capacity of the air traffic control system or to increase safeguards against midair collisions. Sixty-five such collisions had occurred in the United States between 1950 and 1955. This was partly because the ATC system did not have the ability to segregate VFR traffic from instrument flight rules (IFR) traffic, or slow-moving flights from faster ones. Many experts recognized a need to institute positive control -- requiring instrument flight over certain portions of the airspace irrespective of weather conditions.
	In the wake of the tragedy, Congress opened hearings to probe its relationship to the general problems of airspace and air traffic control management. (See Apr 11, 1957.)
19560630	Jun 1956: The first radar in a CAA program to "circular polarize" airport surveillance was completed at La Guardia Airport. The modification program would permit the radar to "see" aircraft passing through rain and snow. With the unmodified equipment, aircraft operating in storm areas often failed to show on the scope.
19560710	Jul 10, 1956: CAA announced the establishment in the Boston area of a Military Integration Branch of the Technical Development Center. The new office was created to provide closer coordination with military development programs, such as the SAGE Air Defense System, at Lexington and Deer Island, Mass. (See Apr 10, 1953, and Sep 21, 1959.)
19560724	Jul 24, 1956: CAA placed the Central Altitude Reservation Facility (CARF) in operation at Kansas City to handle all requests for temporary altitude reservations for military aircraft. Creation of this new facility marked a significant advance in controlling airspace at higher altitudes.
19560801	Aug 1, 1956: The President signed into law a bill permitting the Armed Forces to include flight instruction in Reserve Officer Training Corps (ROTC) programs.

19560830	Aug 30, 1956: The Air Coordinating Committee approved a study panel's recommendation that VOR and TACAN, the separate civil and military air navigation systems, be combined. VORTAC (an acronym used to describe a short-range navigation system, using the VOR directional component and the distance component of TACAN) would become a key element of the civil-military common system of air navigation and air traffic control. (See Jan 14, 1955, and Sep 16, 1985.)
	In addition, the Office of Aviation Information was abolished and its duties were divided between the Office of General Services and a Press and Publications Officer reporting to the Deputy Administrator. The reorganization extended to the regional offices, where counterparts to Washington program offices were to be established wherever there was a clear cut program that required field execution.
19560904	Sep 4, 1956: CAA announced a reorganization designed to streamline the Administrator's office and place greater reliance on a direct line of command as the basic core of CAA organization. The reorganization abolished the Assistant Administrator positions for Operations and for Planning, Research, and Development, and grouped most CAA functions under six major program offices. The Office of Air Navigation Facilities and the Office of Air Traffic Control were created from the former Office of Federal Airways, a change that had been previously announced. (One reason for creating a separate ATC Office, according to Administrator Lowen, was "to reverse completely the approach of having the operations of the air traffic control system governed by the kind of tools the engineers give the operators." Lowen believed that the men who operate the system should develop broad performance specifications for the equipment they need and then the engineers should devise and perfect such equipment.) The Office of International Cooperation was established to replace the International Region, and the Office of Aviation Safety was redesignated the Office of Flight Operations and Airworthiness. The two other two major program offices were the Office of Airports and the Technical Development Center.
19560927	Sep 27, 1956: CAA announced the formation of a team of aviation specialists to provide technical assistance and guidance to Afghanistan in developing a national airways system. Under the sponsorship of the International Cooperation Administration, the modernization program called for loans and expenditures totaling $14,560,000 to expand Afghanistan's air transportation facilities.

19561006	Oct 6, 1956: Upgrading its fleet of flight inspection aircraft, CAA announced that it would obtain five Convair 440s, with delivery in Dec 1957 and Jan 1958. To calibrate and evaluate the performance of airway navigation aids, the agency had previously used DC-3s and Beech 18s, which had an operating ceiling of only 12,000 feet. The pressurized Convairs (later re-engined to the Convair 580 configuration) permitted testing in altitudes up to 20,000 feet. For higher altitudes up to 50,000 feet, the agency had already borrowed two Martin B-57s from the Air Force, and began operations with these in 1957. During 1956-57, CAA also obtained 40 more surplus DC-3s, most of which were eventually modified for flight inspection duty Other changes to the flight inspection fleet in this era included the acquisition in 1958 of the first two of five Lockheed L-749 Constellations, which were used primarily in the Pacific area. (See Calendar Year 1940 and Jan 1962.)
19561031	Oct 1956: CAA leased a computer (IBM type 650) for installation in the Indianapolis ARTCC to assess the value of computers for the preparation of flight progress strips and to familiarize its personnel with this type of equipment.
19561114	Nov 8-14, 1956: At its annual convention, the Air Line Pilots Association changed its policy to allow mechanic-trained flight engineers eligible for membership. The union also adopted as mandatory policy a resolution declaring that no turboprop or turbojet aircraft be operated unless "manned at all flight stations by a qualified pilot." (See Oct 24, 1955 and Jul 21, 1958.)
19561116	Nov 16, 1956: CAA and the USAF Air Defense Command agreed on ground rules to guide a permanent Joint Radar Planning Group charged with developing programs for the joint use of civil and military radar in air traffic control. The agreement followed extensive study by the two agencies, including joint surveys and tests of operating radar facilities and operational evaluation programs conducted at CAA's Technical Development Center at Indianapolis. (See Feb 20, 1956, and Jan 9, 1958.)
19561120	Nov 20, 1956: CAA announced that it had awarded a $9 million contract for 23 long-range radars, the agency's largest single purchase of electronic equipment to that date. The new radars were to be used primarily for en route air traffic control purposes.

19561213

Dec 13, 1956: In Allegheny Airlines, Inc., v. Village of Cedarhurst, the U.S. Court of Appeals for the Second Circuit upheld a lower court judgment that permanently voided a Cedarhurst ordinance prohibiting flights over the village at an altitude under 1,000 feet. Cedarhurst, situated near New York International Airport (Idlewild), argued that the flights over the village constituted a "taking," as set forth by the Supreme Court in the Causby case (see May 27, 1946). In declaring the ordinance invalid, the Appeals Court said that airplanes using Idlewild did not impact on Cedarhurst to such a degree as to constitute a "'taking" within the doctrine of the Causby case." The court further held that Congress had preempted the regulation of air traffic and that any local regulations contrary to Federal rules were precluded. As a consequence of the Federal government's intervention in the case -- along with 10 airlines, the Port of New York authority, and other groups -- the Chairman of CAB with the concurrence of the CAA Administrator took action to repudiate a previous recognition of State authority to adopt and enforce their own safety regulations. (See Mar 1946.)

On Mar 10, 1964, with the Federal courts having consistently struck down locally imposed altitude restrictions, the Town of Hempstead, N.Y.-- a community near the same airport, now named John F. Kennedy International -- tried a new tack: it enacted a noise ordinance that prohibited the operation of any mechanism (including aircraft) that created noise in excess of a specified level of perceived noise decibels. Though the ordinance prescribed no flight patterns, on Jul 17, 1968, the U.S. Court of Appeals for the Second Circuit found in American Airlines v. Hempstead that adhering to the ordinance would have forced aircraft to deviate from existing traffic patterns and FAA procedures. The court concluded, therefore, that the Hempstead ordinance was invalid because it (l) operated in an area preempted by Federal legislation and regulation, (2) posed an unconstitutional burden on interstate commerce, and (3) was in direct conflict with valid Federal regulations. (See May 14, 1973.)

19561231

Calendar Year, 1956 The Cessna Aircraft Company introduced its Model 172, a four-seat general aviation aircraft. During the next 30 years, sales of all versions of the 172s built in the United States totaled an estimated 37,000.

1957

19570211 Feb 11, 1957: The Senate confirmed James T. Pyle as Administrator of Civil Aeronautics. He succeeded Charles J. Lowen, who died Sep 5, 1956 (see entry for Dec 8, 1955). Pyle had been Deputy Administrator under Lowen. He was nominated as Lowen's successor on Dec 20, 1956, and took the oath of office on an interim appointment on Dec 26, 1956.

Pyle studied business law and accounting at Princeton and Columbia Universities, aircraft mechanics at the Casey Jones School of Aeronautics, and meteorology and transportation at the Daniel Guggenheim School of Aeronautics, New York University. From 1935 to 1944 he had worked for Pan American Airways, and during World War II he had served in the Pacific with the Naval Air Transport Service. He returned briefly to Pan American after the war, then became president of the Air Charter Company in Denver, Colo., and later president of the Denver Air Terminal Corporation. In 1953, he became a special assistant to the Assistant Secretary of the Navy for Air, and in 1956 he joined CAA as Deputy Administrator. (See Dec 31, 1958.)

19570213 Feb 13, 1957: CAA held ground-breaking ceremonies for construction of an expanded Aeronautical Center at Oklahoma City. Financed by the city with a $10,665,000 bond issue, the new buildings replaced temporary construction, mostly World War II metal barracks. CAA ultimately concentrated the shop and warehousing activities of the four continental regions and many of its new training programs at the enlarged facility. (See Mar 15, 1946.)

19570228 Feb 1957: CAA began installation of the first "narrow band" radio receivers under a program designed to double the number of civil communications channels available for air traffic control use. The new receivers made it possible to space transmissions 100 rather than 200 kilocycles from the adjacent channel.

19570411 Apr 11, 1957: President Eisenhower transmitted to Congress an interim report by Edward P. Curtis, Special Assistant for Aviation Facilities Planning (see May 4, 1955). The report proposed the establishment of an Airways Modernization Board as a temporary organization to unite scattered responsibilities for system development and selection. Eisenhower stated that his Administration would submit legislation for the establishment of such a board and urged its early enactment.

	On May 10, 1957, Curtis submitted to the President his final report on aviation facilities planning. The report warned of "a crisis in the making" as a result of the inability of the airspace management system to cope with growing congestion and complex patterns of civil and military traffic. Curtis recommended the establishment of an independent Federal Aviation Agency "into which are consolidated all the essential management functions necessary to support the common needs of the military and civil aviation of the United States." Until such a permanent organization could be created, the Airways Modernization Board would function as an independent agency responsible for developing and consolidating the requirements for future systems of communications, navigation, and air traffic control. (See Jul 17, 1957.) Curtis's specific recommendations for improving air traffic including setting aside all airspace above a designated altitude for controlled separation at all times, and dividing certain airspace below this zone into "funnels" and "cylinders" reserved for Intrument Flight Rule (IFR) traffic.
19570422	Apr 22, 1957: CAA commissioned the Spokane air route traffic control center.
19570531	May 1957: Using CAA and USAF aircraft, CAA conducted a service test of VOL-SCAN (a computer for automatic scheduling of aircraft approaching for landing) to evaluate the possible application of such military tactical equipment to air traffic control use in the common system.
19570620	Jun 20, 1957: CAA made public a plan for the security control of air traffic and electromagnetic radiations (SCATER) during an air defense emergency. The joint product of CAA, CAB, the Air Force, and the Navy, it was based on a plan that had been approved in 1952, expanded to include air traffic security control rules. (See Jul 15, 1952.)
19570630	Jun 30, 1957: For fiscal 1957, which ended on this date, CAA received increased funding after several years of declining or stable budgets. The agency's airway facility funds grew from $16 million in FY 1956 to $75 million in 1957, raising the overall CAA budget for 1957 to $278.4 million. Further major increases in facilities and equipment funds the next two years brought the total CAA budget to $565 million, reflecting heightened urgency concerning air traffic control problems.
19570706	Jul 6, 1957: CAA announced that high speed teletypewriters able to transmit 100-word-per-minute would be installed along its three aeronautical weather networks. The new equipment was to replace 75-wordper-minute teletypewriters used for services designated "A," "C," and "O." These three functions made up the basic weather distribution systems for the entire country’s military and civil aviation. On Oct 17, 1958, CAA announced the award of a contract for 600-word-per-minute teletypewriters and related equipment to further speed the dissemination of aeronautical weather information. (See Jan 16, 1961.)
19570717	Jul 17, 1957: President Eisenhower appointed Elwood R. Quesada as his Special Assistant for aviation matters and charged him with "taking the leadership in securing the implementation of the Curtis plan of action." (See Apr 11, 1957.)

19570725	Jul 25, 1957: Dynamite exploded in the lavatory of a Western Airlines Convair 240 flying at 7,500 feet over California, blowing the person who had detonated the charge through the side of the aircraft. The plane landed successfully without further casualties.
19570801	Aug 1, 1957: The United States and Canada informally established the North American Air Defense Command (NORAD). The two countries ratified a formal agreement the following May. The organization was renamed the North American Aerospace Defense Command on May 12, 1981.
19570805	Aug 5, 1957: The Civil Aeronautics Board adopted a rule requiring an approved Flight Data Recorder (FDR) aboard air carrier and commercial airplanes of more than 12,500 pounds maximum certificated takeoff weight, with compliance by Jul 15, 1958. The FDRs were to be capable of recording time, air speed, altitude, vertical acceleration, and heading. In adopting the rule, CAB stated that FDRs would be invaluable in investigating accidents and such incidents as extreme vertical accelerations. (At first, the rule applied only to aircraft certificated for operations above 25,000 feet, but this limitation was dropped in an amendment issued on Jul 12, 1960.)
	On two previous occasions, CAB had rescinded a similar rule. Effective Apr 1, 1941, CAB had required a simpler type of FDR on certain carriers; but on Jun 9, 1944, the board found that operators could not properly maintain their recorders because of wartime material shortages. On Sep 15, 1947, the board again adopted a rule requiring FDRs on aircraft in scheduled air transportation. Contrary to expectations, however, no recording device of proven reliability was readily available, and CAB rescinded the rule on Jun 30, 1948, one day before its effective date. (See Aug 12, 1970.)
19570814	Aug 14, 1957: President Eisenhower signed the Airways Modernization Act (Public Law 85-133). The act established the Airways Modernization Board charged with "the development and modernization of the national system of navigation and traffic control facilities to serve present and future needs of civil and military aviation." The AMB was to select such systems, procedures, and devices as would promote maximum coordination of air traffic control and air defense systems. The act provided for a three-member board consisting of a chairman, appointed by the President with the advice and consent of the Senate, the Secretary of Defense, and the Secretary of Commerce. The act further provided for its own expiration on Jun 30, 1960. Since the AMB was an interim organization, the act also contained the following provision: "It is the sense of Congress that on or before Jan 15, 1959, a program of reorganization establishing an independent aviation authority, following the objectives and conclusions of the Curtis report, entitled 'Aviation Facilities Planning,' be submitted to the Congress."
	The Senate confirmed the appointment of Elwood R. Quesada as chairman on Aug 16. In the following month, Malcolm A. MacIntyre, Under Secretary of the Air Force, and Louis S. Rothschild, Under Secretary of Commerce for Transportation, were designated respectively by the Secretaries of Defense and Commerce to act in their stead as members of the Board. (See Apr 11, 1957, and Nov 1, 1958.)

19570831	Aug 1957: Congress appropriated $12.5 million for a second airport for Washington, D.C., to be built on a site to be recommended by President Eisenhower. (See Dec 1955 & Jan 16, 1958.)
19570907	Sep 7, 1957: The President signed legislation establishing an aircraft loan guarantee program to aid local service and territorial carriers unable to obtain private loans to purchase new and modern equipment. The act authorized CAB to guarantee loans of up to $5 million for each such airline. (see Oct 15, 1962.)
19570913	Sep 9-13, 1957: CAA held demonstrations of scan conversion equipment under evaluation at its Technical Development Center, Indianapolis. The equipment was designed to improve radar display techniques. (See Apr 27, 1960.)
19571004	Oct 4, 1957: The Soviet Union launched Sputnik I, the first manmade earth satellite, into orbit. (See Jan 31, 1958.)
19571029	Oct 29, 1957: The President approved actions of the Airways Modernization Board, taken in accordance with provisions of its basic statute, which transferred to the AMB certain funds and all functions of the Air Navigation Development Board along with several research and development programs of the Departments of Defense and Commerce relating to air traffic control. Subsequent presidentially approved orders transferring additional funds and ATC projects from the DOD. (See May 23, 1948, Jan 1954, and Aug 14, 1957.)
19571126	Nov 26, 1957: The board of directors of the Air Transport Association passed a resolution favoring the creation of an independent Federal agency to make safety rules and develop a common civil-military system of airspace control and use.
19571201	Dec 1, 1957: After receiving authority from the Civil Aeronautics Board, CAA designated all the airspace in the continental United States at or above 24,000 feet (exclusive of prohibited and restricted areas) as the "continental control area" and planned twelve "superskyways" that would provide direct, controlled high-altitude routes for transcontinental commercial flights. Positive control on these routes, however, was mandatory only during instrument conditions; during visual flight rule conditions it was provided at the option of the pilot. This meant that CAA could guarantee separation only between aircraft that filed an IFR flight plan. But these aircraft would have no protection from military and private airplanes that could still choose to fly the same airspace under visual flight rules, so long as weather permitted such flight. In any event, genuine positive control could not be implemented without CAB first permitting it by amending Part 60 of the Civil Air Regulations. (See May 28, 1958.)
19571206	Dec 6, 1957: The Lockheed 188A Electra first flew. The transport, a four-engine turboprop airliner of short-to-medium range with a maximum capacity of 99 passengers, received its type certificate on Aug 22, 1958, and entered scheduled airline service with Eastern Air Lines on Jan 12, 1959.

19571220

Dec 20, 1957: The first U.S.-made turbojet airliner, the Boeing 707, first flew. (Boeing's 367-80, the prototype for both the 707 and the military KC-135 Stratotanker, had first flown on Jul 15, 1954.) CAA certificated the aircraft, a four-engine, long-range plane with a maximum capacity of 189 passengers on Sep 23, 1958. The 707 entered scheduled airline service, on Oct 26, 1958, with Pan American World Airways (see Oct 4, 1958). On Aug 30, 1991, Boeing announced an end to production of the 707. The company built 857 of the 707s, selling the last as a radar surveillance plane earlier in 1991.

1958

19580109	Jan 9, 1958: The Secretaries of Commerce and Defense concluded a joint-use agreement to: avoid duplicating facilities, equipment, and overlapping functions; increase the capability of each function; and create an air traffic control system functionally compatible with the nation's defense facilities in peace and war. They agreed that each department would "make its respective surveillance, data processing, situation display, communications, identification processes and facilities mutually and fully available for the early attainment of the objective above." They also agreed that the Airways Modernization Board would develop criteria for the practical application of this national policy. (See Nov 16, 1956, and Sep 2, 1958.)
19580114	Jan 14, 1958: Australia's Qantas Empire Airways began the first completely round-the-world scheduled passenger service, using Super Constellations. (See Jun 17, 1947.)
19580116	Jan 16, 1958: In a report to Congress, President Eisenhower endorsed the recommendation of his special assistant for aviation, E. R. Quesada, that Washington's second public airport be built at Chantilly, Va. Land acquisition began Jan 27, 1958. (See Aug 1957 and Jul 11, 1958.)
19580131	Jan 31, 1958: The United States successfully launched Explorer I, the first U.S. earth satellite. (See Oct 4, 1957.)
19580213	Feb 13, 1958: The Civil Aeronautics Board issued an amendment to the Civil Air Regulations that reaffirmed and clarified the authority and responsibility of the Civil Aeronautics Administration's Administrator in the designation and use of restricted airspace areas. A concurrent amendment recognized that under defense-emergency circumstances it might be necessary for the military to deviate from the CARs. But all other military flights, such as training , were to be conducted under the terms of a waiver issued by the Administrator. The action became effective Apr l.
19580419	Apr 19, 1958: CAA commissioned the Phoenix air route traffic control center.
19580421	Apr 21, 1958: An Air Force jet fighter collided with a United Air Lines DC-7 near Las Vegas, Nev., killing both occupants of the fighter and all 47 persons aboard the airliner. Another midair collision between a military jet and an airliner occurred on May 20 when a T-33 trainer and a Capital Airlines Viscount collided over Brunswick, Md. This second accident cost the lives of one of the two persons aboard the T-33 and all 11 aboard the Viscount. The twin tragedies spurred governmental action already underway to improve air traffic control and to establish a comprehensive Federal Aviation Agency. (See May 21 and May 28, 1958.)

19580521	May 21, 1958: Senator A. S. Mike Monroney (D-Okla.) introduced S. 3880, a bill "to create an independent Federal Aviation Agency, to provide for the safe and efficient use of the airspace by both civil and military operations and to provide for the regulation and promotion of civil aviation in such a manner as to best foster its development and safety." By the next day 33 Senators were listed as cosponsors of the bill, and Representative Oren Harris (D-Ark.) introduced the same bill as H.R. 12616.
	On Jun 13, President Eisenhower, in a message to Congress, recommended early enactment of such legislation to consolidate "all the essential management functions necessary to support the common needs of our civil and military aviation." (See Aug 23, 1958.)
19580528	May 28, 1958: CAB adopted Special Civil Air Regulation 424, which authorized the CAA Administrator to designate as a "positive control route segment" any portion of the airspace between 17,000 and 35,000 feet to a width of not more than 40 miles. Within airspace so designated, all visual flight rule (VFR) flights would be prohibited regardless of weather; only instrument flight rule (IFR) operations, conducted with the prior approval of air traffic control, were to be permitted. This ruling took into account the extreme closure rates of high performance aircraft, and represented a major modification of the long-established, "see-andbe-seen" philosophy applicable to VFR operations. Until that time Board rulings on the subject had dealt primarily with meteorological conditions affecting a pilot's ability to see other aircraft.
	On Jun 15, CAA designated five positive control routes on trial basis. Although only a stopgap measure to improve safety, the designation of these airways marked the beginning of positive control. On Sep 15, 1959, FAA made these positive control routes permanent, and began plans to develop more positive control in both a route and area basis. (See Oct 15, 1960-Mar 1, 1961.)
19580530	May 30, 1958: The Douglas DC-8 first flew. On Aug 31, 1959, FAA type-certificated this four-engine long-range jet airliner with a maximum capacity for 189 passengers. The plane entered scheduled airline service with Delta on Sep 18, 1959.
19580615	Jun 15, 1958: CAA began using Greenwich mean time for all domestic air traffic control operations.
19580701	Jul 1, 1958: The Airways Modernization Board established the National Aviation Facilities Experimental Center (NAFEC) near Atlantic City, N.J. The fledgling Federal Aviation Agency assumed all functions of the Board, including control of NAFEC, on Nov 1, 1958 (see that date). Beginning in early 1959, the Technical Development Center that CAA had operated in Indianapolis was gradually deactivated, and many of its resources, functions, and personnel were transferred to NAFEC during that year.
19580711	Jul 11, 1958: Congress removed the ceiling of $14 million (see Sep 7, 1950) for the construction of a second Washington airport. On Aug 1, 1958, the U.S. Government took official possession of the 8,200- acre Washington international airport site at Chantilly, Va. Construction on what was eventually to become Dulles International Airport began the following month. (See Jan 16, 1958, and Jul 15, 1959.)

19580721 Jul 21, 1958: A Presidential Emergency Board issued its report on a dispute between the Eastern Air Lines and unions representing its pilots and flight engineers. President Eisenhower had appointed the board the previous January to mediate the controversy over the qualifications of the flight engineer on turbojet transports. The board concluded that a flight engineer on jetliners should have piloting qualifications and recommended that Eastern train its flight engineers to qualify for a commercial pilot's certificate. Despite the board's report in the Eastern dispute, American Airlines decided to give the third seat on the Boeing 707 to mechanic-trained flight engineers. Reacting to that decision, American's pilots walked off the job on Dec 19. After 23 days, the strike ended when American agreed to add a third pilot (a fourth crew member) to the 707 cockpit. Other airlines that traditionally employed mechanic-trained flight engineers (Pan Am, Western, Eastern, and TWA) signed similar labor agreements with the Air Line Pilots Association requiring them to employ a fourth person in the jet cockpit. (See Jul 21, 1958 and Jun 7, 1960.)

19580823 Aug 23, 1958: President Eisenhower signed the Federal Aviation Act of 1958 (P.L. 85-726) into law. Treating comprehensively the Federal role in fostering and regulating civil aeronautics and air commerce, the new statute repealed the Air Commerce Act of 1926, the Civil Aeronautics Act of 1938, the Airways Modernization Act of 1957, and those portions of the various Presidential reorganization plans dealing with civil aviation. The act assigned the functions exercised under these repealed laws, which had been dispersed within the Federal structure, to two independent agencies--the Federal Aviation Agency (FAA), which was created by the act, and the Civil Aeronautics Board (CAB), which was freed of its administrative ties with the Department of Commerce.

FAA came into existence with the signing of the Act, but assumed its functions in stages. Pursuant to the legislation, it also took over the responsibilities and personnel of the Airways Modernization Board, which were transferred to it by Executive Order 10786, on November l. FAA inherited as a nucleus the organization and functions of CAA on Dec 31, 1958. Later (on August 11, 1960), Executive Order 10883 terminated the Air Coordinating Committee, transferring its functions to FAA. Section 103 of the act concisely stated the Administrator's major powers and responsibilities as follows:

(a)The regulation of air commerce in such manner as to best promote its development and safety and fulfill the requirements of national defense;

(b)The promotion, encouragement, and development of civil aeronautics;

(c)The control of the use of the navigable airspace of the United States and the regulation of both civil and military operations in such airspace in the interest of the safety and efficiency of both;

(d)The consolidation of research and development with respect to air navigation facilities, as well as the installation and operation thereof;

	(e)The development and operation of a common system of air traffic control and navigation for both military and civil aircraft." CAB, though retaining responsibility for economic regulation of the air carriers and for accident investigation, lost under the act most of its former authority in the safety regulation and enforcement field to FAA. The law provided, however, that any FAA order involving suspension or revocation of a certificate might be appealed to CAB for hearing, after which CAB could affirm, amend, modify, or reverse the FAA order. Provision was made for FAA participation in accident investigation, but determination of probable cause was to be the function of CAB alone. When the FAA assumed full operational status on Dec 31, 1958, it absorbed certain CAB personnel associated with the safety rulemaking function. (See Nov 1 and Dec 31, 1958.)
19580902	Sep 2, 1958: The CAA Administrator and the Commander of the Air Force's Air Defense Command announced the establishment of a program for joint use of 31 new high-power, long-range radar facilities and plans for such joint use of additional facilities in the future. Under the extensive joint-use program, each agency was to budget for special equipment or modifications to meet its particular requirements, with ADC providing security guards and CAA maintaining the primary radar and other facilities used in air traffic control. (See Jan 9, 1958, and May 1959.)
19581001	Oct 1, 1958: The National Aeronautics and Space Administration (NASA) was established under the National Aeronautics and Space Act of 1958. Passage of the Space Act (signed into law by President Eisenhower on Jul 29, 1958) settled the question of whether space exploration should be under civilian or military control. The National Advisory Committee for Aeronautics (NACA), which had been in existence since 1915, was absorbed by and formed the nucleus for the new civilian space agency.
19581004	Oct 4, 1958: British Overseas Airways Corporation inaugurated the first transatlantic jet passenger service, using de Havilland Comet 4 aircraft flying between New York and London. On the 26th of the same month, Pan American World Airways began the first U.S. scheduled jet service with Boeing 707 flights between New York and Paris. On Dec 10, 1958, National Airlines used leased 707s to begin the first U.S. domestic scheduled jet airline service, flying between New York and Miami.
19581004	Oct 4, 1958: CAA issued a Technical Standard Order containing revised standards for the design of runways to meet the requirements of both conventional and turbine-powered air carrier aircraft. Superseding an October 1948 standard, the new TSO (N6b) reduced the number of airport classifications for air carrier service from six to four, with corresponding changes in runway lengths, widths, and strength.

19581101	Nov 1, 1958: Elwood R. Quesada became the first Administrator of the Federal Aviation Agency. The son of a Spanish businessman and an Irish-American mother, "Pete" Quesada was born in Washington, D.C., in 1904, and attended Maryland and Georgetown universities. He joined the Army in 1924, received his pilot's wings, and returned to civilian life before reentering active duty in 1927. Quesada was a member of the flight crew of the Army C-2 Question Mark, which, under the command of Major Carl Spaatz, broke world endurance marks in Jan 1929 by remaining in the air for more than 150 hours. During World War II, Quesada flew many combat missions and held a series of important commands, including the 12th Fighter Command, the 9th Fighter Command, and the 9th Tactical Air Command. Units under his leadership made important contributions to the success of the Normandy invasion and other campaigns by achieving air superiority, flying interdiction missions, and providing close air support to ground troops. Quesada's assignments after the war included: Commanding General, Tactical Air Command (1946); chairman of the Joint Technical Planning Committee of the Joint Chiefs of Staff (1949); and Commanding General of Joint Task Force Three (1951). He held, with various other awards, the Distinguished Service Medal with one cluster and the Distinguished Flying Cross.
	After retiring from the Air Force in 1951 with the rank of Lieutenant General, Quesada held a variety of positions in private industry before returning to government as Special Assistant to the President for aviation matters (see Jul 17, 1957) and later Chairman of the Airways Modernization Board (see entry for Aug 14, 1957). To qualify as FAA Administrator, Quesada complied with the provisions of the Federal Aviation Act by resigning his commission as a retired regular military officer. (Congress later restored his commission after he left FAA.) Sixty days after Quesada's appointment, FAA assumed the full scope of its responsibilities (see Dec 31, 1958). Quesada served as Administrator for the remainder of the Eisenhower Administration, resigning effective Jan 20, 1961 (see that date).
19581101	Nov 1, 1958: Executive Order No. 10786 transferred all functions of the Airways Modernization Board to the Administrator of the Federal Aviation Agency. This action was taken in accordance with the Federal Aviation Act of 1958. (See Aug 23, and Dec 31, 1958.)
19581231	Dec 31, 1958: The Federal Aviation Agency assumed the full scope of its statutory responsibilities. Under the provisions of the Federal Aviation Act (see Aug 23, 1958) the effective date of appointment of the first FAA Administrator (see Nov 1, 1958) determined the effective date of most of the operative provisions of the act, which were to take effect 60 days from the qualification of the first Administrator. On this date FAA superseded CAA and absorbed certain CAB personnel associated with safety rulemaking. James T. Pyle, the last CAA Administrator, became Deputy Administrator of FAA, a post he continued to hold until Nov 30, 1961 (see Feb 21, 1962).
19581231	Dec 31, 1958: The FAA Administrator signed an agreement with the military departments setting forth the conditions for assignment of members of the Armed Services to FAA.

19581231 Calendar year, 1958: This was the first year that the total number of transatlantic passengers traveling by air exceeded the number traveling by sea. (See Calendar Year 1966.)

1959

19590103	Jan 3, 1959: Alaska entered the Union as the 49th State.
19590104	Jan 4, 1959: A published report described the successful use of Doppler navigation techniques in aerial explorations for oil in remote areas.
19590107	Jan 7, 1959: The Federal Aviation Agency began an extensive air traffic survey covering all segments of U.S. aviation--air carrier, military, and general aviation. Goals of the survey were to develop estimates of air activity through 1980 and to formulate a scientific method of forecasting air activity. FAA's sampling of a period having the lowest level of air activity was followed in July and August by a second survey providing data on the summer peak.
19590115	Jan 15, 1959: Agency Order 1 prescribed FAA's basic organizational structure. The Administrator and his Deputy were assisted by three staff offices headed by Assistant Administrators: Management Services; Personnel and Training; and Plans and Requirements (the name of which was shortened to Plans on July 10, 1960). Other staff officials reporting to the Administrator included the General Counsel, the Civil Air Surgeon, and the heads of the Offices of Public Affairs, Congressional Liason, and International Coordination. The agency's major programs were entrusted to four Bureaus whose Directors reported to the Administrator: Research and Development (testing and development of new equipment); Flight Standards (certification of airmen, aircraft, and air carriers); Air Traffic Management (planning and operation of the airspace system); and Facilities (acquisition and maintenance of air navigation facilities and related equipment). FAA's initial field structure retained the Civil Aeronautics Administration's system of six numbered regions headed by Regional Administrators reporting to the agency chief. Three large field facilities were exempt from regional control: the National Aviation Facilities Experimental Center (NAFEC), the Aeronautical Center, and Washington National Airport.
19590121	Jan 21, 1959: The FAA Administrator submitted to Congress draft legislation to extend the Federal Airport Act to Jun 30, 1963. Intended to effect an "orderly withdrawal" from the airport grant program, the bill authorized $200 million graduated downward over the four-year period. The bill proposed to revise the apportionment of funds among the States, increasing from 25 to 50 percent the proportion of funds that could be allocated at the Administrator’s discretion regardless of geographical location. The proposal also limited grants under the act to construction of landing area facilities such as runways and control towers, while excluding such items as terminal buildings, parking lots, and entrance roads. (See Aug 3, 1955, Oct 18, 1955, and Jun 20, 1959.)
19590125	Jan 25, 1959: Transcontinental jet airliner service began as American Airlines inaugurated Boeing 707 flights between New York and Los Angeles. The new service also made American the first U.S. airline to begin domestic scheduled jet flights using its own aircraft (see Oct 4, 1958). High-altitude radar advisory service was also established, using FAA-military radar teams based at 17 military installations across the United States.

19590127	Jan 27, 1959: The Convair 880 (Model 22) first flew. On May 1, 1960, FAA certificated this four-engine medium-range jet airliner with a maximum capacity of 110 passengers. The plane, built by General Dynamics Corporation, entered scheduled service on May 15, 1960, with Delta Air Lines.
19590129	Jan 29, 1959: The Civil Aeronautics Board issued the first certificates to supplemental air carriers. The certificated supplemental operators were authorized to offer unlimited domestic charter service, as well as up to ten round trips per month between any pair of U.S. points for individually ticketed passengers or individually waybilled cargo. The Board awarded the certificates of public convenience and necessity on a two- or five-year basis to 23 applicants, most of whom were already offering substantially the same types of services under an interim exemption. (See Nov 15, 1955, and Jul 10, 1962.)
19590203	Feb 3, 1959: A Pan Am 707 entered a steep dive toward the Atlantic after its autopilot disengaged at 35,000 feet. The captain, who had been in the passenger cabin when the dive began, fought powerful gravity forces to return to the cockpit. Taking command from the copilot, he was able to end the dive at 6,000 feet. Prompted by this near-disaster, FAA in April began rigorously enforcing an often-disregarded rule requiring all flight-crew members to remain at their stations "except when the absence of one is necessary in connection with his regular duties.
19590208	Feb 8, 1959: FAA announced plans to coordinate Federal research and development in aviation weather forecasting and reporting. The announcement followed general agreement between FAA, the Department of Commerce (Weather Bureau), and Department of Defense on the need for such a joint research program.
19590225	Feb 25, 1959: In a special conference at Montreal, the International Civil Aviation Organization (ICAO), approved the distance-measuring element (DMET) as a complement to the very high frequency omnidirectional radio range (VOR). Over protests of the British delegation, which favored its own Decca Navigator System, the conferees adopted the American-developed system as a navigational-aid standard for the world's airlines until 1975. This action extended a 1949 ICAO agreement not to require replacement of basic VOR equipment prior to January 1, 1966 to 1975.
19590328	Mar 27-28, 1959: At FAA's Aeronautical Center, Administrator Elwood R. Quesada held a meeting on rulemaking and enforcement attended by nearly 200 regional administrators, regional attorneys, and key Flight Standards personnel. Quesada announced plans for a concentrated aviation safety drive and full use of the agency's rulemaking powers. The Administrator stated his "4-F" philosophy that FAA enforcement activities must be "firm, fair, fast, and factual."
19590401	Apr 1, 1959: British Overseas Airways Corporation completed the first turbine-powered airline passenger flight around the world, (in this case, both turbojet and turboprop aircraft were used). The airline began this service on a regular basis on Aug 22, 1959. (See Oct 10, 1959.)

19590401	Apr 1, 1959: Three air defense identification zones (ADIZs) were eliminated and flight requirements within the remaining zones were relaxed effective this date. Elimination of the Western, Eastern, and Presque Isle Identification Zones became possible by the complete encirclement of the United States following establishment of an ADIZ in the Gulf of Mexico on Feb l. (See Dec 1, 1955.)
19590402	Apr 2, 1959: FAA announced the adoption of a new "mobile lounge" concept of transporting airline passengers between the terminal building and parked aircraft at Washington's planned jet airport at Chantilly, Va. Making possible a reduction in terminal building size, the mobile lounge system was intended to eliminate finger docks, tunnels, and other devices to get passengers to their airplane. Although passengers at some European airports traveled between terminal and aircraft on buses, this was the first time that a specially designed vehicle had been proposed for this purpose. On Nov 27, 1961, FAA reaffirmed the concept for use at the new airport and announced a $4.7 million contract award for 20 mobile lounges.
19590408	Apr 8, 1959: CAB ruled that foreign airlines could not carry commercial traffic moving only between U.S. cities. Consistent with U.S. international commitments, the ruling was viewed as strengthening the stand of U.S. airlines against further invasion of domestic markets by foreign carriers.
19590427	Apr 27, 1959: FAA announced a contract award for development of an air height surveillance radar (AHSR-1) to automatically provide air traffic controllers with information on aircraft altitudes up to a range of 50 nautical miles. This data would add a third dimension to the distance and bearing data provided by radar currently in use. The AHSR-1 would have a three-sided fixed antenna 150 feet in height, with each of the three sides 60 feet wide. FAA completed development and testing of the AHSR-1 during fiscal 1963, but the project was placed on standby as a possible backup system due to a decision to use secondary radar as the primary means of acquiring aircraft height data. (See Sep 10, 1959.)
19590501	May 1, 1959: Installation of an experimental runway barrier for commercial aircraft began at FAA's National Aviation Facilities Experimental Center near Atlantic City. Aimed at developing an effective barrier for civil aircraft in case of overruns on landings or takeoffs, the program--the first to be sponsored by the Federal government--called for a six-month evaluation of the arresting device.
19590511	May 11, 1959: The Vertol 107 helicopter, a twin-turbine-powered transport, was demonstrated in flight at Philadelphia International Airport.

19590515	May 15, 1959: New procedures for allocating airspace to meet civil and military requirements became effective. In keeping with the authority vested solely in the FAA Administrator by the Federal Aviation Act, the revised rules superseded procedures under which airspace matters were processed through the Air Coordinating Committee and its regional counterparts. The new regulation also established procedures for assignment of airspace in accordance with provisions of the Administrative Procedure Act. By the end of calendar 1960, approximately 25,100 square miles of restricted- and prohibited-area airspace had been restored to common use. Approximately 123,700 square miles of restricted-airspace blocks remained.
19590531	May 1959: In keeping with its mandate to develop a common civil-military airspace system (see Aug 23, 1958), FAA initiated "Project Friendship." Consultations were begun with the Defense Department to determine which military functions pertaining to air navigation and air traffic control -- both domestic and overseas -- should be transferred to FAA and when the transfers should be made. (See Oct 7, 1959.)
19590601	Jun 1, 1959: FAA commissioned the Guam air route traffic control center.
19590603	Jun 3, 1959: FAA announced that the agency had commissioned UNIVAC file computers for use in air traffic control at its New York and Washington air route traffic control centers (ARTCCs). Additional systems were scheduled to be installed in late summer at the Pittsburgh, Cleveland, and Boston ARTCCs. These general purpose electronic computers were to be used in preparing flight progress strips, exchanging information with one another, and generally aiding air traffic controllers in their "bookkeeping chores."
19590614	Jun 14, 1959: FAA established a Bureau of National Capital Airports to provide management responsibility for Washington National Airport and the new Washington International Airport, then under construction at Chantilly, Va, and soon to be renamed (see Jul 15, 1959). Establishment of the new bureau was viewed as an interim measure pending enactment of legislation to set up a government corporation, within the framework of FAA, to handle the management and operational functions of both airports.
19590620	Jun 20, 1959: The President approved a two-year extension of Federal-aid to airport program (FAAP) at the current $63 million level of funding. An administration bill had proposed $200 million for a four-year period of "orderly withdrawal" from the aid program, while the Senate originally passed a four-year $465 million program. The House approved a $297 million plan for the four-year period. Refusal of the President to expand the FAAP commitment and the failure of the Senate-House conferees to resolve their differences resulted in this stopgap compromise measure. (See Jan 21, 1959 and Sep 20, 1961.)
19590701	Jul 1, 1959: A new safety rule became effective requiring that holders of first class medical certificates-- airline transport pilots--must submit to an annual electrocardiogram.

19590710	Jul 10, 1959: The Federal Aviation Agency, which had assumed the safety rulemaking functions of the Civil Aeronautics Board, announced an end to the three-year near miss reporting program that had granted immunity from prosecution to pilots reporting their own involvement in near-collisions (see Feb 23, 1956). The purpose of the program had been to compile data on the numbers and causes of such incidents. Believing that the program had outlived its usefulness, FAA Administrator Quesada directed that future reports of near misses be handled by FAA in accordance with the normal investigative procedures established for other safety violation reports. (See Jun 7, 1961.)
19590715	Jul 15, 1959: President Eisenhower signed an order designating Washington's international airport under construction at Chantilly, Va., as the Dulles International Airport in memory of his late Secretary of State, John Foster Dulles. (See Jul 11, 1958, and Nov 17, 1962.)
19590726	Jul 26, 1959: FAA consolidated responsibility for the planning, coordination, and utilization of radio frequencies in a newly established Frequency Management Staff Division within its Bureau of Facilities. In addition to these functions, the new staff division was assigned responsibility for representing FAA before the Interdepartmental Radio Advisory Committee.
19590731	Jul 31, 1959: Effective this date, FAA required that one pilot at the controls of a turbine-powered airliner operating above 25,000 feet wear and use an oxygen mask, and that the other cockpit crew members wear masks ready for immediate use. This rule was modified as experience with jet operations grew and oxygen mask design evolved. Effective Feb 1, 1960, the altitude above which one pilot was required to use a mask was raised to 30,000 feet if all cockpit crew members wore masks designed for fast donning when needed. Effective Sep 30, 1965, the altitude above which these requirements applied to turbine aircraft equipped with fast-donning masks was raised to 41,000 feet.
19590821	Aug 21, 1959: Hawaii entered the Union as the 50th State.
19590910	Sep 10, 1959: To aid in the control of civil and military air traffic, FAA put into operation in the New York area a 64-code air traffic control radar beacon system, commonly known as secondary radar. A descendant of the World War II IFF (Identification, Friend, or Foe), the new equipment was designed to reinforce primary radar signals and permit positive identification of individual aircraft carrying transponders. By May of the following year, 20 radar beacons had been put in operation at 16 air route traffic control centers. (See Apr 7, 1961.)
19590915	Sep 15, 1959: FAA adopted new procedures for handling temporary airspace reservations for mass movements of military aircraft and extended the altitude reservation service to oceanic areas. Reflecting the growing use by civil jets of altitudes above 24,000 feet--airspace previously used almost exclusively by military aircraft--the new rules required the filing of airspace reservation requests four to twelve days in advance of the mission. Missions not airborne within 30 minutes past the scheduled time of departure would be subject to FAA cancellation to make the airspace available to other users.

	To supplement the work of its Central Altitude Reservation Facility (CARF) in Kansas City, Mo. (see Jul 24,1956), FAA established gateway sectors at the Honolulu air route traffic control center and at the New York ARTCC to handle altitude reservations for military flights over the Pacific and North Atlantic Ocean areas, respectively.
19590920	Sep 20, 1959: FAA commissioned the San Antonio air traffic control center's new building, the first in a program to construct 32 new center facilities. Located in most cases away from airports to permit more space and to withstand nuclear attack on critical target areas, the buildings had an expandable design to facilitate installation and use of the latest equipment. By the end of 1960, 15 of the centers were under construction or completed.
19590921	Sep 21, 1959: FAA announced that its representatives and those of DOD and the Air Force had signed an agreement to establish nine FAA air route traffic control centers at Air Force SAGE supercombat centers. The supercombat centers were part of the SAGE (semiautomatic ground environment) system for radar surveillance and identification of air traffic for air defense. (See Jul 10, 1956, and Apr 12, 1960.)
19590929	Sep 29, 1959: A Braniff Lockheed Electra lost a wing and exploded in flight over Buffalo, Tex., with the loss of all 34 persons aboard. (See Mar 17, 1960.)
19591007	Oct 7, 1959: Speaking on the theme "Project Friendship," FAA Administrator Quesada announced that FAA was preparing to assume the operation of about 2,095 military air traffic control facilities at 337 global locations. Under the "Friendship" plan, four types of military functions would be scheduled for transfer: air navigation and air traffic control services; military flight service; air traffic controller training; and facilities flight inspection. FAA and DOD would coordinate time phasing for absorbing military facilities, and implementation of certain parts of the project depended on further understandings with DOD and agreements with foreign countries. (See May 1959, and Dec 15, 1960.)
19591010	Oct 10, 1959: Pan American World Airways inaugurated round-the-world jet service (excluding the continental United States) using intercontinental versions of the Boeing 707. On Oct 27, Australia's Qantas Empire Airways began operating the first jet service to completely circle the globe.
19591015	Oct 15, 1959: FAA adopted an amendment to Civil Air Regulations Part 29 that clarified the physical and mental conditions disqualifying an airman from holding a medical certificate. The disqualifying medical conditions spelled out in the new revision included: diabetes mellitus requiring insulin; coronary artery disease; a history of psychosis; or certain other mental or nervous diseases such as behavior disorders, chronic alcoholism, drug addiction, or epilepsy.
19591031	Oct 31, 1959: FAA announced plans to establish a Civil Aeromedical Research Center (later named the Civil Aeromedical Research Institute) at the Aeronautical Center, Oklahoma City, to carry out its assigned responsibilities for research in aviation medicine. CARI's research would aim at developing medical data needed to meet operational problems anticipated as civil air operations moved into higher altitudes and greater speeds. (See Jul 1, 1953 and Oct 21, 1962.)

19591122	Nov 22, 1959: An extensive reorganization of FAA's Bureau of Research and Development became effective. In place of the six previous divisions plus the National Aviation Facilities Experimental Center (NAFEC) at Atlantic City, N.J., the new structure embodied ten divisions consisting of the following five staff and five program divisions, respectively: Plans, Operations, Contracts, Budget, and Administrative Services; Research, Test and Experimentation, Systems Engineering, Air Defense Integration, and Development.
19591123	Nov 23, 1959: The Strategic Air Command began using seven special air routes established for its use by FAA to carry out day and night, all-weather, low-altitude training missions. The routes for Operation Oil Burner, code name for these SAC radar bomb runs over simulated targets throughout the country, were laid out to avoid congested population and airport centers to the maximum extent possible.
19591123	Nov 23, 1959: The Boeing 720 first flew. On Jun 30, 1960, FAA certificated the 720, a four-engine medium-range jet transport with a maximum capacity of 140 passengers. The plane entered scheduled service with United Airlines on Jul 5, 1960.
19591207	Dec 7, 1959: FAA began a stepped-up safety inspection program of all scheduled air carrier flight operations and training programs, placing its safety inspectors on a round-the-clock schedule. The concentrated 30-day program was prompted by a rash of accidents and was intended to underscore FAA's intensified commitment to air safety.
19591213	Dec 13, 1959: Effective this date, FAA realigned responsibilities for its materiel functions, management of FAA aircraft, and activities at the Aeronautical Center, Oklahoma City, Okla. The Bureau of Facilities--with "Materiel" added to its designation--was assigned expanded responsibility for procurement of materiel for the establishment, maintenance, and repair of air navigation and air traffic control equipment. The task of monitoring agencywide the application of materiel practices and policies was given to the Office of Management Services.
	Reporting directly to the Bureau of Facilities and Materiel, a Facilities and Materiel Depot was established at the Aeronautical Center to perform overhaul and heavy maintenance on all FAA aircraft, centrally warehouse and distribute materiel, and operate shops for repair and fabrication of airways equipment. Responsibility for the management and light maintenance of all FAA aircraft was assigned to the Bureau of Flight Standards. The Bureau of Personnel and Training controlled the extensive training programs at the Aeronautical Center, which were grouped together as the FAA School (later known briefly as the Training Center before being renamed the FAA Academy in early 1962).
19591213	Under the new concept of organization, the Director of the Aeronautical Center was responsible for providing the physical plant and administrative and supporting services for the various agency bureaus and offices conducting programs at the Center. The operating bureaus and offices, however, exercised line authority over the programs.

19591231 Dec 1959: FAA established the world's first helicopter air traffic control service in the New York area to aid in an intensive government-industry test of all-weather helicopter operations.

1960

19600101 Jan 1, 1960: A major realignment of responsibilities for Federal Aviation Agency field operations became effective. Under the new centralized concept of operations, the Washington Bureaus of Air Traffic, Facilities and Materiel, and Flight Standards, as well as the Office of the Civil Air Surgeon, received authority to exercise direct supervision over all program activities in the field except in Alaska, Hawaii, and at the Aeronautical Center and National Aviation Facilities Experimental Center. FAA abolished the position of Regional Administrator and created, in its place, the post of Regional Manager to carry out the administrative and support functions required by the program divisions in the field. In March, FAA prescribed a standard organization for the regional headquarters under the new system. At the same time the agency gave managers in Region 1 through 4 authority to foster coordination and exchange of information among all field divisions.

19600106 Jan 6, 1960: A National Airlines DC-6B crashed near Bolivia, N.C., killing 34 passengers and crew. The Civil Aeronautics Board accident investigation revealed that the plane had disintegrated in flight as a result of a dynamite explosion. Bomb fragments were found imbedded in the body of passenger Julian Frank, who, in the preceding year, had taken out more than a million dollars in life insurance. The indication of sabotage sparked demands for the use of baggage-inspection devices and moved FAA to clamp a ceiling of $165,000 on the amount of airline trip insurance a passenger could purchase at Washington National Airport. (See Nov 10, 1964.)

19600108 Jan 8, 1960: The New York Times reported that Pan American World Airways had put into operation near Shannon, Ireland, the first unit in a planned worldwide radio transmission system using the "forward scatter" technique. This was the first such very-high-frequency ground station to be put into operation by an airline.

19600109 Jan 9, 1960: FAA announced a rule requiring airborne weather radar on most U.S. airliners in passenger service. Deadlines for installation were: (a) Jul 1, 1960 for turbojet and turboprop airliners; (b) Jan 1, 1961, for the Douglas DC-6 and DC-7 series and the Lockheed Constellation 1049 and 1649 series; and (c) Jan 1, 1962, for all other affected aircraft. The rule exempted the Curtiss C-46, Douglas DC-3, and Lockheed L-18, as well as aircraft operated only within Alaska or Hawaii. An FAA rule issued on Apr 8, 1966, extended the requirement to large transport aircraft used for cargo only. Turbojets were required to comply by the end of 1966, and all others by the end of 1967. This rule also exempted certain older aircraft as well as operations solely in Alaska or Hawaii.

19600301 Mar 1, 1960: FAA announced that it was giving its Air Traffic Communications Stations (ATCS) and International Air Traffic Communication Stations (IATCS) the new names Flight Service Stations (FSS) and International Flight Service Stations (IFSS) respectively to identify properly the primary functions of those stations.

	The history of these evolving facilities can be traced to Aug 20, 1920, when the U.S. Post Office Department issued orders to establish the first Air Mail Radio Stations along the transcontinental air mail route. The first 10 stations were ready by Nov 1, and all 17 stations were operational by the end of 1921. When the Department of Commerce became responsible for the transcontinental airway (see Jul 1, 1927), it assumed operation of the stations, which it renamed Airway Radio Stations (see Mar 20, 1928). With other airway facilities, the stations were transferred to the Civil Aeronautics Authority in 1938 and to the Civil Aeronautics Administration in 1940. They were redesignated as Airway Communication Stations in 1938, and were later known as Interstate Airway Communication Stations (INSACS) and Overseas and
19600301	Foreign Airway Communication Stations (OFACS). After becoming part of the new FAA in 1958, the facilities initially received the ATCS and IATCS designations until renamed as described above.
19600314	Mar 1-14, 1960: FAA transferred from Washington to Oklahoma City certain organizational elements responsible for: aircraft registration; preparation and administration of knowledge examinations for certification of airmen and ground instructors; and the issuance of airman certificates.
19600315	Mar 15, 1960: FAA's "age-60 rule" went into effect, barring individuals who reached their 60th birthday from serving as a pilot on aircraft engaged in certificated route air carrier operations or on large aircraft engaged in supplemental air carrier operations. The rule did not apply to commuter or on-demand air taxi operations, which employed smaller aircraft. In adopting the rule, FAA declared that a progressive deterioration of certain physiological functions normally occurs with age and that sudden incapacity due to certain medical defects such as heart attack and strokes becomes significantly more frequent in any group reaching age 60. The agency therefore imposed the age-60 rule until science provided better tests to determine individual pilots' susceptibility to these problems.
	The Air Line Pilots Association sought an injunction against the new rule on the grounds that it was arbitrary and discriminatory. The courts found the rule reasonable, however, and this view was upheld by the Supreme Court in Jun 1961. (See Jun 21, 1968.)
19600316	Mar 16, 1960: New requirements regarding instrument flying skills became effective. Persons receiving a commercial pilot certificate were required to have a minimum of 10 hours of instrument flight instruction and to demonstrate their ability to control their aircraft manually while relying solely on instrument guidance. Successful applicants for private pilot certificates were required to have dual instruction in the basic control of the aircraft by the use of instruments, and to demonstrate their manual capability in attitude control in simulated emergencies involving the loss of visual reference during flight. The added requirements applied only to new applicants, not holders of existing certificates.

19600317	Mar 17, 1960: A Lockheed Electra lost a wing in turbulent air and crashed near the towns of Tell City and Cannelton, Ind. All 63 persons aboard the Northwest Airlines flight were killed. On Mar 20, FAA reduced the top cruising speed of the Electra Model 188 series turboprop airliners from 373 to 316 m.p.h., pending determination of the cause. Additional restrictions effective on Mar 25 included a further cutback in permissible speed (down to 259 m.p.h., or 225 knots) and a series of rigid tests and inspections. These measures seemed warranted by similarities between the Tell City crash and the crash of another Electra in Texas (see Sep 29, 1959). On Apr 12, the Civil Aeronautics Board unanimously recommended grounding all Electras not inspected since the Tell City accident. FAA Administrator Quesada decided, however, that the aircraft could safely continue to operate under the Mar 25 restrictions. On May 12, Lockheed announced its conclusion that the two aircraft destroyed in the accidents had sustained prior damage. This had permitted their power-package nacelles to wobble, allowing development of a "whirl-mode" phenomenon that overstressed their wings. (See Oct 4 and Dec 31, 1960.)
19600321	Mar 21, 1960: FAA announced the appointment of 21 of the nation's leading forensic pathologists as consultants to help determine involvement of human factors in aircraft accidents. This nationwide system of consultants supplemented an already-existing program of aeromedical investigation of aircraft accidents by FAA's Office of the Civil Air Surgeon with the assistance of pathologists from the Armed Forces Institute of Pathology.
19600324	Mar 24, 1960: The Federal Aviation Agency established a new Bureau of Aviation Medicine to replace the former Office of the Civil Air Surgeon. The elevation to bureau status pointed to the growing significance of the role of the medical program in the agency's primary mission of air safety. During the following three months, work began on a series of new aeromedical research projects concerned with the effects of aging on pilot proficiency, selection criteria for and environmental stress factors experienced by air traffic controllers, and in-flight fatigue affecting flight engineers on jet aircraft.
19600325	Mar 25, 1960: FAA Administrator Elwood R. Quesada revealed details of a new program under which agency air carrier operations inspectors were being trained as specialists in the operation of specific types of high-performance turbine-powered aircraft. The specialist program called for increased ground and flight training and type rating of selected inspectors in the Convair 880, Fairchild F-27, Vickers Viscount, Douglas DC-8, Lockheed Electra, and the KC-135, the Air Force jet tanker version of the Boeing 707.
19600401	Apr 1, 1960: The United States launched Tiros I, the first of a successful series of weather satellites. Equipped with long-range television cameras, the satellite transmitted 22,952 cloud-cover photos during the 78 days that its instruments functioned.

19600401 Apr 1, 1960: In answer to an Oct 1958 suggestion by the United States, the Soviet Union informed Washington that it was ready to negotiate for regular airline traffic between the two countries. On May l , however, an American U-2 spy plane was shot down inside the Soviet Union. Soviet Premier Nikita Khrushchev used the incident as grounds for pulling out of the Paris summit conference scheduled for later in the month. Khrushchev subsequently made increasing verbal attacks on the United States, and a U.S. RB-47 was shot down over international waters off Soviet territory. Because of this deterioration in relations, the United States on Jul 14 postponed scheduled talk on a bilateral agreement for the exchange of commercial air rights. On Aug 2, however, a Soviet delegation arrived in the United States in an exchange program between the two countries in the field of civil air transportation. The visit was part of the cultural and scientific exchange agreement signed in November 1959. In mid-September, a group of U. S. aviation experts headed by the FAA Administrator began a three-week tour of Soviet civil air transport operations and facilities. (See Nov 4, 1966.)

19600404 Apr 4, 1960: FAA placed in effect the first of a series of regulations designed to minimize aircraft noise at major airports by procedural methods while retaining safety as the primary objective. This Special Civil Air Regulation No. 438 set up rules for both civil and military aircraft operating at Los Angeles International Airport, including minimum altitudes, preferential runways, and approach and departure routes over the least populated areas. Similar special regulations covering operations at New York International (Idlewild) and at Washington National Airport were issued Oct 15 and Nov 29, 1960 respectively. (See Jul 18, 1960, and Dec 4, 1967.)

19600412 Apr 12, 1960: FAA announced the start of a live test of the SAGE air defense system as a means of improving high-altitude air traffic control services. A part of a joint FAA-USAF project called Trailsmoke, the flight advisory service test (FAST) aimed essentially at evaluating the capability of the SAGE system to provide civil and military radar advisory information on potential air traffic conflicts. Specific operating positions would be occupied by FAA controllers at two SAGE direction centers of an Air Defense Division monitoring air activity in the Midwest section of the nation. (See Sep 21, 1959, and Apr 17, 1960.)

19600412 Apr 12, 1960: The Defense Department released a report recommending Air Force contracts with commercial airlines for most passenger and cargo flights being operated by the Military Air Transport Service. The report was prepared by a committee appointed by the Secretary of the Air Force.

19600417 Apr 17, 1960: FAA announced a contract award totaling nearly $6 million to the MITRE Corporation, Lexington, Mass., for advanced experimentation on automated air traffic control. Work to be performed under the contract included research and experimentation on joint use of military SAGE equipment and facilities for air traffic control, as well as for air defense purposes. FAA and the Air Force would share the cost of the project. (See Apr 12, 1960, and Sep 11, 1961.)

19600427 Apr 27, 1960: FAA announced a contract with the General Instrument Corporation for 38 radar bright display systems for Air Route Traffic Control Centers. The equipment used a dual purpose scan converter/storage tube to present a brighter display that would help controllers work more efficiently in lighted rooms. FAA and its predecessors had been involved in developing bright displays as early as Aug 18, 1952, when CAA's Technical Development and Evaluation Center reported favorably on using storage tube techniques for the purpose. At the time of the 1960 order, bright display units were already in service at 10 ARTCCs and 4 towers. On Jul 9, 1961, FAA announced an order for 40 more of the systems. (See Sep 9-13, 1957, Jul 15, 1968, and Apr 5, 1988.)

19600520 Apr 6-May 20, 1960: FAA conducted a management experiment called Project Straight-Line in the Cleveland air route traffic control center area. Limited to the Bureau of Air Traffic Management and the Bureau of Facilities and Materiel, the experiment tested the feasibility of transferring operational responsibilities in the field to a new echelon, the area office, below the regional level. (See Sep 2, 1960.)

19600607 Jun 7, 1960: A wildcat strike broke out at Eastern Air Lines when an FAA safety inspector boarded an Eastern DC-8 flight and took the forward observer's seat from the third pilot. The Air Line Pilots Association had previously protested this practice as a threat to safety. FAA, however, maintained that the Douglas DC-8 and Boeing 707 had been certificated for air carrier operations with a crew of two pilots and a flight engineer and that the third pilot was superfluous. The agency immediately promulgated a regulation requiring the third pilot to give up the forward observer's seat to an FAA inspector. Meanwhile, the strike spread to Pan American but ended on Jun 21 following an injunction. (See Jul 21, 1958 and Feb 7, 1961.)

19600615 Jun 15, 1960: Regulations became effective that required applicants for a student or private pilot (class 3) medical certificate to take their medical examinations solely from FAA-designated aviation medical examiners. Applicants for airline transport pilot (class l) and commercial pilot (class 2) medical certificates were already required to be examined by designated medical examiners. During the past 15 years, however, student and private pilot applicants had been permitted to receive their physical examinations from any registered physician. (See Jun 1, 1945).

19600630 Jun 30, 1960: The House Committee on Science and Astronautics recommended that Congress support a Federal program for the development of a commercial supersonic transport (SST). The committee report called for completion of the B-70 bomber program, which it considered justified on defense grounds and which was expected to blaze a technological trail for the SST. The report also recommended that NASA assume leadership in devising a program for SST development. (See Jan 9, 1961.)

19600701 Jul 1, 1960: Effective this date, 5 additional megacycles of radio frequencies were allocated for FAA air traffic control communications. This was the first increase in the VHF radio spectrum allocated for communications in the common air traffic system since Oct 1946. The additional 5 megacycles (126.825 to 128.825 and 132.025 to 135.0) added 100 channels to the air traffic control system.

19600706	Jul 6, 1960: FAA certificated the single-turbine Sikorsky S-62, an amphibious helicopter, for commercial operations on passenger and mail routes.
19600718	Jul 18, 1960: As part of its noise abatement program, FAA issued a new series of detailed takeoff and landing instructions for jet airliners. Applying to individual aircraft by type and intended for inclusion in pilot training programs, the new instructions were designed to become standard methods of operating the Boeing 707, the DC-8, the Convair 880, the Lockheed Electra, the Fairchild F-27, the Viscount, and the Napier Eland Convair. The new procedures were drawn up and voluntarily agreed upon by all elements of the aviation industry during an FAA-sponsored meeting in the spring of 1960. Further such meetings were planned for reviewing and updating the procedures. (See Apr 4, 1960, and Jan 25, 1967.)
19600801	Aug 1, 1960: FAA launched Project Searchlight, an intensive and comprehensive study of its activities involving maintenance of equipment in the Federal Airways System. The agency conducted the study in several phases, completing it in early 1962. The resulting recommendations led to several improvements (see Jan 1963 and May 1, 1963), including the creation of a separate Systems Maintenance Service (see May 16, 1962).
19600811	Aug 11, 1960: Executive Order 10883, signed by President Eisenhower this date, but effective Oct 10, 1960, abolished the Air Coordinating Committee (see Sep 19, 1946). In a memorandum accompanying the Executive Order, the President made future coordination of aviation matters in the Federal Government the responsibility of the FAA Administrator. Since the need for such coordination would be greatest in the international area, the President suggested that the Administrator form an interagency group to develop recommendations on international aviation questions for the Secretary of State. The President stated that continuing membership in this group should be small, but ad hoc membership should be open to any other agencies having a substantial interest in matters under consideration by the group. (See Dec 19, 1960.)
19600825	Aug 25, 1960: FAA commissioned the first ASR-4 airport surveillance radar at Newark. Scheduled for installation at 34 of the nation's airports, the new radar system had a range of 60 miles, the capability of reaching an altitude of 25,000 feet, a 16-inch picture tube, and controller's-option display of either fixed or moving objects. The Civil Aeronautics Administration, FAA's predecessor agency, had commissioned the first ASRs during fiscal year 1951. (See Jun 1975.)

19600902 Sep 2, 1960: FAA Administrator Quesada approved a field reorganization of the Federal Aviation Agency in accordance with the recommendations of Project Straight-Line (see Apr 6-May 20, 1960), to be completed in phases by Jun 30, 1961. Intended to decentralize many regional responsibilities to a new and lower echelon, the area office, the reorganization would establish a "straight line" of command between the bureaus at FAA headquarters in Washington and the field facilities. Involved in the reorganization would be the field of the Bureau of Air Traffic Management, the facility maintenance and field supply functions of the Bureau of Facilities and Materiel, and the flight inspection and procedures activities and services of the Bureau of Flight Standards. The area organization was to be based on the geographic boundaries of air traffic flight advisory areas and located physically near the air route traffic control centers within the then existing 27 flight advisory areas in FAA's four domestic regions. The functions of 74 airway technical district offices and 27 air traffic supervisory offices were to be merged into the new area offices. FAA issued orders to implement the new area concept of administration on Nov 11, 1960, and Feb 6, 1961. (See Apr 7, 1961.)

19600908 Sep 8, 1960: FAA issued a new aircraft noise abatement technical planning guide for use by Federal and local officials. The guide discouraged certain kinds of construction in areas around large airports, such as residential subdivisions, schools, churches, hospitals, and other places of public assembly. Land lying immediately under the takeoff and landing patterns of jet runways, the guide recommended, should be utilized wherever possible for industrial, commercial, agricultural, or recreational purposes.

19600908 Sep 8, 1960: FAA adopted the British RAE visual glide path indicator landing lights as a national standard for use at U.S. airports. Developed by the Royal Aircraft Establishment in England, the RAE system required no equipment of any kind in the aircraft cockpit. Where installed at airports, it promoted air safety by reducing the possibility that aircraft might overshoot or undershoot the runway, and it helped abate noise by keeping aircraft as high during landing approach as safety factors permitted.

19600909 Sep 9, 1960: FAA permitted aviation medical examiners (AMEs) to deny, as well as issue, medical certificates to applicants that they examined. Previously, applicants whose fitness was questioned by the AME were automatically referred to the FAA Civil Air Surgeon in Washington. Under the new procedure, such referral ceased to be automatic, but the AME-denied airman could still appeal to the Civil Air Surgeon. Denial by the Civil Air Surgeon also remained appealable, to the Civil Aeronautics Board, as provided by the Federal Aviation Act of 1958. On Dec 14, FAA named nine members to a Medical Advisory Panel to assist the Administrator with the cases of applicants for airman certification who petitioned for exemption from medical standards.

On Oct 25, meanwhile, FAA had also announced the establishment of a Medical Advisory Council of 11 prominent doctors. The Council was appointed by the Civil Air Surgeon and assisted in developing and coordinating the aviation medicine program.

19600910 Sep 10, 1960: The Department of Defense conducted Operation Sky-Shield, a giant air defense drill, which necessitated the grounding of all commercial and general aviation aircraft throughout the North American continent for a six-hour period.

19600930 Sep, 1960: FAA commissioned its first Airport Surface Detection Equipment (ASDE-2) at Newark, N.J. Originally developed for the Air Force, ASDE was a radar system that provided air traffic controllers with information on the position of aircraft and other vehicles on the ground, even during darkness and fog. The ASDE antenna picked up this data for display on a scope in the airport tower. FAA's specifications for ASDE-2 were based largely upon an improved developmental model that had been operated under the agency's cognizance at New York International Airport (Idlewild). Besides Newark and Idlewild, eight other major U.S. airports were also scheduled to receive ASDE-2 in this initial installation program: Washington (Washington National and Dulles International), Boston, Seattle, San Francisco, Cleveland, Los Angeles, and Portland. (See Jul 5, 1977.)

19601004 Oct 4, 1960: An Eastern Air Lines Electra plunged into Boston Harbor shortly after taking off from Logan Airport, killing all but 10 of the 72 persons aboard. The accident marked the fifth Electra crash in two years and touched off renewed demands to ground the aircraft, which was being allowed to operate by FAA under a reduced speed regime (see Mar 17 and Dec 31, 1960). The presence of many dead birds on the Logan runway helped to convince FAA Administator E. R. Quesada that the accident had probably been caused by ingestion of birds into the aircraft’s engines rather than structural failure. Quesada decided not to ground the Electra. This judgement was later supported by laboratory tests that pointed conclusively to bird ingestion. Following the Boston crash, FAA engaged in studies and research on the bird hazard and methods of protecting aircraft from the effects of bird strikes.

19601009 Oct 9, 1960: FAA commissioned the Oakland air traffic control center's new building, followed by the Atlanta center's new building on Oct 15.

19601015 Oct 15, 1960-Mar 1, 1961: FAA successfully tested positive control on an area basis, as distinguished from a route basis (see May 28, 1958 and Apr 6, 1961), in Operation Pathfinder. As a result, area positive control was continued as a regular service in the location used for the test: airspace between the altitudes of 24,000 and 35,000 feet overlying 120,000 square miles surrounding FAA's air route traffic control centers at Chicago and Indianapolis. Any aircraft entering this airspace, whether on or off the airways, were required to be equipped with (1) a radio permitting direct communication with controllers at the centers, and (2) a radar beacon transponder for identifying the aircraft, independently of voice communications, on the controllers' radarscopes. In addition, such aircraft were required to fly on instruments regardless of weather, remaining under control of the centers while in the positive control area. Under these conditions of constant radar surveillance, aircraft required as little as half the standard separation interval.

	The launching of Operation Pathfinder was preceded by more than a year of special preparations at the Chicago and Indianapolis centers--including intensive controller training, installation of additional radar and communications equipment, development of air traffic control procedures and phraseology, and an exhaustive analysis of the program through simulation studies.
19601018	Oct 18, 1960: FAA announced a comprehensive project to consolidate and simplify aviation safety regulations. The regulations had evolved without a coordinated plan, and interested persons might have to consult as many as 11 different publications to secure the desired information. Redundant and obsolete provisions and unnecessarily complicated or technical language also made it difficult to use the regulations. The purpose of the project was to eliminate these faults without changing the substance of the regulations. (See Nov 1, 1937, and Aug 31, 1961.)
19601029	Oct 29, 1960: A chartered Curtiss-Wright Super C-46F crashed at Toledo, Ohio, killing 22 of the 48 persons aboard, including 18 members of the California State Polytechnic College football team. CAB cited the probable cause as loss of control during premature liftoff, with contributary factors that included zero-visibility fog. The pilot's license had been revoked by FAA for a series of previous violations, but he had continued flying pending an appeal before CAB. The operator, Artic-Pacific, lost its certificate as a result of the crash. After the accident, FAA instructed its tower controllers to withold takeoff clearance from commercial aircraft under specified conditions of low visibility.
19601103	Nov 3, 1960: FAA certificated the Beech 95-55 Baron, a four- to five-place aircraft powered by two Continental 260 h.p. fuel-injection engines. The plane had first flown on Feb 29, 1960.
19601215	Dec 15, 1960: FAA began the assimilation of six Military Flight Service Centers manned by approximately 500 men of the USAF Airways and Air Communications Services. Completed the following spring, the transfer was a part of the overall FAA-DOD plan labeled "Project Friendship" (see Oct 7, 1959, Jan 1962, and Feb 17, 1962).

19601216 Dec 16, 1960: A United DC-8 and a TWA Super Constellation collided in midair over Brooklyn, N.Y., killing all 128 occupants aboard the planes and eight persons on the ground. CAB determined that the probable cause was that the United flight proceeded beyond its clearance limit and confines of the airspace assigned by Air Traffic Control. The DC-8's high speed, coupled with a change of clearance which reduced the distance which the aircraft needed to travel by approximately 11 miles, contributed to the crash. The Board concluded that the crew did not take note of the change of time and distance associated with the new clearance. The crew's workload was increased by the fact that one of their two Very High Frequency radio navigational receivers was inoperative, a fact unknown to Air Traffic Control. FAA actions taken as a result of the accident included: a requirement that pilots operating under instrument flight rules report malfunctions of navigation or communications equipment, effective Feb 17, 1961; a program to equip all turbine-powered aircraft with distance measuring equipment, or DME (see Jun 15, 1961); a speed rule, effective Dec 18, 1961, prohibiting aircraft from exceeding 250 knots when within 30 nautical miles of a destination airport and below 10,000 feet, except for certain military jets requiring a higher minimum speed for safe operation; and other steps to strengthen air traffic control procedures.

19601219 Dec 19, 1960: The Martin Company delivered its last airplane, a Marlin Patrol Boat, to the Navy. Since the company's founding by Glenn L. Martin in 1912, it had produced more than 12,000 aircraft. Since 1948, the company had also been active in the missile-space field, and it would continue in that field.

19601219 Dec 19, 1960: FAA Administrator Quesada announced the establishment of the Interagency Group on International Aviation (IGIA). With the Administrator as chairman, the group included one representative each from the Civil Aeronautics Board and the Departments of State, Defense, and Commerce, and one ad hoc representative each from any other agencies having a substantial concern in business before the group. The IGIA was to develop recommendations for the Secretary of State on international aviation questions involving the substantial interest of two or more agencies other than the Department of State. The work to be done by IGIA had formerly constituted part of the function of the Air Coordinating Committee. (See Aug 11, 1960.)

19601230 Dec 30, 1960: FAA and Air Force jointly announced a U.S. Air Force program to develop a long-range all-cargo aircraft designed to meet civil and military needs. Part of a program to modernize the Military Air Transport Service (MATS) with long-range jet transports, the aircraft was to be developed in such a way as to be qualified, upon completion, for immediate FAA certification as a commercial carrier. On Dec 17. 1963, the U.S. Air Force's C-141A first flew, and on Apr 23, 1965, the Air Force accepted delivery of its first C0141. On Jan 19, 1965, FAA had type-certificated the civil version, the Lockheed Model 300-50AOl (StarLifter).

19601231 Dec 31, 1960: FAA lifted the speed restriction on Lockheed Electras when modification to prevent recurrence of the nacelle-wing whirl mode phenomenon had been accomplished (see Mar 17, 1960). The agency informed all known operators of the Electra by telegram and published the airworthiness directive in the Federal Register on Jan 17, 1961.

1961

19610109	Jan 9, 1961: The Federal Aviation Agency released a report on the commercial supersonic transport (SST), prepared by FAA with the assistance of DOD and NASA. The report concluded that a Mach 3 (2,000 m.p.h.) transport could and should be built by U.S. industry, with governmental financial support limited to demonstrated needs. Although he had been unable to persuade the outgoing Eisenhower Administration to request funds for SST development, Administrator Quesada recommended prompt and careful consideration of the immediate establishment of such a program. (See Jun 30, 1960, and Jul 24, 1961.)
19610109	Jan 9, 1961: Pursuant to Executive Order 10902, signed on this date, the Office of Civil and Defense Mobilization Preparedness issued its Order No. 3 charging the FAA Administrator with preparation for emergency management of the nation's civil airports and civil aviation operating facilities. On Feb 16, 1962, Executive Order 11003 continued and extended this responsibility by directing the Administrator to prepare national emergency plans and preparedness programs for the nation's civil airports, civil aviation operating facilities and services, and civil aircraft other than air carriers.
19610113	Jan 13, 1961: AN FAA directive gave the Bureau of Research and Development full responsibility for the improvement and modification of air navigation aids, communications, and related equipment used in the Federal airways system. While continuing to procure, install, and maintain such facilities, the Bureau of Facilities and Materiel, which had previously shared or performed certain R&D functions, would henceforth provide only required "immediate" engineering support.
19610116	Jan 16, 1961: FAA introduced a new Automatic Data Interchange System (ADIS), a multi-point highspeed teletypewriter network capable of transmitting weather data at 850 words per minute. The new network connected interchange centers located at Cleveland, Atlanta, Fort Worth, Kansas City, and San Francisco that served five national "weather areas." The new high-speed circuit would be used for Service A, the most complex of FAA's three weather communications networks. (See Jul 6, 1957, and Jun 1979.)
19610120	Jan 20, 1961: John F. Kennedy became President, succeeding Dwight D. Eisenhower. The resignation of FAA Administrator Elwood R. Quesada became effective, and Deputy Administrator James T. Pyle became Acting Administrator. (See Mar 3, 1961.)
19610124	Jan 24, 1961: The Convair 990 (model 30) first flew. On Dec 15, FAA certificated the four-engine jet airliner of medium-to-long range with a maximum capacity of 121 passengers. The plane, built by General Dynamics Corporation, entered scheduled service on Mar 9, 1963, with Swissair.
19610207	Feb 7, 1961: FAA commissioned the Cleveland air traffic control center's new building, followed by the Jacksonville center's new building on Feb 25.

19610207	Feb 7, 1961: Affirming the decision of a neutral committee, the U.S. National Mediation Board ruled that the pilots and flight engineers of United Air Lines constituted one craft for purposes of representation. The Board ordered an election in which the Flight Engineers International Association (FEIA) faced certain defeat by the more numerous members of the Air Line Pilots Association (ALPA). On Feb 17, flight engineers walked off the job at seven airlines to protest the board's decision, which they feared would set an industry-wide precedent. On Feb 21, with several wildcat strikes still in progress, President Kennedy appointed a three-man investigative commission headed by law professor Nathan Feinsinger. On May 24 and Oct 17, the commission issued two reports recommending that: all four-man cockpit crews be gradually reduced to three men; flight engineers on jets should take pilot training at airline expense; FEIA and ALPA should merge or take other cooperative action to settle their dispute over flight deck jurisdiction; and no disciplinary action should be taken against the flight engineers who struck in February. ALPA gave formal acceptance to only part of these recommendations, while FEIA accepted them as suggestions rather than binding solutions. All the airlines except Western, which refused to rehire its striking engineers, accepted the recommendations. By negotiations or strike-breaking, all the carriers that had been using a four-man cockpit crew had succeeded in eliminating the fourth man by the end of 1964. (See Jun 7, 1960 and Apr 21, 1965.)
19610221	Feb 21, 1961: Effective this date, an amendment to Part 60, Civil Air Regulations, made it possible for FAA to raise the floor of control areas (airways) from the existing 700 feet to at least 1,200 feet above the surface, on a case-by-case basis. Such actions would provide an additional 500 feet or more of uncontrolled airspace. The additional uncontrolled airspace would be available to pilots operating under visual flight rules (VFR) when flight visibility was as low as one mile, in contrast to a three-mile visibility required for VFR operations in controlled airspace.
19610226	Feb 26, 1961: FAA and the U.S. Weather Bureau announced the expansion of aviation weather services. Under the joint program, direct weather briefing service would be made available to pilots at hundreds of additional airports. The expanded program involved training FAA's 4,000 flight service specialists to handle preflight briefing and to answer air-ground requests for weather information.
19610303	Mar 3, 1961: Najeeb E. Halaby became the second FAA Administrator, succeeding Elwood R. Quesada (see Nov 1, 1958). The appointment, which President Kennedy had announced on Jan 19, was submitted to the Senate on Feb 13 and confirmed on Feb 24.

	Born in Dallas, Tex., Halaby received a B.A. from Stanford in 1937 and a law degree from Yale in 1940; however, his aviation career had already begun in 1933 when, at the age of 17, he received his student pilot certificate. Early in World War II (1942-1943), he served as a test pilot for the Lockheed Aircraft Corporation. After becoming a naval aviator in 1943, he served at the Naval Air Test Center, Patuxent, Md. He participated in the first flights of U.S. jet-powered aircraft. Among the positions in which Halaby served the Federal government after the war were: foreign affairs adviser to the Secretary of Defense; special assistant to the Administrator of the Economic Cooperation Administration; Deputy Assistant Secretary of Defense for International Security Affairs; and vice chairman of the Aviation Facilities Study Group (see May 4, 1955). In 1953, Halaby was selected by the Junior Chamber of Commerce for an award as the "outstanding young man in Federal Service." His private business activities included the practice of law with a Los Angeles firm in 1940-1942 and, after World War II, service as: an associate of Laurence Rockefeller; executive vice president and director of Servomechanisms, Inc.; president of American Technological Corporation, a technical ventures corporation; secretary-treasurer of Aerospace Corporation, a firm that was principal adviser to the Air Force missile and space program; and director of his own law firm in Los Angeles.
	Halaby headed FAA for over four years, the longest tenure of any of the agency's first twelve Administrators, before resigning effective Jul 1, 1965 (see that date).
19610303	Mar 3, 1961: President Kennedy requested Administrator Halaby to develop a statement of national aviation goals for the period 1961-70 which would define the technical, economic, and--excluding matters of peculiar concern to combat operating forces--military objectives of the Federal government throughout the broad spectrum of aviation. To undertake the study, called Project Horizon, an eight-member task group of aviation experts was formed under the chairmanship of Fred M. Glass, business executive and former member of the Harding Aviation Facilities Study Group. (See Sep 10, 1961.)
19610308	Mar 8, 1961: President Kennedy requested FAA Administrator Halaby "to conduct a scientific, engineering review of our aviation facilities and related research and development and to prepare a practicable long-range plan to insure efficient and safe control of all air traffic within the United States." In response to this directive, the Administrator established the Project Beacon task force--a study group that brought together eight recognized experts in aeronautic and related technologies under the chairmanship of Richard R. Hough, vice president-operations of the Ohio Bell Telephone Company. (See Sep 11, 1961.)
19610309	Mar 9, 1961: Administrator Halaby launched an "air share" program under which he and other top FAA officials met the general aviation community in a series of "hangar sessions" to discuss changes in the Civil Air Regulations. These meetings afforded airmen the opportunity to "air" their views and "share" the benefits of improved rules for safe flying. In Oct 1961, 90 air share meetings were held throughout the nation on a single day.

19610313	Mar 13, 1961: The Civil Aeronautics Board, rendering a decision in the Southern Transcontinental Service Case, awarded Delta Air Lines and National Airlines additional route segments that allowed both airlines to begin transcontinental service on Jun 11, 1961.
19610329	Mar 29, 1961: Administrator Halaby requested a four-man group of consultants to review FAA rulemaking and enforcement procedures. This Project Tightrope study group, headed by Lloyd N. Cutler of Washington, D.C., was composed of prominent attorneys experienced in administrative law and aviation problems. Submitted in October, the Tightrope report made a number of recommendations that resulted in important changes in these procedures. Among the group's recommendations were: establishing a Regulatory Council directly under the Administrator; appointing advisory committees for major rulemaking projects; eliminating the practice of keeping the rules docket closed until the end of the public comment period; publishing the proposed rule early in the rulemaking process; and having a trial-type hearing before an independent examiner prior to suspension or revocation of a certificate. (See Jan 8 and 17, 1962.)
19610406	Apr 6, 1961: FAA established a three-layer airways system and lowered the floor of the continental control area from 24,000 to 14,500 feet. A new intermediate system covering altitudes between 14,500 and 24,000 feet was designed primarily to provide express airways for long- and medium-haul operations. The high-altitude jet route system extended above 24,000 feet; the low-level system, in operation for many years, extended up to 14,500 feet. The lowering of the floor of the continental control area put into effect more stringent weather minimums for visual flight rule (VFR) operations above 14,500 feet. (See Oct 15, 1960-Mar 1, 1961, and Sep 17, 1964.)
19610407	Apr 7, 1961: FAA rescinded previous orders that had authorized the establishment of field area offices in accordance with recommendations of Project Straight-Line. (See Sep 2, 1960 and Oct 1, 1963.)
19610407	Apr 7, 1961: FAA adopted the side-lobe suppression feature as a national standard for the air traffic control radar beacon system. The side-lobe suppression technique would permit ground facilities to interrogate and receive a radar reply only from the aircraft being queried. This ability expanded the radar beacon system's capacity to handle air traffic. (See Sep 10, 1959, and Sep 11, 1961.)
19610412	Apr 12, 1961: Soviet Cosmonaut Yuri Gagarin became the first man in space when he rode the Vostok I for a single orbit of earth before landing safely. Astronaut Alan B. Shepard became the first American in space with a May 5 suborbital flight. The following year, John H. Glenn, Jr., piloted the first U.S. manned orbital flight on Feb 20, 1962.
19610414	Apr 10-14, 1961: The first FAA-sponsored International Aviation Research and Development Symposium, convened at Atlantic City, covered subjects relating to advances in electronics and their application to air navigation and air traffic control systems. Attendees included officials of some 20 foreign governments and representatives of the electronics and aviation communities.

19610417	Apr 17, 1961: Air traffic control training for a group of military ATC trainees began at FAA's Aeronautical Center in Oklahoma City. The purpose of the experimental program was to determine whether FAA, inline with the Project Friendship plan, should eventually assume responsibility for training all military air traffic controllers. (See Oct. 7, 1959, and Mar 1, 1963.)
19610501	May 1, 1961: The first series of aircraft hijackings in the U.S. began when a passenger on a flight to Key West, Fla., forced the pilot to fly to Cuba. Four other "skyjacking" incidents took place before the end of Aug. In concert with other agencies, FAA actively supported congressional efforts to remedy a lack of criminal laws applicable to these and other threats to air safety. On Sep 5, President Kennedy signed Public Law 87-197, an amendment to the Federal Aviation Act of 1958. The law prescribed death or imprisonment for not less than 20 years for interference with aircrew members or flight attendants in the performance of their duties. Pertinent parts of the U.S. Code were made applicable to certain other crimes aboard aircraft in flight. To help enforce the act, a special corps of FAA safety inspectors were trained for duty aboard airline flights (see Aug 10, 1961).
19610502	May 2, 1961: The FAA Administrator and the CAB Chairman issued a joint policy statement favoring the use of a single air carrier airport serving adjacent communities when such an arrangement might cut costs and improve service. The statement indicated that this policy should be increasingly important in considering applications for airport construction grants and for certificated airline service. (See Sep 1965.)
19610504	May 4, 1961: FAA issued orders providing for the organization and operation of a comprehensive flight information service to ensure that current and complete information required for operations in the navigable airspace was available in the most suitable form.
19610505	May 5, 1961: Navy aeronauts Malcolm Ross and Victor Prather set a balloon high altitude record of 113,740 feet while testing space suits developed for use by Project Mercury astronauts. They landed as planned in the Gulf of Mexico, but Prather drowned during the recovery phase of the operation.
19610525	May 25, 1961: A Special Civil Air Regulation effective this date banned the use of portable FM radios on U.S. civil aircraft. Radios having oscillators operating within or very near the Very High Frequency (VHF) band affected the VHF radio navigation system of the aircraft.
19610526	May 26, 1961: FAA Administrator Halaby disclosed his intention to decentralize the agency's operational responsibilities and broaden the authority of regional executives. He selected FAA's Region One, with Headquarters in New York, for the pilot program, and chose Oscar Bakke, head of the Bureau of Flight Standards, to develop the program and to submit a transition plan which would be used as a model for reorganization of the other regions. Bakke assumed the title of Assistant Administrator for the Eastern Region, effective Jul 1 (see that date).
19610601	Jun 1, 1961: United Air Lines absorbed Capital Airlines in the biggest U.S. domestic airline merger up to that time.

19610605	Jun 5, 1961: FAA announced a program of improvements to Washington National Airport that would include easier highway access, upgraded baggage handling, enclosure of walkways, and a new taxiway near the North Terminal, a facility that had been added in 1958.
19610607	Jun 7, 1961: FAA signed a contract with the Flight Safety Foundation for a survey of near-collisions in the air during a one-year period, including compilation of statistical data, analysis, and recommendations. The resulting Project Scan began on Jul l. To ensure a free flow of information, the Foundation protected the identity of those reporting the near misses. A final report released on Aug 31, 1962, analyzed more than 2,500 of the incidents. It recommended an educational program for pilots, improvements in equipment and procedures, and continued collection of anonymous reports "to provide a broad background of information on the near mid-air collision hazard." (See Jan 1, 1968.)
19610608	Jun 8, 1961: FAA announced plans to establish an additional regional office, with headquarters in Atlanta, Ga. The new Southern Region office would have responsibility for FAA activities in Georgia, Florida, North Carolina, South Carolina, Tennessee, Alabama, Mississippi, Puerto Rico, the Virgin Islands, and Swan Island--areas currently under the supervision of FAA Region 2 headquartered at Fort Worth, Tex. The Southern Region would be a controlled installation with minimum staffing, designed to serve as a model for reducing regional headquarters cost through prudent management. At the same time, FAA disclosed that its regions would be identified by geographical rather than numerical designations. Thus, Region 1 would become the Eastern Region; Region 2, Southwest Region; Region 3, Central Region; Region 4, Western Region; Region 5, Alaskan Region; and Region 6, Hawaiian Region (subsequently changed to Pacific Region)
19610615	Jun 15, 1961: Following installation of distance-measuring equipment (DME) on the entire jet fleet of American Airlines, FAA began using DME air traffic control procedures for the first time on a nationwide basis. While these procedures had been in effect since Jan 1960, their use had been limited by the small number of DME-equipped civil aircraft. (See Dec 16, 1960, and Jul 1, 1963.)
19610626	Jun 26, 1961: FAA announced that as a result of a recent decision by the U.S. Civil Service Commission, many air traffic controller positions in approach control towers and air route traffic control centers would be raised one grade to reflect increased job requirements and complexity. Primarily affected were the positions of certain controllers performing coordination and radar control duties as well as facility chiefs and other supervisors. (See Dec 15, 1968.)
19610629	Jun 29, 1961: FAA commissioned the first Doppler VOR system, for service at Marquette, Mich. The Doppler version of the very-high frequency omnidirectional radio range, a primary navigational aid of the Federal airways system, was developed for installation at sites where standard VOR's could not be used. (See Jun 1, 1952.)

19610701	Jul 1, 1961: An extensive reorganization of the Federal Aviation Agency began. Termed "evolutionary" and keyed to a revised concept of Washington-field relationships, the reorganization was intended to strengthen agency management by centralizing development of programs, policies, and standards in Washington and delegating broad operational responsibilities to regional offices. The seven regional offices would be headed by assistant administrators responsible for the executive direction of all FAA programs in the field within the framework of the national guidelines established by Washington. To assist the Administrator in the overall management of specific functional areas, the posts of Deputy Administrator for Plans and Development and Deputy Administrator for Administration were established. In an earlier action, the FAA Administrator had named Alan L. Dean, formerly Assistant Administrator for Management Services, as the new Deputy Administrator for Administration. The following April, Robert J. Shank, an engineer-executive from private industry, was selected to head the redesignated post of Deputy Administrator for Development. The statutory Deputy Administrator was to serve as general manager of the agency's operations, coordinating the activities of the regional offices and the operating programs in Washington. James T. Pyle, former CAA Administrator and Deputy Administrator under Quesda, would continue to occupy this post until his resignation in Oct 1961. General Harold W. Grant was selected as the new Deputy Administrator in February 1962. Except for the Bureau of National Capital Airports, all of the former bureaus and the Office of International Coordination were redesignated as services, each headed by a director. Other changes involved the former Budget Division of the Office of Management Services, which became the Office of Budget.
19610701	Jul 1, 1961: FAA, with the cooperation of the U.S. Weather Bureau, inaugurated pilot-to-forecaster weather service as a test program in the Washington, D.C., and Kansas City areas. The service allowed pilots to request weather information via a special radio frequency.
19610701	Jul 1, 1961: FAA commissioned the Balboa (C.Z.) air route traffic control center.
19610712	Jul 12, 1961: Findings of a recently completed U.S. Civil Service Commission review of the functions and operations of FAA flight service stations were released. The CSC study concluded that changes in the functions and responsibilities of specialists at these facilities warranted in many instances one or two-grade salary increases.
19610713	Jul 13, 1961: FAA issued new procedures for the emergency operation of the DC-8 hydraulic system in a telegram to the aircraft’s users. The action followed a United Air Lines accident fatal to 17 persons on Jul 11 and a non-fatal accident on Jul 12.

19610715	Jul 15, 1961: The "tall tower" rule (Part 626, Regulations of the Administrator) became effective. This was the first single regulatory document containing criteria and procedures for determining potential hazards to air navigation which might be created by proposed tall structures. The controversial rule was regarded as a firm rejection of the broadcast industry's contention that such regulation invaded Federal Communications Commission jurisdiction. On Jul 21, 1961, FAA Administrator Halaby and FCC
	Chairman Newton N. Minow announced agreement on a number of measures to insure coordination of the new rule with FCC requirements to prevent unnecessary restriction.
19610724	Jul 24, 1961: A joint FAA-DOD-NASA Commercial Supersonic Transport Aircraft Report was issued. Based on a review of information gathered from industry and Federal government sources, the report concluded that development of a commercial transport aircraft to fly three times the speed of sound (Mach 3) was feasible and could be done by 1970-71. During August, Congress made its first appropriation for FAA research on the Supersonic Transport (SST). (See Jan 9 and Sep 25, 1961.)
19610725	Jul 25, 1961: FAA requested contract bids for the development of a compact airborne radar beacon for light aircraft. The transponders became commercially available during fiscal year 1965. The equipment, designated SLATE (small lightweight altitude-transmitting equipment), provided air traffic controllers with altitude information, permitting users to receive positive separation service in busy terminal area controlled airspace.
19610731	Jul, 1961: Work began at Anchorage on the installation of an automatic telecommunications system to modernize FAA's aeronautic communications in the Alaskan area. The new system was able to automatically switch reports coming in from 65 stations to the proper receiving station. It would handle mainly messages in FAA's Service B, which covered primarily aircraft movements, flight plans, and messages related to air traffic control and aviation safety. Additional steps were taken in September to modernize major portions of FAA's Alaskan telecommunications network with the award of a contract for 200 high-speed teletypewriters and associated equipment.
19610810	Aug 10, 1961: For the first time the Federal government employed armed guards on civilian planes. (See May 1, 1961.) The first such guards were border patrolmen from the U.S. Immigration and Naturalization Service. In Mar 1962, Attorney General Robert F. Kennedy swore in FAA's first "peace officers," as Special U.S. Deputy Marshals. Graduates of a special training course at the U.S. Border Patrol Academy, all of the men worked as safety inspectors for Flight Standards and only carried out their role as armed marshals on flights when specifically requested to do so by airline management or the FBI. (See Feb 21, 1968.)
19610813	Aug 13, 1961: Standard instrument departure (SID) procedures went into effect for the first time for civil aircraft at New York International Airport. In the form of pictorial charts, the SID's simplified pilot-controller exchange of complex clearance information.

19610828	Aug 28, 1961: FAA issued type and production certificates for the Lockheed Model 1329 JetStar, powered by four Pratt & Whitney JT12A-6 engines. The JetStar was the first four-engine turbojet executive-type transport designed and developed in the United States to be certificated.
19610831	Aug 31, 1961: FAA issued orders setting up an accelerated program to codify the agency's safety rules. The purpose of the program was to replace an ungainly mass of regulatory material with one streamlined body of rules. Primary responsibility was assigned to a Director of Rules Codification reporting to the agency's General Counsel. (See Oct 18, 1960, and Dec 31, 1964.)
19610907	Sep 7, 1961: FAA approved in principle the use of Doppler radar and other flight deck navaids to guide airliners across the North Atlantic. Authorization to operate on these routes without a navigator was contingent on satisfactory completion of a pilot training program and a refinement of procedures. The announcement resulted in a strike threat by airline navigators, who would be replaced by the all-electronic navigation systems. In Feb 1962, however, Trans World Airways became the first carrier to obtain FAA authorization to employ the Doppler navigational system in lieu of celestial navigation. (See Jul 21, 1964.)
19610910	Sep 10, 1961: The White House released the Project Horizon task force report (see Mar 3, 1961) on aviation goals for the 1960s with a presidential endorsement and instructions to the FAA Administrator to take the lead in its implementation. At the same time, the President instructed the Secretary of Commerce to take Horizon proposals fully into account in preparing a report on overall transportation policies, thus aiding in the quest for "an integrated national aviation program within a broad national transportation policy."
	The 239-page report defined 24 national aviation goals and outlined various programs aimed at helping to achieve those important objectives. Among the major points were those that called for:
	* Maintaining U.S. leadership in world aviation.
	* Basic reorientation of the Federal government's approach to the economic regulation of the airlines to avert the threatened collapse of the industry's financial structure.
	* Development of a Mach 3 supersonic commercial transport.
	* More emphasis on the aeronautical as opposed to astronautical aspects of the Federal R&D effort.
	* A comprehensive study of international aviation relations, commissioned by the President. * Enactment of legislation tailored to aviation's needs to replace the Railway Labor Act.
	* Continued effort to achieve a common civil-military air traffic control and air navigation system, including the establishment of a Federal Aviation Service within the FAA that would become an integral part of the military services in time of war.
	* Implementation of pending Project Beacon recommendations on air traffic control (see Sep 11, 1961).

19610911

Sep 11, 1961: The Project Beacon task force on Air Traffic Control (see Mar 8, 1961) submitted its report to the FAA Administrator. While finding that the air traffic control system was "being expertly operated by a highly skilled organization," the report concluded that substantial improvements were needed to meet the future challenge of aviation's projected growth. FAA urgently needed an overall systems plan. In effect, the recommended improvement involved a major reorientation of the modernization effort that had been launched in 1957 following the Curtis report. Keyed to the use of an air traffic control radar beacon system (ATCRBS) as a primary means of providing controllers with aircraft position information, the new concept found little promise in ground-based altitude measuring devices such as the 3-D radar under test as part of the earlier program (see Apr 7, 1961, and Dec 27, 1963). The report also urged expanded use of general purpose computers rather than special computer systems formerly under development for air traffic control. Rejecting the idea of fully merging air traffic control with the SAGE air defense system, the report urged that only radar elements of SAGE be used for the air traffic control system (see Apr 17, 1960, Feb 21, 1962, and Dec 1, 1963). The task force also urged a variety of changes involving airports, the segregation of controlled traffic, navigation and all-weather landing systems, a new category of flight known as controlled visual rules (CVR), and the extension of positive control and weather information.

On Nov 7, having reviewed the Project Beacon report, President Kennedy directed FAA Administrator Halaby to begin carrying out the report's recommendations. With respect to unresolved differences of opinion between FAA and DOD concerning integrating the SAGE air defense and air traffic control systems--a matter which had delayed release of the report by some two months--Kennedy asked Halaby "to consult with the Secretary of Defense and the President's Scientific Advisor, Dr. [Jerome B.] Wiesner, so that the optimum application of all resources of the Government in the safe and economical use of the airspace may be assured."

19610915

Sep 15, 1961: The White House announced establishment of a steering committee to study "economic, political, military, and prestige interests" related to U.S. international aviation policies, as recommended by Project Horizon. FAA Administrator Halaby chaired the committee, which included: Kenneth R. Hansen, Assistant BOB Director; Alan S. Boyd, Chairman, CAB; C. Daniel Martin, Jr., Under Secretary of Commerce for Transportation; Edwin M. Martin, Assistant Secretary of State for Economic Affairs; F. Haydn Williams, Deputy Assistant DOD Secretary; and James P. Grant, Deputy AID Director for Program and Planning. In October, a contract was jointly awarded to Robert P. Nathan Associates and the Systems Analysis and Research Corporation to conduct a broad study of international aviation problems for the use of the steering committee. Completed in early 1963, the committee's report led to a new presidentially approved statement of U.S. policy on international air transportation. (See Apr 24, 1963.)

19610920	Sep 20, 1961: The Federal Airport Act was amended to extend the Federal-aid airport program through fiscal year 1964. The new law authorized appropriations of $75 million each for fiscal years 1962- 64. See Appendix VII for subsequent appropriations under this Act until its repeal in 1970. (See Jun 20, 1959, and May 21, 1970.)
19610921	Sep 21, 1961: Senator A. S. Mike Monroney (D.-Okla.) introduced legislation proposed by FAA Administrator Halaby for creation of a Federal Aviation Service (FAS) to assure the continuity of essential airways services during any national emergency. Representative Oren Harris (D.-Ark.) introduced a similar bill in the House. The proposal was submitted in accordance with section 302(g) of the Federal Aviation Act of 1958, which directed the Administrator, in consultation with other affected Federal agencies, to study the special personnel problem inherent in the functions of the FAA and make recommendations to the Congress. Though basically civilian in character, the recommended FAS could be placed in military status by the President if necessary for defense purposes. DOD viewed such legislation as prerequisite to the eventual transfer of military air traffic control and air navigation facilities to FAA contemplated by the Federal Aviation Act. (See Feb 17, 1962.)
19610925	Sep 25, 1961: FAA, NASA, and the Defense Department agreed on a plan for the research and study phase of the commercial supersonic transport (SST) program. Assigning FAA responsibility for overall program leadership and management direction, the plan provided for a Supersonic Transport Steering Group--headed by the FAA Administrator and including the Assistant Secretary of the Air Force for Materiel and NASA's Director of Advanced Research Programs--to formulate broad policy and give overall guidance for the Federal role in the program. The Steering Group would be supported on the working level by the SST task group, which had been in operation for some time. Comprised of designated FAA-DOD-NASA representatives, the task group was to continue coordinating the SST activities of the three agencies. (See Jul 24 and Dec 11, 1961.)
19611013	Oct 13, 1961: FAA commissioned a CONSOLAN long-range navigation aid for service at Miami, Fla. The new station reduced the gap in radio navigation facilities covering the North and South Atlantic, the Gulf of Mexico, and the Caribbean, in addition to strengthening coverage of the U.S. east coast.
19611021	Oct 21, 1961: A new rule made airline management responsible for banning passengers appearing to be intoxicated. Although the pilot still retained his authority as captain in command, the new rule took into account the fact that the pilot was normally occupied with preflight checks during the time passengers were boarding.
19611106	Nov 6, 1961: Reflecting increased emphasis on the Federal-aid-to-airports program (see Sep 20, 1961), FAA established an Airports Service to replace the former Airports Division of the Aviation Facilities Service.

19611108	Nov 8, 1961: An Imperial Airlines L-049 Constellation crashed after stalling while attempting an unscheduled landing at Richmond, Va. The crash, which claimed 77 lives, was the latest in a series of accidents involving supplemental ("nonsked") carriers. It triggered investigations by Congress, CAB, and FAA into the supplementals' safety record, financial status, and business practices. (See Jul 9 and 10, 1962.)
19611201	Dec 1, 1961: FAA began an operational evaluation of aircraft powerplant reliability in a program jointly developed with the airline industry. The new program was designed to substitute continuous records of operational reliability for the older system of establishing minimum overhaul times as a measure of safety for aircraft powerplants.
19611211	Dec 11, 1961: A Supersonic Transport Advisory Group established in November held its first formal meeting with the joint Supersonic Transport Steering Group. The new group was headed by General Orval R. Cook (USAF Ret.) and included aviation industry leaders. Its major tasks were: to assess basic technical background material of the supersonic transport (SST); to define Federal-industry roles in program management; to consider the impact on U.S. and world markets if a European Mach 2 SST flew before the American SST; to develop a plan for financing development; to prepare a blueprint for development, production, and entry into airline service; and to consider methods for airline financing of SST purchases. (See Sep 25, 1961, and Jan 16, 1963.)
19611226	Dec 26, 1961: Air traffic rules establishing the first national standards for conducting flight operations on and around all controlled airports throughout the country became effective. At airports providing Federal traffic control tower service, the new rules established airport traffic areas, approach and departure procedures, and pattern altitudes; required two-way radio communications; and set airspeed limits within the airport traffic area. The airport traffic area affected was defined as airspace within a five-mile horizontal radius from the airport's center extending from the surface up to 2,000 feet.

1962

19620101 Jan 1, 1962: As a step in the Federal Aviation Agency's decentralization of operational activities to the field (see Jul 1, 1961), FAA transferred to its seven regions the additional responsibility of processing enforcement actions arising from violations of the Civil Air Regulations by air carriers, air carrier airmen, manufacturers, or military personnel. The regions already had authority to process actions in the general aviation field.

19620108 Jan 8, 1962: FAA established an Agency Regulatory Council to facilitate rulemaking and to insure the implementation of the Administrator's rulemaking policies. The agency also established the position of Executive Director to provide full-time management for the Council. Besides the Executive Director, original regular membership consisted of: the Administrator (as chairman); the Deputy Administrator; the Director, Air Traffic Service; the Director, Flight Standards Service; the Civil Air Surgeon; and the General Counsel. Added as regular members later were: the Director, Airports Service; the Director, Systems Research and Development Service; the Associate Administrator for Programs; and the Assistant Administrator, International Aviation Affairs. The other Associate Administrators and other office and service heads participated individually as ad hoc members in matters of substantive concern to them. Establishment of the Regulatory Council implemented one of the principal recommendations of Project Tightrope (see Mar 29, 1961). The Council's first meeting took place on Jan 10, 1962.

19620117 Jan 17, 1962: President John F. Kennedy issued Executive Order 10988, which guaranteed the right of Federal employees to join organizations--i.e., any lawful association, labor union, federation, council, or brotherhood "having as a primary purpose the improvement of working conditions among Federal employees"--and engage in collective bargaining. The order also made provision for Federal agencies to accord informal, formal or exclusive recognition to employee organizations. FAA Administrator Halaby argued unsuccessfully before Kennedy Administration councils that air traffic controllers, because they served a national defense function, should be excluded from the provisions of the order. (See Jan, 1968.)

19620117 Jan 17, 1962: As recommended by Project Tightrope (see Mar 29, 1961), FAA established the positions of chief hearing officer and hearing officers to make available to airmen a trial-type proceeding when charged with a violation of the Civil Air Regulations for which their certificate might be suspended or revoked. Appearance before a hearing officer would not prejudice the airman's statutory right to appeal an FAA decision to the Civil Aeronautics Board. In July 1963, FAA broadened hearing officer duties to include the conduct of such other public and intra-agency hearings as the Administrator might direct. Three hearing officers began their new duties about Mar 1, 1962. Based one each at Los Angeles, Kansas City, and Atlanta, they held hearings at various locations within their respective jurisdictions, which covered the contiguous 48 states. Pending the appointment of a chief hearing officer, the hearing officers reported to the Administrator through the Executive Director of the Agency's Regulatory Council (see Jan 8, 1962).

19620131	Jan, 1962: FAA began using semiautomatic flight inspection (SAFI) equipment for all-weather flight inspection at high altitudes, initially on a limited basis. By the end of fiscal 1963, SAFI-equipped aircraft performed almost all inspections of those air navigation facilities in the 48 contiguous states used purely for en route navigation. (As the dependability of the en route system became established, the SAFI program was reduced until by 1990 it was conducted by a single aircraft.)
	Meanwhile, an Executive Order of Aug 28, 1962, formally authorized the transfer of flight inspection responsibilities from the Defense Department to FAA, as planned under Project Friendship (see Oct 7, 1959). This process had already begun during the first half of calendar 1961, when FAA had undertaken flight inspection for the Army and Navy, initially on reimbursable basis. During fiscal 1963, the agency also took over routine inspection of air navigation aids for the Air Force, although that service retained some flight inspection aircraft of its own (see Oct 1, 1991). At the end of fiscal 1963, FAA's worldwide flight inspection fleet consisted of: 55 Douglas DC-3s; 6 DC-4s (C-54s); 8 Convair 240s (T-29s); 5 Convair 440s (C-131s); 2 Boeing 707s (KC-135s); 4 Lockheed 749 Constellations; and one Fairchild C-123. (See Oct 6, 1956, and Jul 8, 1973.)
19620217	Feb 17, 1962: The Director of the Bureau of the Budget proposed appointment of a joint Bureau of the Budget/Department of Defense/Federal Aviation Agency Steering Committee to study outstanding problems and recommend further action in the matter of the proposed mass transfer of military air navigation facilities to FAA and consolidation of air traffic management functions in that agency as part of Project Friendship (see May 1959).
	In the course of the following month, such a Steering Committee was appointed, consisting of the Assistant Director of the Bureau of the Budget, DOD's General Counsel, and FAA's Deputy Administrator (later, Associate Administrator) for Administration. On Apr 4, 1962, the Steering Committee approved a prospectus for the study drawn up by a working group from the three agencies. In the same month, on recommendation of the Steering Group, FAA advised the appropriate Senate and House committees that hearings on the bill to establish a Federal Aviation Service to provide centralized operation of all air navigation facilities should be deferred pending the Steering Committee's findings. (See Sep 21, 1961, and Mar 1, 1963.)

19620221

Feb 21, 1962: The U.S. Senate confirmed Major General Harold W. Grant, USAF, as FAA's Deputy Administrator, succeeding James T. Pyle (see Dec 31, 1958). A specialist in communications, General Grant was Commander of the Air Force Communications Service when the President selected him, on Feb 1, for the FAA position. Born in Louisville, Ky., General Grant received a bachelor of science degree from Northwestern University in 1928, and was commissioned in the Army Air Corps the following year. In World War II, he served as U.S. Air Signal Planner for Combined Operations in the European Theater and as Deputy Signal Officer in Chief of the Southeast Asia Command in India. During the Korean conflict, he was Vice Commander of the Japan Air Defense Force. After other assignments of high responsibility in the Far East and the United States, he became, in mid-1958, director of communications and electronics in the Office of the Deputy Chief of Staff for Operations, U.S. Air Force Headquarters. From this position he was assigned in July 1961 to the command from which he came to FAA. His decorations include the Legion of Merit with two clusters and the Order of the British Empire. (See Jul 1, 1965.)

During the two years after his appointment, Grant helped to work out a series of agreements with military commands that provided close integration of communication systems and joint use of facilities, espcially radar. Under an agreement with the Continental Air Defense Command, FAA handled the ATC operations of interceptor flights going to and returning from a target. These agreements reduced the chances of civil-military midair collisions and provided better defense readiness. The improved coordination of military and FAA activities helped to ease tensions that had developed over the FAA decision to make only limited use the military's SAGE system in the national ATC system (see Sep 11, 1961, and Dec 1, 1963).

19620227

Feb 27, 1962: FAA announced Project Little Guy, a three-year program aiming at development of a simpler, more efficient cockpit layout for light aircraft. The results of this research and development effort would be available to future aircraft designers.

19620228

Feb 28, 1962: FAA received the Project Pipeline report, a study to improve and modernized FAA's supply system. The final report, based on an extensive study of the supply systems of private industry and Federal agencies, established guidelines for subsequent improvements in FAA's supply-materiel . A parallel project, titled the Harbridge House study (for the Boston management firm which produced it), was also undertaken and completed in the spring. The Harbridge study reviewed FAA's materiel activities with respect to organization for management of the materiel function, training requirements for materiel programs, and problem areas in procurement. During fiscal year 1963, FAA formulated a comprehensive Materiel Systems Improvement Plan. According to the agency's FY63 annual report, FAA began a two-year implementation process of that plan, streamlining business methods, increasing the use of electronic automatic data-processing equipment, and improving distribution and storage techniques.

19620301	Mar 1, 1962: Los Angeles Airways began the world's first airline service by a multi-engine turbine-powered transport helicopter. The airline used the new Sikorsky S-61L, which had first flown on Dec 6, 1960, and which became the first twin-turbine helicopter to receive an FAA commercial type certificate on Nov 2, 1961. An important competitor to the S-61L was the Boeing-Vertol 107-II, which had first flown in prototype on Oct 25, 1960, and received certification on Jan 26, 1962. The Vertol 107-II entered scheduled service with New York Airways on Jul 1, 1962.
19620305	Mar 5, 1962: In Griggs v. Allegheny County, the U. S. Supreme Court held that noise from low-flying aircraft had interfered with the use and enjoyment of Grigg's residential property near a runway to such an extent as to constitute a "taking" of an air easement for which compensation must be made. In Causby v. United States (see May 27, 1946), the Court had ruled that such an easement had been taken by the Federal government, which was the owner/operator of the aircraft in that case. In Griggs, however, the Court asserted that Allegheny County, Pa., as the "the promoter, owner, and lessor of the airport" took the air easement. The Court absolved the airlines and the Federal government of any taking, stating that it was Allegheny County that decided, subject to Civil Aeronautics Administration approval, "where the airport would be built, what runways it would need, their direction and length, and what land and navigation easements would be needed." The Court concluded that, in designing the airport, the County had not acquired enough private property to satisfy constitutional standards. (See Dec 13, 1956, and May 14, 1973.)
19620316	Mar 16, 1962: Effective this date, FAA abolished the Office of Plans, and transferred its personnel to other FAA components (see Jan 15, 1959 and Aug 28, 1967).
19620323	Mar 23, 1962: FAA type-certificated North American Aviation's Sabreliner (Model 265), an executive type jet aircraft. It thus became the first executive-type aircraft with twin turbojet engines to be designed, developed, and certificated in the United States.
19620325	Late Mar, 1962: FAA Administrator N. E. Halaby added a Special Assistant for General Aviation to his personal staff. A recognition of general aviation's great growth and continuing expansion, this appointment carried out one of the recommendations of the Project Horizon study (see Sep 10, 1961).
19620401	Apr 1, 1962: FAA commissioned the Fort Worth air traffic control center's new building. Other new center buildings commissioned during 1962 were: Kansas City, Apr 30; Denver, May 1; Memphis, May 5; Minneapolis, Jul 1, Seattle, Aug 1; Salt Lake City, Oct 1; Indianapolis, Nov 1; and Chicago, Dec 1.
19620411	Apr 11, 1962: Simultaneous code-identification and voice broadcasts from air navigation facilities would soon be standard, FAA announced, as a result of modifications being made to VORs and VORTACs. Simultaneous broadcasts had been recommended for international adoption by the Seventh Session of the International Civil Aviation Organization's Communications Division.

19620411	Apr 11, 1962: Administrator Halaby announced the formation of a Technical Advisory Board to assist FAA in keeping abreast of science and technology in general, and to help in particular with the agency's planning for modernizing the airspace system on the basis of the Project Beacon recommendations (see Sep 11, 1961). Richard R. Hough, Vice President for Engineering of the American Telephone and Telegraph Company served as chairman of the committee. Mr. Hough had previously served as chairman of the Project Beacon task force. Joseph D. Blatt, Director of FAA's Aviation Research and Development Service became executive secretary. The five other members were drawn from the air carrier and aircraft-manufacturing industrys and the academic community.
19620411	Apr 11, 1962: FAA announced that the first appointee as Assistant Administrator for Appraisal would assume his duties on Apr 16, with responsibility for evaluating the agency's operations both in Washington and the seven regions. On May 16, 1962, a formal order set forth the functions of the new Office of Appraisal.
19620416	Apr 16, 1962: The new FAA Internal Directives System became effective. It substituted a single, uniform, agencywide system in place of the previous diversity of directive types, formats, and numbering schemes.
19620516	May 16, 1962: In accordance with the recommendations of Project Searchlight (see Aug 1, 1960), the Aviation Facilities Service ceased to exist. FAA reorganized the service's diverse component parts by function, combining them with other organizational units to form two new specialized services. The new Installation and Materiel Service had responsibility for the acquisition, construction, and installation of air navigation, air traffic control, and aeronautical communication facilities, whether for the National Airspace System, international programs, or foreign governments. The service was also responsible for procurement and management of real and personal property, transportation, and procurement of services in support of all agency programs. The new Systems Maintenance Service received the mission of maintaining facilities and equipment for air traffic control, air navigation, and aeronautical communications.
19620516	May 16, 1962: FAA formally established a new Office of Policy Development with the mission of developing broad policy and objectives and the plans required to carry them out. On the same day, FAA created an Office of Compliance and Security in an action that consolidated these two functions organizationally. Previously, compliance matters had been handled by a staff assistant to the Deputy Administrator (later Associate Administrator) for Administration, and security matters were the concern of a division in the Office of Personnel and Training. The new office had the mission of assuring the highest possible standards of ethical, trustworthy, and nondiscriminatory conduct among employees, the physical security of information and property, and the conduct of investigations to meet the agency's needs. (See Nov 18, 1969.)

19620522	May 22, 1962: An explosion blew the tail off a Continental Air Lines 707 flying over southern Iowa, killing all 45 persons aboard. Officials later cited the probable cause as a dynamite detonation in a rear lavatory. On Jun 5, a government/industry steering committee headed by FAA Administrator Halaby convened to review efforts to combat the aircraft bombing hazard.
19620619	Jun 19, 1962: The FAA Administrator approved a standard organizational configuration for regional headquarters for FAA's seven regions, to be implemented by Oct 1, 1962. Besides the regional assistant administrator and his deputy, the organizational plan provided for an executive officer and divisions in large measure paralleling the office and service structure at the national headquarters. Any deviation from the standard pattern that might be needed to meet special local conditions would require specific approval by the Administrator.
19620629	Jun 29, 1962: The British Aircraft Corporation's VC-10 first flew. On Apr 29, 1964, this long-range jet airliner with four engines in lateral pairs on each side of the rear fuselage entered scheduled service with a BOAC flight from London to Lagos, Nigeria.
19620630	Jun, 1962: FAA established a Psychiatric Services Staff within its Aviation Medical Service to assure that the agency's medical program would give proper emphasis to the psychological dimension and needs of the nation's airmen.
19620709	Jul 9, 1962: Effective this date, a new FAA rule required supplemental (”nonsked”) airlines to conduct proving flights on new or materially altered aircraft before placing them in service. In effect, the new rule extended to the supplementals the provisions of a rule already applying to the scheduled airlines, requiring such aircraft to be flight tested a total of 100 hours, including 50 hours of en route operation and at least 10 hours at night. The new rule was one of several tightening-up measures deemed necessary when the supplementals' safety record, which had been excellent, deteriorated in 1960 and 1961. (See Nov 8, 1961, and Jul 10, 1962.)
19620710	Jul 10, 1962: An amendment to the Federal Aviation Act regularized the role in U.S. air commerce of the supplemental carriers (see Jan 29, 1959) after a court decision made new legislation necessary. The new law authorized the Civil Aeronautics Board to issue to such carriers limited charter certificates and to grant temporary authority for individually ticketed service where required to meet special public needs for air transportation. Increased emphasis on the safety of supplementals was reflected in provisions of the law that mandated certain fitness requirements and permitted the Board to require these airlines to carry adequate insurance and to furnish performance bonds.

19620831	Aug 31, 1962: FAA Administrator Halaby created the Office of Assistant Administrator for General Aviation Affairs to supersede the function of Special Assistant for General Aviation (see late Mar 1962). The mixed nature of the agency's programs involving general aviation made their grouping in a line-ofauthority relationship under one office impractical; hence, the new office functioned as the focal point in matters concerning the general aviation field. The new office also had responsibility for congressional relations and for aviation education matters.
19620904	Sep 4, 1962: Executive Order 11048 vested authority for the civil administration of Wake Island in the Secretary of the Interior and make effective an earlier agreement between the FAA Administrator and the Secretary of the Interior. Under the agreement, FAA assumed responsibility for the civil administration of this Pacific island, exercising executive, legislative, and judicial authorities. The FAA Administrator also promulgated a new Wake Island Code, which greatly strengthened the legal system and reduced previous administrative uncertainty. (See Jun 24, 1972.)
19621012	Oct 12, 1962: At the Administrator's direction, the Office of the General Counsel assumed sole responsibility for drafting of FAA safety rules. This action ended a situation in which the Office of the General Counsel had shared rule drafting responsibility with other major FAA components.
19621015	Oct 15, 1962: Public Law 87-820 transferred final responsibility for the aircraft loan guarantee program from the Civil Aeronautics Board to the Secretary of Commerce. (See Sep 7, 1957, and Jun 13, 1968.)
19621015	Oct 15, 1962: An experiment testing FAA's capability to provide air traffic control service to interceptor aircraft of the Air Force's Air Defense Command (ADC) during military operations got underway in FAA's Central Region. The experiment was born of the need to end a situation in which two organizations--FAA, controlling civil aircraft, and ADC, controlling its interceptor aircraft--were directing aircraft movements in the same airspace at the same time. This need, which had caused concern for some time, was intensified by the implementation of the area positive control program (see Oct 15, 1960-Mar 1, 1961). In the test, ADC's pilots received air traffic control service from FAA controllers for scramble, flight en route to target, and recovery; for actual intercept, they were handed off to ADC intercept directors. The test ended successfully on Apr 6, 1963, and pending formalization of the program, FAA continued providing services as during the test period. (See Sep 9, 1963.)
19621021	Oct 21, 1962: FAA Administrator Halaby dedicated the Civil Aeromedical Research Institute's new $8.5 million custom-designed building at the Aeronautical Center, Oklahoma City (see Oct 31, 1959). Key programs continued in the new facility included investigation of such topics as: the "true" age of pilots as opposed to their chronological age; effects of certain prescription drugs on aircrew members; crash-impact survival; methods for selecting trainee controllers, stress experienced by controllers, and the bearing of such stress on the desirability of an early retirement program.

19621021	Oct 21, 1962: Under the air route traffic control center consolidation program first announced in 1959, FAA phased out the Pittsburgh center and transferred its operational responsibilities to the Cleveland center.
19621022	Oct 22, 1962: President Kennedy made a national broadcast on the Cuban missile crisis and U.S. "quarantine" of Cuba. On the previous day, FAA had set up a temporary air traffic control tower at Key West about 5 hours after receiving a request for this action to assist military operations. During the crisis, the Miami air route traffic control center became a focal control point for air operations to support preparedness. The center also administered a special regulation, placed in effect on Oct 24, banning civil flights over the southern two-thirds of Florida and adjacent waters without a flight plan or functioning navigational equipment and two-way radio.
19621105	Nov 5, 1962: FAA announced acceptance of a design concept for a standard air traffic control tower. Prepared by the New York architectural firm I. M. Pei and Associates, the concept featured a free-standing tower providing greater visibility from the cab, improved space for operating radio and radar equipment, and a better environment for air traffic control personnel. Acceptance of the Pei design was recommended by FAA engineers and the agency's Design Advisory Committee, a group of citizens prominent in the fields of architecture or design. (See Dec 14, 1964.)
19621117	Nov 17, 1962: Ceremonies marked the opening of Dulles International Airport. Scheduled airline service began two days later. Air carrier operations reached a daily level of 72 by mid-1963, and operations of all types for fiscal 1964 totaled 111,071. (See Jul 15, 1959.)
19621130	Nov, 1962: FAA Administrator Halaby invited the civil aviation heads of 93 friendly foreign countries to meet individually with him in Washington during 1963. The aim was to discuss developments in aeronautical matters and stimulate thinking on measures to advance world progress in civil aviation. By the end of 1963, 25 such officials had visited FAA or were planning visits.
19621215	Dec 15, 1962: FAA authorized simultaneous instrument approaches and landings on parallel runways at Chicago's O'Hare International Airport to relieve traffic backup during peak-activity periods. The agency approved this air traffic control innovation only after extensive testing under both simulated and actual conditions. Participating pilots had to operate under instrument flight rules, regardless of weather. They were radar vectored by the tower's approach controllers from four outer fixes to one of the two final approach ILS courses.

1963

19630116 Jan 16, 1963: The Federal Aviation Agency's Supersonic Transport Advisory Group recommended U.S. development of a commercial supersonic transport (SST) as a top-priority Federal-industry program in a report made public this date. In acknowledging the report, Administrator Halaby said that it made a "powerful" case for proceeding with SST development, but he asked for additional conclusions and recommendations in the following areas: cost of development and testing up to the preproduction stage for each airplane; unit cost which should be charged to the air carriers by manufacturers after the production stage was reached, "assuming production of some 200 aircraft"; direct operating costs; and management organization for development of an SST. The group submitted this supplementary report in May 1963 before dissolving in July. At the end May 1963, a Cabinet-level committee headed by Vice President Lyndon B. Johnson submitted recommendations to President Kennedy that were favorable to the program. (See Dec 11, 1961, and Jun 5, 1963.)

19630131 Jan, 1963: Implementing a Project Searchlight recommendation, FAA began using a new reporting system to provide comprehensive data on circumstances associated with outages of air navigation facilities because of equipment failures. Initially using punchcard accounting machinery to obtain data summaries from some 30,000 reports per month, FAA early began to convert the system to a computer. Analyses of the data identified equipment deficiencies, established the basis for equipment modifications, provided a means of evaluating cost-benefit ratios for facility and equipment proposals, and led to an improvement in maintenance productivity. (See Aug 1, 1960.)

19630201 Feb 1, 1963: In a formal agreement effective this date, the Deputy Secretary of Defense and the FAA Administrator called for joint FAA-DOD use of operational point-to-point communications networks on a worldwide basis. As the first step, leasing of FAA's commercial-wire communications requirements was phased in as an activity of the Defense Communications Agency. The phase-in was complete by the following Jun 30. The integration of FAA-DOD telecommunications facilities was undertaken to enhance the efficiency and reliability of both agencies' communications. Specific benefits foreseen included cost savings, greater protection for FAA's communications against service disruption, and an optimum balance of operational and economic considerations in a system satisfying both military and FAA cryptographic requirements.

19630209 Feb 9, 1963: The Boeing 727 first flew. On Dec 24, 1963, FAA certificated the 727, a three engine jet airliner of short/medium range with a basic capacity of 94 and a maximum capacity of 119 passengers. The plane entered scheduled airline service with Eastern Air Lines on Feb 1, 1964, and achieved worldwide popularity. By 1988, U.S. air carriers alone were operating 1,246 of the 727s.

19630214 Feb 14, 1963: The Civil Aeronautics Board disapproved agreements reached by the International Air Transport Association at its Chandler, Ariz., conference the previous fall to increase certain passenger fares on North Atlantic and Pacific routes. The CAB stand for lower fares resulted in a major controversy among international air carriers and their governments. Most European governments approved the higher fares and took steps to require U.S. carriers to charge the increased tariffs as a condition of entry into their respective countries. The controversy was temporarily resolved by a compromise agreement worked out by the carriers at Montreal in late May and subsequently approved by CAB.

19630301 Mar 1, 1963: The BOB-DOD-FAA Interagency Steering Committee (see Feb 17, 1962) reported to Administrator Halaby its findings concerning air traffic control and related functions of the Department of Defense and the Federal Aviation Agency. In summary, the Committee concluded: (1) a general assimilation of military traffic control functions by FAA could not be justified by cost or operational considerations; (2) assumption of operational and maintenance responsibilities by FAA for individual military facilities or classes of facilities might be advantageous, and the continuation of assimilation programs in such cases on a selective and mutually agreeable to basis was desirable; and (3) that it was desirable to further explore the feasibility of such joint programs as the training of traffic controllers and the establishment of common technical performance standards for equipment. By the time of this report, the opposing views of the air traffic controllers and the military had produced a deadlock that destroyed prospects for a Federal Aviation Service (see Sep 21, 1961.).

19630312 Mar 12, 1963: FAA published the first issue of Intercom, a weekly newsletter to keep employees at headquarters abreast of agency business. The issue announced that Intercom's for field personnel would be developed at the regional level by adding regional news to that reported in the headquarters version. In May of the same year, FAA also distributed the first issue of Horizons, a longer publication for employees. Horizons appeared monthly until biweekly publication began during 1967. In January 1971, it was superseded by the monthly FAA World. Publication of World was suspended after May 1986, but resumed in December of that year and continued through April 1994.

19630401 Apr 1, 1963: As an initial move in decentralizing its international aviation activities, FAA established a Europe, Africa, and Middle East region. Within its geographical area, the new regional organization represented the Administrator and unified authority for all FAA activities except the supervision of technical assistance programs. The new region assumed responsibility for the European, African, and Middle Eastern activities of the agency's international field offices, the Committee for European Airspace Coordination representatives, systems research and development offices, and air traffic control advisers. Headed by an Assistant Administrator, the new organization became fully operational on Sep 1, 1963. By that date, London had been selected as its headquarters. (See Jul 17, 1963, and May 1, 1965.)

19630404	Apr 4, 1963: Under the air route traffic control center consolidation program, FAA completed a phaseout of the Spokane center and transferred its responsibilities to the Seattle center. The agency completed two similar phase-outs on Jun 22 (El Paso, with responsibilities transferred to the Albuquerque center) and Jun 30 (Norfolk, with responsibilities transferred to the Washington center).
19630420	Apr 20, 1963: FAA commissioned the Albuquerque air traffic control center's new building on this date. Other new center buildings commissioned during 1963 included: Washington at Leesburg, Va., on Apr 28 (FAA held formal dedication ceremonies on Jun 15) and Miami on Sep 2.
19630424	Apr 24, 1963: President Kennedy approved a new statement of U.S. international air transport policy based on a report submitted earlier by an Interagency Steering Committee, chaired by the FAA Administrator (see Sep 15, 1961). A change in emphasis rather than in fundamental approach, the new statement stressed the necessity for keeping the environment of the international air transport industry as free as possible from restrictions, whether imposed by government or intercarrier agreement. U.S. policy was to seek an atmosphere of free enterprise that would benefit U.S. international air carriers and strengthen the entire system generally. As a follow-up action, the President, on Jun 22, 1963, directed the Secretary of State to organize an Interagency Committee on International Aviation Policy. The new body was to assist in the continuing task of developing and updating this and related U.S. policies. Chaired by the Under Secretary of State for Political Affairs and with the FAA Administrator as vice chairman, the committee consisted essentially of membership representing the same agencies as those of the Interagency Group on International Aviation (see Aug 11, 1960), which continued to handle technical matters affecting international aviation.
19630426	Apr 26, 1963: A split occurred within the Air Line Pilots Association, resulting in the formation of a separate union, the Allied Pilots Association, that gained the right to represent the pilots of American Airlines.
19630501	May 1, 1963: Effective this date, FAA revised Part 45 of the Civil Air Regulations to require commercial operators of large aircraft to file financial statements and to demonstrate their financial fitness. The new requirement grew from the agency's belief that an operator suffering severe financial difficulties might tend to relax safety standards. Recent accidents involving supplemental air carriers operating had strengthed this belief (see Nov 8, 1961, and Jul 10, 1962).
19630501	May 1, 1963: A year-long VOR maintenance study recommended by Project Searchlight (see Aug 1, 1960) got underway to determine whether VOR outage time occasioned by routine periodic maintenance work could be reduced without impairing the reliability of VOR service to users. The study showed that the equivalent of 135 personnel, or $1,120,000 annually, could be saved by using a revised maintenance schedule.

19630518	May 18, 1963: Effective this date, FAA required aircraft of Cuban registry engaging in nonscheduled international service in U.S. airspace to follow designated routes and to land at designated airports for inspection. FAA issued the rule at the request of the Departments of State and Defense as a measure necessary to national security. Its content was disseminated on May 20 in an international notice to airmen.
19630605	Jun 5, 1963: President Kennedy announced his decision to proceed with the development of a U.S. supersonic transport (SST) in an address at the Air Force Academy's commencement exercises. In a Jun 14 letter to Congress, Kennedy wrote that the national interest required a U.S. SST superior to any comparable transport, and he formally recommended a program to develop such an aircraft. He suggested that private industry bear 25 percent of the development costs, with the Federal government paying the remaining 75 percent. To provide this Federal share, the President on Jun 24 requested Congress to appropriate $60 million. The money was subsequently included in FAA's appropriation for fiscal 1964. (See Jan 16, 1963, and Jul 29, 1963.)
19630605	Jun 5, 1963: Administrator Halaby announced the establishment of an aviation mechanic safety awards program, to be administered by FAA in conjunction with the Flight Safety Foundation of New York City. Under the program, annual awards would honor airline and general aviation mechanics at state, regional, and national levels on the basis of their suggestions for improving either maintenance procedures or the mechanical reliability of aircraft and component systems. State aviation officials and representatives of FAA and industry would select the winners at the state and regional levels. FAA, the Flight Safety Foundation, and a committee of prominent members of the aviation community would select national winners.
19630612	Jun 12, 1963: The Administrator announced the appointment of David D. Thomas to the new FAA position of Deputy Administrator for Programs. Thomas would be responsible for planning and coordinating the operating programs of FAA's Air Traffic Service, Flight Standards Service, Airport Service, and Systems Maintenance Service. The title of the position was changed on Jun 28, 1963, to Associate Administrator for Programs, at the same time that the positions of Deputy Administrator for Administration and Deputy Administrator for Development were redesignated Associate Administrators for Administration and for Development.
19630701	Jul 1, 1963: FAA established the Office of Headquarters Operations, consolidating under a single managerial responsibility the personnel, accounting, data processing, and other administrative and support services required by FAA's Washington headquarters.

19630701 Jul 1, 1963: AN FAA safety rule requiring distance-measuring equipment (DME) on all airline turbojets and on all other civil aircraft flying instrument flight rules (IFR) above 24,000 feet in the contiguous 48 States went into effect. (See Jun 15, 1961, and Sep 18, 1965.) FAA stated that the rule would be extended to Alaska and Hawaii when the necessary ground equipment became available in those States. The agency extended the rule to all air carrier aircraft operating IFR, regardless of altitude, beginning with turboprops on Jan 1, 1964; pressurized piston-engine airplanes on Jul 1, 1964; and other planes having a maximum takeoff weight above 12,500 pounds on Jul 1, 1965.

19630717 Jul 17, 1963: FAA reconstituted its International Aviation Service as the Office of International Aviation Affairs, under an Assistant Administrator for International Aviation Affairs reporting to the Administrator. The same order directed decentralization of operational responsibility for the agency's international aviation activities to the regions. Full implementation was achieved in September 1963. As a result, the mission of the new Washington headquarters organization changed from an operating function to a staff activity; however, the new office retained responsibility for the management of FAA's role in technical assistance programs.

19630721 Jul 21, 1963: FAA commissioned a new building for the New York air route traffic control center at Islip, N.Y. This new building brought into service the first real-time solid-state computer to be used by the FAA in air traffic control. Formal dedication ceremonies took place Sep 7-8, 1963. The New York center's old building, in use since 1956, had been located at New York International Airport (Idlewild).

19630729 Jul 29, 1963: FAA Administrator Halaby announced the appointment of Gordon M. Bain to the new position of Deputy Administrator for Supersonic Transport Development. Bain was to head the organization within the FAA charged with overall responsibility for the Federal-industry program to develop a commercial supersonic transport (SST) aircraft. A division-level organization had previously handled the agency's role in the feasibility and research phase of the program, which was conducted jointly with NASA and the Defense Department. (See Jun 5, 1963, Aug 15, 1963, and Sep 15, 1965.)

19630731 Jul, 1963: FAA issued a Guide to Drug Hazards in Aviation Medicine, the first work of its kind. Dr. Windsor Cutting, professor of therapeutics at Stanford University, prepared the work for the agency with the assistance of of other eminent pharmacologists and staff members of FAA's Aviation Medical Service. A comprehensive listing of all commonly used drugs, both prescription and nonprescription, the Guide treated these by groups with similar pharmacological characteristics. For each group there was a concise statement of side effects, if any, making the drugs undesirable for fliers, and recommendations concerning the length of time a pilot should wait after taking a drug before resuming flight activity.

19630815 Aug 15, 1963: FAA issued a request for proposals (RFP) that established performance objectives for the United States supersonic transport (SST), providing the basis for design competition among airframe and engine manufacturers. The program timetable called for initial submission of manufacturers' designs based on this RFP by Jan 15, 1964. By Sep 10, 1963, three major airframe manufacturers and three major engine builders had notified FAA of their intention to submit proposals. (See Jul 29, 1963, and Nov 19, 1963.)

19630820 Aug 20, 1963: The BAC 1-11 first flew. The plane received a British type certificate on Apr 6, 1965. On Apr 15, 1965, FAA typed certificated the twin-engine, short-range jetliner with a maximum passenger capacity of 79, the first airliner since the 1940s to be certificated for operation with a two-man cockpit crew. Braniff Airways pressed the aircraft into U.S. domestic service on Apr 25, 1965.

19630909 Sep 9, 1963: FAA issued interim policy and guidance to cover an expansion of air traffic control services to the peacetime activities of the Continental Air Defense Command (CONAD). Limited thus far to the Central Region (see Oct 15, 1962), these FAA services would become available to CONAD in all regions after necessary preparations. The agency would provide air traffic control for a large part of intercept operations, but leave the control of critical phases to military air defense facilities. On Oct 7, 1963, Administrator Halaby hailed this development as "a milestone in air traffic control and in FAACONAD relations," and stated that the new procedures would become effective on Feb 1, 1964.

19630914 Sep 14, 1963: The Convention on Offenses and Certain Other Acts Committed on Board Aircraft (known as the Tokyo Convention) was opened for signature at a diplomatic conference held under the auspices of the International Civil Aviation Organization (ICAO). AN FAA official representing President Kennedy signed the document on behalf of the United States. The Legal Committee of ICAO had spent many years drafting the convention, which clarified certain jurisdictional issues concerning hijacked aircraft, and recognized the authority of aircraft commanders to use reasonable force to preserve law and order aboard their aircraft. The agreement also obligated signatory nations in which a hijacked aircraft might land to restore that aircraft to its lawful commander and to permit passengers and crew to continue their journey as soon as possible. The convention was to become effective 90 days after the twelfth signatory state deposited its instrument of ratification. (See Dec 4, 1969.)

19630930 Sep 30, 1963: A National Aircraft Accident Investigation School, jointly established by the Civil Aeronautics Board and FAA, opened at Oklahoma City with a prototype class of 16 students. The six-week course in accident investigation techniques and procedures was primarily for CAB-FAA personnel, with participation by a limited number of foreign students.

19631001	Oct 1, 1963: FAA began Project FOCUS (field organization configuration study), a set of working tests of alternative modes of field organization which were conducted simultaneously through Apr 1, 1964. The tests were the core of a study to address the problem of administrative decentralization at FAA's subregional level. Since each of the tested concepts offered different advantages and costs, the agency required an extensive period of evaluation following the tests to determine which provided the best cost-benefit ratio and greatest potential for meeting the future needs of the agency and the aviation public.
	While Project FOCUS was conducted only within the 48 contiguous states, three FAA regions took action to establish area offices outside the contiguous states during fiscal 1964. The Southern Region established area offices at Balboa (for the Canal Zone) and San Juan (for Puerto Rico and the Virgin Islands); the Alaskan Region, at Anchorage, Juneau, Fairbanks, Nome, Sitka, and 16 other locations; the Pacific Region, at Wake Island, Canton Island, Guam, and American Samoa. Area offices were expected to provide prompter and more locally responsive actions, a reduced regional headquarters workload, and generally more effective supervision of field offices and facilities. Area managers, the heads of these offices, had line authority over four basic operating programs--air traffic, flight standards, airway facilities, and airports. These programs had previously been in the hands of the regional directors and the regional program division chiefs. (See Apr 7, 1961, and May 18, 1965.)
19631007	Oct 7, 1963: The Learjet 23 made its initial flight. FAA certificated the twin-engine executive aircraft in July of the following year, and the company made its first delivery in October. The success of Model 23 and later Learjets helped to popularize corporate jet transportation.
19631030	Oct 30, 1963: FAA announced a proposed program to stimulate development of a new passenger/cargo aircraft for the short haul market, still dominated by the venerable DC-3. A preliminary design competition was completed in June 1964, but FAA did not consider any of the designs submitted a sufficient advance in the state of the art to warrant a detailed design contract.
19631101	Nov 1, 1963: At New York International Airport (Idlewild), FAA began operational tests of automatic broadcasts of routine, noncontrol terminal information using the voice channel of the navaid serving the airport. The agency later extended the new procedure to other busy terminal areas to reduce pilot-controller frequency congestion.
19631119	Nov 19, 1963: Responding to requests from U.S. and foreign carriers for priority deliveries of the U.S. supersonic transport (SST) when it became available, FAA established a delivery priorities system for the first 70 airliners to come off the production line. The agency stated it was acting as intermediary for the airlines pending final selection of a manufacturer to make the SST available at an early time to the broadest possible market, while maintaining a reasonable balance of distribution been U.S. and foreign carriers. (See Aug 15, 1963, and Jan 15, 1964.)
19631122	Nov 22, 1963: President John F. Kennedy was assassinated, and was succeeded by Lyndon B. Johnson.

19631122	Nov 22, 1963: FAA's Washington headquarters staff began moving into the newly completed Federal Office Building 10A, at 800 Independence Avenue, SW. Completed in December, the move brought together under one roof personnel formerly housed in several widely dispersed buildings, including some "temporary" buildings of World War II vintage.
19631201	Dec 1, 1963: FAA's air route traffic control center at Great Falls, Mont., began joint use with the Air Force of facilities originally installed to serve the latter's SAGE direction center at Malmstrom Air Force Base, Great Falls. Under this arrangement the same facilities served the dual purpose of air traffic control and air defense. This marked the first use of SAGE data for air traffic control by an FAA facility. (See Sep 11, 1961.)
19631208	Dec 8, 1963: A lightning-induced fuel tank explosion caused the crash of a Pan American Boeing 707 near Elkton, Md., with the loss of all 81 persons aboard. FAA's response included a Dec 18 telegram to air carriers and aircraft operators requiring installation of static dischargers on aircraft using turbine fuels. The accident led to research into methods of preventing such explosions, and to a debate on the safety of JP-4 (Type B) jet fuel. (See Jan 15, 1965.)
19631217	Dec 17, 1963: As a result of a congressional joint resolution and a Presidential proclamation,Wright Brothers Day occurred for the first time as a continuing annual observance on this 60th anniversary of the brothers' epocal first flight. (The anniversary had previously received this official designation on a onetime basis for the year 1959.) Dec 17 also remained Pan American Aviation Day (see Dec 17, 1940).
	Also on this date in 1963, "First Flight Airport" was dedicated at Kill Devil Hills, N.C., near the scene of the achievement commemorated in the facility's name. To build this general aviation airport, contributions of $44,444 each were made by the state of North Carolina, FAA, and the National Park Service.
19631224	Dec 24, 1963: New York International Airport (known as Idlewild) was renamed John F. Kennedy International Airport.
19631227	Dec 27, 1963: The civil-military common system of air navigation and air traffic control moved forward a step with a final action on FAA-DOD agreements defining the use, technical standards, and equipment characteristics of a key component--the air traffic control radar beacon system (ATCRBS). (See Sep 11, 1961, and Mar 4, 1976.)
19631230	Dec 30, 1963: FAA made public a study completed for the agency by a private research firm with the cooperation of the Air Transport Association. The study concluded that airport surface congestion was the principal cause of airport delays, a finding that corroborated an Aug 1962 FAA staff study. The firm found that runways, taxiways, ramp space, and gate positions were inadequate for modern-day air traffic, particularly during the evening rush hour. Only about one in five flights encountered delay, however, and significant delays were concentrated within a relatively few large airports.

19631231 Calendar Year, 1963: Marlon Green became the first African American to be hired as a pilot by a major U.S. passenger airline, after winning a discrimination suite against Continental Airlines. Earlier black pilots to fly for airlines had included August Martin, hired by a cargo line in 1955, and Perry Young, who joined a helicopter air carrier in 1956.

1964

19640109	Jan 9, 1964: The Federal Aviation Agency stated that its recent tests indicated that crash locator beacons could effectively aid in the location of downed aircraft. (See Feb 26, 1968.)
19640115	Jan 15, 1964: Six companies submitted supersonic transport (SST) design proposals to FAA in response to the agency's Aug 1963 request for such proposals. The companies included three airframe manufacturers (Boeing, Lockheed, and North American Aviation) and three engine manufacturers (General Electric, Pratt & Whitney, and Curtiss-Wright). (See Nov 19, 1963, and Apr 1, 1964.)
19640120	Jan 20, 1964: The Beech King Air first flew. The aircraft received type certification on May 19, becoming the first U.S. light twin-engine turboprop business aircraft to be type-certificated.
19640130	Jan 30, 1964: FAA established a staffing validation program to provide a systematic and standardized agencywide approach to the problem of developing accurate staffing requirements. Under this program, staffing standards would largely be determined by onsite factfinding studies conducted by specialists trained in the program's concepts and techniques.
19640203	Feb 3, 1964: A series of sonic boom studies began as FAA launched a six-month project to test public reaction to the phenomenon in Oklahoma City, using regularly scheduled overflights by Air Force supersonic jets. On Aug 5, the National Academy of Sciences announced the establishment of a committee to study effects of sonic boom as related to the development of the supersonic transport. On Nov 18, FAA launched a three-month study of the effects of sonic boom on typical structures in White Sands, N.M. (See Jan 27, 1965.)
19640204	Feb 4, 1964: As part of a continuing effort to modernize the National Airspace System, FAA announced the first phase of a long range plan to gradually reduce the number of flight service stations (FSSs) in the contiguous 48 states from 297 to 150 hard-core stations backed up by a network of manned and remote communications links. The resulting consolidated FSS system, made possible by advances in communications technology, would require between 500 and 600 fewer flight service specialists than the existing system and would save approximately $3 million annually, according to FAA estimates. In the first consolidation phase, 42 stations would be replaced either by manned information and communications facilities (MANICOMs) or airport information desks (AIDs), which would function as satellites of hard-core stations.

	President Johnson approved the plan, and on Apr 14, 1964, instructed FAA Administrator Halaby to “move as rapidly as possible to close unnecessary flight service stations." The plan, however, encountered strong resistance from general aviation organizations, individual private pilots, and communities where FSSs were scheduled to be closed. Critics of he plan argued that the remote, impersonal service provided by AIDs was no substitute for on the-spot service offered by manned stations. In view of this opposition, Congress attached a rider to the fiscal year 1965 Independent Offices Appropriations Act restraining FAA from closing any flight service stations during fiscal 1965. After restudying the plan, FAA in August 1965 informed Congress that it would not implement the consolidation program; instead, it would evaluate the service needed in each FSS area on a case-by-case basis. (See Feb 1976.)
19640316	Mar 16, 1964: A manpower study conducted by FAA revealed an approaching shortage of aircraft maintenance personnel. The survey, "Report of 1962 Survey of Maintenance Airmen," revealed that only 3 percent of the total aviation mechanic work force was between 18 and 24 years of age, and relatively few members of this age group were entering the aviation mechanic career field. The survey found that many aviation mechanics were discovering lucrative job opportunities in the missile and space fields. (See Sep 30, 1964, and Mar 17, 1965.)
19640327	Mar 27, 1964: The severe "Good Friday" earthquake destroyed the Anchorage airport traffic control tower. One FAA employee died in the quake, which registered between 8.5 and 8.7 on the Richter scale. As a result of widespread damage in the Alaska area, Congress authorized FAA to retain jurisdiction for two more years over 15 airports in Alaska. The agency operated these airports under the Alaska Omnibus Act of 1959, which funded the reimbursement of Federal agencies performing services for the new state of Alaska normally performed by state or local governments. Authorization for these funds had been due to expire on Jun 30, 1964, but was extended to Jun 30, 1966 by Public Law 88-311, enacted May 27, 1964.
19640401	Apr 1, 1964: Executive Order 11149 established the President's Advisory Committee on Supersonic Transport (SST) to advise President Lyndon B. Johnson on "all aspects of the supersonic transport program." The committee's original membership included Defense Secretary Robert S. McNamara (chairman), Treasury Secretary C. Douglas Dillon, Commerce Secretary Luther H. Hodges, NASA Administrator James E. Webb, FAA Administrator N. E. Halaby, CIA Director John A. McCone, and two private citizens: Eugene R. Black, former president of the World Bank, and Stanley de J. Osborne, Chairman of the Board of Olin Mathieson. The committee remained in existence until Sep 5, 1968, when it was terminated by the President.

	Also on Apr 1, 1964, FAA's Deputy Administrator for SST Development Gordon Bain reported on the results of a evaluation made in Phase I of the SST design competition. A 210-person Federal team gave the highest competitive scores to the Boeing variable-sweep wing airframe design and the General Electric after-burning turbojet engine design. In transmitting these results to Administrator Halaby, Bain recommended that the two companies be selected to go into a one-year noncompetitive detailed-design phase. (See Jan 15 and May 20, 1964.)
19640415	Apr 15, 1964: FAA established a Value Engineering Staff to achieve engineering objectives at the lowest overall cost. Value engineering (or value analysis) was to be applied to design, construction, installation and other activities involved in FAA's programs for establishing air navigation and air traffic control facilities.
19640417	Apr 17, 1964: Geraldine ("Jerrie") Mock completed the first solo flight around the world by a woman. Mock made the 23,103-mile flight in 29 days 11 hours 59 minutes, landing at Port Columbus Airport, Ohio. Later, on Apr 10, 1966, she set a world nonstop distance record for women of 4,550 miles.
19640424	Apr 24, 1964: The deliberate wrecking of a Douglas DC-7 near Phoenix, Ariz., began a testing program in which FAA and the Flight Safety Foundation attacked the problem of preventing postcrash fatalities. FAA crashed a Lockheed 1649 Constellation at the same site in Sep 1964. These experiments reflected a growing realization that fatalities in takeoff or landing accidents could be reduced if passengers were prevented from colliding with the aircraft's interior structure or furnishings and protected from postcrash fire and smoke. The test aircraft crashed through manmade barriers and then into a rocky slope, carrying dummy passengers, cameras, and instruments for recording impact forces, G-forces, hydrostatic pressures, and other stresses. The tests provided valuable data on such matters as fuel spillage, safety characteristics of rear-, forward-, and side-facing passenger seats, and the efficacy of passenger-restraining devices. Beginning in Apr 1965, FAA used the wrecked Constellation's fuselage for emergency evacuation tests. (See Jun 7, 1965, and Sep 20, 1967.)
19640504	May 4: , 1964 President Johnson announced the formation of a 32-member FAA Women's Advisory Committee on Aviation, created to advise the FAA Administrator on problems and matters relating to women in civil aviation. On Jan 23, 1975, the name of the group was changed to Citizens Advisory Committee on Aviation, and the membership expanded to include men. The committee was terminated on Jan 23, 1977.
19640507	May 7, 1964: A passenger shot the captain and first officer of a Pacific Air Lines Fokker F-27 en route from Reno, Nev., to San Francisco, Calif. The aircraft crashed near San Ramon, Calif., killing all 44 occupants. (See Aug 6, 1964.)

19640520	May 20, 1964: President Johnson gave his approval for the U.S. supersonic transport (SST) development program to proceed into Phase IIA--a six-month design competition between two airframe manufacturers (Boeing and Lockheed) and two engine manufacturers (General Electric and Pratt & Whitney). The President based his decision on the recommendations of the President's Advisory Committee on Supersonic Transport made on May 15, 1964. On Jun 1, the four competitors signed the six-month Phase IIA contracts. The contracts authorized each air frame manufacturer to spend at the rate of $1 million per month during the contract period and each engine manufacturer at a rate of $835,000 per month. All four manufacturers agreed to bear 25 percent of the contract costs. The design competition was subsequently extended for an additional six month period designated Phase IIB. (See Apr 1, 1964, and Jul 1, 1965.)
19640601	Jun 1, 1964: La Guardia Airport opened to scheduled air carrier jet operations. Jet air carriers had begun operating at John F. Kennedy International Airport on Oct 4, 1958, and at Newark Airport on Sep 11, 1961. (See Apr 24, 1966.)
19640601	Jun 1, 1964: The French-Anglo-United States Supersonic Transport (FAUSST) group opened its first meeting. The group was established to exchange information on airworthiness and environmental matters in SST development, certification, and operation. FAA represented the United States in the group.
19640626	Jun 26, 1964: FAA issued a rule requiring Cockpit Voice Recorders to be installed in certain aircraft used by air carriers or commercial operators. The rule applied to large turbine-powered aircraft and to large pressurized aircraft with four piston-type engines. The compliance date, as subsequently amended, was Mar 1, 1967. In the event of an accident, the voice recorder could provide the cockpit conversation of the aircrew during the preceding half-hour, which might give investigators clues to the nature and cause of the mishap. The information from this device would supplement that provided by the aircraft's Flight Data Recorder. (See Aug 5, 1957, and May 4, 1970.)
19640701	Jul 1, 1964: Continuing its consolidation of air route traffic control centers, FAA decommissioned the St. Louis center and transferred its functions to the Kansas City center. The agency subsequently decommissioned the Detroit center on Jul 5 (transferring it responsibilities to the Cleveland center) and the Phoenix center on Aug 20 (transferring responsibilities to the Albuquerque center).

19640707	Jul 7, 1964: President Johnson issued Executive Order 11161 directing FAA and the Department of Defense (DOD) to plan on the basis of the probability that in time of war FAA would become an adjunct of DOD. Under the guiding concept, FAA would remain organizationally intact and the Administrator would retain responsibility for his statutory functions, "subject to the authority, direction, and control of the Secretary of Defense to the extent deemed by the Secretary to be necessary for the discharge of his responsibilities . . . ." The Secretary of Defense was explicitly authorized to direct the Administrator to place operational elements of FAA under the direct control of military commanders. The order also required the Secretary and the Administrator to assure that during any national emergency short of war the functions of FAA would be performed in a manner satisfying essential national defense requirements. As a step in executing the order, FAA and DOD agreed on a memorandum of understanding on Apr 13, 1966. The understanding covered the relationship between the two agencies in the event that FAA became an adjunct of DOD, and provided for planning for this eventuality and for lesser emergencies.
19640720	Jul 20, 1964: To decentralize and thus speed up operational decisionmaking in airspace management, FAA transferred the responsibility for designating controlled airspace in terminal areas from Washington to the regional headquarters.
19640721	Jul 21, 1964: Pan American World Airways announced that inertial navigation systems would be installed on most of its jet aircraft. (See Sep 7, 1961, and Dec 15, 1969.) An inertial navigation system, being independent of external referents, permitted increased accuracy in navigation over oceans and other expanses where surface navigation aids were not available and where the conventional magnetic compass was unreliable (as in transpolar flight).
19640806	Aug 6, 1964: An FAA rule effective this date required the closing and locking of crew compartment doors of scheduled air carriers and other large commercial aircraft in flight to deter passengers from entering the flight deck either intentionally or inadvertently (see May 7, 1964). The agency made exception for takeoffs and landings of certain aircraft in which the door involved led to a required passenger emergency exit. On Dec 18, 1965, FAA published a rule that extended this exception to aircraft in which the crew compartment door led to a floor level exit that was not a required emergency exit, but which might nevertheless assist passenger evacuation.
19640807	Aug 7, 1964: Congress passed the Tonkin Gulf Resolution supporting intervention in the Vietnam conflict. U.S. involvement in the war had begun with the assignment of advisors to South Vietnam in the mid-1950s, and its scope increased greatly in the mid-1960s. The last U.S. troops left Vietnam in March 1973. (See Spring 1975.)

19640907 Sep 7, 1964: Effective this date, FAA prescribed more rigorous safety standards for air-taxi operators and commercial operators of small aircraft weighing 12,500 pounds or less. The new directive was designated Part 135 of the Federal Aviation Regulations in accordance with an ongoing recodification (see Dec 31, 1964), and its scope included the larger scheduled air taxis later designated commuter airlines (see Jul 1, 1969). Part 135 contained provisions on pilot qualifications, operational procedures, and aircraft equipment. Need for the new standards was underscored by a marked increase in the complexity and volume of air-taxi operations. The scheduled air taxi was becoming a popular means of transportation where small airports were located near industry or population centers, or where route-carrier scheduling did not meet local need. Aircraft manufacturers contributed to the growth of this mode of transportation by designing small aircraft especially suited for air-taxi operations. Route carriers, recognizing the potential of the air taxi as a feeder to main terminals, also contributed by entering into operating agreements with air-taxi operators. (See Feb 1968 and Calendar year 1968.)

19640917 Sep 17, 1964: FAA implemented a simplified two-layer airway route structure, replacing the previous three-layer system (see Apr 6, 1961). The lower layer of the new structure extended generally from an altitude of 1,000 feet to 18,000 feet, and the jet route portion from 18,000 to 45,000 feet. Airspace above 45,000 feet was reserved for point-to-point operations on a random routing basis. Besides requiring fewer aeronautical navigation charts, the new system reduced pilot-controller workload by requiring fewer radio contacts and navigational checkpoints. As a necessary complement, FAA revised rules governing use of the standard altimeter setting by lowering the base altitude for such settings from 24,000 to 18,000 feet above mean sea level. (See Mar 4, 1965.)

19640921 Sep 21, 1964: The Air Force XB-70A supersonic aircraft made its first flight. Subsequent flights of this steel-bodied airplane, which had been conceived as a bomber but recast as a research aircraft, provided the FAA-managed U.S. supersonic transport development program with useful technical data. (See Jun 8, 1966.)

The air traffic control system targeted for replacement was essentially a manually operated system employing radar, general purpose computers, radio communications, and air traffic controllers. Only five ARTCCs (New York, Boston, Washington, Cleveland, and Indianapolis) had computers capable of processing flight data, calculating flight progress, checking for errors, and distributing flight data to control sectors. The old system had a two-dimensional radar display, which permitted controllers to view only an aircraft's range and bearing. Vital information such as altitude and identity was obtained through voice contact with the pilot or from the flight plan. To retain the correct identity of an aircraft target, controllers were required to tag the targets with plastic markers (known as "shrimp boats") and move the markers by hand across the radar display. The planned semiautomated system would perform these functions automatically, faster, and more accurately than the controller. Properly equipped aircraft would report their altitude, identity, and other flight data automatically at any given time. The computer processed messages would appear on a radar display next to the aircraft they identified, in the form of alphanumeric symbols which would make the radar display three-dimensional in effect. (See Oct 6, 1964, May 24, 1965, and Dec 30, 1968.)

19640926 Sep 26, 1964: The Bureau of Budget released the first significant amount of hardware-procurement funds for modernizing the National Airspace System (NAS). These funds were specifically designated for installing the first complete NAS En Route Stage A configuration (FAA's semiautomated system for en route air traffic control) at the ARTCC at Jacksonville, Fla. (See Feb 1, 1967.) Modernization of both the en route and terminal air traffic control subsystems of NAS had been recommended in 1961 by the Project Beacon task force (see Sep 11, 1961). The modernization was a long-range program that would require a decade or longer to fully implement.

19640929 Sep 29, 1964: The tilt-wing XC-142A (LTV-Hiller-Ryan VHR-447), a triservice assault transport, made its first flight, flying horizontally. This V/STOL (vertical/short takeoff and landing) aircraft was capable of taking off, landing, and flying like a helicopter or a conventional aircraft. The craft made its first hovering flight on Dec 29, 1964, and its first transition flight--from hover to horizontal flight and return--on Jan 11, 1965.

19640930 Sep 30, 1964: FAA released the Project Long Look study by the Aviation Human Resources Study Board that Administrator Halaby had created on Feb 6, 1964. The study warned of deficiencies in career planning and training of both flight and mechanic personnel, citing a decrease in the number of schools offering aviation training and in aviation course enrollment. Most new pilots were business people over age 35, few persons under 30 were learning to fly, and the percentage of young student pilots going on to earn pilot certificates was relatively small. Estimating that demand for air carrier and other commercial aircraft pilots would increase some 73 percent between 1965 and 1980, the Board recommended a government/industry program to encourage young people to choose aviation careers, including establishment of scholarships for pilot and aviation mechanic trainees. (See Mar 16, 1964, and Mar 17, 1965.)

19640930	Sep, 1964: FAA's Pacific Region headquarters staff moved into the newly completed headquarters building in Honolulu, bringing together personnel formerly housed in four widely dispersed buildings.
19641002	Oct 2, 1964: President Johnson proclaimed 1965 as International Cooperation Year (ICY) within the United States, in support of a similar action by the United Nations on a global basis. FAA was represented on the President's ICY Cabinet Committee, which planned and coordinated United States participation in ICY, and chaired the ICY Aviation Committee.
19641002	Oct 2, 1964: Taking another step toward the goal of all-weather landing, FAA announced qualifying criteria for Category II landing operations. Air carrier and commercial aircraft operators meeting these criteria could land at properly equipped airports under weather conditions permitting a decision height (vertical visibility) as low as 100 feet and a runway visibility range (horizontal visibility) as low as 1,200 feet. Hitherto, under Category I weather minimums, landing operations were permitted only when the decision height was at least 200 feet and the runway visibility range was at least 1,800 feet (four-engine jets required a runway visibility range of 2,600 feet). An operator able to qualify would first be permitted to land with a decision height of at least 150 feet and a runway visibility range of at least 1,600 feet. After six months of successful operation with these minimums, the operator could be authorized to use the lower minimums of 100 and 1,200. On Oct 29, 1965, United Air Lines became the first to qualify for the initial step of the Category II approval process, receiving authorization to use the 150 and 1,600 minimums with its DC-8 aircraft. (See Mar 30, 1947, and Aug 7, 1967.)
19641004	Oct 3-4, 1964: The Eastern and Southern regions jointly conducted a general aviation airlift exercise, called "Survival East and South 1964," to test the effectiveness of general aviation in support of military operations and civil survival efforts in a national emergency.
19641006	Oct 6, 1964: FAA established the National Airspace System Special Projects Office (NASSPO) to provide the management leadership and coordination necessary for the effective and timely implementation of the semiautomated air traffic control subsystem of the National Airspace System. (See Sep 26, 1964, and Apr 25, 1966.)
19641006	Oct 6, 1964: The Sikorsky S-61L and S-61N became the first civil helicopters in the non-communist world to be certificated for instrument flight rules (IFR) operations. (See Mar 1, 1962.)
19641016	Oct 16, 1964: The regulation of air cushion vehicles, or hovercraft, fell within the Federal Maritime Commission's jurisdiction -- not FAA's or CAB's -- according to a statement issued by seven Federal agencies and bureaus. (See Nov 1967.)
19641018	Oct 18, 1964: FAA dedicated the Aviation Records Building at the Aeronautical Center, Oklahoma City.

19641030	Oct 30, 1964: FAA and Eurocontrol signed an agreement to increase their cooperative efforts in the area of air safety. The agreement opened the way for a free exchange of technical information and air traffic statistics between the two organizations. Eurocontrol was an organization of six European States established in 1963 for the unified control of air traffic in the upper airspace of Europe. Its members were Belgium, France, the Federal Republic of Germany, Luxembourg, the Netherlands, and the United Kingdom.
19641110	Nov 10, 1964: FAA announced the results of a study concluding that neither eliminating nor limiting air-trip insurance would solve the airline sabotage problem. (See Jan 6, 1960.) The study was conducted for the agency by Clarence C. Pell, Jr., head of the aviation division of a New York insurance firm. In his view, the value of restrictions on air-trip insurance would be nullified by the availability of other types of insurance and by the irrational nature of airline saboteurs. These conclusions were in general agreement with those reached by the Government-Industry Steering Committee on Airline Sabotage on Mar 8, 1963.
19641130	Nov, 1964: FAA commissioned the first distance-measuring equipment (DME) combined with an instrument landing system (ILS) at John F. Kennedy International Airport. The ILS-DME combination provided the pilot of an appropriately equipped aircraft with continuous information on his distance from the runway.
19641201	Dec 1, 1964: United States International Aviation Month began under a Presidential proclamation commemorating the twentieth anniversary of the signing of the Convention on International Civil Aviation. (The proclamation, issued on Jul 28, 1964, came at the request of the Council of the International Civil Aviation Organization.) As part of the observance, the heads of aviation of 19 nations toured U.S. aviation facilities as guests of the FAA Administrator during Dec 14-16. (See Nov 1-Dec 1, 1944.)
19641204	Dec 4, 1964: FAA relaxed sport parachuting rules. Parachutists were no longer required to obtain a certificate of authorization from an FAA District Office before drifting over congested areas, open-air assemblies, or airports without functioning control towers. Before making a parachute jump over any airport, however, parachutists were still required to receive permission from the airport's management. All other rules governing intentional parachute jumps remained in force. (See Mar 24, 1967.)
19641208	Dec 8, 1964: A United Air Lines Caravelle jet made the first computer landing (automatic touchdown) at Dulles International Airport. (See Jun 10, 1965.)

19641210	Dec 10, 1964: The Airman's Information Manual (AIM) replaced three basic FAA flight information publications: the Airman's Guide (see Apr 1946), the Directory of Airports and Seaplane Bases, and the Flight Information Manual. The AIM was divided into five sections that were revised either monthly, quarterly, or semiannually. In 1978, Parts 2 and 3 were discontinued as parts of the AIM and were published as the Airport/Facility Directory. Parts 3A and 4 were also separated from the AIM and published under the title Notices to Airmen. The Part 1 data, concerning basic flight information and air traffic control procedures, continued to be issued as the AIM. On Jul 20, 1995, the AIM's title was changed to Aeronautical Information Manual.
19641214	Dec 14, 1964: The first FAA-designed and -constructed airport traffic control tower was commissioned at Lake Tahoe (Calif.) Airport. Previously, the airport sponsor designed and constructed the tower structures, with FAA participating in the financing. The Lake Tahoe tower had a pentagonal cab to provide an unobstructed view of the entire airport. (See Nov 5, 1962, and Feb 1965.)
19641221	Dec 21, 1964: The General Dynamics F-111 fighter, the world's first variable-wing aircraft, made its first flight.
19641231	Dec, 1964: FAA and DOD established an Air Traffic Controller Training Council to develop recommendations on joint or cooperative efforts by the two agencies in the training of civilian and military air traffic controllers. A secretariat representing both agencies was located at the FAA Academy, Oklahoma City.
19641231	Dec, 1964: FAA began operating its first single-sideband (SSB) air-ground equipment at Point Barrow, Alaska, for aircraft flying the northern polar air route. Designed for remote operation, the Point Barrow transmitter beamed vital air traffic control information, weather, and other messages to pilots flying "on top of the world."
19641231	Dec 31, 1964: FAA completed its codification of previous aviation regulatory issuances into a single body of rules, the Federal Aviation Regulations (FAR's). FAA had reorganized and streamlined the regulations to eliminate duplicate, obsolete, and unnecessary provisions of multiple regulatory systems inherited from the Civil Aeronautics Board (CAB) and the Civil Aeronautics Administration (CAA). The FARs consolidated and simplified the former Civil Air Regulations (CARs), Civil Aeronautics Manuals (CAMs), and Regulations of the Administrator.
19641231	The codification program had occupied several years (see Aug 31, 1961), and the various parts of the new FARs were published as completed. Examples were Part 135, covering air taxis and commercial operators of small aircraft, which was published on Mar 5 and became effective on Sep 7, 1964 (see that date). The last major part to be published was Part 121, which appeared on Dec 31, 1964. Part 121 covered domestic, flag, and supplemental air carriers and commercial operators of large aircraft over 12,500 lb.

1965

19650104 Jan 4, 1965: Under a rule effective this date, FAA required approved survivor lights on all life preservers and liferafts carried by U.S. air carriers and other large commercial aircraft flying more than 50 miles from shore, to assist in the rescue of passengers in the event of a night ditching. (See Jan 28, 1966.)

19650115 Jan 15, 1965: AN FAA-sponsored study by the Coordinating Research Council of New York, reported all aviation fuels equally safe, and that no basis existed for the contention that kerosene offered more overall safety than JP-4 aviation fuel (a mixture of gasoline and kerosene). Despite this finding, TWA announced on Jan 21, 1965, that it was suspending use of JP-4. Earlier, on Jan 7, 1965, Pan American World Airways had announced that it would make kerosene its standard jet fuel because of public mistrust of JP-4. The Airways Club, a New York organization of frequent air travelers, had long urged banning JP-4 as a commercial jet fuel because of its alleged high volatility.

19650118 Jan 18, 1965: FAA released a study concluding that transport-aircraft fuel tanks could be designed to reduce the fire hazard of crash landings. Conducted for the agency by General Dynamics, the study involved tests in which experimental tanks survived crashes of up to 57Gs without rupturing. The study estimated that such tanks would increase wing weight and production costs by as little as one percent, and recommended consideration of fuel-containment principles during preliminary design of future aircraft.

19650127 Jan 27, 1965: The National Academy of Sciences' Committee on Supersonic Transport Sonic Boom concluded that prototype development of a supersonic transport (SST) was "clearly warranted" by evidence from research, tests, and studies of sonic boom phenomena (see Jul 1, 1965). This finding was largely based on data collected by FAA in the Oklahoma City area (see Feb 3, 1964).

On Apr 25, 1965, FAA made public a summary of its Oklahoma City sonic boom study, in which U.S. Air Force jets had subjected residents to 1,253 booms during daylight hours. Most boom intensities ranged between 1.0 and 2.0 pounds of overpressure per square foot, but adverse atmospheric influences caused approximately 11 percent to exceed the intended limit of 2.0 pounds of overpressure. FAA also released an interim report on the related test at White Sands, N.M., in which Air Force jets subjected 16 representative structures to 1,494 booms varying in intensity from 2.0 to 20.0 pounds of overpressure. The findings of the two tests included:

* Sonic booms of less than 5 pounds of overpressure caused no discernible damage to structurally sound buildings; however, booms of this intensity probably triggered cracks in faultily constructed walls, breaks in cracked windows, and other damage in structurally unsound buildings.

* Booms of the order of those expected to be generated by the U.S. supersonic transport (SST) had no measurable physiological effect on humans.

	* The subjective reaction of individuals to sonic boom would be the area of greatest concern for the U.S. SST program.
	* Fully 27 percent of the people polled in the Oklahoma City area during the closing weeks of testing declared they could not live with sonic boom; additionally, 40 percent of those polled were unconvinced that booms did not cause damage to buildings.
	In releasing the information, Administrator Halaby stated his conclusion that a supersonic transport could be designed in terms of configuration, operating attitude, and flight paths so as to achieve public acceptance in the early 1970s. On Mar 8, 1969, the Federal government lost its appeal in a class action suit involving claims for property damage allegedly caused by the Oklahoma City tests. (See Apr 27, 1973.)
19650225	Feb 25, 1965: The Douglas DC-9 made its maiden flight. On Nov 23, 1965 FAA type-certificated the aircraft, a twin-engine turbojet transport designed for short- to medium-haul market for operation with a two-man crew. The plane entered service with Delta on Dec 9.
19650228	Feb, 1965: FAA commissioned the first nonradar control tower to be constructed according to a standard design, adopted by FAA in 1962, at Lawton Municipal Airport, Lawton, Okla. This was also the first control tower of standard design to be built entirely with FAA funds. The nonradar towers were freestanding and featured a control cab placed atop a pentagonal supporting steel structure that housed five floors of operating space beneath the cab floor. (See Dec 14, 1964, and Jun 30, 1967.)
19650304	Mar 4, 1965: Under an amendment to a rule effective this date, FAA consolidated positive control of nearly all of the airspace in the contiguous 48 states between 24,000 and 60,000 feet into one area known as the continental positive control area. FAA had begun nationwide implementation of positive air traffic control in Oct 1962. (See Oct 15, 1960-Mar 1, 1961 and Nov 9, 1967.)
19650306	Mar 6, 1965: A Navy Sikorsky SH-3A made the first helicopter nonstop flight across the North American continent, covering 2,116-miles in 15 hours 52 minutes. The helicopter flew from an aircraft carrier at San Diego, Calif., to another carrier at Mayport, Fla.
19650317	Mar 17, 1965: FAA announced that it had joined with CAB, the Department of Labor, and the Department of Health, Education, and Welfare in a project to establish a national data bank for interagency exchange of information on civil aviation manpower resources. The undertaking had been prompted by Project Long Look (see Sep 30, 1964). On Apr 20, 1965, FAA outlined government-industry cooperative efforts to implement the Project Long Look recommendations, primarily by promoting youth interest in aviation careers and improving training opportunities and standards.

19650320	Mar 20, 1965: FAA's first regulation providing penalties for cheating and improper conduct in connection with airman tests and related records became effective. The new rule imposed an automatic one-year disqualification from receiving a certificate or rating as a sanction for cheating or other irregularities. Such misconduct might also result in the suspension or revocation of certificates or ratings already held.
19650331	Mar, 1965: Los Angeles Airways became the first helicopter air carrier certificated by FAA to conduct instrument flight rules (IFR) operations. This initial approval was limited to IFR departures from, and approaches to, Los Angeles International Airport. (In Apr 1950, CAA had authorized the same carrier to fly on instruments at night for periods up to 15 minutes when moving through "smog" in Southern California.)
19650401	Apr 1, 1965: A British Overseas Airways Corporation BAC Super VC-l0 became the first British-built turbojet to cross the Atlantic (London to New York) on a scheduled passenger run since the Comet IV ceased transatlantic operations in 1961.
19650406	Apr 6, 1965: The British government disclosed it had abandoned the TSR-2 tactical-strike reconnaissance jet program. The Ministry of Defence stated that the program's cost "was out of all proportion to the aircraft's military value." The loss of technical experience resulting from this decision was perceived as a setback for development of the supersonic transport Concorde (see Dec 11, 1967).
19650408	Apr 8, 1965: FAA demonstrated, with the manufacturer's assistance, a McDonnell Aircraft Corporation 188 STOL (short takeoff and landing) aircraft at Dulles International Airport as part of the agency's long-range study of interurban air transportation (see Apr 1966). The aircraft, a U.S. version of the Breguet 941, took off and landed at the 500-foot Dulles helistrip. Known as a blown-wing aircraft, the 188 had large propellers for high static thrust; the propeller slipstream covered the aircraft's entire wing area. It employed highly deflected, full-span, triple-slotted flaps to produce the required lift for low takeoff and landing speeds as well as safe maneuverability. One commercial version of the aircraft could accommodate 55 passengers and take off with a maximum gross weight of 58,422 pounds.
19650411	Apr 11, 1965: The Federal government terminated subsidies that had been paid to three certificated helicopter airlines, New York Airways, Los Angeles Airways, and Chicago Helicopter Airways. The action was followed by the demise of Chicago Helicopter Airways at the end of 1965.
19650417	Apr 17, 1965: Homeowners of North Caldwell, N.J., flew war-surplus weather balloons over their homes to protest the noise created by low-flying aircraft using neighboring Caldwell-Wright Airport.
19650421	Apr 21, 1965: Administrator Halaby issued a statement of FAA's long-range policies that included such basic principles as respect for the rights of airspace users and the general public. Among other points, the statement recognized a favorable balance of benefits versus cost as a guide in actions affecting the National Airspace System.

19650421	Apr 21, 1965: FAA eliminated the rule requiring a three-man crew on all transports with a takeoff weight over 80,000 pounds (see Jun 15, 1947), and substituted a rule that set forth workload criteria as the standard for determining the size of an air transport cockpit crew. On Nov 23, FAA type-certificated the Douglas DC-9 for operation with a two-man crew (see Feb 25, 1965). Earlier in the year, FAA had certificated the BAC 1-11, a British-made transport, for operations with a two-man crew. (See Feb 7, 1961 and Nov 20-29, 1966.)
19650429	Apr 29, 1965: FAA established an Office of Audit, which was under the administrative direction of the Associate Administrator for Administration and reported directly to the FAA Administrator on substantive matters. The rapid evolution of the audit function from division to staff to office within a period of seven months reflected the growing emphasis placed by FAA on cost reduction and financial management.
19650430	Apr, 1965: FAA reported that a new nongyroscopic blind flight instrument could prevent a significant number of accidents caused by disorientation, a conclusion based on evaluation in a Civil Aeromedical Research Institute aircraft.
19650501	May 1, 1965: FAA completed transfer of the Europe, Africa, and Middle East Region headquarters from London to Brussels. At the same time, the agency consolidated various elements that had been located in Washington, D.C., New York, and Paris with the regional headquarters group. (See Apr 1, 1963.)
19650510	Apr 29-May 10, 1965: The Miami Air Route Traffic Control Center provided air traffic control service for an emergency Air Force airlift to the Dominican Republic during U.S. intervention in civil conflict in that country. In 1,710 missions, the airlift carried 14,699 tons of cargo and 17,921 passengers.
19650513	May 13, 1965: FAA advised homeowners that radio-controlled garage doors could be hazardous to air navigation since a pilot might inadvertently "home in" on the radio signal emitted by the equipment. Effective Sep 7, 1965, the Federal Communications Commission barred the use of radio-controlled door openers operating within the frequencies reserved for radio navigation of aircraft.
19650514	May 14, 1965: The formation of a 12-member NASA-FAA Coordinating Board for the exchange of research and development information and for joint planning of related activities was announced. The aim of the Board was to strengthen the coordination, planning, and exchange of information between the two agencies.

19650518 May 18, 1965: FAA announced a plan to establish 18 area (or subregional) offices in the contiguous 48 states, as part of plans to decentralize FAA which had begun in 1961. Elements of the decentralization plan had been tested during Project FOCUS (see Oct 1, 1963). Under the plan, an area manager would head each of the 18 area offices, and would have line responsibility over four basic operating programs: air traffic, flight standards, airway facilities, and airports--programs that had previously been in the hands of the regional directors and the regional program division chiefs. FAA selected as area office headquarters sites: Boston, Cleveland, New York, and Washington in the Eastern Region; Atlanta, Memphis, and Miami in the Southern Region; Chicago, Kansas City, and Minneapolis in the Central Region; Albuquerque, Fort Worth, and Houston in the Southwest Region; Denver, Los Angeles, Salt Lake City, San Francisco, and Seattle in the Western Region. In September 1965, nine area offices opened for business; all 18 offices were fully operational by the end of the following month. (See Jun 30, 1965.)

19650518 May 18, 1965: An FAA-DOD agreement effective this date provided for exchange of mobile flight facilities equipment and services between the Air Force and FAA in such circumstances as defense readiness, natural emergencies, and equipment outages affecting the aviation community.

19650521 May 21, 1965: The Interagency Air Cartographic Committee (IACC) was created to standardize Governmental aeronautical charts and thus avoid duplication. The committee was to be chaired by FAA with the Departments of Defense and Commerce as members.

19650524 May 24, 1965: FAA announced the start of the first field appraisal of prototype alphanumerics using automated air traffic control equipment. ARTS (advanced radar traffic control system--later changed to automated radar terminal system), the terminal prototype, would go through an 18-month evaluation at the Atlanta ATCT. SPAN (stored program alphanumerics), the en route prototype, would go through a 10-month evaluation at the Indianapolis ARTCC. These field tests were part of FAA's program to replace an essentially manual air trafifc control system with a semiautomated system. ARTS electronically tagged radar targets with luminous letters and numbers, indicating the identity and altitude of each target aircraft. The electronic tags moved with the corresponding aircraft blip across the controllers' radarscopes. To be so tagged, an aircraft had to be equipped with a transponder. (See Sep 26, 1964, and Feb 1966.)

19650526 May 26, 1965: In the U.S. Army's closely contested light observation helicopter competition, the Hughes Model 369 (YOH-6A) was announced the winner over two other entries, the Bell 206 (OH-4A) and the Fairchild-Hiller 1100 (OH-5A1). During 1964, FAA had type-certificated all three of these new turbine-powered light helicopters, which were expected to expand civil use of rotorcraft.

19650531	May, 1965: Findings of Project Taper (turbulent air pilot environmental research), a joint FAA-NASA research effort, showed flight through turbulent air required improved instrumentation and pilot capabilities for longitudinal control, trimming, and control of oscillation. These findings were based on data collected by instrumented FAA jet aircraft flying through areas of known turbulence.
19650607	Jun 7, 1965: New rules governing the rapid evacuation of passengers from aircraft became effective this date. The new regulations required all carriers and commercial operators using aircraft with a seating capacity of more than 44 passengers to demonstrate, among other things, the ability under simulated emergency conditions to evacuate a full passenger load through only half of the airplane's exits within two minutes. Operators were required to assign each crewmember specific emergency evacuation duties. The minimum number of flight attendants on an aircraft was raised according the following formula: one attendant for planes with 10-44 passenger seats; two for 45-99; three for 100-149; and four for more than 149 (see Jun 15, 1972). Operators were also required to brief passengers on the location of emergency exits and provide them with cards showing their operation. The new regulations also set emergency equipment requirements. Aircraft were required to be equipped by Jul 1, 1966, with battery-powered megaphones, increased emergency lighting capacity, larger emergency-exit signs, and ropes or approved equivalent devices at overwing exits. (See Sep 20, 1967.)
19650607	Jun 7, 1965: FAA announced progress in the use of chemicals to remove snow, ice, and slush on runways. The agency found that a mixture of 75 percent tripotassium phosphate and 25 percent formamide was best for use at temperatures as low as -10 degrees.
19650608	Jun 8, 1965: Administrator Halaby dedicated the helipad atop FAA's Headquarters building (FOB-l0A) at ceremonies attended by six former FAA/CAA administrators and William F. McKee, President Johnson's nominee to succeed Halaby. The helipad was designed to serve Federal officials who might be called upon to make sudden trips during emergencies. The facility was not heavily used, and in 1984 was listed as closed until further notice.
19650609	Jun 9, 1965: FAA conducted a one-day national symposium on aircraft noise in New York City. The symposium, attended by all segments of the aviation community, considered current and proposed programs to alleviate aircraft noise and related problems.
19650610	Jun 10, 1965: A British European Airways Trident I landing in London made the first automatic touchdown by a scheduled commercial airliner carrying fare-paying passengers. (See Dec 8, 1964, and Jul 7, 1967.)
19650610	Jun 10, 1965: FAA's Pacific Region established an area office on each of five Hawaiian Islands having FAA activities: Oahu, Kauai, Molokai, Hawaii, and Maui. Because of FAA's withdrawal from Canton Island, however, the area office there was disestablished. On Jul 1, the agency ceased operations for Canton and relinquished responsibility for the island to the National Aeronautics and Space Administration. (See Oct 1, 1963, and Jun 17, 1966.)

19650626	Jun 26, 1965: The new Houston air route traffic control center assumed the functions of the New Orleans center and some of the responsibilities of the San Antonio Center. The remainder of San Antonio's control area was transferred to Houston on Jul 10. The personnel of the two defunct centers were reassigned.
19650629	Jun 29, 1965: FAA established an Office of Congressional Liaison. Since Aug 31, 1962, congressional liaison responsibilities had been a function of the Office of General Aviation Affairs. (See Aug 31, 1962.)
19650630	Jun 30, 1965: During fiscal year 1965, which ended on this date, FAA established seven area offices in the Europe, Africa, and Middle East Region: Beirut, Frankfurt, London, Paris, Rome, Lagos, and New York. (See Oct 1, 1963 and May 1, 1965.)
	Also during fiscal 1965, FAA transferred five FAA-operated intermediate landing fields to local sponsors to be turned into public airports. The one remaining FAA-operated intermediate field in the contiguous United States was at Hanksville, Ut. The state of Utah assumed operation of that facility on Jun 23, 1974.
19650630	Among other actions in this fiscal year, FAA compiled a list of nearly 500 "safe haven" airports for air carrier fleet dispersal in the event of a national emergency. The Office of Emergency Planning (subsequently renamed Office of Emergency Preparedness) aided the project, and FAA coordinated the list with the Air Force to insure the integration of military and civil dispersal plans. FAA also developed a special-purpose vehicle for measuring surface-friction characteristics of airport runways as part of a program to improve the stopping capability of civil transport aircraft under adverse runway conditions.
19650701	Jul 1, 1965: General William F. McKee (USAF, Ret.) became the third FAA Administrator, succeeding Najeeb E. Halaby (see Mar 3, 1961). President Johnson had announced his selection of McKee on Apr 27, but did not submit his name for Senate confirmation until Congress passed special legislation exempting the general from a provision of the Federal Aviation Act that required the Administrator to be a civilian. This legislation cleared Congress on Jun 22, after prolonged debate. Johnson formally nominated McKee on Jun 23, and the Senate confirmed the nomination on Jun 30.
	Born in Chilhowie, Va., in 1906, "Bozo" McKee graduated from West Point in 1929. He began his career with the U.S. Army Coast Artillery Corps, but transferred in 1942 to the Army Air Forces. McKee received his first star in 1945. The following year, he was appointed Chief of Staff of the Air Transport Command. In 1947, when the Air Force became a separate service, McKee became Assistant Vice Chief of Staff, Air Force, a position held for six years. He was serving as Commander of the Air Force Logistics Command when selected for the Vice Chief of Staff post, the second highest military position in the Air Force. At the time he received his fourth star, he was the only Air Force officer to have attained that rank without holding an aeronautical rating. Upon his retirement from the military in 1964, he joined the National Aeronautics and Space Administration as Assistant Administrator for Management Development.

The selection of McKee to head FAA was linked to the need for an experienced executive to oversee the development of the U.S. supersonic transport (see Jul 1, 1965, entry on this topic, below). He served as Administrator for three years and one month (see Jul 31, 1968).

19650701 Jul 1, 1965: David D. Thomas became FAA's Deputy Administrator. Thomas was FAA's Associate Administrator for Programs when President Johnson selected him for the new post. He succeeded Lt. Gen. Harold W. Grant (see Feb 21, 1962), who had resigned the previous day. (Grant was barred from serving under Gen. McKee, because the Federal Aviation Act prohibited the filling of the Deputy Administrator's post with a military officer on active duty, a retired regular officer, or a former regular officer if the Administrator himself is a former regular officer.)

A career civil servant, Thomas began his Federal service in 1938 as an air traffic controller with the Civil Aeronautics Authority in the Pittsburgh air route traffic control center. After a number of other field assignments, Thomas came to CAA headquarters in 1946, serving successively as Deputy Chief of the International Services Office, Chief of CAA's Planning Staff, and Deputy Director, Office of Federal Airways. Following the breakup of the Office of Federal Airways in 1956, he was elevated to Director, Office of Air Traffic Control. With the creation of FAA in 1958, he became Director, Bureau of Air Traffic Management. In 1961, after an FAA administrative reorganization, he became Director, Air Traffic Service, the position he was holding when selected, in 1963, to be Associate Administrator for Programs.

Thomas served as Acting Administrator between the tenures of Administrators McKee and Shaffer (see Jul 31, 1968, and Mar 24, 1969). He then continued as Deputy Administrator until retiring from Federal service on Feb 15, 1970.

19650701 Jul 1, 1965: President Johnson announced that the supersonic transport (SST) development program would move into Phase IIC, an 18-month detailed design phase costing approximately $220 million. The President’s decision, which was made known during General William F. McKee's swearing-in as FAA Administrator, was based on the recommendations of the President's Advisory Committee on Supersonic Transport.

The decision postponed prototype development and fabrication for at least 18 months, prolonging the program's competitive phase by retaining the two airframe competitors (Boeing and Lockheed) and the two engine competitors (General Electric and Pratt & Whitney) selected in 1964. Unlike the previous design phases, however, Phase IIC was not purely a "paper" competition. The airframe manufacturers would construct full-scale mock-ups, and the engine manufacturers would build and test full-scale demonstrator engines.

	The President enumerated four primary objectives of the new competitive design phase: (1) to provide a sound foundation for realistic estimates of operating performance and production costs; (2) to take advantage of the flight experience of the SR-71, the XB-70, and the variable swept-wing F-111; (3) to reduce developmental risks and developmental costs, while retaining the capacity to accelerate the program in its later phases; (4) and to provide a better basis for judgment as to the manner in which the program should proceed after the 18-month period. The President asked Congress for $140 million to initiate the 18-month program. (See May 20, 1964, and Dec 31, 1966.)
19650701	Jul 1, 1965: A new communications system linking virtually every non-Communist airline in the world went into operation. Known as the Electronic Switching System, it was connected to the interline teletype transmission systems of major U.S. airlines and foreign carriers serving the United States. All interline teletype communications involving reservations and internal administrative messages automatically were directed to a computer in Chicago, which scanned the messages for correctness and electronically forwarded them to the proper airline.
19650717	Jul 17, 1965: A 16-year absence of air service between the United States and any part of the Communist bloc by United States or Communist-bloc airlines ended this date when Pan American World Airways began serving Prague, Czechoslovakia.
19650724	Jul 24, 1965: FAA announced Project GAPE, a General Aviation Pilot Education program aimed at reducing general aviation accidents by upgrading pilot knowledge and proficiency. The program, developed in cooperation with the Flight Safety Foundation, disseminated letters and safety kits to aircraft operators, published accident summaries, bulletins, and special studies, and conducted a vigorous publicity campaign through radio, television, and printed media.
19650802	Aug 2, 1965: FAA and the Department of Commerce signed a formal agreement on this date updating all FAA and U.S. Weather Bureau working arrangements in the areas of aviation weather services and meteorological communications. (See Sep 15, 1950.)

Development of arresting gear devices had first been explored by the Airways Modernization Board in 1958. FAA continued this work and, in 1962, demonstrated the technical feasibility of arresting large transport aircraft on airport runways by means of a tail hook and a cross-runway cable connected to an arresting engine. The issue of whether this emergency gear should be mandatory at large air carrier airports came into sharp focus in Apr 1964, when three airliners at two New York airports skidded off slippery runways in one 12-hour period. In May 1964, FAA officials opened discussions with aviation industry representatives on arresting gear, and in July the agency formed a committee to work with the air transport industry in studying the question. The committee's recommendation that the arresting system be integrated into the National Airspace System was reinforced in Jan 1965 by the results of an FAA-sponsored study conducted by the Flight Safety Foundation. The study concluded that 17 of 87 accidents in the past five years could have been prevented by an emergency arresting system, and forecast 55 jet transport accidents resulting from runway overshoots on takeoff or landing over the next 10 years. In the end, however, FAA decided that the system could not be justified on a cost-versus-benefit basis, a judgment supported by virtually all elements of the aviation industry except the Air Line Pilots Association. The estimated cost of equipping 65 major jetports with two emergency arresting systems and retrofitting all four-engine air carrier jet aircraft with tail hooks was about $47 million. FAA held that this money would buy more safety if spent in such other ways as developing better brakes, removing water from runways through drying and blowing techniques, or eliminating aircraft hydroplaning on runways by grooving or ribbing the pavement (see Apr 23, 1967). Meanwhile, FAA relied on a new wet-runway rule to reduce potential landing hazards (see Jan 15, 1966).

19650804 Aug 4, 1965: In a letter to Senator A. S. “Mike” Monroney (D-Okla.), FAA Administrator William F. McKee revealed an FAA decision not to incorporate emergency arresting systems for large air carrier aircraft into the National Airspace System.

19650810 Aug 10, 1965: San Francisco-Oakland Helicopter Airlines initiated the first scheduled air cushion vehicle (hovercraft) service in the United States between Oakland and San Francisco. The service began a year-long test authorized by the Civil Aeronautics Board to determine the feasibility of using air-cushion vehicles in ferrying passengers in metropolitan areas. (See Nov 1967.)

19650816 Aug 16, 1965: A series of three Boeing 727 accidents within three months began as a United Air Lines flight crashed into Lake Michigan for undetermined reasons, killing all 30 people aboard. On Nov 8, an American 727 crashed in Kentucky on approach to Greater Cincinnati Airport, killing 58 of the 62 people aboard. CAB later determined the probable cause was the crew's failure to properly monitor the altimeters. On Nov 11, a United 727 crash landed at Salt Lake City. All 91 occupants survived the impact, but 43 died of the effects of postcrash flames and smoke (see Sep 20, 1967). CAB later cited the probable cause as the pilot's failure to arrest an excessive descent rate. On Nov 12, FAA declared it could find no pattern in the mishaps and hence it would be premature to ground the 727, about 190 of which were in operation.

19650825	Aug 25, 1965: A Curtiss-Wright X-19, an experimental vertical takeoff and landing aircraft, one of two X-19 prototypes developed by Curtiss-Wright, crashed during its first extended test flight, at FAA's National Aviation Facilities Experimental Center. It had first flown on Jun 26, 1964.
19650830	Aug 30, 1965: CAB assumed responsibility for a factfinding investigation of nonfatal aircraft accidents involving air-taxi operators and other commercial operators of small aircraft. By this action, CAB withdrew a delegation of this function made to FAA on Dec 31, 1958. FAA continued to conduct under a CAB delegation of authority factfinding investigations of nonfatal accidents involving noncommercial fixed-wing aircraft with a maximum takeoff weight of 12,500 pounds or less.
19650831	Aug 31, 1965: The world's largest cargo plane, the Aero Spacelines B-377SG Super Guppy completed its maiden flight. A converted Boeing 377 Stratocruiser with a capacity of 49,790 cubic feet, the Super Guppy was under contract to NASA for use in hauling rockets and other space equipment.
19650901	Sep 1, 1965: An inspector or other authorized flight examiner conducting a flight test is an observer, and normally not considered to be the pilot in command, according to a rule effective this date.
19650903	Sep 3, 1965: After withholding Federal funds from the Port of New York Authority (PNYA) for two years, FAA announced resumption of annual grants under the Federal-aid airport program (FAAP). In Aug 1963, FAA had notified the PNYA of the tentative allocation of $4.3 million in FAAP matching funds for lengthening the runways at La Guardia Airport, one of New York City's three major airports, on the condition that PNYA develop a plan for improving airport facilities for general aviation in the metropolitan New York area. PNYA did not submit such a plan acceptable to FAA. Eventually, the differences between the two agencies narrowed down to the continued operation (desired by FAA) of Teterboro, a general aviation airport in northeastern New Jersey which PYNA owned and operated at a loss. When Pan American World Airways leased this airport from the Port Authority and agreed to keep it in operation, FAA considered all outstanding issues between itself and PNYA resolved.
19650907	Sep 7, 1965: FAA presented its first type certificate for a Japanese-made aircraft to the Nihon Aeroplane Manufacturing Company, Ltd., for its NAMC YS-11, a twin-turboprop short/medium-range transport with a maximum seating capacity of 59 passengers. The YS-11 had first flown in Aug 1962, and had received its Japanese type certificate on Aug 25, 1964. (See Mar 14, 1955.)
19650915	Sep 15, 1965: Deputy Administrator for Supersonic Transport Development Gordon Bain resigned from FAA effective this date. Brig. Gen. Jewell C. Maxwell (USAF) was assigned to replace Bain with the new title Director of Supersonic Transport Development. The new designation entailed no change in responsibilities or organizational relationship. (See Jul 29, 1963, and Apr 6, 1970.)

19650918	Sep 18, 1965: FAA required distance-measuring equipment on turbine-engine aircraft and pressurized piston-engine aircraft when operated by foreign air carriers within the contiguous United States after Dec 31, 1966. The agency required other foreign air carrier aircraft having a maximum certificated takeoff weight of more than 12,500 pounds to have this equipment after Dec 31, 1967. All foreign civil aircraft not engaged in air carrier operations were required to have this equipment after Dec 31, 1966, when flying at or above 24,000 feet. (See Jul 1, 1963.)
19650926	Sep 26, 1965: A rule effective this date required biennial requalification of all flight instructors. It also required instructors to assume additional responsibilities for the supervision of student-pilot solo flight operations.
19650930	Sep, 1965: The Texas cities of Dallas and Fort Worth agreed on a site for a regional airport, culminating more than a decade of disagreement and negotiation over this issue. The site chosen had been recommended by a consulting firm called into the dispute by a Civil Aeronautics Board examiner. It contained 18,000 acres lying approximately equidistant from the two cities, but overlapping part of Fort Worth's Greater Southwest International Airport. The agreement was a victory for the regional airport concept advocated by FAA and the Civil Aeronautics Board (see May 2, 1961, and Feb 2, 1967). Construction began on the Dallas-Fort Worth Regional Airport in Dec 1968 (see Jan 13, 1974).
19651001	Oct 1, 1965: FAA created the position of Associate Administrator for Personnel and Training. The new associate administrator reported directly to the FAA Administrator; previously, the head of the agency's personnel and training functions reported to the Associate Administrator for Administration. (See Jan 19, 1968.)
19651001	Oct 1, 1965: As part of the agency's continuing decentralization program, FAA placed the Aeronautical Center in Oklahoma City under a director reporting directly to the FAA Administrator. A similar change on Oct 22 placed the National Aviation Facilities Experimental Center in Atlantic City, N.J., under a director reporting the Administrator. Both centers had previously been headed by a manager, and had been under the jurisdiction of various offices or services in Washington.

19651008 Oct 8, 1965: In two separate but related rulemaking actions, FAA authorized increased industry participation in the certification of aeronautical products. One rule permitted FAA to delegate authority to qualified manufacturers in certification of helicopters, small turbine engines, and aeronautical parts. Previously, delegation procedures were permitted only in the certification of airplanes and gliders weighing 12,500 pounds or less, small piston engines, and propellers manufactured for use with these engines (see Sep 29, 1950). The other rule provided for the establishment of Designated Alteration Stations by qualified manufacturers, air carriers, commercial operators of large aircraft, and domestic repair stations. FAA authorized the stations to: issue supplemental type certificates for already type-certificated products; issue experimental airworthiness certificates for aircraft they altered; and amend standard airworthiness certificates for such aircraft. In Jun 1966, FAA made the first issuance of a "Designated Alteration Station" authorization to the American Airlines repair station in Tulsa, Okla.

19651015 Oct 15, 1965: FAA established a comprehensive new air traffic controller health program. The previous practice had been to examine only terminal controllers, under standards originally designed for airman certification. Under the new program, every controller and flight service specialist would receive an annual physical examination, including a chest X-ray, electrocardiogram, audiogram, measurement of intraocular tension, and psychological screening. Psychophysiological data generated by these examinations would be used to formulate administrative policies on selection, employment, and retirement.

19651021 Oct 21, 1965: Effective this date, FAA clarified its regulations governing the issuance of limited operations medical certificates. The previous language of the rule had led some applicants to believe that they had a right to attempt to demonstrate their ability to fly safely regardless of the nature of their limiting deficiency. The new wording made it clear that certain disases and disabilities could not be compensated for under any circumstances.

19651022 Oct 22, 1965: The Air Force-operated USAF/USN Central NOTAM (Notice to Airmen) Facility (CNF) began operations in FAA Headquarters Building, Washington, D.C., after moving from Tinker AFB, Okla. The military NOTAM facility was co-located with the FAA-operated civil NOTAM system (National Flight Data Center), and the two were eventually consolidated into a single National NOTAM System managed by FAA.

19651101 Nov 1, 1965: FAA announced that it had recovered the entire cost of developing a low-cost, lightweight transponder for general aviation use. The Wilcox Electric Company made the repayment in accordance with a special clause in the 1960 contract under which the equipment was developed. This represented perhaps the first time that a Federal civilian agency had recovered the entire cost of developing a device produced under government contract by a private manufacturer and sold to the public. The money was deposited into the U.S. Treasury’s general fund.

19651110

Nov 9-10, 1965: New York's La Guardia and John F. Kennedy airports were forced to shut down when the overloading of a switch at an electrical generating plant in Ontario, Canada, set off a chain reaction that caused a massive power failure in the northeast, blacking out for 13 hours or longer an 80,000-squaremile area. The power failure hit during the evening rush hour, but several factors combined to head off disaster: clear weather, a moonlit night, and the fact that FAA's air route traffic control centers in the blacked out area continued to operate. Relying on secondary commercial suppliers, the ARTCCs guided aircraft to Newark, Philadelphia, Washington, and other airports not affected by the failure.

Prior to the blackout, the agency had believed that a standby engine generator was not as desirable as a second source of commercial power when two or more such sources were available, for the simultaneous loss of multiple sources was considered highly improbable. The power failure, however, demonstrated the need for generators at individual facilities. On Mar 2, 1966, FAA announced a program to install standby engine generators to power essential services at 50 airports in the contiguous United States. The 50 airports, chosen on the basis of their activity and location, would receive standby engine generators capable of powering a control tower, airport surveillance radar, approach-light system, instrument landing system, and runway lights on the primary runway.

The following year, FAA began planning a similar program for the air route traffic control centers. Over the past three years, ARTCCs had suffered more than 1,300 power failures lasting long enough to impair the operational use of critical equipment. Recognizing that power loss would be a potentially more serious safety threat in the future due to increased reliance on automation, FAA planned to equip all 20 centers in the contiguous U.S. with adequate auxiliary power sources and uninterruptible power units. (See Jun 27, 1969.)

19651115 Nov 15, 1965: The United States served a formal notice of denunciation of the Warsaw Convention, effective six months later, because of the inability to substantially raise the liability limit above the approximately $16,600 per international passenger set by the 11-year-old Hague Protocol to the Convention. The United States stated that it would withdraw the notice if there were reasonable prospects for ICAO to amend the convention to raise the liability limit to at least $100,000, and if the international carriers worked out an interim agreement for a liability limit of $75,000, with strict liability Although a 1966 ICAO meeting failed to reach an agreement on an acceptable limit, the International Air Transport Association, in consultation with U.S. officials, reached an interim agreement with international carriers providing for a liability limit of $75,000 per passenger. The U.S. Civil Aeronautics Board (CAB) approved the interim agreement on May 13, 1966, and the United States withdrew its notice of termination. Participation in the agreement was mandated by the U.S. CAB in permit and certificate conditions, and later generalized by regulation (14 CFR 203). Subsequent attempts to raise the Warsaw liability limit by a new Protocol were unsuccessful. In 1996, the U.S. Department of Transportation approved three agreements, proposed by the International Air Transport Association and Air Transport Association, under which carriers agreed to waive the Warsaw passenger liability limits in their entirety. Widespread implementation of these agreements was anticipated in early 1997.

19651117 Nov 14-17, 1965: In a flight sponsored by Rockwell-Standard, a Boeing B-707 became the first aircraft to girdle the globe going north to south, covering 26,230 miles in 62 hours 28 minutes. Beginning in Honolulu, the flight flew over the North Pole, made stops at London, Lisbon, and Buenos Aires, flew over the South Pole, and returned to Honolulu by way of Christchurch, New Zealand.

19651121 Nov 21, 1965: FAA renamed the Civil Aeromedical Research Institute (CARI) the Civil Aeromedical Institute (CAMI). (See Oct 21, 1962.)

19651216 Dec 16, 1965: Under a rule effective this date, FAA required pilots flying large aircraft (12,500 pounds or more) to hold a type rating for that aircraft. Previously, the agency required only pilots in command of large aircraft carrying passengers or freight for remuneration to hold such a type rating. The new rule also required pilots in command of small turbojet aircraft to be type rated for such aircraft after Mar 31, 1966. The purpose of the rule was to insure that pilots were fully qualified to serve in command of aircraft that handled differently from those in which they had acquired their flying experience.

19651231 Dec 31, 1965: Effective this date, FAA required scheduled helicopter air carriers to assign individual emergency evacuation duties to their crewmembers. The new regulations also included rules on drinking on helicopter airlines similar to those already in effect for fixed-wing airlines: passengers were prohibited from drinking alcoholic beverages unless served by the carrier, and carriers were prohibited from allowing persons who appeared intoxicated to board flights or to be served alchoholic beverages on board.

19651231 Dec, 1965: FAA published three studies concerning human circadian rhythms (biological rhythms with a period of about 24 hours, linked to mental and physical efficiency). The studies were based primarily on biomedical assessments of human subjects aboard a series of intercontinental flights. The subjects selected had daily work and sleep habits representative of the adult male population. The flights traveled across multiple time zones from east to west and from west to east, as well as from north to south within the same time zone. Subjects on all the flights displayed subjective fatigue. Those traveling east-west or west-east experienced shifts of circadian periodicity that required various periods for readjustment. The east-west travelers displayed a significant impairment of psychological performance not shown by those on the other flights.

19651231 Calendar year, 1965: Forty-two million people, or 38 percent of the adult population of the United States, had flown in a commercial aircraft, according to a survey made during 1965 by the Gallup Organization for Trans World Airlines. In 1962, a similar TWA-sponsored survey had shown that 33 percent of the adult population had flown in a commercial aircraft. (See Jun 1970.)

1966

19660101	Jan 1, 1966: Part 137 of the Federal Aviation Regulations, "Agricultural Aircraft Operations," became effective on this date, establishing for the first time national standards and requirements for private and commercial agricultural operator certificates, operating rules, aircraft airworthiness, and pilot qualifications.
19660110	Jan 10, 1966: Reliance on radar for controlling air traffic advanced when a rule effective this date permitted pilots flying Instrument Flight Rules in a radar environment to omit routine position reports.
19660111	Jan 11, 1966: FAA announced that Washington National Airport would be opened to jet aircraft on Apr 24, 1966 (see that date). The decision was supported by a study entitled "Economic Feasibility of Alternative Programs for Washington National Airport," published on Jan 26. The study discussed modernization of the airport and concluded that a continued ban on jet airline operations would reduce its function to virtually that of a general aviation field, with greatly decreased passenger traffic and revenues.
19660115	Jan 15, 1966: Effective this date, a rule intended to prevent runway overruns required turbojet transport aircraft landing on wet or slippery runways to have available 15 percent more runway length than considered adequate in dry weather. If the increased runway length was not available at an arrival airport and weather reports indicated slippery or wet runways during a transport's anticipated arrival time, the aircraft was required to compensate for the shorter runway length by carrying less payload or fuel. (See Aug 4, 1965.)
19660128	Jan 28, 1966: FAA published a rule requiring a life preserver or some other approved flotation device for each occupant of large aircraft used by air carriers or other commercial operators in all overwater operations. The compliance deadline was Mar 1, 1967, subsequently extended to Sep 1, 1967. Such devices had already been required for operations of large aircraft conducted over water at a horizontal distance of more than 50 miles from the nearest shoreline. (See Jan 4, 1965.)
19660131	Jan, 1966: FAA and the Department of Defense signed an agreement on development of DAIR (direct altitude and identity readout), an automated air traffic control configuration for military facilities and low-density civil terminals. Unlike more sophisticated automated ATC configurations designed to provide alphanumerics, DAIR would employ only numerics. During fiscal 1970, the Air Force contracted for 304 production models of the system, now renamed the AN/TPX-42, and FAA exercised an option to acquire 56 of the systems over a five-year period.
19660203	Feb 3, 1966: The Soviet Union's unmanned spacecraft LUNA IX made the first soft landing on the moon. (See Jun 2, 1966.)
19660213	Feb 13, 1966: AN FAA-developed mobile air traffic control tower began operating at the Lockheed Air Terminal, Burbank, Calif., within 40 hours after a fire had destroyed the Lockheed tower.

19660218	Feb 18, 1966: The National Committee for Clear Air Turbulence was established to determine operational needs for the detection and prediction of this hazard, known as CAT. Formed at the instigation of the Defense Department, the committee was composed of representatives from the National Science Foundation and seven Federal agencies, including FAA. In a Dec 1966 report, the committee called for a coordinated national effort to understand and remedy the CAT problem. The report's recommendations included a national data collection project to gather information needed to achieve CAT detection and forecasting. On Mar 29, 1967, the CAT hazard was illustrated by the death of an unbelted passenger when a United Airlines jet reportedly plunged 8,000 feet after encountering turbulence. Subsequent FAA actions regarding CAT included participation in joint research on forecasting methods.
19660222	Feb 22, 1966: Under a rule effective this date, FAA required newly certificated flight engineers to have an aircraft class rating for each class of aircraft (piston-engine, turboprop, or turbojet) in which they flew. Currently active flight engineers had until Feb 22, 1968, to exchange their existing certificate for one with a class rating.
19660228	Feb, 1966: FAA completed a 10-month evaluation of SPAN (stored program alphanumerics) at the Indianapolis air route traffic control center. The agency subsequently dismantled and shipped this prototype ATC system to the New York ARTCC to help cope with the extremely high air traffic density in the New York area. (See May 24, 1965, and Spring 1968.)
19660301	Mar 1, 1966: An unmanned Soviet spacecraft entered the atmosphere of Venus, becoming the first space probe to reach another planet.
19660302	Mar 2, 1966: President Johnson recommended to Congress the creation of a Cabinet-level Department of Transportation. The President noted that the United States lacked a coordinated transportation system permitting travelers and goods to move conveniently from one means of transportation to another, using the best characteristics of each. The responsibility for transportation within the Federal government, he observed, was fragmented among many agencies resulting in a series of uncoordinated modal policies. What was needed was a single department to develop and carry out comprehensive policies and programs for transportation in its totality.
	The President proposed that the following agencies and functions be consolidated in the new department: the Office of the Under Secretary of Commerce for Transportation; the Bureau of Public Roads; the Federal Aviation Agency; the U.S. Coast Guard; the Maritime Administration; the safety functions of the Civil Aeronautics Board (CAB); the safety functions and car service functions of the Interstate Commerce Commission (ICC); the Great Lakes Pilotage Administration; the St. Lawrence Seaway Development Corporation; the Alaska Railroad; and certain minor transportation-related activities of other agencies. The President also recommended the creation within the Department of a National Transportation Safety Board, which would absorb the safety functions transferred from CAB and ICC. (See Oct 15, 1966.)

19660316	Mar 16, 1966: Gemini VIII, a U.S. manned space flight, achieved the first space docking.
19660317	Mar 17, 1966: The Bell Triservice X-22A, a tilting-duct Vertical/ Short Takeoff and Landing (V/STOL) aircraft, made its maiden flight. On Jun 30, 1966, with the tilting ducts at an angle of 30 degrees, the aircraft made its first STOL takeoff, and subsequently attained a top speed in excess of 100 miles an hour.
19660317	Mar 17, 1966: FAA type-certificated the Learjet 24, a two-engine turbine-powered business aircraft seating eight (two crewmembers and six passengers). In the first flight of its kind by a business jet, a Learjet 24 completed a 17-leg, 23,002-statute-mile, round-the-world flight on May 26, 1966. The global flight took 65 hours 40 minutes (actual flying time, 50 hours).
19660408	Apr 8, 1966: FAA established a Noise Abatement Staff, under the Associate Administrator for Programs, to lead the agency's response to a call by President Johnson for a government-wide effort to alleviate the problem of aircraft-engine noise. The President's call came on the heels of a recommendation by the Jet Aircraft Noise Panel of the Office of Science and Technology that the Federal government take the lead in seeking solutions to the problem. Shortly after this recommendation, the President established an interagency aircraft noise abatement program under the Office of Science and Technology. FAA served on three interagency committees set up under this program. The various projects developed under this program fell into three categories: developing quieter engines; revising aircraft operating procedures; and promoting land uses around airports compatible with airport operations.
	Later in the year, FAA drafted legislation empowering it to prescribe noise standards as part of the criteria for aircraft certification. The administration's noise abatement bill was introduced in the 89th Congress, but did not come to a vote. (See Jul 21, 1967, Dec 4, 1967, and Jul 21, 1968.)
19660417	Apr 17, 1966: FAA commissioned the San Juan air route traffic control center's new building.

19660424 Apr 24, 1966: Scheduled air carrier jet operations began at Washington National Airport (see Jan 11, 1966). FAA limited air carrier jet use of the airport to two- and three-engine aircraft with short- and medium-range. A further limitation--agreed to voluntarily by the twelve certificated route air carriers serving National and approved by the Civil Aeronautics Board--required the first stop for these air carrier jet flights to be within a radius of 650 miles from Washington, D.C., except that nonstop service in effect on Dec 1, 1965, to eight specified cities outside that radius could continue. These eight cities, all within 1,000 miles, were Memphis, Minneapolis, St. Louis, Miami, Orlando, Tampa, and West Palm Beach, and Hamilton, Bermuda. (Flights to and from Hamilton were later forced to operate out of Dulles International.) The 650-mile radius agreement expired on Jan 1, 1967; however, all parties to the original agreement continued to adhere to its provisions, thus fixing National's role as that of a short-haul airport. The introduction of jet air carrier service at this airport required special arrival and departure procedures, based on the Potomac River as the natural flyway for reducing noise disturbances. In addition, a curfew on jet operations was imposed between the hours of 10 p.m. and 7 a.m. (See Sep 1, 1966 and Mar 23, 1978.)

19660425 Apr 25, 1966: FAA established the National Airspace System Program Office, replacing the NAS Special Projects Office as a staff element under the Associate Administrator for Development. Headed by the Deputy Associate Administrator for Development, NASPO had responsibility for design, engineering, procurement, and installation--in addition to central programming, planning, and scheduling--of designated program elements of the air traffic control subsystem of the National Airspace System. (See May 18, 1970 and Feb 10, 1972.)

19660430 Apr, 1966: The United States and New Zealand signed the first agreement for flight inspection of U.S. air navigation facilities by a foreign country. New Zealand's flight inspection of U.S. navaids in American Samoa was expected to save FAA $15,000 per year.

19660430 Apr, 1966: AN FAA published a study examining the technological and economic feasibility of a V/STOL (vertical/short takeoff and landing) transport system. Prepared for the agency by the McDonnell Aircraft Corporation, the report concluded that a 100-passenger V/STOL aircraft operating from small airports close to downtown city areas could play a major role in meeting increasing needs for short-distance transportation. (See Apr 8, 1965, and Nov 5, 1966.)

19660519 May 19, 1966: According to a Senate Committee on Aeronautical and Space Sciences staff report entitled, "Policy Planning for Aeronautical Research and Development," civil aeronautics was served by technology in a haphazard manner. For civil aviation to advance as rapidly as technology will allow, the report recommended: taking civil requirements into greater account during military aircraft development planning; Federal underwriting of the increasing financial risks in civil aeronautical development; providing tax credits and other incentives to the aeronautical industry; and carrying out of transportation systems planning on the Federal level.

19660520	May 20, 1966: A $2.50 charge for in-flight motion picture entertainment on international flights received the approval of the Civil Aeronautics Board. The charge, covering the audio portion of the entertainment, had been put in effect by U.S.-flag carriers on Apr 1, 1966.
19660602	Jun 2, 1966: Surveyor I became the first U.S. spacecraft to make a soft landing on the moon. The spacecraft transmitted television pictures back to earth. (See Feb 3, 1966.)
19660608	Jun 8, 1966: A midair collision with an F-104 over Barstow, Calif., destroyed one of the two XB-70 experimental aircraft built by North American Aviation. (See Sep 21, 1964, and Mar 25, 1967.)
19660617	Jun 17, 1966: FAA consolidated the Pacific Region area offices on the Hawaiian Islands of Hawaii, Maui, Oahu, Kauai, and Molokai into one area office in Honolulu. (See June 10, 1965.)
19660628	Jun 28, 1966: The design of the Dulles International Airport terminal building won for Eero Saarinen and Associates one of three "first honors" awards for architectural excellence presented by the American Institute of Architects for 1966. The awards jury cited the Dulles terminal for conveying the "free and graceful movement that we associate with flight," and stated that the entire project set "a new high in architectural achievement by the Federal Government." (See Feb 22, 1978.)
19660630	Jun 30, 1966: The Lockheed L-286 helicopter became the first rigid-rotor helicopter to receive FAA type certification.
19660630	Jun 30, 1966: During fiscal 1966, which ended on this date, FAA's interests in 21 airports owned, operated, or maintained by the agency were transferred to the state of Alaska. The FAA-owned facilities transferred to the state were intermediate airports at Cold Bay and 7 other locations. FAA continued for a time to own 7 other intermediate airports in Alaska, but by 1996 the agency owned only one of these facilities.
	During the same fiscal year, FAA also returned the international field office at San Francisco to the line control of the Pacific Region's Flight Standards Division. In fiscal 1965 the field office had been assimilated to the area-manager concept by being placed under an FAA representative responsible directly to the Director, Pacific Region.
	Jun, 1966: FAA implemented the performance and reliability system (PAR) designed to monitor mechanical reliability in the airline industry as represented by 15 participating airlines. Regularly updated information on selected safety parameters were displayed in graphs and charts for each airline. The performance patterns thus revealed allowed inspectors to concentrate on problem areas and reduce routine inspections.

	In a related effort to improve monitoring of air carrier compliance with operational and maintenance rules, FAA partially implemented the Systemworthiness Analysis Program (SWAP) on Jul 1. Under this program, the agency strategically based teams of inspectors within an inspection area to complement small cadres of inspectors domiciled at the carriers' main operations and maintenance bases. The resident cadres maintained routine surveillance, while the SWAP teams, periodically and as necessary, performed in-depth inspections of air carrier programs for keeping their personnel and materiel up to standards. FAA fully implemented SWAP during fiscal 1968.
19660701	Jul 1, 1966: The Slick Corporation ceased air transport operations, transferring most of its assetts to Airlift International. The company had begun flying on Mar 4, 1946, under the name Slick Airways. It had become the nation's largest all-cargo commercial airline by 1951, but had encountered difficulties as passenger airlines increasingly competed for air freight.
19660711	Jul 11, 1966: A joint planning document effective on this date set forth the responsibilities of FAA and DOD in developing plans and procedures for using non-air-carrier civil aircraft to support civil defense during a national emergency.
19660712	Jul 12, 1966: Effective this date, FAA established a policy that television towers or other structures in excess of 2,000 feet above the ground were presumed to be hazards to air navigation. The agency would only rule that no hazard existed in exceptional cases in which an applicant had shown clearly that the structure would cause no danger of inefficient use of airspace.
19660818	Aug 18, 1966: FAA commissioned the nation's 300th civilian airport traffic control tower at Hillsboro, Ore. Dedication ceremonies were held on Aug 28.
19660819	Jul 8-Aug 19, 1966: A strike by the International Association of Machinists halted for 43 days the flight operations of Eastern, National, Northwest, TWA, and United. This was the longest and costliest strike in U.S. airline history to that date.
19660901	Sep 1, 1966: A voluntary agreement effective this date limited operations at Washington National Airport to a maximum of 60 Instrument Flight Rules operations per hour--40 for air carriers and 20 for general aviation. If air carrier IFR operations dropped below 40 per hour, general aviation would assume the unused “slots.” The agreement had been reached between FAA and the aviation groups using the airport, and approved by CAB.

	The need to limit operations at Washington National had risen from crowded conditions in the terminal buildings and on the runways, and from the rise in noise complaints since the introduction of jets into the airport. On Jul 1, 1966, FAA had issued a new operating policy, to be effective Aug 7, 1966, which required flights originating or departing from National to land on their first stop within a radius of 500 miles from Washington, D.C. This would have reduced the 650-mile radius agreed to in Apr by the airlines serving National (see Apr 24, 1966, and May 26, 1981). Shrinking the perimeter served by National, FAA had calculated, would have reduced the flow of passenger traffic through the terminal from 22,000 people daily to a manageable 18,000. FAA decided, however, to drop the more restrictive perimeter rule in favor of a rule limiting operations at National to 60 per hour. The quota rule was never issued because the airport users' voluntary agreement made it unnecessary. With FAA's and CAB's blessing, a scheduling committee composed of representatives of carriers serving the airport was constituted to distribute slots among its membership. The agreement formally expired on Dec 1, 1966, but its terms were continued in force voluntarily. (See Spring 1967 and Jun 1, 1969.)
19660909	Sep 9, 1966: The Interagency Bird Hazard Committee, formed to exchange and consolidate data useful in developing methods for reducing the danger of collisions between birds and airplanes, held its first meeting. Represented on the committee were FAA, NASA, the Civil Aeronautics Board, the Department of Interior, the Department of Health, Education, and Welfare, and the three armed services.
19660911	Sep 11, 1966: Tracy Barnes completed the first hot-air-balloon flight across the contiguous United States, landing near Villas, N.J., near the eastern shore of the Delaware Bay. He had departed San Diego, Calif., on Apr 10, 1966. The flight took twice the time Barnes had originally estimated due to mishaps, including one that hospitalized him for three days, and unfavorable winds. Hot air ballooning had emerged as a popular sport in the early 1960s. (See Aug 11-17, 1978.)
19660919	Sep 19, 1966: AN FAA rule effective this date required U.S.-registered civil aircraft operating outside the United States to meet basically the same operational and maintenance standards as those prescribed for operations within the United States.
19660930	Sep 30, 1966: FAA consolidated its aeromedical research function into one location by transferring such activities at the Georgetown Clinical Research Institute, Washington, D.C., to the Aeronautical Center's Civil Aeromedical Institute (CAMI) in Oklahoma City. (See Nov 21, 1965.)

19661015	Oct 15, 1966: President Johnson signed the Department of Transportation Act (Public Law 89-670), bringing 31 previously scattered Federal elements, including FAA, under the wing of one Cabinet Department. The purpose of the new Department was to: assure the coordinated, effective administration of the transportation programs of the Federal Government; facilitate the development and improvement of coordinated transportation service, to be provided by private enterprise to the maximum extent feasible; encourage cooperation of Federal, State, and local governments, carriers, labor, and other interested parties toward the achievement of national transportation objectives; stimulate technological advances in transportation; provide general leadership in the identification and solution of transportation problems; and develop and recommend to the President and the Congress national transportation policies and programs to accomplish these objectives with full consideration of the needs of the public, users, carriers, industry, labor, and the national defense.
	The legislation provided for five initial major operating elements within the Department. Four of these organizations were headed by an Administrator: the Federal Aviation Administration (previously the independent Federal Aviation Agency); the Federal Highway Administration; the Federal Railroad Administration; and the Saint Lawrence Seaway Development Corporation. The new Department also contained the U.S. Coast Guard, which was headed by a Commandant and had previously been part of the Treasury Department.
	The DOT Act also created within the new Department a five-member National Transportation Safety Board. The act charged the NTSB with (1) determining the cause or probable cause of transportation accidents and reporting the facts, conditions, and circumstances relating to such accidents; and (2) reviewing on appeal the suspension, amendment, modification, revocation, or denial of any certificate or license issued by the Secretary or by an Administrator. In the exercise of its functions, powers, and duties, the Board was made independent of the Secretary and the other offices and officers of the Department.
	Two important differences between President Johnson's proposal (see Mar 2, 1966) and the final DOT Act were: (1) the Maritime Administration was left out, and (2) the actions of the FAA Administrator relating to safety, and the decisions of the NTSB, were designated "administratively final" with appeals only to the courts. Three months after signing the DOT Act, Johnson appointed the first Secretary of Transportation (see Jan 16, 1967). The new Department began full operations on Apr 1, 1967. (See Mar 2, 1966, Jan 16, 1967, and Apr 1, 1967.)
19661017	Oct 17, 1966: Effective this date, FAA required pilots to have a helicopter instrument rating to operate a helicopter under Instrument Flight Rules conditions.
19661020	Oct 20, 1966: FAA type-certificated the 206A Bell JetRanger, a five-place, rotary-wing, turbine-powered general-purpose helicopter. This highly successful helicopter had first flown on Jan 10, 1966.

19661104 Nov 4, 1966: The United States and the Soviet Union signed an agreement authorizing commercial airline service between New York and Moscow. (See Apr 1, 1960, and Jul 15, 1968.)

19661105 Nov 5, 1966: A two-day exercise designated Metro Air Support '66 began as a demonstration of aviation's ability to provide emergency access and logistic support to a city center. The first major operation of its kind, it involved more than 200 airplanes, helicopters, and Short Takeoff and Landing (STOL) aircraft.

FAA was a key participant in planning the exercise, and a number of airlines cooperated by flying supplies from distant points to airports in the New York City vicinity. The key operation involved airlifting supplies from the fringes of the city to its center, which was accomplished by helicopters and STOL aircraft. The exercise had its headquarters at a pier on the Hudson River, and one of its objectives was to encourage the development of waterfront locations for STOL ground facilities. (See Apr 1966 and Jun 30, 1968.)

19661129 Nov 20-29, 1966: The Air Line Pilots Association (ALPA) board of directors adopted an article to its constitution and by-laws providing that all future turbine-powered transports (excluding 'stretch' models of the turbine-powered, twin-engine aircraft presently certificated) be manned by a minimum crew of three pilots. On Jun 29, 1967, ALPA formally proposed to FAA's Western Region, and to the FAA Administrator on Aug 8, 1967, that a three-man crew be incorporated in the 737 cockpit, then under development. (See Apr 21, 1965 and Jul 25, 1967.)

19661205 Dec 5, 1966: Bureau of National Capital Airports headquarters personnel moved from FAA headquarters in Washington, D.C., to Falls Church, Va. The move allowed the Bureau, which operated Washington National and Dulles International Airports, to be centrally located between the two airports. The Eastern Region's Washington Area Office also moved from Washington to Falls Church during December. (See Jun 14, 1959.)

19661206 Dec 6, 1966: The launching of NASA's first applications technology satellite (ATS I) on this date afforded FAA the first opportunity to evaluate a satellite as an air-ground-air relay for long-distance veryhigh-frequency radio voice communications. The 775-pound spin-stabilized satellite transmitted voice messages of excellent clarity originating either from the ground or from flying aircraft. Both FAA and air carrier aircraft took part in the testing, conducted during 1966 and 1967. (See Mar 29, 1967.)

19661231 Dec 31, 1966: FAA declared the Boeing Company and the General Electric Company winners of the supersonic transport (SST) development program competitive design and study phase (Phase IIC). The agency selected Boeing's variable-sweep-wing airframe design over the Lockheed Corporation's double-delta-wing design and General Electric's after-burning turbojet engine over the Pratt & Whitney ductburning turbofan engine. The selections were based on an intensive two-month evaluation conducted by a 240-person team of aeronautical experts from the Defense Department, NASA, CAB, and FAA. In addition, 10 U.S. and foreign airlines independently evaluated the proposals and submitted individual recommendations. (See Jul 1, 1965, and Feb 6, 1967.)

19661231 Calendar year, 1966: In crossing the North Atlantic, 89 percent of the year's travelers went by air and 11 percent by sea. Total passengers were estimated to be 5,322,000, of which 4,720,000 flew and 602,000 sailed. (See Calendar year 1958 and May 8, 1967.)

1967

19670111 Jan 11, 1967: A Scramjet (supersonic combustion ramjet), a vehicle described by scientists as a forerunner of aircraft that would carry passengers at speeds of about 8,000 miles an hour at very high altitudes, made its first test flight when launched from an Air Force-NASA Scout rocket.

19670116 Jan 16, 1967: Alan S. Boyd became the first Secretary of the Department of Transportation (see Oct 15, 1966, and Apr 1, 1967). President Johnson had announced his intention to nominate Boyd on Nov 6, 1966. The new Secretary had been a member and chairman of the Civil Aeronautics Board and, at the time of his nomination, Under Secretary of Commerce. Boyd served as Secretary for the rest of the Johnson Administration, resigning effective Jan 20, 1969. (See Jan 22, 1969.)

19670125 Jan 25, 1967: A study of aircraft noise at Washington National Airport (WNA) released on this date revealed that four-engine piston air carrier aircraft made more noise on departure than did two- and three-engine jet air carrier aircraft. (Four-engine jet airliners were not permitted at WNA: see Apr 24, 1966.) The noise levels of executive jet aircraft were relatively high, and turboprop air carrier aircraft, as a group, were the quietest on both departure and arrival. During the first half of 1967, FAA developed and implemented a two-segment takeoff profile for noise abatement at WNA. The procedure called for a rapid climb to a specified altitude, and then a reduced-thrust climb until the aircraft was ten miles from the airport. AN FAA study of aircraft overflight recordings showed that the procedure was effective. (See Jul 18, 1960, and Dec 4, 1967.)

19670201 Feb 1, 1967: A Civil Aeronautics Board order effective this date permitted the merger of Pan American-Grace Airways (Panagra) into Braniff International Airways. President Johnson had approved the purchase of Panagra by Braniff on Oct 19, 1966. The merger reduced the number of U.S. flag carriers serving South America from three to two--Braniff and Pan American World Airways.

19670201 Feb 1, 1967: FAA awarded a contract to the Raytheon Company for the purchase of computer display channels for NAS En Route Stage A, the agency's automation program for its air route traffic control centers (ARTCC's). The computer display channel comprised about a third of the equipment in an automated ARTCC and was the final link in the process of providing the air traffic controllers with three-dimensional information on their radar display. The contract was the largest awarded to that date for air traffic control equipment. (See Sep 2, 1964.)

19670202 Feb 2, 1967: FAA issued an advisory circular entitled "Regional Air Carrier Airport Planning" as an aid in determining when a single regional air carrier airport was preferable to two or more airports. In line with joint FAA-CAB policy (see May 2, 1961), the circular advised that a regional airport study should be made in specified circumstances involving inadequacies at existing airports located within 50 miles and one hour's driving time of another air carrier airport or another community receiving scheduled service. (The National Airport Plan for fiscal years 1968-72, issued in Apr 1967, was the first such plan to identify locations that could be developed as regional airports.)

19670206 Feb 6, 1967: FAA asked U.S. air carriers to help finance the supersonic transport (SST) prototype program by contributing $1 million in risk capital for each SST delivery position held (see Nov 19, 1963). The agency took the step at the direction of President Johnson, who considered it a way in which the airlines could demonstrate to the Congress and the public their faith in the SST program. Under the proposal, contributions would in no way affect the established places of contributing and noncontributing carriers on the reservation schedule. The money would go directly to the Boeing Company to be used in the development program in lieu of Federal funds. The airlines would recover their investment--up to a maximum of $1.5 million for each $1 million contributed--through aircraft royalty payments. Ten U.S. air carriers holding a total of 52 delivery positions agreed to put up risk capital. Details of the participation agreement could not be worked out before April, however, and this became a factor in delaying the President's announcement of his decision to take the SST program into prototype development. (See Dec 31, 1966, and Apr 29, 1967.)

19670225 Feb 25, 1967: A four-lane viaduct opened between Washington National Airport and U.S. Route 1, improving the airports accessibility by automobile. The viaduct cost $3.7 million.

19670228 Feb 28, 1967: The 40th anniversary of the designated aviation medical examiner (AME) program was celebrated by a special seminar jointly conducted by the FAA and the Aerospace Medical Association for designated AME's from 37 foreign countries and U.S. possessions. (At the end of fiscal 1967, there were 5,961 AME's.) (See Feb 28, 1927.)

19670321 Spring, 1967: Scheduled air-taxi operators agreed to limit their operations at Washington National Airport to a maximum of eight per hour. (See Sep 1, 1966, and Jun 1, 1969.)

19670324 Mar 24, 1967: New parachute jumping rules effective this date required pilots of aircraft used for jumps in controlled airspace: to have two-way voice radio communication equipment; to establish communications with air traffic control at least 5 minutes before jumps began; to monitor FAA radio channels during the jump; and to advise air traffic control when the jump was completed. The minimum time for notifying FAA of planned jumps in controlled airspace was reduced from six hours to one hour. (See Dec 4, 1964, and Aug 7, 1968.)

19670325	Mar 25, 1967: The management of the XB-70 supersonic aircraft research program was transferred from the U.S. Air Force to the National Aeronautics and Space Administration's Flight Research Center. The program, much of which was devoted to the study of supersonic flight in support of the U.S. supersonic transport development program, continued as a joint NASA-USAF effort. (See Sep 21, 1964, Jun 8, 1966, and Feb 4, 1969.)
19670327	Mar 27, 1967: FAA approved a new 2,000-candlepower runway centerline light to permit operations under visibility as low as 700 feet.
19670329	Mar 29, 1967: FAA participated in NASA's first public demonstration of a new data-link system using an orbiting satellite for transmitting navigation data from aircraft to ground stations. A Pan American World Airways cargo jet beamed the data to NASA's ATS I satellite, which relayed the signals to an antenna at the Mojave Desert Ground Station in California. The signals then went by telephone lines to Kennedy International Airport by way of the Goddard Space Flight Center in Greenbelt, Md. This was the first test of an aircraft antenna designed specially for transmitting satellite messages. (See Dec 6, 1966, and Nov 21, 1967.)
19670401	Apr 1, 1967: The Department of Transportation (DOT) began operations. At the same time, FAA ceased to be the independent Federal Aviation Agency and became the Federal Aviation Administration, a modal agency within the new Department. (See Mar 2, 1966, Oct 15, 1966, and Jan 16, 1967.)
19670407	Apr 7, 1967: FAA certificated West Germany's first civilian jet transport, the Hamburger Flugzeugbau HFB 320 Hansa. The nine-passenger twin-jet had received German type approval on Feb 23, 1967, and had first flown on Apr 21, 1964.
19670409	Apr 9, 1967: The Boeing 737 made its first flight. On Dec 15, 1967, FAA type-certificated the airliner, a short-range jet transport with swept wings, wing-mounted twin engines, and a maximum capacity of 107 passengers, for operation with a two-man cockpit crew. The plane entered scheduled airline service on Feb 10, 1968.
19670423	Apr 23, 1967: A project completed on this date made Washington National Airport's main runway the first U.S. runway for commercial operations to be grooved. Developed by the British, runway grooving proved highly successful in reducing the tendency of landing aircraft to aquaplane on wet surfaces. The grooves at National were 1/8 inch wide, 1/8 inch deep, and cut at angles to the runway centerline with a 1- inch spacing. They carried water away in what amounted to thousands of tiny gutters. On May 24, 1968, FAA announced that Chicago Midway Airport would receive the first funding allocation for runway-grooving under the Federal-aid airport program. (See Aug 4, 1965 and Jul 13, 1983.)
19670428	Apr 28, 1967: The McDonnell Douglas Corporation came into being, the result of a merger between the Douglas Aircraft Company and the McDonnell Company. Douglas had been founded in 1920, McDonnell in 1939.

19670428	Apr 28, 1967: FAA required operators of unmanned free balloons to equip their balloons with at least two separate, independently operated self-destruction mechanisms for both the balloon envelope and its instrument package. The agency further required the balloon envelope to have radar reflective equipment.
19670429	Apr 29, 1967: President Johnson announced that the U.S. supersonic transport (SST) development program would proceed into the prototype development phase (Phase III). Johnson based his decision on the recommendations of the President's Advisory Committee on Supersonic Transport. On May 1, 1967, the date of the President's formal approval, FAA, Boeing, and General Electric signed the Phase III contracts retroactive to Jan 1, 1967, which called for the construction of two identical variable, sweep-wing SST prototypes. (See Feb 6 and Jun 5, 1967.)
19670501	May 1, 1967: Effective this date, FAA dropped its requirement that applicants under 21 years of age have parental or guardian consent for student pilot certificates. The 16-year minimum age for a student pilot's license remained unchanged. (See Apr 18, 1939, and Jul 1, 1945.)
19670508	May 8, 1967: The prevailing preference for flying rather than sailing among transoceanic travelers was pointedly emphasized as the Cunard Steamship Company announced retirement of the world's two largest passenger liners, RMS Queen Elizabeth and the RMS Queen Mary. (The 81,237-ton Queen Mary completed her 1,000th and final transatlantic voyage for Cunard on Sep 27, 1967; the Queen Elizabeth completed her final transatlantic voyage on Nov 6, 1968.) (See Calendar year 1966.)
19670601	May 31-Jun 1, 1967: Two Sikorsky HH-3Es made the first helicopter non-stop transatlantic crossings, flying from New York to the Paris Air Show. Each aircraft required nine aerial refuelings during the flight. (See Jul 15-31, 1952.)
19670605	Jun 5, 1967: The Boeing Company assumed from FAA responsibility for allocating supersonic transport (SST) delivery positions to purchasers (see Nov 19, 1963). At the same time, FAA raised the cost of reserving future positions from $200,000 to $750,000. The $750,000 deposit would be made directly to Boeing, would be in the form of risk capital, and would bear no interest. It would be used by Boeing in lieu of Federal funds to help finance the prototype program. Boeing agreed to honor the 113 delivery positions already allocated by FAA among 26 airlines. (See Apr 29, 1967, and Jan 15, 1968.)
19670606	Jun 6, 1967: The nation’s First Lady, Mrs. “Lady Bird” Johnson, presented FAA's first Airport Beautification Award to Phoenix, Ariz., for its Sky Harbor Municipal Airport. FAA established the award to honor organizations that protect, restore, or enhance airport beauty.
19670606	Jun 6, 1967: FAA adopted a new U.S. standard for Category II approach lights to conform with the standard of the International Civil Aviation Organization. Red light barrettes would be added on either side of existing white centerline lights over the last 1,000 feet of the approach light system. The new standard also required a red and white crossbar 500 feet from the end of the runway, and white centerline lights at 100 and 200 feet from the runway threshold.

19670630	Jun 30, 1967: During fiscal year 1967, which ended on this date, FAA installed an IBM 9020 simplex computer system at the Cleveland (Ohio) ARTCC (see Feb 18, 1970).
	FAA also adopted a new, lower-cost design standard for control towers at medium activity airports. The new design retained the appearance of the tower concept adopted by FAA in 1962, featuring a free-standing 60- to 120-foot pentagonal concrete shaft topped by a control tower cab with 300 square feet of operating space. Money was saved in construction through use of more conventional techniques and elimination of certain operational features. (See Feb 1965.)
	In addition, during fiscal 1967, FAA used thickened, or gelled, fuels for the first time to operate a ground-based jet aircraft engine. This test, successfully concluded at FAA's National Aviation Facilities Experimental Center, was followed by the initiation of an expanded FAA sponsored program at the Naval Air Propulsion Test Center. The use of gelled fuels was one of a number of avenues being explored by FAA for reducing the fire hazard in aircraft accidents.
19670701	Jul 1, 1967: Pacific Northern Airlines merged into Western Air Lines.
19670707	Jul 7, 1967: A Pan American World Airways Boeing 707 made the first fully automatic approach and landing by a four-engine jet aircraft with passengers on board. (See Jun 10, 1965.)
19670713	Jul 13, 1967: NASA awarded the first contract in its quiet-engine project, part of the Government-wide noise abatement program, to the Pratt & Whitney Aircraft Division of the United Aircraft Corporation. The objective of the quiet engine project, due to run into fiscal 1972 and cost $50 million, was to employ all known noise control techniques in a 20,000-pound-thrust demonstrator engine. When installed in a new sound absorbing nacelle, the "quiet engine" was expected to be 20 perceived noise decibels quieter than jet engines in use during the late 1960s.
19670719	Jul 19, 1967: A midair collision near Hendersonville, N.C., between a Piedmont Airlines Boeing 727 and a Cessna 310 killed all 82 people aboard the two aircraft. The fatalities included Secretary-designate of the Navy John T. McNaughton. The National Transportation Safety Board listed the probable cause as the Cessna's deviation from its Instrument Flight Rules (IFR) clearance. The Board could not specifically identify the reason for the Cessna's deviation; however, it cited the "minimum control procedures" used by FAA in handling the Cessna as a contributory factor in the accident. The Board's recommendations included improvements to the air traffic control system and more stringent requirements for IFR pilots, including an annual proficiency flight check.
19670721	Jul 21, 1967: FAA established the Office of Noise Abatement, a measure of the importance the agency attached to the problem of aircraft-engine noise. Hitherto, the agency's noise-abatement program had been under the direction of a small noise abatement staff. (See Apr 8, 1966, and Nov 27, 1968.)
19670721	Jul 21, 1967: FAA retitled the Associate Administrator for Programs the Associate Administrator for Operations. (See Jun 12, 1963.)

19670725	Jul 25, 1967: United Airlines made public its order for 79 jet aircraft at a cost of $690 million, the largest airline equipment purchase announced at one time to that date. The order included 13 Boeing 747s, 23 Boeing 727s, 25 Boeing 737s, and 18 McDonnell Douglas DC-8s.
19670725	Jul 25, 1967: A Federal mediation board recessed without resolving a dispute between United Air Lines and the Air Line Pilots Association (ALPA) over the crew complement of the Boeing 737. United insisted that the aircraft could be safely flown with two pilots, while the union argued for a three-man cockpit crew. On Mar 21, 1968, United and its pilots agreed to conduct an in-service evaluation of the 737, but they could not agree on the evaluation's results. On Feb 22, 1969, a Federal arbitration panel ruled in favor of the pilots for the life of the current United-ALPA contract, and on Mar 31, 1970, a second arbitration panel affirmed this ruling for the duration of the next contract. This decision on United Air Lines, the first airline to order the 737, influenced Western to accept a three-man cockpit on its 737s. (See Nov-20-29, 1966 and Jul 21, 1969.)
19670807	Aug 7, 1967: In a rule effective this date, FAA set equipment and procedural standards under with general aviation pilots operating properly equipped airplanes were authorized to land under Category II weather minimums--a 1,200-foot runway visibility range and a 100-foot decision height. (See Oct 2, 1964, and Nov 3, 1967.)
19670828	Aug 28, 1967: FAA appointed an Associate Administrator for Plans. This new position was responsible for developing the agency's long-range plans for meeting future demands for its services. (See Mar 16, 1962, and Nov 27, 1968.)
19670831	Aug 31, 1967: President Johnson signed the Veteran's Pension and Readjustment Act of 1967 (Public Law 90-77), which became fully effective Oct 1. The Act authorized the Veterans Administration to reimburse eligible veterans for 90 percent of the cost of flight training necessary for a recognized vocational objective. The legislation specified that: the eligible veteran must have a private pilot certificate (or have completed the required flight-training hours), with at least a second class medical certificate, and the flight school courses meet FAA standards and be approved both by FAA and the appropriate State agency.
19670910	Sep 10, 1967: A rule requiring that the design of transport category airplanes include the protection of the fuel system against lightning became effective.
	A special FAA-Air Force task force directed the evacuation and worked round the clock to restore critical navaids and airport capabilities. Portable equipment (including a tower, VOR, and TACAN) was air lifted to the island. Within 48 hours after the typhoon struck, the airport had resumed transpacific airlift operations on a reduced scale. By the last week in September, all essential facilities of both the airport and the center had returned to service.

19670916	Sep 16, 1967: Typhoon Sarah struck Wake Island with winds exceeding 140 miles per hour, knocking out the island's electric power plant, air traffic control tower, air route traffic control center, and navigation aids. Damage to the island's housing, sanitation system, and freshwater supply necessitated the evacuation of one fourth of Wake's population.
19670920	Sep 20, 1967: FAA published new safety rules designed to improve crashworthiness and passenger evacuation standards in transport airplanes. The new rules required air carriers, other commercial operators, and aircraft manufacturers to demonstrate that airplanes with more than 44 seats were capable of permitting the evacuation of a full load of passengers through only half the aircraft's exits in 90 seconds. The previous rule, which did not require demonstration by aircraft manufacturers, had set a time limit of 120 seconds.
	Other key provisions of the new rules related to: the distribution and type of exits, and their ratio to passengers; improved access to overwing exits; evacuation slides deployable in 10 seconds; improved interior lighting and new exterior lighting; cabin linings with self-extinguishing qualities; stowing carry-on baggage; slip-resistant and clearly marked escape routes; and better protection of fuel and electric lines. Compliance dates for the new rules ranged from Oct 24, 1967, to Oct 1, 1969. (See Jun 7, 1965, and May 1, 1972.)
19670920	Sep 20, 1967: Citing the rapid growth of commercial and private flying, President Johnson requested Transportation Secretary Alan S. Boyd to develop a long-range, comprehensive plan for the facilities, equipment, and personnel required for a substantial expansion and improvement of the air traffic control system. The President stated that the plan "should be accompanied by a proposal for financing the improvements through a system of charges by which the users of the Nation's airways bear their fair share of its costs." (See May 20, 1968.)
19670922	Sep 22, 1967: North American Rockwell Corporation came into being, result of a merger between North American Aviation and Rockwell-Standard Corporation.
19670925	Sep 25, 1967: AN FAA report released on this date concluded that the economic effects of the development of general aviation airports were beneficial for five communities studied: Hereford, Tex.; Sumter, S.C.; Hayward, Calif.; Frederick, Md.; and Fairmount, Minn. FAA found that airports served as a catalyst for business growth, helping to provide industrial jobs for machine-displaced farm laborers, as well as providing operational bases for aerial crop seedings and crop spraying.
19671003	Oct 3, 1967: Maj. William J. Knight, USAF, piloting the X-15 rocket plane, set an unofficial world record of 4,534 miles an hour, almost seven times the speed of sound. (See Jul 28, 1976.)

19671011	Oct 11, 1967: A new prototype airport traffic control tower equipped with solid-state electronic equipment went into operation at Reid-Hillview Airport, San Jose, Calif. Designed primarily for small airports, such a tower provided the same services as towers with vacuum tube equipment, but at much less cost. The solid-state equipment was also more reliable, compact, easier to install, and required less maintenance.
19671019	Oct 19, 1967: FAA type-certificated the Grumman Gulfstream II, a two-engine corporate jet with a crew of two and a maximum capacity of 19 passengers in the corporate seating arrangement.
19671019	Oct 19, 1967: FAA retitled the Office of Management Services the Office of Management Systems, to reflect a shift in the primary responsibility of the office from providing specific administrative support services to the development of agencywide systems and methods for solving management problems.
19671103	Nov 3, 1967: Pan American World Airways became the first airline to receive FAA approval for full Category II operations, permitting the airline to land in weather offering only a 100-foot decision height and a 1,200-foot runway visibility range. At this date, however, such operations could be conducted only at Dulles International Airport. In the ensuing seven months, seven additional airports qualified for Category II operations. (See Aug 7, 1967, and Jan 21, 1972.)
19671109	Nov 9, 1967: FAA lowered the floor of area positive control over the northeastern and northcentral United States--perhaps the most heavily traveled airspace of its size in the world--from 24,000 to 18,000 feet. The area was bounded roughly by a line running from Presque Isle, Maine, south to Danville, Va., west to Salina, Kan., north to Minneapolis, Minn., and east again to Presque Isle. This action followed FAA's determination that it could no longer assure the safe separation of aircraft in this area without extending positive control. (See Mar 4, 1965, and Oct 14, 1971.)
19671121	Nov 21, 1967: A Pan American World Airways jet flying the North Atlantic successfully used NASA's ATS III, one of a series of application research satellites, as an air-ground-air radio voice relay. The demonstration was part of a program by major airlines to develop a global system of long-range, static-free, very-high-frequency communications between the air and ground. (See Mar 29, 1967.)
19671130	Nov, 1967: The Council of the International Civil Aviation Organization (ICAO) revised its definition of aircraft to exclude air cushion vehicles, or hovercraft. ICAO had previously defined aircraft as "any machine that can derive support in the atmosphere from the reactions of the air," but amended this by adding "other than reactions of the earth's surface." This change meant that hovercraft were not subject to international standards and regulations governing aircraft. (See Oct 16, 1964.)

19671204	Dec 4, 1967: Effective this date, FAA required pilots of small turbine-powered aircraft to follow the same noise abatement procedures mandated for pilots of large transports. The change meant that the rules now applied uniformly to all large (over 12,500 lbs.) aircraft and to all turbine-powered aircraft, whose pilots were currently required to: (1) enter an airport traffic area at 1,500 feet above surface and maintain that altitude until further descent was necessary for safe landing; (2) climb to 1,500 feet as rapidly as practicable after takeoff; and (3) use assigned noise abatement runways at airports where FAA had established a formal runway use program. In addition, pilots of all large aircraft and all turbine-powered aircraft equipped with an Instrument Landing System (ILS) were required to remain at or above the glide slope on final approach for ILS landings. (See Apr 4, 1960, and Feb 4, 1971.)
19671207	Dec 7, 1967: FAA decommissioned the Wake Island air traffic control center and transferred its air traffic control functions to the Honolulu ARTCC.
19671211	Dec 11, 1967: Sud Aviation and the British Aircraft Corporation unveiled a prototype of the British-French Concorde, the West's first supersonic transport, in Toulouse, France. On Mar 2, 1969, the Concorde made its first flight. Almost ten years later, on Sep 21, 1979, after meeting in London, aviation officials of France and the United Kingdom agreed to end the unprofitable Concorde production program. Unsold Concordes were allocated to the flag carriers of the two countries--Air France and British Airways. Only sixteen of the supersonic jet transports had been built.
19671218	Dec 18, 1967: The Post Office Department imposed requirements on air taxi operators desiring contracts for carrying U.S. mail. To qualify, air taxi aircraft had to have at least two engines, complete deicing equipment, and Instrument Flight Rules (IFR) capability. Similarly, air-taxi pilots were required to have an IFR rating, a minimum of 500 flight hours, 50 hours of night operations, and 50 hours of IFR operations under actual IFR conditions.
19671222	Dec 22, 1967: FAA renamed its Installation and Materiel Service the Logistics Service to describe better the service's revised functions. (See May 16, 1962 and Jan 19, 1970.)

1968

19680101 Jan 1, 1968: The Federal Aviation Administration began a one-year study of the causes of near-collisions in the air, hoping to gather data for developing effective counteractive measures. Since the study's success depended on the full and frank cooperation of those involved, FAA granted immunity from any enforcement or other adverse action, remedial or disciplinary, to any person involved in a near miss that had been voluntarily reported to FAA during the course of the study. On Dec 18, FAA extended the program for an additional year. (See Jun 7, 1961, and Jul 15, 1969.)

19680115 Jan 15, 1968: AN FAA technical team began a review of modifications made by Boeing to its supersonic transport (SST) prototype design (variable-sweep-wing model 2707-200). The team found that these changes, by increasing the aircraft's weight, had resulted in a poor weight-payload ratio. This overweight factor limited range and payload to such an extent that the prototype's calculated performance fell well below the specifications for the Phase III contract. (With a full payload, the 2707-200 had a range of only 2,775 statute miles.) An amendment to the Phase III contract, dated Mar 29, 1968, required Boeing to submit to FAA by Jan 15, 1969, a fully substantiated design capable of meeting the Phase III contract criteria for the prototype airplane. (See Jun 5, 1967, and Oct 21, 1968.)

19680119 Jan 19, 1968: FAA Administrator McKee approved the realignment of the functions of the Associate Administrator for Personnel and Training (see Oct 1, 1965). Under the new organizational structure, the agency established a separate Office of Personnel and a separate Office of Training, as well as a Manpower and Planning Staff and an Executive and Military Personnel Staff. This realignment provided a closer grouping among traditional personnel and training functions and permitted a quicker response to agency needs. The new office became operational on Feb 1, 1968.

19680131 Jan, 1968: A group of dissatisfied air traffic controllers in the New York area formed the Professional Air Traffic Controllers Organization (PATCO). By the end of Jun 1968, PATCO had a national membership of well over 5,000 FAA employees. (See Jan 17, 1962, and Jul 3, 1968.)

19680221 Feb 21, 1968: A sustained wave of U.S. air carrier hijackings began when a fugitive aboard a Delta Air Lines DC-8 forced the pilot to divert to Havana. By Jul 17, four more U.S. airliners had been diverted to the same destination. On Jul 19, FAA announced that specially trained FAA safety inspectors ("sky marshals") had begun boarding Florida-bound airline flights (see Aug 10, 1961, and Oct 28, 1970). The inspectors, sworn in as deputy U.S. marshals after being trained at the U.S. Border Patrol Academy, were generally assigned to flights on a random, unannounced basis. Hijackings continued, however, and a total of twelve airliners and six general aviation aircraft were diverted to Cuba during 1968. (See Jan 1969.)

19680226	Feb 26, 1968: FAA issued an advance notice of proposed rulemaking inviting comments on the advisability of requiring general aviation pilots to carry crash locator beacons when flying over large bodies of water, mountainous terrain, or remote areas. The agency cited a growing body of opinion that the device would be useful in the rapid location of crash sites and survivors. FAA had begun testing the equipment in 1963, and had subsequently encouraged its use (see Jan 9, 1964). The agency had resisted regulatory action, however, because of the equipment's high cost and the need for related airborne search units used to “home in” on the crash site. (See Mar 20, 1969.)
19680226	Feb 26, 1968: FAA's put into operation its National Airspace Communications System (NASCOM), a daily nationwide telephone conference. NASCOM connected the Administrator, Deputy Administrator, the associate administrators, the heads of FAA's operating services, the regional directors, and area managers in the contiguous United States, and the directors of NAFEC and the Aeronautical Center in a telephone discussion of the status of the National Airspace System (NAS). The agency developed NASCOM because of the need to keep Washington headquarters closely and constantly in touch with activities in the NAS.
19680229	Feb, 1968: AN FAA study noted the growing volume of mail receiving air transportation in recent years with special emphasis on first-class mail moved on a space available basis. About 95 percent of first-class mail traveling over 200 miles currently moved by air. The study predicted that mail by air would continue to increase steadily and that the use of air taxis would be expanded to expedite overnight delivery to additional communities. (See Dec 18, 1967, and Calendar year 1968.)
19680301	Mar 1, 1968: The Point Barrow, Alaska, flight service station went into operation, becoming FAA's northernmost facility (71 degrees 22 minutes north latitude). FAA's southernmost facility, located at 14 degrees 16 minutes south latitude, was the Pago Pago international flight service station in American Samoa.
19680316	Mar 16, 1968: Under a rule effective this date, FAA prohibited VFR (visual flight rules) operations at or above 10,000 feet above mean sea level unless a pilot enjoyed a minimum visibility of five miles while remaining at least 1,000 feet vertically and one mile horizontally from cloud formations.

19680321	Spring, 1968: The Stored Program AlphaNumerics (SPAN) equipment transferred to the New York air route traffic control center in 1966, and subsequently renamed Beacon AlphaNumerics (BAN), was dismantled and shipped to Atlanta, where it was to augment the ARTS I configuration at that terminal area. (ARTS and BAN hardware components were virtually identical.) While BAN had been perfectly capable of handling the en route traffic assigned to the Indianapolis ARTCC, it was incapable of meeting the considerably greater control demands imposed by the New York center, which had perhaps the most difficult radar beacon and traffic control environment in the United States. The chief difficulties with BAN in New York were those growing out of the configuration's limited capacity. BAN could cover only nine of the center's 37 sectors. Consequently, aircraft were flying out of sectors with automation into sectors without automation, and vice versa. (See Feb 1966.)
19680401	Apr 1, 1968: Consolidation of several airlines in Alaska occurred as Alaska Coastal Airlines merged into Alaska Airlines, which had absorbed Cordova Airlines on Feb 1, 1968. On the same day, a merger of Northern Consolidated Airlines and Wien Alaska Airlines created a new intrastate carrier, Wien Consolidated Airlines.
19680417	Apr 17, 1968: Bonanza Air Lines and West Coast Airlines merged with Pacific Air Lines to form Air West, which was renamed Hughes Air West in Jul 1970, following its acquisition by Howard Hughes.
19680430	Apr 30, 1968: FAA banned Special VFR (visual flight rules) operations by fixed-wing aircraft at 33 major airports, under a rule effective this date. Special VFR operations are visual operations conducted under less than basic VFR weather minimums. The new rule continued to permit such operations in the control zones of other airports served by a radar-equipped control tower, though priority would be given to aircraft operating under instrument flight rules (IFR). The rule also continued to permit special VFR operations in airport control zones not served by radar, but only when IFR operations were not being conducted. The growing number of high performance aircraft, coupled with the continuing increase in air traffic, necessitated this reduction in special VFR operations.
19680502	May 2, 1968: The Beechcraft Model 99 received FAA type certification. The aircraft was a twin-engine, 17-passenger turboprop designed specifically for the scheduled air taxi market.
19680520	May 20, 1968: The Johnson Administration submitted two legislative proposals dealing with airport and airway development to Congress. One bill provided for Federal loans to sponsors of public airport development, and for a small Federal grant-in-aid program to certain airports. The other bill provided for expanded user taxes, with revenues generated by these taxes being used to fund airway development. Both proposals were an outgrowth of President Johnson's letter to Secretary Boyd calling for a long-range airways development plan (see Sep 20, 1967).

	The Senate Commerce Committee rejected the airport loan proposal in a report issued Jul 1. Instead, the committee favored a grant-in-aid program for airports of $150 million a year--double the amount authorized at that time by the Federal Airport Act (see Sep 20, 1961). In addition, the committee recommended the establishment of an aviation trust fund--a concept opposed by the Administration--into which would go all revenues generated by user taxes and other congressional appropriations to FAA. All FAA programs and operations would be funded through this fund.
	The committee reported out a bill based on these recommendations. Although the 90th Congress failed to act on this measure, it later became the basis of the Airport and Airway Development and Revenue Acts of 1970. (See Jun 16, 1969, and May 21, 1970.)
19680527	May 27, 1968: FAA announced that Washington National was the first airport in the U.S. to have its main instrument runway equipped with color-coded centerline lights for greater safety in low-visibility weather. Alternate red and white lights cautioned pilot that they were entering the last 3,000 feet of runway, while all-red centerline lights marked the last 1,000 feet.
19680613	Jun 13, 1968: The Secretary of Transportation delegated responsibility for administering the aircraft loan guarantee program to the FAA Administrator. The Department of Transportation Act of 1966 had transferred final loan guarantee responsibility from the Secretary of Commerce to the Secretary of Transportation. Authority to guarantee loans under the act had lapsed in 1967, but was renewed in 1973 with changes that included an increase of the maximum limit per carrier to $30 million. (See Oct 15, 1962, and Sep 7, 1977.)
19680620	Jun 20, 1968: FAA abolished the Northway (Alaska) Area Office and transferred its duties to the Fairbanks Area Office. (See Apr 23, 1959.)
19680621	Jun 21, 1968: The U.S. Department of Labor ruled that FAA's age-60 rule on airline pilot retirement represented a "bona fide occupational qualification" (BFOQ) under the provisions of the Age Discrimination in Employment Act of 1967. On Apr 20, 1977, however, a U.S. appeals court held in the case of Houghton v. McDonnell Douglas that age did not necessarily constitute a BFOQ for test pilots. (See Mar 15, 1960, and Jan 24, 1974.)
19680630	Jun 30, 1968: The Lockheed C-5A Galaxy, a long-range military heavy transport, made its first flight. On Sep 30, 1965, the Air Force had selected Lockheed to develop and produce the heavy logistics transport aircraft. The C-5A was powered by four General Electric TF39-GE-1 turbofan engines, each rated at 41,000 pounds of thrust. Intended primarily as a freighter, the aircraft's maximum takeoff weight was 728,000 pounds; its design payload, 220,000 pounds. On Dec 17, 1969, the Lockheed C-5A transport was formerly turned over to the U.S. Air Force during ceremonies at Marietta, Ga., where the aircraft was manufactured.
19680630	Jun 30, 1968: During fiscal 1968, which ended on this date, the U.S. Weather Bureau transferred responsibility for the Pilot Automatic Telephone Weather Answering Service (PATWAS) to FAA.

	Also during this fiscal year, airports to accommodate STOL (short takeoff and landing) aircraft were for the first time included in the National Airport Plan, which covered the years 1967-73. Twenty-five potential STOLports were identified in the eastern megalopolis and along the west coast, both areas of dense traffic deemed a ready market for short-haul operations within and between cities. (See Nov 5, 1966, and Aug 5, 1968.)
19680701	Jul 1, 1968: FAA implemented Project 85, a general aviation accident prevention program, for a two-year trial in the Central and Southwest Regions. Under the program, an accident-prevention specialist at each general aviation district office was to stimulate and focus cooperation of the aviation public, the aviation industry, and the government agencies toward a substantial reduction in general aviation accidents. (See Nov 30, 1970.)
19680701	Jul 1, 1968: Effective this date, FAA included on its list of emergency procedures the dropping of chaff by pilots experiencing a communications failure or wishing for any other reason to declare an in-flight emergency. The chaff (strips of tinfoil or other radio-wave-reflecting material) would cause radar echoes to attract the attention of air traffic controllers.
19680701	Jul 1, 1968: FAA transferred the Aeromedical Education Division from the Office of Aviation Medicine, FAA Headquarters, Washington, D.C., to FAA's Aeronautical Center, Oklahoma City, Okla.
19680703	Jul 3, 1968: PATCO president Michael J. Rock announced "Operation Air Safety," which he described as a campaign among PATCO members to maintain FAA-prescribed separation standards between aircraft. Rock said that FAA supervisors were violating these standards to accommodate the high levels of traffic, but that thereafter PATCO-affiliated controllers would "go by the procedures in the manual." (See Jan, 1968, and Jul 19, 1968.)
19680715	Jul 15, 1968: By this date, FAA had commissioned the first Bright Radar Indicator Tower Equipment (BRITE-1) systems at the Newark, Dallas (Love), and Birminham airport towers (see Apr 27, 1960). The system presented a televised image of a radar display, an image distinct enough to be used by tower cab controllers in daylight. FAA had used such televised displays on a limited basis since the mid-1960s, then ordered the BRITE-1 from ITT in Mar 1967. The agency subsequently procured two upgraded versions of the system, which were designated BRITE-2 and BRITE-4. By Jul 1979, there were approximately 394 BRITEs in service, some of which provided a remote display of radar data at satellite airports without radar transmitters. A Bright Alphanumeric Subsystem (BANS) was used to convert digital data from Automated Radar Terminal Systems (ARTS) for presentation on BRITE displays. In Jul 1986, FAA ordered approximately 400 Digital Bright Radar Indicator Tower Equipment (DBRITE) systems from Unisys as part of a joint procurement with the Defense Department. DBRITE was expected to provide a simplified and more reliable replacement for both BRITE and BANS. By the end of fiscal year 1992, FAA had completed installation of the DBRITE systems.

19680715 Jul 15, 1968: The New York Common Instrument Flight Rules (IFR) Room at John F. Kennedy International Airport went into limited operation by taking over the manual IFR operations controlled by the Kennedy TRACON (terminal radar approach control facility). The Common IFR Room then took over manual IFR operations controlled by the Newark and La Guardia airports' TRACONS in August and September.

This consolidation permitted more flexible and efficient air traffic control. Under the old scheme, each of the control facilities at Kennedy, Newark, and La Guardia had been assigned airspace with more or less inviolable boundaries separated by large buffer zones. Because of the slowness of communications between the control facilities, boundaries and buffer zones could not be easily shifted to meet changes in traffic flow. In the Common IFR Room, however, controllers working different control areas were within easy reach of each other; when necessary, they were able to shift boundaries and buffers almost instantaneously. (See Jun 1, 1969.)

19680715 Jul 15, 1968: Aeroflot Soviet Airlines and Pan American World Airways inaugurated twice-weekly scheduled passenger service between Moscow and New York as an Aeroflot Ilyushin IL-62 departed Moscow and flew to Kennedy International Airport via Montreal. A Pan American Boeing 707 departed Kennedy that evening and, after an intermediate stop in Denmark, arrived at Moscow on Jul 16. Aeroflot had been issued a foreign air carrier permit by the Civil Aeronautics Board on Jun 15, 1968 and the President approved the CAB permit on Jun 19, 1968. (See Nov 4, 1966, and Jun 19, 1973.)

19680717 Jul 17, 1968: The Department of Transportation formed an Air Traffic Control Advisory Committee for the purpose of recommending air traffic control systems and requirements for the 1980s and beyond. (See Dec 1969.)

19680719 Jul 19, 1968: Air traffic congestion reached critical proportions when a total of 1,927 aircraft in the vicinity of New York City were delayed in taking off or landing, some for as long as three hours. The jam, which spread to other major transportation hubs, was exacerbated by PATCO's decision to conduct a slowdown. (See Jul 3, 1968, and Jan 15, 1969.) At the root of the problem, however, was the inability of an inadequate and long-neglected air traffic control and airport system to accommodate the heavy tourist-season traffic. The jam was symptomatic of conditions that forced FAA to develop schedule restrictions for certain airports. (See Jun 1, 1969.)

19680721 Jul 21, 1968: President Johnson signed Public Law 90-411, which amended the Federal Aviation Act of 1958 to require aircraft noise abatement regulation. The act vested in the FAA Administrator the power, after consultation with the Secretary of Transportation, to: prescribe and amend standards for the measurement of aircraft-engine noise and sonic boom; prescribe noise standards as criteria for aircraft certification; require the retrofit of existing aircraft with quieter engines or noise-abating devices; enforce operating procedures that reduce noise; and ban overland supersonic flights of civil aircraft. (See Dec 1, 1969, and Oct 27, 1972.)

19680731	Jul 31, 1968: General William F. McKee resigned as FAA Administrator effective this date (see Jul 1, 1965). On Aug 1, 1968, Secretary of Transportation Alan S. Boyd designated FAA Deputy Administrator David D. Thomas as Acting Administrator. No one was named to the FAA Administrator post during the remaining months of the Johnson Administration. (See Mar 24, 1969.)
19680805	Aug 5, 1968: The first STOLport (short takeoff and landing facility) for commercial aircraft in the United States opened at La Guardia Airport in New York City. The STOLport, 1,095 feet long, would be used for VFR flying only. (See Jun 30, 1968, Sep 23, 1968, and Oct 17, 1971.)
19680807	Aug 7, 1968: AN FAA rule effective this date required deployment-assisting devices on parachutes for static-line jumps. The rule responded to a number of static-line parachuting accidents caused by improper extensions of the pilot chute or by entanglement of parachutes with jumpers. (See Mar 24, 1967.)
19680808	Aug 8, 1968: Congress exempted FAA air traffic control personnel from those provisions of Public Law 90-364 limiting the number of full-time civilian employees in the executive branch to the total employed on Jun 30, 1966. Controller shortages at the large air hubs and the busier centers, coupled with a more rapid than expected increase in air traffic necessitated the need for additional controllers.
19680923	Sep 23, 1968: Washington Airlines began the nation's first regularly scheduled short takeoff and landing (STOL) service. The new air shuttle service, using 11-passenger, twin-engined Dornier Skyservants linked the Washington, D.C., area's three major airports: Washington National, Dulles International, and Baltimore Friendship. (The service proved short-lived, however, since the airline ceased operations on Sep 26, 1969.)
	Also on Sep 23, 1968, FAA issued design guidance for developing STOL airport facilities, recommending runways 1,500 feet long and 100 feet wide, taxiways 60 feet wide, and pavements strong enough to support 150,000-pound STOL transports. STOLports at close-in locations were expected to alleviate some of the air traffic congestion at large conventional airports. To further encourage their development, FAA on Nov 5, 1970, issued an advisory circular providing criteria and specific information for planning, designing, and constructing such facilities. (Aug 5, 1968, and Apr 29, 1971.)
19680928	Sep 28, 1968: Under provisions of a rule effective this date, FAA required an approved altitude alerting system to be installed on all U.S. civil turbojet aircraft by Feb 29, 1972. Aided by this device, a pilot climbing or descending to a preselected altitude would be alerted, by signals to both eye and ear, in sufficient time to establish level flight at the desired altitude. The device would also provide a warning if the pilot strayed from an assigned altitude. FAA considered this necessary because of the dangers posed by inadvertent aircraft deviations from assigned or predetermined flight lanes in an environment increasingly populated by turbojets possessing capability for rapid climb and descent.

19680929	Sep 29, 1968: AN FAA-sponsored report released this date outlined four optional plans for modernizing 27-year-old Washington National Airport through a new or enlarged terminal building, more vehicular parking, the accommodation of a rapid transit station, and such airport-related facilities as a hotel and office building. In its 1972 budget submission, FAA unsuccessfully requested $26 million as the Federal share of a modernization program for which air carriers and concessionaires were expected to contribute $131 million.
19681001	Oct 1, 1968: The first partial instrument landing system (ILS) to be paid for and installed without Federal financial assistance was commissioned at the Westmoreland-Latrobe County Airport, Latrobe, Pa. Later, on May 1, 1969, the Outagamie Airport, Appleton, Wis., installed the first full ILS to be purchased without benefit of Federal funds. A partial ILS includes outer and middle markers and a localizer, while a full ILS also includes a glide slope.
19681010	Oct 10, 1968: Enactment of Public Law 90-566 authorized higher overtime pay for certain FAA employees. Those nonmanagerial employees with duties critical to the daily operation of the air traffic control and navigation system became eligible for overtime pay at one and a half times their regular pay in grades up to and including GS-14. The affected employees--who worked in air traffic control, flight inspection of navigational aids, and airway facility maintenance--were thus excepted from a general ceiling that limited overtime pay to one and a half times the regular pay for the first step of pay grade GS-10.
19681014	Oct 14, 1968: A new Part 123 of the Federal Aviation Regulations went into effect, upgrading safety requirements for air travel clubs using large aircraft (over 12,500 pounds). This new part was intended to raise the clubs' maintenance and operating standards to the safety level of airlines and commercial operators certificated under Part 121 (see Dec 31, 1964), but without imposing onerous or inappropriate requirements. The affected clubs were required to cease operations after Dec 1 unless they applied for a certificate under the new Part 123. Those that applied were permitted to operate without such a certificate until Feb 1, 1969.
19681021	Oct 21, 1968: The Boeing Company formally announced it had abandoned its variable-sweep-wing design for the U.S. supersonic transport (SST) in favor of a conventional fixed-wing. The company’s engineers had never been able to overcome the weight penalties imposed by the variable-sweep wing design. Boeing would submit the new design to FAA for approval in Jan 1969. (See Jan 15, 1968, and Jan 15, 1969.)
19681023	Oct 23, 1968: The National Transportation Safety Board announced that aircraft accident investigation reports would be available, upon request, to the public. The Board took this action to make the disclosure of aircraft accident information consistent with the Freedom of Information Act.

19681031	Oct, 1968: FAA resumed basic air traffic control training at the FAA Academy in Oklahoma City. Since the fall of 1962, apprentice ATC specialists had been receiving their basic training on the firing line-- at towers, centers, or flight service stations, depending on their specialty. This procedure had worked satisfactorily when the ATC work force was declining (as it was between Jun 1963 and Jun 1967). By mid-1968, however, the number of ATC trainees had ballooned to 10 percent of the total ATC specialist work force. Training a contingent of this size required a faster, more efficient, and more formal training program. (See Calendar year 1968.)
19681113	Nov 13, 1968: President-elect Richard M. Nixon announced that "a first priority of my Administration will be to strengthen our air-controller force, improve their working conditions and provide them with new equipment they need to keep our airways safe."
19681121	Nov 21, 1968: The first U.S. rapid transit system linking an airport to a downtown area began operating in Cleveland between Hopkins International Airport and the city's Union Terminal. This rail service provided easy access to the airport from most sections of Cleveland.
19681122	Nov 22, 1968: In accordance with a plan approved in Feb 1968, FAA ordered a realignment of relationships between its regional and area offices. The aim was to give area managers more time for day-to-day operational functions by shifting many functions to the regional headquarters. In the area of facilities and equipment, the regions assumed responsibility for contracting, program control, and installation; however, the area offices continued to make site investigations, perform preliminary engineering and planning, and participate in acceptance inspections. The regions assumed final authority for air carrier enforcement actions; however, area offices, in conjunction with general aviation district offices, continued to handle all air taxi and general aviation enforcement actions. The area compliance and security branches, and the area counsels, were abolished and their functions assumed by the regions. The area budget and management branches were also abolished, and the area offices retained only small administrative staffs. Field offices and facilities now submitted requests for budgetary resources directly to the regional offices. The regional offices assumed all formal management analysis functions. The regions also provided a full range of personnel and training services to the area offices, which retained only small personnel and training staffs.
	This realignment was the first such change since the 18 area offices in the contiguous United States had been established under the agency's long-range decentralization program (see May 18, 1965, and May 22, 1969).
19681127	Nov 27, 1968: FAA formally established an Office of Aviation Economics and an Office of Aviation Policy and Plans under the Associate Administrator for Plans. At the same time, the Office of Noise Abatement was transferred to the Associate Administrator for Plans from the Associate Administrator for Operations. (See Jul 21, 1967, Aug 28, 1967, and Dec 22, 1970.)

19681127	Nov 27, 1968: AN FAA circular outlined modifications to airport terminal facilities to assist physically disabled persons traveling by air. Areas requiring improvement included: vehicular loading areas, parking areas, doors, stairways, elevators, escalators, toilet facilities, drinking fountains, telephones, signs, and signals.
19681215	Dec 15, 1968: New classification and qualification standards for air traffic control specialists became effective this date. The new standards, developed by the Civil Service Commission, simplified procedures for career development within the occupation. FAA upgraded 9,234 ATC specialist positions within six months after the new standards went into effect. (See Jun 26, 1961.)
19681221	Dec 21, 1968: The United States launched Apollo 8, the first manned mission to orbit the moon. (See Jul 20, 1969.)
19681230	Dec 30, 1968: The data-processing capability of the NAS En Route Stage A system at the Jacksonville (Fla.) ARTCC went into operation on a part-time basis. The system's new computer complex processed and automatically updated flight plans filed by pilots with the Jacksonville ARTCC area. (See May 24, 1965, and Feb 18, 1970.)
19681231	Dec 31, 1968: The Soviet Union's Tupolev TU-144 prototype became the world's first supersonic transport to make its maiden flight. (See entry for Dec 11, 1967.)
19681231	Calendar year, 1968: The air taxi business was the fastest growing component of general aviation thus far during the 1960s. As of Nov 1, 1968, scheduled air-taxi operators in the United States numbered 240, with 1,272 aircraft in use. Less than five years earlier, on Jan 1, 1964, there had been only 12 scheduled air-taxi operators, with 72 aircraft in use. The main demand for this "third level" of service had come from people desiring air transportation from outlying points not served by local-service or trunk airlines. Another important part of the growth was in air-taxi carriage of the U.S. mail. (See Sep 7, 1964, Feb 1968, and Jul 1, 1969.)
	Also during this year, FAA-approved courses in air traffic management were offered as part of the regular 1968-69 curriculum by a number of junior colleges participating in an FAA-organized cooperative aviation education program designed to help meet the critical need for air traffic control personnel. Under the program, FAA tested applicant students for suitability for ATC work. Those enrolled served tours of duty at FAA installations while pursuing their college work. During their first semester of ATC course work, these students were employed as GS-3 flight data aids; they were to become eligible for promotion for GS-4 during their second semester. (See Jun 29, 1948, and Oct 1968.)

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19690107	Jan 7, 1969: FAA imposed additional airworthiness standards for small airplanes used in air taxi operations under Special Federal Aviation Regulation 23, effective this date. The standards applied to piston-powered and turboprop airplanes weighing 12,500 pounds or less and capable of carrying more than 10 occupants, including the flightcrew. (See Sep 7, 1964, and Dec 1, 1978.)
19690115	Jan 15, 1969: The U.S. Civil Service Commission (CSC) ruled that the Professional Air Traffic Controllers Organization (PATCO) was an employee organization, not a professional society, because it had sought and obtained a dues-withholding agreement. FAA had agreed to permit a voluntary payroll deduction plan for the payment of PATCO dues with the understanding that PATCO would remain a professional society. As a result of the CSC ruling, PATCO became subject to the Standards of Conduct and the Code of Fair Labor Practices. At the same time, however, PATCO became eligible for formal recognition as a labor bargaining organization under Executive Order 10988. (See Jul 19, 1968, and Jun 11, 1969.)
19690115	Jan 15, 1969: FAA adopted a method of regulating the flow of traffic into the Metropolitan New York area. The new procedures went into effect each time the delay forecast for IFR aircraft flying into New York exceeded one hour. When this happened, the flow of air traffic into New York was limited by keeping New York-bound aircraft on the ground at their points of departure. Though the new procedures did little or nothing to reduce the length of delays incurred by New York-bound aircraft, they did reduce the length of time spent in airborne holding patterns to an hour or less. This, in turn, reduced congestion on the airways leading to New York and facilitated the flow of non-New York traffic using or crossing these routes. (See Jul 19, 1968, and Jun 25, 1970.)
19690115	Jan 15, 1969: The Boeing Company submitted to FAA for evaluation a new supersonic transport (SST) configuration, a delta-wing design with a horizontal tail. A 100-person review team drawn from FAA, NASA, and the Defense Department found that Boeing had adequately integrated the new design.
	In February, President Nixon appointed an interdepartmental committee headed by Under Secretary of Transportation James M. Beggs to review the SST program. The committee's report, submitted in early April, contained mixed views on the program's future. Secretary of Transportation Volpe, however, continued to advise in favor of the program.
	On Sep 23, 1969, Nixon announced that the SST development program would be continued because the project was essential to maintaining U.S. leadership in world air transport. The President requested Congress to appropriate $96 million during fiscal year 1970 ($662 million over a five-year period, fiscal 1970 through fiscal 1974) to pursue the program. (See Oct 21, 1968, and Apr 6, 1970.)
19690120	Jan 20, 1969: Richard M. Nixon became President, succeeding Lyndon B. Johnson.

19690122	Jan 22, 1969: John A. Volpe became Secretary of Transportation, succeeding Alan S. Boyd (see Jan 16, 1967), who had resigned with the change in administrations. Volpe, a successful building contractor, had served as Governor of Massachusetts. (See Feb 2, 1973.)
19690127	Jan 27, 1969: Under an FAA contract, the University of Ohio initiated a five-year study seeking to improve the overall capabilities of the existing instrument landing system, giving particular attention to interference problems. The contractor examined existing criteria for controlling taxiing aircraft on or near ILS runways and also examined criteria for taxi-strip and warmup-area construction. This part of the study had largely been prompted by the introduction of the Boeing 747 and the Lockheed C-5A, which, because of their size, could seriously interfere with ILS signals. Another part of the study dealt with the possible effects of hangars, buildings, powerlines, and terrain on electronic signals. A computer manufacturer developed a mathematical model and a generalized computer program for predicting these effects for the study.
19690131	Jan, 1969: Eight U.S. airliners were hijacked to Cuba during the month (see Feb 21, 1968). In February, FAA created an eight-man Task Force on the Deterrence of Air Piracy that combined a broad spectrum of expertise under the leadership of the Deputy Federal Air Surgeon (see Aug 3, 1970). Systematic study by the Task Force revealed that a hijacker "profile" could be constructed from behavioral characteristics shared by past perpetrators. When used in conjunction with a magnetometer weapons-screening device developed by the agency, the profile system offered a promising method of preventing potential hijackers from boarding aircraft. On Oct 15, FAA announced that Eastern Air Lines was using the system at several key locations. By Jun 15, 1970, four U.S. air carriers were employing the system. (See Jul 17, 1970.)
19690204	Feb 4, 1969: The XB-70 supersonic research aircraft made its final flight, from Edwards AFB, Calif., to Wright-Patterson AFB, Ohio, where it was placed on exhibit in the Air Force Museum. (See Mar 25, 1967.)
19690209	Feb 9, 1969: The Boeing 747, the first of the wide-body jetliners, made its initial flight. On Sep 30, 1968, Boeing had unveiled the large subsonic jet, which was powered by four Pratt & Whitney JT9D-3 turbofan engines, each rated at 43,500 pounds of thrust. The plane had a maximum takeoff weight of 710,000 pounds and a maximum payload of 220,000 pounds. Its seating capacity ranged up to 490 passengers, although most airlines planned a seating configuration in the 350-365 range. FAA certificated the 747 on Dec 30, 1969. Pan American World Airways, which on Apr 13, 1966, had placed the first order for the 747s at a cost of $525 million for 25, became the first airline to operate the new wide-body as the 747 entered service with a takeoff from New York for London on Jan 22, 1970. Trans World Airlines inaugurated the first transcontinental 747 service, between Los Angeles and New York, on Feb 25, 1970.

19690220	Feb 20, 1969: Theodore C. Uebel, an FAA International Liaison Officer, received the first International Aviation Service Award. The award, which recognized singular achievements in advancing the cause of international aviation, was financed by private donations from FAA employees.
19690221	Feb 21, 1969: To keep pace with the growth of the U.S. civil aviation fleet, FAA expanded the number of aircraft identification numbers available. The identification numbers continued to consist of the prefix letter "N", followed by not more than five symbols. These symbols could consist of all numerals (e.g., N10000), or of one to four numerals with a suffix letter (e.g., N1000A). In the past, FAA had sometimes also assigned identification numbers with one to three numerals and two suffix letters (e.g, N100AB), but only to fulfill certain special requests. Now, however, FAA permitted the unrestricted issuance of these identification numbers consisting of one to three numerals and two suffix letters. This change increased the number of available identification numbers from about 339,000 to about 739,000.
19690227	Feb 27, 1969: FAA launched the Experimental Aviation Technology Education Project in cooperation with a number of institutions of higher learning to establish college-level programs responsive to the manpower needs of the aviation community and FAA. Curriculums at the institutions combined broad liberal arts educational subjects and aviation-oriented academic study with on-the-job experience at FAA facilities. After a two-year test period at 15 schools, FAA removed this program from the experimental stage, renamed the work study program, and transferred it from the Washington Headquarters to FAA's Regional Offices.
19690305	Mar 5, 1969: A Puerto Rico International Airlines (PRINAIR) de Havilland 114 Heron crashed near San Juan, P.R., killing all 19 persons aboard. The National Transportation Safety Board (NTSB) listed the probable cause as the vectoring of the aircraft into mountainous terrain by a controller performing beyond the safe limits of his performance capability and without adequate supervision. NTSB noted that a routine psychological test in 1966 had suggested that the controller suffered from high anxiety and low stress tolerance. He then received psychiatric and psychological examinations, after which the regional flight surgeon pronounced him fit for duty. NTSB concluded the controller’s problems with anxiety and stress, in combination with other factors, might have caused his inadequate duty performance. NTSB therefore recommended that FAA expand the psychiatric and psychological assessment of controllers, and place such assessment under the strict supervision of qualified psychiatrists and psychologists. In reply, FAA pointed to the appointment of a panel of psychiatrists and psychologists to assist the Federal Air Surgeon.
19690307	Mar 7, 1969: A Civil Aeronautics Board rule effective this date imposed the first Federal requirement for air taxi operators to carry liability insurance covering passengers as well as persons and property on the ground. The minimum coverage was $75,000 per person and $100,000 for property damage.

19690320 Mar 20, 1969: FAA published a proposal to require air taxis and small aircraft flown by commercial operators to carry crash locator beacons and other survival equipment. FAA's proposal referred to public and congressional concern generated in recent years by accidents in which survivors had perished because rescuers could not locate the crash site. The agency also noted the expansion of air taxi operations to include larger aircraft over longer routes, and the disappearance in Feb 1969 of a DC-3 on an air taxi flight from Hawthorne, Nev. (See Feb 26, 1968, and Dec 29, 1970.)

19690324 Mar 24, 1969: John H. Shaffer became the fourth FAA Administrator, succeeding William F. McKee (see Jul 1, 1965). President Nixon had nominated Shaffer on Mar 6 and the Senate confirmed the nomination on Mar 20.

Born in Everett, Pa., in 1919, Shaffer earned his wings while still at West Point. Graduating in Jan 1943, at the height of World War II, he went on to fly 46 combat missions as a B-26 pilot with the 9th Air Forces in Europe. In 1946, while still in uniform, he earned an M.S. degree from Columbia University. This was followed by successive assignments as production project officer of the Army Air Forces B-50 program (1946-48) and weapons system program manager of the Air Force's B-47 program (1948-54). In Jan 1954, he resigned his Air Force commission with the rank of lieutenant colonel to become general production manager and assistant plant manager of the Ford Motor Company's Mercury assembly plant in Metuchen, N.J. Three years later, he joined TRW, Inc., an aerospace conglomerate. Shaffer resigned his position as corporate vice president (customer requirements) of TRW to become FAA Administrator, a post which he held for nearly four years. He resigned, as part of a broad Nixon Administration reorganization, effective Mar 14, 1973 (see that date).

After leaving FAA, Shaffer remained active in aviation as a consultant and served as a board member of several companies. He died on Sep 14, 1997.

19690327 Mar 27, 1969: FAA created an Equal Opportunity Staff, headed by a Director of Equal Opportunity, and transferred the equal opportunity and civil rights functions of the Office of Compliance and Security to the new staff. On May 19, 1969, the staff became the Office of Civil Rights. The head of the office, who reported directly to the Administrator, was titled the Director of Civil Rights (later the Assistant Administrator for Civil Rights). The new office's responsibilities included assuring: that FAA offered equal opportunities to all employees eligible for advancement and all qualified job applicants; that employment practices of FAA contractors, subcontractors, material suppliers, and recipients of FAA grants-in-aid conformed with Federal civil rights regulations; and that FAA programs and activities affecting housing and urban development were consistent with the fair housing provisions of the Civil Rights Act of 1968. FAA's action was in response to a call by the Secretary of Transportation to "do everything the letter and the spirit of the law provide in order to make equal opportunity a reality." An Office of Civil Rights had been established in the Office of the Secretary on Dec 14, 1968.

19690328	Mar 28, 1969: The first charter flight from the United States to the Soviet Union departed New York via an Overseas National Airways aircraft. On Jun 6, 1970, Alaska Airlines inaugurated the first of a series of charter flights from Anchorage to Khabarovsk, U.S.S.R.
19690423	Apr 23, 1969: FAA abolished the Kenai and Cordova (Alaska) Area Offices. The Anchorage and Juneau Area Offices absorbed the territory formerly served by these offices. (See Jun 20, 1968 and Feb 27, 1970.)
19690425	Apr 23-25, 1969: More than 800 aviation community representatives attended the first National Aviation System Planning Review Conference, held in Washington, D.C. the conference featured seminars covering subjects discussed in FAA's first 10-year National Aviation System Plan (1970-79). In preparing the following year's version of the Plan, FAA reviewed the views expressed at the seminars, together with documented proposals submitted by the aviation community. The conference was held on an annual basis as a forum for government/industry discussion of FAA's long-range plans and policies.
19690427	Apr 27, 1969: The National Aeronautics and Space Administration announced the retirement of the two extant X-15 rocket research aircraft. The X-15 had first flown on Jun 8, 1959; it made its final flight on Oct 24, 1968. (See Oct 3, 1967.)
19690430	Apr, 1969: FAA launched an automated airport data system for collecting, processing, and disseminating data on all civil and joint-use airports, heliports, Short Takeoff and Landing airports, and seaplane bases in the United States, Puerto Rico, and the Virgin Islands. The system, capable of storing up to 137 data elements for each landing facility, would provide data for use in pilot briefings, flight planning, airspace clearance, airport planning, and aeronautical chart production.
19690430	Apr, 1969: FAA issued a report recommending ways of relieving congestion at 18 of the nation's busiest airports. The short-range recommendations included improving traffic flow on the airfield through additional runway exits, access taxiways, holding and staging aprons, and expanded terminal aprons, and creating additional runway capacity through runway extension and grooving. Long-range recommendations included: review of noise-abatement procedures and restrictions; construction of new general aviation airports and new air carrier airports; installation of navaids; and installation of landing aids at reliever airports to attract general aviation traffic.
19690505	May 5, 1969: FAA announced the establishment of two new engineering and manufacturing district offices--one in Kansas City, Mo., and one in Chicago--bringing the nationwide total of such offices to 21. From these offices, FAA's manufacturing inspectors worked with companies and individuals seeking certification or approval of airframes, aircraft engines, propellers, parts, or appliances for use in civil aviation.

19690508 May 8, 1969: The Martin Marietta X-24A rocket-powered, manned, lifting-body research aircraft made a successful 4-minute glider (unpowered) flight at Edwards AFB, Calif. The X-24A was released from underneath the wing of a B-52 Stratofortress at 45,000 feet. The aircraft made its first powered flight on Mar 19, 1970. Development of the X-24A came as part of Martin Marietta's program to develop a maneuvering manned re-entry vehicle able to perform as a spacecraft in orbit, fly in Earth's atmosphere like an aircraft, and land at conventional airports.

19690514 May 14, 1969: Hamburger Flugzeubau GmbH and Messerschmitt-Bolkow GmbH merged to form Messerschmitt-Bolkow-Blohm, the largest aerospace concern in Germany.

19690522 May 22, 1969: Administrator Shaffer requested plans for consolidating regional and area offices located in the same city within the contiguous United States. The move offered operating economies and the saving of numerous positions that could be used to fill critical "firing line" position shortages. FAA implemented the consolidations during late summer 1969, and completed the transfer of functions and personnel to the appropriate regional divisions on Sep 8. The agency eliminated the area officers in Atlanta, Fort Worth, Kansas City, Los Angeles, and New York as they gave up their functions and resources to the regional headquarters located in the same city. (See Nov 22, 1968 and Apr 2, 1971.)

19690601 Jun 1, 1969: The shifting of the New York common IFR room from a manual radar system to a computerized alphanumeric radar system further enhanced the traffic-handling capabilities of the New York terminal area. The semiautomated system permitted an aircraft equipped with a beacon transponder to provide the terminal controller automatically with information on its identity, altitude, range, and bearing. Under the old system, the controller could obtain an aircraft's altitude and identity only through voice contact with the aircraft's pilot. (See Jul 15, 1968.)

19690601 Jun 1, 1969: In response to growing congestion, FAA implemented a rule placing quotas on instrument flight rule (IFR) operations at five of the nation's busiest airports between 6 a.m. and midnight. The rule assigned the following hourly quotas: Kennedy International, 80 (70 for air carriers and supplementals; 5 for scheduled air taxis; 5 for general aviation); O'Hare, 135 (115 for air carriers and supplementals; 10 for scheduled air taxis; 10 for general aviation); La Guardia, 60 (48 for air carriers and supplementals; 6 for scheduled air taxis; 6 for general aviation); Newark, 60 (40 for air carriers and supplementals; 10 for scheduled air taxis; 10 for general aviation); Washington National, 60 (40 for air carriers and supplementals; 8 for scheduled air taxis; 12 for general aviation). The rule did not charge extra sections of scheduled air carrier flights (such as hourly shuttle flights) against the established quotas, except at Kennedy; this airport, however, was permitted 10 extra air carrier operations per hour during the peak traffic period between 5 p.m. and 9 p.m.

IFR flights were required to make advanced reservations for each operation. Pilots obtained IFR reservations by contacting the Airport Reservation Office (established May 30, 1969) in Washington, D.C., or any FAA flight service station. Aircraft under visual flight rules (VFR) made arrival reservations in the air when approximately 30 miles from their intended destination. Departure reservations for such aircraft were handled by the air traffic control facilities serving these five high density airports.

Originally implemented for a six-month period, this "High Density Rule" was subsequently extended to Oct 25, 1970. On that date, the hourly limitations on operations were suspended at Newark, where peak operations during fiscal 1970 had averaged 18 less than the assigned quota of 60. At the same time, the quotas were extended for another year at the other four airports. In taking this action, FAA noted that the percentage of aircraft delays at the five airports had decreased substantially since the rule was put into effect.

On Aug 24, 1971, FAA published an amendment extending the High Density Rule until Oct 25, 1972. Flight limitations remained unchanged at La Guardia and Washington National, but at O'Hare and Kennedy the quotas were now in effect only between 3 p.m. and 8 p.m. The relaxation was due in part to a decline in aviation activity during a general downturn in the U.S. economy.

An amendment published on Oct 25, 1972, extended the High Density Rule until the same date in 1973, when another amendment was published giving it an indefinite extension. At the same time, FAA eliminated the requirement that pilots operating under visual flight rules at all five airports file a flight plan. FAA believed this requirement was no longer necessary since these airports were now operating under the terminal control area concept, which required pilots to establish radio communications with the tower and receive permission to enter the terminal airspace. (See Mar 23, 1978, Nov 3, 1980, and Mar 6, 1984.)

19690604 Jun 4, 1969: FAA and the Central American Corporation for Air Navigation Services (COCESNA) signed a contract under which FAA would provide technical assistance for air navigation and traffic control services to COCESNA, a five-nation governmental group whose members were Costa Rica, El Salvador, Guatemala, Honduras, and Nicaragua. FAA had traditionally provided technical assistance to Latin American countries under the sponsorship of the State Department's Agency for International Development; however, this was the first time FAA provided such services to these countries under a direct reimbursable contract.

19690611 Jun 11, 1969: Russell J. Sommer, PATCO's Western Coordinator, notified PATCO Southwest delegates of upcoming FAA testimony before Congress on a PATCO-supported controller career bill. "If testimony not favorable," Sommer wrote, "D-Day June 18th!" In opposing the bill before a congressional committee on Jun 17, FAA Administrator John Shaffer characterized controllers as "well-paid" considering their educational level. That evening, PATCO counsel F. Lee Bailey appeared on the NBC "Tonight Show" and reportedly told host Johnny Carson, "I'd start walking if I were you." (See Jan 15, 1969, and Jun 18-20, 1969.)

19690616	Jun 16, 1969: FAA commissioned the Anchorage air route traffic control center's new building, located on Elmendorf AFB. Formal dedication ceremonies were on Aug 21, 1969.
19690616	Jun 16, 1969: The Nixon Administration submitted to Congress the Aviation Facilities Expansion Bill of 1969, proposed legislation to expand and improve the nation's airway and airport systems and to provide revenue to support this expansion. Similar legislation had been submitted to Congress by President Johnson (see May 20, 1968), but was not acted on. Features of the Nixon Administration's proposals included:
	* Increasing the outlay for airway facilities and equipment to $250 million a year over the next 10 years. (During the decade of the sixties, annual appropriations for airway facilities and equipment averaged $93 million.)
	* Increasing the average yearly Federal outlay for airport development to $250 million over the next 10 years. (In the past, Congress had appropriated approximately $65 million a year in FAAP funds.)
	* Imposing (1) an 8 percent tax on domestic airline passenger tickets; (2) a $3 surcharge on passenger tickets for international flights originating in the United States; (3) a 5 percent tax on air-freight waybills; and (4) a 9-cent-a-gallon tax on gasoline and jet fuel used by general aviation aircraft.
	* Placing the revenues generated by the new taxes in a designated account in the U.S. Treasury to be used exclusively for airway and airport development. (See Sep 20, 1967, and May 21, 1970.)
19690619	Jun 19, 1969: FAA redesignated the Office of Information Services the Office of Public Affairs, which had been its original name when Agency Order 1 was issued in Jan 1959. The Information Services title had been adopted in the early 1960s.
19690620	Jun 18-20, 1969: Numerous FAA facilities felt the effects of a work stoppage by PATCO-affiliated air traffic controllers, who claimed illness and did not report for work. The "sickout," which resulted in widespread flight delays, coincided with congressional hearings on legislation to provide higher pay, early retirement, and other benefits for controllers. Of 477 controllers who took sick leave during the job action, FAA suspended 80 from three to fifteen days. On Jul 27, FAA terminated its dues-withholding agreement with PATCO, stating that it was not in the public interest to assist an organization taking part in an illegal job action. (See Jun 11, 1969, and Oct 27, 1969.)
19690627	Jun 27, 1969: FAA announced the commissioning of its first Uninterruptible Power System, designed to control power failures and fluctuations that caused errors in high speed data processing equipment and affected radar and communications. Installing this system at the Jacksonville Air Route Traffic Control Center was the initial step in an FAA-wide electric power modernization program for the en route centers. (See Nov 9-10, 1965, and Sep 19, 1974.)

19690630 Jun 30, 1969: Fiscal year 1969, which ended on this date, saw a dramatic increase in Alaskan air activity following the discovery of oil in the Prudhoe Bay area of the state's North Slope. The Fairbanks Flight Service Station (FSS), for example, experienced a 325 percent rise in flight services performed. On the North Slope itself, services performed by the Point Barrow FSS rose 500 percent during the period, to 17,221, while the number performed by the Bettles FSS rose 87 percent to 16,168. In order to accommodate this traffic, FAA and oil companies drilling in the area collaborated to bolster the air traffic facilities on the Slope. The oil companies built six new airfields, and both FAA and the companies furnished navaids to serve the area. (See Mar 1, 1968.)

19690701 Jul 1, 1969: Effective this date, CAB selected "commuter air carrier" as its name for certain scheduled air taxi operators (see Calendar Year 1968). The new title "commuter" applied to an air taxi operator that performed at least five round trips per week between two or more points and published flight schedules giving certain specified information, or transported air mail under a current contract. There were 138 commuter operators in 1969, and an average of 180 during the 1970s. The Airline Deregulation Act of 1978 encouraged the commuter airlines, which gained opportunities as many larger operators dropped service that they had been required to supply to smaller communities. By 1981, an estimated 270 commuter airlines were operating in the contiguous United States. Like the local service airlines before them (see Jul 11, 1944), the commuters began referring to themselves as "regionals" as they grew more prominent. The term "regionals" was also part of a revenue-based classification system adopted by CAB on Oct 2, 1980 (see that date). (See Sep 17, 1972.)

19690706 Jul 6, 1969: A Beech 99 operated by Air South crashed near Monroe, Ga., killing all 14 persons aboard the aircraft. In an accident report adopted on Aug 26, 1970, the National Transportation Safety Board (NTSB) cited the probable cause as "an unwanted change in longitudinal trim which resulted in a nose-down high-speed flight condition that was beyond the physical capability of the pilots to overcome." NTSB stated that the design of the aircraft flight control system was conducive to malfunctions that could lead to a loss of control.

	The Beech 99 had been type-certificated under FAA's delegated option authority program (see Sep 29, 1950). Under this procedure, manufacturers of aircraft under 12,500 lb. were authorized to submit information that was used by FAA as a basis for certification. The NTSB report stated that FAA normally participated in flight tests only when a new regulation was applied to an aircraft, or when the manufacturer produced a new design feature that it had not previously certificated. The Beech 99's trimmable stabilizer was such a new feature, but FAA had not participated in flight testing this item. NTSB recommended that FAA participate directly in the certification of all newly designed aircraft components. FAA replied that it participated directly in delegation option authority certification when deemed necessary, but had judged the design concept in question to be of high integrity. After subsequent reevaluation, the agency required numerous improvements to the component. In response to other NTSB recommendations, FAA revised its type certification handbook to assure proper consideration of information gained from accident investigations and took other steps to improve certification procedures.
19690711	Jul 11, 1969: DOT consolidated the Washington Headquarters libraries of FAA, the Coast Guard, and the Federal Highway Administration and established the Department of Transportation Library. A service branch, primarily containing aviation-related materials, was located in FAA's Washington Headquarters' building.
19690715	Jul 15, 1969: FAA issued a study of near midair collisions. To encourage the reporting of such incidents, FAA had granted pilots and other airmen immunity from penalties under the Federal Aviation Regulations (see Jan 1, 1968). This study found that most of the reported near miss incidents of 1968 that were judged to be hazardous had occurred in congested airspace near large airports having air traffic control service, and resulted from mixing controlled traffic with traffic under visual flight rules.
	On Jul 31, 1969, on the heels of FAA's report, the National Transportation Safety Board released a study of actual midair collisions, which was also based on incidents occurring in 1968. In contrast to FAA's findings on near misses, the Board found that the majority of the 38 real collisions had taken place in uncongested airspace at or near airports without air traffic control service. There was no evidence that adverse weather was a significant factor in any of the 38 accidents. All of the 71 persons killed in the collisions were occupants of general aviation aircraft. A general aviation aircraft was involved in each accident, with three collisions involving air carrier aircraft and one military airplane.
	On Dec 4, 1969, FAA's near miss reporting program was extended for an additional two years (see Dec 31, 1971).
19690720	Jul 20, 1969: Astronauts Neil A. Armstrong and Edwin E. Aldrin, Jr., became the first people to land on the Moon, while Michael Collins remained in lunar orbit. Later in the day, Armstrong and then Aldrin became the first to walk on the lunar surface. The National Aeronautics and Space Administration's Project Apollo achieved five more Moon landings between this date and Dec 11, 1972.

19690721	Jul 21, 1969: The pilots of Piedmont Airlines went on strike when the company moved to reduce its Boeing 737 cockpit crew to two men. On Aug 14, 1969, Piedmont secured a Federal injunction ordering its pilots back to work. The dispute raged for months, but was eventually resolved when the pilots accepted a two-man crew complement in exchange for higher pay. The Air Line Pilots Association refused to sign the agreement, although it took no action against Piedmont pilots for violating its constitution (see Nov 20- 29, 1966). Piedmont permanently switched to two-man crews on its 737s on Jan 9, 1973. (See Jul 25, 1967 and Nov 23, 1971.)
19690808	Aug 8, 1969: Secretary of Transportation John A. Volpe established an Air Traffic Controller Career Committee, a seven-member group headed by professional consultant John J. Corson. The committee was to inquire into the controller career field and report its findings and recommendations to the Secretary. Topics to be investigated inluded employment practices, employee compensation, work environment, training, and employee-management relations. The committee was instructed to give special attention to the controller's occupational stresses. (See Jan 29, 1970.)
19690829	Aug 29, 1969: In the first hijacking of a U.S. aircraft outside of the Western Hemisphere, two Arabs seized control of a TWA 707 bound for Israel and diverted it to Syria, where they deplaned the occupants and then threw hand grenades into the cockpit area (see Calendar Year 1969).
19690905	Sep 5, 1969: AN FAA rule concerning the flight hazards associated with flying contraband drugs between Mexico and the United States went into effect. The rule made such illegal activity grounds for suspension or revocation of pilot certificates and of the operating certificates of aircraft owners or lessors knowingly involved. The rule also required all pilots to file flight plans and radio positions when operating civil aircraft between the two countries. Pilots without two-way radios were required to land at the nearest designated airport of entry and file an arrival notice.
	In proposing the rule on Aug 1, FAA had cited President Nixon's Jul 14 announcement of a government-wide campaign against drug smuggling. The agency stated that any pilot attempting to evade this increased enforcement effort could be expected to engage in such hazardous practices as very low flight to avoid radar or use of unprepared landing sites. Effective Aug 1, 1973, FAA extended its ban on illicit carraige of drugs by air to domestic flights and to flights between the United States and Canada.

19690909 Sep 9, 1969: A midair collision near Fairland, Ind., killed all 83 people aboard the aircraft involved, an Allegheny Airlines DC-9 and a Piper PA-28. The National Transportation Safety Board (NTSB) listed the probable cause as deficiencies of the air traffic control system in a terminal area with mixed instrument flight rules (IFR) and visual flight rules (VFR) traffic. The cited deficiencies included the inadequacy of the see-and-avoid concept under the circumstances, lack of regulations to provide an adequate separation system for mixed VFR/IFR traffic in terminal areas, and the technical limitations of radar in detecting all aircraft. In response to NTSB recommendations, FAA agreed to expedite research into enhancing radar detection through a passive device to be carried by smaller aircraft. Meanwhile, the agency moved toward greatly improved radar detection by requirements for radar beacons (transponders) aboard aircraft in designated terminal areas (see Jun 25, 1970).

19691001 Oct 1, 1969: Sixteen area navigation routes opened between 11 U.S. cities on an interim basis pending formal rulemaking. The new routes were the first in a projected nationwide area navigation route system designed to increase airway capacity. They ran between the following cities: Chicago and New York (two routes); Los Angeles and Chicago (two); Kansas City and Minneapolis (two); San Francisco and Chicago (two); Atlanta and Pinehurst, N.C. (two); Knoxville and Atlanta (two); Houston and Dallas (four). In succeeding months, additional cities were linked as more routes were developed (see Apr 29, 1971).

The primary air navigation system in use in the United States in 1969 required pilots to fly directly toward or away from the ground-based radio navigation aid (a VOR or VORTAC) transmitting a line of position, or radial. With area navigation, aircraft did not have to fly a track to or from a navaid, though they did depend on signals from VORs or VORTACs. Pilots flying appropriately equipped aircraft could, within the limitations of the system, follow any preselected arbitrary track. An airborne computer calculated the aircraft's position and displayed track and distance to a point selected by the pilot or prescribed by the controller. The system's advantages included: routes could be established along the shortest and most convenient paths; parallel and one-way routes could be established to reduce congestion; aircraft could be segregated according to speed and destination; navaids could be placed at accessible points on more favorable terrain; departure routes could be designed to lead directly from the runway to the appropriate parallel airway; and arrival routes could be designed to accept traffic directly from en route airways. (See Mar 6, 1972.)

19691027 Oct 27, 1969: FAA denied PATCO's request for formal recognition because of its participation in the recent "sickout" (see Jun 18-20). On Oct 29, however, President Nixon issued Executive Order 11491, replacing Executive Order 10988 as the basis for Federal employee-management relations. The order, which went into effect on Jan 1, 1970, gave the Labor Department authority to grant exclusive recognition to Federal unions. (See Feb 18, 1970.)

19691028	Oct 28, 1969: Executive Order 11490 ("Assigning Emergency Preparedness Functions to Federal Departments and Agencies") consolidated and superseded over 20 previous directives, including Executive Order 11003, which had dealt with FAA's preparedness functions. (See Jan 9, 1961.)
19691030	Oct 30, 1969: FAA dedicated its new Systems Training Building at the Aeronautical Center. In addition to classrooms for air traffic control and systems maintenance personnel training, the building contained simulators, computers, and other equipment used in training FAA personnel.
19691031	Oct 31, 1969: Rafael Minichiello, a U.S. Marine absent without leave, commandeered a TWA 707 bound for San Francisco and embarked on a 17-hour journey that ended in Rome, Italy. The first hijacker to force a crew to land and refuel repeatedly, Minichiello received worldwide publicity that included some sympathetic coverage (see Calendar Year 1969).
19691115	Nov 15, 1969: Air taxi operators of large aircraft became subject to stricter operational requirements applying to supplemental air carriers. (See Sep 7, 1964, and Dec 1, 1978.)
19691118	Nov 18, 1969: FAA changed the title of the Office of Compliance and Security to the Office of Investigations and Security. (See May 16, 1962 and Aug 3, 1970.)
19691122	Nov 22, 1969: Effective this date, FAA increased minimum flight-time requirements for an airline transport pilot (ATP) certificate from 1,200 to 1,500 hours. All flight time logged as second-incommand in airline operations would be credited toward the ATP certificate, as would a limited amount of flight engineer time.
19691126	Nov 26, 1969: The Beech Aircraft Corporation delivered its last Model 18 aircraft. The original Model 18 first flew on Jan 15, 1937, and was type-certificated on Mar 4, 1937. When production of the plane ceased, the Model 18 had been in continuous production longer than any other aircraft.
19691201	Dec 1, 1969: Effective this date, FAA added a new Part 36 to the Federal Aviation Regulations that established allowable engine-noise levels as part of the criteria for transport aircraft type-certification. The new rule had been published on Nov 18, 1969, and was the first issued under Public Law 90-411 (see Jul 21, 1968). The rule applied to two classes of aircraft for which an application for a type certificate was made after Jan 1, 1967: all subsonic aircraft in the transport category, and all subsonic turbojets regardless of category. The allowable noise levels varied with aircraft size and type, ranging from 93 to 108 effective perceived noise decibels (EPNdB). The noise limits also varied according to the type of aircraft operation: between 102 and 108 EPNdB on approach, and between 93 and 108 EPNdB during takeoff. The agency further limited sideline noise--i.e., noise along the runway or taxiway during idling or taxiing--to a range between 102 and 108 EPNdB. (See Oct 26, 1973.)
19691204	Dec 4, 1969: Dulles International Airport banned student pilot operations because of the rising traffic volume at the airport.

19691204	Dec 4, 1969: The Convention on Offences and Certain Other Acts Committed on Board Aircraft, popularly known as the Tokyo Convention, went into force among ratifying countries. The United States had ratified the agreement on Sep 5, 1969, completing the 12 ratifications required to bring it into force 90 days later. Though ineffectual against the hijacking of aircraft to nonsignatory or nonratifying countries, the convention was a forward step in its clarifying of jurisdiction over crimes aboard aircraft anywhere in the world. It afforded a useful framework within which an international or diplomatic solution to aircraft piracy could be pursued.
	Denmark, the Republic of China, Italy, Norway, the Philippines, Portugal, Sweden, the United Kingdom, the Republic of Upper Volta, Mexico, and Niger ratified the convention before the United States. A dozen more countries ratified the convention soon after the United States and over 130 eventually became party to it. (See Sep 14, 1963, and Oct 14, 1970.)
19691205	Dec 5, 1969: The Legal Committee of the United Nations General Assembly voted a resolution urging governments to prosecute aircraft hijackers, and urged member states without laws against aircraft piracy to enact such legislation.
19691205	Dec 5, 1969: FAA announced a major program to expand and modernize the physical plants of 20 air route traffic control centers in the contiguous United States to accommodate the personnel and equipment needed to handle the increasing volume of air traffic. The basic plan of the modernization program called for an additional three-story administrative wing at each center to provide space for training and administration. Space would also be provided for the automated air traffic control systems being delivered to the centers, for additional engine generators, and for future expansion of mechanical, electrical, and communications systems. The plant modernization program would continue through the early 1970s.
19691215	Dec 15, 1969: American Airlines began the nation's first use of three-dimensional area navigation equipment on regularly scheduled passenger service. In Jun 1968, American had inaugurated scheduled passenger operations using an inertial navigation system; however, it was only a two-dimensional system, not equipped with the ascent-descent feature. (See Oct 1, 1969.)
19691218	Dec 18, 1969: FAA certificated the first all-plastic aircraft, the Windecker AC-7, a four-place craft made of moulded fiberglass and epoxy resins.
19691229	Dec 29, 1969: FAA abolished the Honolulu Area Office and transferred its functions to the regional office.

19691231	Dec, 1969: The Air Traffic Control Advisory Committee (see Jul 17, 1968) submitted its report to the Secretary of Transportation. The committee saw a continued rise in the demand for air traffic control services during the decades ahead, and stated that if FAA expected to accommodate the anticipated growth in aviation traffic, three critical problems required solutions: the shortage of terminal capacity; the need for new means of assuring separation; and the limited capacity and increasing cost of air traffic control. The committee believed that major improvements in airport capacity could be achieved through the use of parallel runways, high speed turnoffs, advanced terminal automation, and reduced longitudinal separation between aircraft on final approach for landing. For the safe separation of aircraft, the report recommended further efforts to upgrade radar beacon transponders for tracking aircraft on radar. The committee believed that the midair collision problem could be overcome in airspace under radar surveillance by automating and making more precise the air traffic control advisory service. The report also noted that a higher level of automation would enable the system to handle perhaps two or three times the 1969 traffic with the same controller work force. This higher automation might be achieved by expanding NAS En Route Stage A and ARTS III version of the Automated Radar Terminal System to include spacing, sequencing, and conflict prediction/resolution, and by adding data link. The committee's report, which was made public in May 1970, also recommended rapid development of the Microwave Landing System (see Jun 19, 1970).
19691231	Dec, 1969: Eastern Air Lines put into operation at its terminal at Kennedy International Airport the first computerized system for issuing seat assignments and boarding passes to airline passengers as they checked in at the airport.
19691231	Calendar year, 1969: Worldwide concern focused on hijacking as the number of aircraft involved in such incidents during the year totaled 87, as compared to 37 for 1968. The number of U.S. aircraft involved was 40, as compared to 47 foreign aircraft. (In 1968, 22 out of a total of 35 incidents involved U.S. aircraft.)
	Cuba remained the most popular destination for hijackers during 1969: 31 U.S. and 25 foreign air carrier aircraft, as well as one foreign general aviation aircraft, were forced to land there. But the year also saw a break in the diversion-to-Cuba pattern when 11 foreign and 2 U.S. air carrier aircraft were forced to land in other countries. (See Aug 29 and Oct 31, 1969.) For U.S. aircraft, the only previous hijacking completed to a destination other than Cuba had been an Aug 31, 1965, incident in which an airliner was forced to return to Honolulu shortly after takeoff.
19691231	1960s: The number of U.S. civil aircraft possessing current airworthiness certificates increased 89 percent during the decade, from 70,747 on Dec 31, 1959, to 133,814 on Dec 31, 1969. The general aviation fleet increased 90 percent (from 68,727 to 130,806), while air carrier aircraft increased 49 percent (from 2,020 to 3,008).

1970

19700101 Jan 1, 1970: The Department of Labor designated the Federal Aviation Administration as the agency responsible for air transportation industry compliance with the equal employment opportunity provision of Executive Order 11246 (issued Sep 24, 1965), which prohibited discrimination in hiring by the government and its contractors.

19700101 Jan 1, 1970: Sud Aviation, Nord Aviation, and S.E.R.E.B. merged forming the Societe National Industrielle Aerospatiale.

19700113 Jan 13, 1970: Blanche Stuart Scott, often considered the first American woman to pilot an airplane, died. In Sep 1910, Scott made her first solo flight in a Curtiss Pusher at Hammondsport, N.Y. According to some accounts, however, the flight was an unintentional one caused by wind lifting her taxiing aircraft off the ground. Later that year, Bessica Faith Raiche became the first American woman to make an undisputedly intentional solo airplane flight.

19700115 Jan 15, 1970: President Nixon announced an agreement to seek a site for the development of a Miami (Fla.) jetport outside of a proposed land area in the ecotone between Big Cyprus Swamp and Everglades National Park. The agreement was signed by the Dade County Port Authority, the State of Florida, and the Secretaries of Transportation and Interior.

Dade County had acquired 39 square miles in the area for a future jetport to relieve the anticipated saturation of Miami International. Lying 40 miles west of Miami and surrounded by natural buffer zones, the proposed new jetport would pose neither a noise nuisance nor an air pollution threat to residents. Conservationists, however, argued that a major airport on the tract would upset the delicate ecology of the Everglades. After environmental studies, Dade County officials agreed with state and Federal authorities to seek another site.

The agreement also provided that a one-runway training airport already constructed on the tract would be operated under strict environmental safeguards until a new training facility could be established at the still-to-be-determined jetport site. Construction of the training field had begun in Sep 1968. During fiscal 1969, FAA had awarded a $500,000 grant to assist the project, which was intended to divert training flights from Miami International and provide the nucleus for an eventual air carrier facility.

In announcing the agreement, President Nixon directed the Secretary of Transportation to consider introducing legislation to ensure that the national interest would be adequately represented in regional airport development. "We have learned," the President stated, "that the development of major facilities, such as a regional airport, may have widespread environmental and social consequences that cannot wisely be left entirely to local initiative and local decision."

19700119	Jan 19, 1970: FAA established the Facility Installation Service under the Associate Administrator for Operations. This service assumed the management of FAA's facilities establishment program from the Logistics Service. It also assumed from the Systems Research and Development Service the responsibility for preparing procurement specifications for production equipment and for prescribing technical instructions and standards for its installation. The new service's mission included the facilities establishment programs for air navigation, air traffic control, aeronautical communications, and visual ground marking; however, it did not include facilities establishment for NAS En Route Stage A and the various terminal automation programs. (See Dec 22, 1967, and Oct 1, 1971.)
19700120	Jan 20, 1970: FAA and the Department of Health, Education, and Welfare reached an agreement with 31 scheduled and charter airlines on the retrofit of Pratt & Whitney JT8D engines with smoke-reducing combustors. Under the retrofit plan, the airlines voluntarily agreed to install combustors on approximately 1,000 Boeing 727s, Boeing 737s, and Douglas DC-9s by Dec 31, 1972. The combustors reduced the level of visible pollutants emitted by jet engines, but had no effect on invisible pollutants. (See Dec 31, 1970.)
19700129	Jan 29, 1970: The Air Traffic Controller Career Committee (popularly known as the Corson Committee) submitted its report to Secretary of Transportation John Volpe. The report's recommendations included:
	*Reduce the overtime work required of controllers in high-density areas.
	*Reduce the consecutive hours spent by controllers in operational positions to two, and the total hours per day on such positions to six.
	*Detail qualified journeyman controllers to high-density facilities with critical manpower shortages.
	*Develop a more mobile controller work force so that the needs of the system, rather than the preferences of controllers, determine assignments.
	*Develop incentives to attract the most talented controllers to the most difficult positions.
	*Pay special rates for employment in facilities located in high-cost-of-living areas. *Accelerate and improve training of developmental controllers.
	*Seek legislation providing for the early retirement of controllers who attain a certain age and cannot be retained or reassigned to less arduous duty--e.g., retirement at age 50 after 20 years of ATC service with 50 percent of high-three average salary.
	*Designate a single official immediately responsible to the FAA Administrator to handle all relationships with employee organizations at the national level.

	A number of the committee's recommendations, including detailing journeyman controllers to facilities with critical manpower shortages, and providing developmental controllers with "update" training, received immediate attention. In addition, FAA appointed a Director of Labor Relations on Mar 23, 1970. The agency established nine groups to consider the remaining recommendations and develop programs for their implementation. (See Aug 8, 1969, Mar 25-Apr 14, 1970, Nov 6, 1970, and May 16, 1972.)
19700131	Jan 1970: The General Aviation Manufacturers Association (GAMA) was founded as a trade association of firms producing general aviation aircraft, engines, avionics, and components.
19700202	Feb 2, 1970: A rule effective this date permitted expanded use of FAA-approved airplane simulators in training airline crews. With the advances in flight simulation technology, the use of these simulators would help to ease the serious problems of congestion in the airspace by permitting more training on the ground.
19700205	Feb 5, 1970: Effective this date, FAA required manufacturers to make a maintenance manual available to their customers at the time of aircraft delivery. The manual was to contain information that the manufacturer deemed essential to proper maintenance.
19700218	Feb 18, 1970: FAA's first IBM 9020 computer and its associated software program became operational at the Los Angeles ARTCC (see Jun 30, 1967). The new computer system was at the heart of the new semiautomated airway air traffic control system--NAS En Route Stage A. This equipment reduced controller workload by automatically handling incoming flight information messages, performing necessary calculations, and distributing flight data strips, as needed, to controller positions. The agency planned to install similar equipment at all of the centers, and with the new automated nationwide system each center would have the capability to collect and distribute information about each aircraft's course and altitude to all the sector controllers along its flight path. The new computers also had the ability to record and distribute any changes registered in aircraft flight plans en route. (See Dec 30, 1968, and Feb 13, 1973.)
19700218	Feb 18, 1970: A commuter airlines terminal officially opened at Washington National Airport to facilitate the operations of the 13 commuter airlines serving the airport.
19700218	Feb 18, 1970: PATCO filed a petition with the Federal Labor Relations Council for certification as exclusive bargaining representative for all non-supervisory air traffic control specialists. (See Oct 27, 1969, and Mar 25-Apr 10, 1970.)
19700227	Feb 27, 1970: FAA abolished the McGrath (Alaska) Area Office and transferred the territory formerly served by that office to the Anchorage and King Salmon Area Offices. (See Apr 23, 1969.)

19700228 Feb 1970: FAA began a new training program for the air traffic and electronic technician occupations. The agency hoped that the project, termed the 150 Program because of the number of positions initially allotted to it, would work to broaden the recruitment base and equalize opportunities for minorities. Candidates began at the GS-4 level and, after successfully completing a six month training program at the Aeronautical Center, became GS-5s. The 150 Program was later renamed the Pre-development Program.

19700301 Mar 1, 1970: FAA implemented a revised separation standard to protect small aircraft from wake turbulence, rotating air currents trailed by large aircraft. The danger from these wake vortices had grown with the introduction of “jumbo” jetliners. The new standard changed from three miles to five miles the required separation between a "heavy" aircraft (over 300,000 pounds) and an aircraft operating behind it. (See Nov 1, 1975.)

19700304 Mar 4, 1970: FAA retitled the Office of Associate Administrator for Personnel and Training as the Office of the Associate Administrator for Manpower to emphasize the broader functional responsibilities of this office. The agency issued a formal order reflecting this change on Jan 9, 1971. The same order officially established under the new associate administrator the Office of Labor Relations (the Director of Labor Relations had been appointed on Mar 23, 1970), an Employee Communications Staff, and an Equal Employment Opportunity Staff within the Office of Personnel, which, along with the Office of Training, rounded out the major components of the new administrative complex. (See Jan 19, 1968.)

19700307 Mar 7, 1970: Effective this date, FAA required every U.S. civil aircraft owner to submit an annual report on aircraft registration, eligibility, identification, and activity no later than Jun 30 of each year. The submission of the annual reports through 1977 permitted the updating of the aircraft register and the removal of about 32,000 obsolete records. On Jan 25, 1978, FAA revoked the annual reporting requirement because the register could now be kept largely current on the basis of sales records and other information received in the normal course of business. The agency noted, however, that it might be necessary to implement a new reporting procedure. (See Apr 30, 1980.)

19700317 Mar 17, 1970: The first death in a domestic U.S. aircraft hijacking incident occurred when a hijacker shot and killed the copilot on an Eastern Air Lines shuttle (Newark-Boston). Although fatally wounded, the copilot still managed to shoot and severely wound the hijacker with the latter's gun. The aircraft's captain, himself wounded in both arms, landed his DC-9 safely in Boston.

19700319 Mar 19, 1970: FAA issued an advance notice of proposed rulemaking asking public comment on whether smoking should be allowed aboard passenger-carrying aircraft. This action resulted from two petitions filed with FAA in Dec 1969. One petition requested a ban on smoking on all flights, while the other requested that domestic air carriers effectively segregate smokers from other passengers. FAA believed the petitions warranted an in-depth study to determine to what extent tobacco smoke was harmful to nonsmokers. The agency's existing rules prohibited smoking only during takeoff and landing. (See May 10, 1973.)

19700324 Mar 24, 1970: FAA announced a program to improve the appearance of the nation's airports by removing derelict aircraft. FAA field personnel would perform periodic checks and bring such aircraft to the attention of airport management. The agency urged airport operators to include in their contracts with aircraft owners and operators of aviation activities provisions for the removal of such aircraft at owner's expense. FAA and the fixed-base operators concluded such an arrangement at Washington National and Dulles International Airports.

19700401 Apr 1, 1970: Extensive amendments establishing additional operating requirements for air taxi and commercial operators of small aircraft became effective. The new rules reflected many of the operating requirements of major air carriers, and were designed to fit the growing complexity of air taxi operations. (See Sep 7, 1964, and Dec 1, 1978.)

19700403 Apr 3, 1970: Under a rule effective this date, FAA would not approve Federal-aid airport program (FAAP) projects involving the displacement and relocation of people until adequate replacement housing was provided for (by construction, if necessary) and offered to all affected persons.

19700406 Apr 6, 1970: Management responsibility for the supersonic transport (SST) development program was transferred from the FAA to the Office of the Secretary, Department of Transportation. The Director of Supersonic Transport Development would henceforth take guidance and direction from the Under Secretary of Transportation, while FAA would continue to provide a variety of support functions for the program. In announcing the transfer a few days earlier, Secretary Volpe had explained that it would increase his oversight of the program. In addition, the change would ensure that FAA, the agency responsible for certificating the aircraft, would not be responsible for its development. Volpe had also announced the appointment of William M. Magruder as Director of the program, succeeding Brig. Gen. Jewell C. Maxwell, who had resigned during the previous summer. (See Jan 15, 1969, and Apr 22, 1970.)

19700409 Apr 9, 1970: Boeing 727-200 "stretch jets" were allowed to operate at Washington National Airport, initially on a temporary basis. These larger capacity aircraft had been banned in the past to prevent overcrowding of the airport's terminal building. (See Apr 24, 1966.)

19700410	Mar 25-Apr 10, 1970: Some 3,000 air traffic controllers, all members of PATCO, engaged in a "sick-out" strike. All but a few of those involved were en route, rather than terminal, controllers. Some remained absent for a day or two, others for the entire 17-day period. The work stoppage reflected widespread discontent, but its immediate trigger was FAA's decision to ignore PATCO's protests and carry out the involuntary transfer of three controllers from the Baton Rouge combined station-tower. The absentees claimed sick leave, but the Department of Transportation viewed their action as a strike against the U.S. government and hence illegal. The government obtained temporary restraining orders against PATCO. When the union failed to comply with these orders, a show-cause order was obtained against its officers. During the hearing on the show-cause order, PATCO agreed to call off the "sickout." FAA suspended nearly 1,000 controllers and fired 52 for their role in the affair. (See Feb 18, 1970, and Apr 23, 1970.)
19700418	Apr 18, 1970: Braniff International Airways put into operation its "Jetrail," a monorail transporting passengers from parking lot to terminal area at Dallas' Love Field. The three-quarter-mile trip took 3 minutes.
19700422	Apr 22, 1970: The first annual Earth Day observance throughout the United States included protests indicating environmentalists' rising opposition to the supersonic transport (SST) program. Concerns about the SST included such issues as sonic booms (see Jan 27, 1965) and the aircraft's effect on the ozone layer of the earth's upper atmosphere. (See Apr 6 and Dec 30, 1970.)
19700423	Apr 23, 1970: John F. Leyden, newly elected president of PATCO, told the union's members of his intention to introduce realism into the organization, "to eliminate a 'showboat-gunboat' approach, and to replace it with a firm and reasonable persuasion." Nevertheless, PATCO used slowdowns as a tactic during Leyden's tenure. (See Mar 25-Apr 10, 1970, and Sep 10, 1970.)
19700427	Apr 27, 1970: The Central Flow Control Facility was established at FAA Headquarters as a permanent part of the air traffic control (ATC) system. This facility took over from the air route traffic control centers some of the responsibility for restricting the number of aircraft moving from the control of one center to another. Central Flow Control collected and correlated system-wide air traffic and weather data, using this information to prevent isolated clusters of congestion from disrupting the overall traffic flow. Linked by teletypwriter and telephone to all 21 centers, the facility detected potential trouble spots and suggested to the centers such solutions as flow-control restrictions or rerouting. (See Jul 29, 1970.)

	The centers retained the authority to accept or reject the Central Flow facility's recommendations, but their decisions were now based on broad information about the overall condition of the ATC system. Lacking such information, the centers had previously tended to be over-defensive. For example, when a buildup of traffic forced one center to restrict the number of incoming aircraft from an adjacent center, the adjacent center might fear an impending traffic buildup in its own area and hence institute restrictions against yet another center. The spreading restrictions could eventually affect Instrument Flight Rules aircraft throughout the ATC system.
	During a three-month test beginning in Jan 1970, the Central Flow facility had proved its worth in reducing delays, and had been invaluable in monitoring and rerouting traffic during the controller "sick-out" strike (see Mar 25-Apr 10, 1970).
	On Jul 29, 1970, FAA established the Air Traffic Control Systems Command Center to integrate the functions of the Central Flow Control Facility, Airport Reservation Office, the Air Traffic Service Contingency Command Post, and Central Altitude Reservation Facility. (See Dec 31, 1983.)
19700430	Apr 30, 1970: FAA commissioned the International Aeronautical Telecommunications Switching Center at Kansas City. This high-speed, fully automated message switching facility was the key element in the North Atlantic and Caribbean Aeronautical Fixed Telecommunications Network (AFTN), a worldwide communications system operated by members of the International Civil Aviation Organization. Some 86 communications channels, the first commissioned on Mar 4, 1970, connected the center directly to three U.S. networks and to more than 100 locations in 17 other countries. The center speeded the flow and improved the accuracy of international aeronautical information by eliminating all other intermediate relay points.
19700430	Apr 1970: An FAA study reported that adherence to basic preflight procedures could reduce general aviation accidents by as much as 14 percent. The study was based on data about the 4,968 general aviation accidents in 1968 and on responses to a pilot survey. The results indicated that faulty preflight procedures could be linked to 697 accidents, of which 184 were fatal. Of these 184 fatal accidents, the largest number (81) resulted from flying under Visual Flight Rules into bad weather, and the next highest number (42) from impairment by alcohol. Of the non-fatal accidents caused by poor preflight procedures, the largest number (132) was due to fuel exhaustion. Eighty-two percent of pilots involved in accidents linked to preflight procedures had not filed a flight plan.
19700503	May 3, 1970: Upgraded certification requirements for aviation maintenance technician schools (formerly called "aviation mechanic schools") became effective. The changes, which included new curriculum requirements for both certification and operations, were designed to reflect recent technological advances in aviation.
19700504	May 4, 1970: FAA issued a rule requiring that Cockpit Voice Recorders be installed in large transport category helicopters operated in scheduled service, with compliance by Jul 8, 1971. (See Jun 26, 1964, and Mar 25, 1987.)

19700504 May 4, 1970: FAA implemented a standard organizational structure for the larger air route traffic control centers, including the so-called Level IB (300,000 to 1,000,000 aircraft handled per year) and Level II (over 1,000,000 aircraft handled per year) centers. The new structure strengthened administrative and technical supervision of air traffic control personnel. It was designed to increase operational efficiency through better manpower utilization, while providing a more effective basis for the development of the controller's career progression plans. As part of the new structure, the agency assigned personnel management specialists to all centers in the contiguous United States, except Great Falls, to advise managers and supervisors. These specialists also worked with organized employee groups and provided professional advice on personnel matters to individual center employees.

19700508 May 8, 1970: Upgraded type-certification standards for new large transport aircraft became effective. The new airworthiness standards resulted from several years of government/industry study and development. They related to four major certification areas: flight requirements; systems and equipment; airframe; and powerplant.

19700511 May 11, 1970: Kenneth M. Smith became FAA's Deputy Administrator, succeeding David D. Thomas (see Jul 1, 1965). He was nominated by the President on Mar 24, and confirmed by the Senate on Apr 30.

Born in Sacramento, Calif., Smith began his career in aviation in 1939 as an aircraft electrical installer with Consolidated Vultee Aircraft Corp. (later the General Dynamics Corp.) in San Diego. He was a Navy pilot during World War II, and attended St. Mary's University and California Polytechnic University in 1943 and 1944 under a Navy training program. Smith returned to Consolidated Vultee at war's end, became the firm's representative in the nation's capital in 1952, subsequently moved to other positions, and was named corporate vice president in 1960. Smith left General Dynamics in 1962 to become vice president/marketing for the Consolidated Electrodynamics Division of Bell and Howell. In 1964, he joined Rockwell Standard Corporation as vice president and assistant general manager of the Aero Commander Division, and was promoted to general manager in December. Smith became president of Management Enterprises, an aircraft industry consulting firm in Oklahoma City in 1966. In 1967, he assumed the presidency of Windecker Research in Midland, Tex., became vice chairman of the board in 1969, and held these positions when selected for FAA's top post.

19700511 Smith served as FAA Deputy Administrator until Jul 15, 1972, when he left the agency to become Executive Vice President of E-Systems, Inc., an engineering research and development firm specializing in aerospace and electronic systems. (See Aug 9, 1974.)

19700515 May 15, 1970: FAA published new taxiway design standards aimed at speeding ground movements of large aircraft and thus increasing an airport's capacity. These new standards were based on the size of the aircraft using an airport; previously, taxiway designs were determined by the length of the runway. The agency intended the new standards primarily for yet-to-be-built airports, though they applied to existing airports served by aircraft in the Boeing 747 category.

19700515 May 15, 1970: FAA completed the functional realignment of the Logistics Service on this date. This service, while relinquishing some of its responsibilities to the National Airspace System Program Office and the Facility Installation Service (see Jan 19, 1970), retained its responsibility over materiel purchasing; at the same time, it was given the responsibilities in property management previously exercised by the Office of Management Systems and moved (on Jan 19, 1970) from the jurisdiction of the Associate Administrator for Development to the jurisdiction of the Associate Administrator for Administration. (See Dec 22, 1967.)

19700518 May 18, 1970: FAA established the Office of the Associate Administrator for Engineering and Development, replacing the abolished Office of the Associate Administrator for Development. The new Associate Administrator had executive direction over the National Airspace System Program Office (NASPO), the Systems Research and Development Service (SRDS), and the National Aviation Facilities Experimental Center (NAFEC). Previously, NASPO and NAFEC reported directly to the FAA Administrator. Under the new organizational structure, the agency abolished the Aircraft Development Service and assigned its responsibilities to SRDS. (See Jan 13, 1961, Jul 1, 1961, Oct 22, 1965, and Apr 25, 1966.)

19700521 May 21, 1970: President Nixon signed Public Law 91-258, of which Title I was the Airport and Airway Development Act of 1970 and Title II was the Airport and Airway Revenue Act of 1970. The legislation responded to problems posed by civil aviation's extraordinary growth during the 1960s. Between mid-1959 and mid-1969, the number of aircraft handled by FAA's air route traffic control centers had increased by 110.6 percent, while aircraft operations at FAA's airport towers had increased by 112 percent. Airport and airway development programs, inadequately funded, had failed to keep pace with this growth in aviation activity, resulting in a severe strain on the air traffic control system (see Jul 19, 1968).

The new legislation assured a fund of about $11 billion over the next decade for airport and airway modernization. By establishing an Airport and Airway Trust Fund modeled on the Highway Trust Fund, it freed airport and airway development from having to compete for General Treasury funds. Into the trust fund would go new revenues from aviation user taxes levied by the Airport and Airway Revenue Act, and other funds that Congress might choose to appropriate to meet authorized expenditures. Revenues would be raised by the following levies on aviation users: an 8 percent tax on domestic passenger fares; a $3 surcharge on passenger tickets for international flights originating in the United States; a tax of 7¢ a gallon on both gasoline and jet fuel used by aircraft in noncommercial aviation; a 5 percent tax on airfreight waybills; and an annual registration fee of $25 on all civil aircraft, plus (1) in the case of piston-powered aircraft weighing more than 2,500 pounds, 2¢ a pound for each pound of maximum certificated takeoff weight, or (2) in the case of turbine powered aircraft, 3.5¢ a pound for each pound of maximum certificated takeoff weight. The principal advantages of the user-charge/trust-fund approach to revenue raising and funding were that it provided a predictable and increasing source of income, more commensurate with need; permitted more effective and longer range planning; and assured that the tax revenues generated by aviation would not be diverted to nonaviation uses.

The major weaknesses of the Federal Airport Act (see May 13, 1946), which was repealed by the new legislation, were inadequate funding and the nature of the formula for distributing those resources. The annual authorization for airport development under the old act totaled only $75 million. Of this total, the distribution of $66.5 million was fixed by a formula apportioning 75 percent of it by population and area among the states--half in the ratio of each state's population to the total population of all the states, and half in the ratio of each state's area to the total area of all the states. The remaining 25 percent of the $66.5 million, plus any state's apportionment under the population-area formula if unclaimed for two fiscal years, went into a discretionary fund with certain other funds; however, this discretionary fund was too small to make a significant impact on critical, high-priority areas.

Under the new Airport Development Aid Program, by contrast, airport aid received a greatly increased annual authorization of $280 million for each of the next five fiscal years (see Aug 6, 1970). The new law also provided an improved distribution formula. Of the annual $280 million, $250 million in matching funds would be distributed in the following manner among airports serving air carriers certificated by CAB and airports serving general aviation primarily to relieve congestion at airports serving other segments of aviation:

* One-third as follows: (1) 97 percent of this third among the several states, one-half in the ratio of each state's population to the total U.S. population, and one-half in the ratio of each state's area to the total area of all the states; (2) 3 percent of this third among Hawaii, Puerto Rico, Guam, and the Virgin Islands, the first two places receiving 35 percent shares each, and the last two, 15 percent shares each.

	* One-third among airports serving CAB-certificated air carriers in the ratio of each such airport's passenger enplanements to the total number of passengers enplaned at all such airports.
	* One-third at the discretion of the Secretary of Transportation.
	The remaining $30 million of the annual $280 million would be apportioned by the Secretary as follows for developing in the several states and in Puerto Rico, Guam, and the Virgin Islands airports serving segments of aviation other than CAB-certificated air carriers: 73.5 percent among the several states, one-half of this in the ratio of each state's population to the total population of all the States, and one-half in the ratio of each State's area to the total area of all the States; 1.5 percent for Hawaii, Puerto Rico, Guam, and the Virgin Islands in shares of 35 percent, 35 percent, 15 percent, and 15 percent, respectively; and 25 percent at the discretion of the Secretary.
	In its provisions concerning planning, the new legislation reflected both lessons of experience and the emergence of certain new planning factors. Experience under the Federal Airport Act with the National Airport Plan (NAP), which covered a period of five years and was revised annually, led to the requirement in the new law for a National Airport System Plan (NASP) covering at least 10 years and revised only as necessary. Notable among factors explicitly mentioned for the Secretary's consideration in preparing the NASP, but not explicitly mentioned in relation to the NAP, were: the relationship of each airport to the local transportation system, to forecasted technological developments in aeronautics, and to developments forecasted in other modes of intercity transportation; and factors affecting the quality of the natural environment.
	A significant feature of the new legislation was its provision for planning grants (see Mar 31, 1971). The law authorized a total of $75 million for grants to planning agencies for airport system planning, and to public agencies for airport master planning; however, planning grants could not exceed $15 million in any one fiscal year; nor could any such grant exceed two-thirds of an airport project's cost. Another important provision of the bill gave FAA the responsibility for the safety certification of airports served by air carriers (see May 21, 1973).
	No less than airport development, airway modernization would benefit from the increased funding under the Airport and Airway Development Act. Whereas appropriations for airway facilities and equipment had averaged $93 million a year during the 1960s, the new legislation authorized "not less than" $250 million a year for the next five fiscal years. A principal beneficiary of this more generous authorization would be FAA's efforts to automate the air traffic control. (See Nov 27, 1971, and Jul 1, 1972.)
19700525	May 25, 1970: FAA issued the first supplemental type certificate for installation and operation of area navigation equipment in general aviation aircraft to the Butler National Corporation for use of the Butler Vector Analog Computer. The certificate permitted the use of this equipment during the en route, terminal, and approach phases of operation. (See Oct 1, 1969.)

19700526	May 26, 1970: Effective this date, FAA prohibited persons from operating any moored balloon, unmanned free balloon, kite, or unmanned rocket in a manner interfering with aircraft operations. The rule was in response to an attempt by certain individuals to disrupt aircraft operations at two airports in California by flying kites or balloons, the sizes of which were not covered by Federal regulation.
19700527	May 27, 1970: Resumption of flight operations by National Airlines ended the longest complete shutdown of a domestic U.S. airline by a strike to that date. The 116-day strike had begun on Jan 31.
19700615	Jun 15, 1970: FAA, the Civil Air Patrol (CAP), and the Air Force signed a memorandum of understanding setting forth the relationship between CAP wings and State and Regional Defense Airlift (SARDA) organizations. According to the agreement, the CAP would function as an arm of SARDA during a national emergency.
19700617	Jun 17, 1970: Effective this date, FAA set requirements for the use of supplemental oxygen in nonpressurized general aviation aircraft. Flight crews were required to use supplemental oxygen: on flights remaining more than 30 minutes above 12,500 feet and up to 14,000 feet; and during the entire time a flight remained above 14,000 feet. Above 15,000 feet, supplemental oxygen was to be provided for each occupant of the aircraft. Previously, only air carrier and air taxis had been covered by requirements concerning supplemental oxygen.
19700619	Jun 19, 1970: An Interagency Microwave Landing System Planning Group was formed at the direction of the Secretary of Transportation. With the FAA Administrator as chairman, the group included representatives from the Office of the Secretary of Transportation, the Department of Defense, and the National Aeronautics and Space Administration. The group was charged with preparing a five-year plan for the development and implementation of a microwave landing system (MLS) for civil-military common use. The development of the new system had been a recommendation of DOT's Air Traffic Control Advisory Committee. (See Dec 1969 and Jul 1971.)
19700619	Jun 19, 1970: FAA established two-way air traffic control satellite communications between its facilities in San Francisco/ Oakland and Honolulu. This service, the first full-time point-to-point satellite communication service in air traffic control, consisted of one voice and three teletypewriter channels leased from the International Telecommunications Satellite Consortium (Intelsat). The new system was superior to the previously used high frequency radio circuits and permitted the decommissioning of FAA's high frequency International Flight Service Transmitting and Receiving Service at Tracy, Calif.

19700625	Jun 25, 1970: The first series of area navigation instrument approach procedures in the United States went into effect at six terminal areas--Kirksville, Mo., Longview, Tex., and Fullerton, Lancaster, Palm Springs, and Torrance, Calif. The new procedures permitted pilots of aircraft equipped with area navigation equipment to make straight-in instrument approaches to runways without the use of runway-oriented electronic approach aids. This eliminated the need for pilots to conduct time consuming turns and circling maneuvers required by conventional IFR approaches. (See Oct 1, 1969.)
19700625	Jun 25, 1970: FAA introduced major changes in the New York Metropolitan Area's air traffic patterns and procedures. Known as New York Metroplex, the new procedures reduced traffic congestion in and around New York airports, and accelerated the movement of aircraft along major north-south routes. Under Metroplex, primary holding patterns, or arrival fixes, for area airports were moved farther out from the center of the city. This enabled FAA to add five new en route corridors, with the following results: the number of departure routes increased significantly, traffic distribution improved, bottlenecks were reduced, and crisscrossing of incoming and outgoing flight corridors was minimized. The introduction of the new procedures, first scheduled for Apr 2, 1970, but delayed by a postal employees strike and then the air traffic controllers strike, was made possible by the presence of the New York common IFR room (see Jul 15, 1968), which gave the New York area a greater and more flexible traffic handling capability than the older, unintegrated terminal control system. (See Jan 15, 1969.)
19700625	Jun 25, 1970: In a major new safety rule effective this date, FAA established the terminal control area (TCA) concept. FAA designed the rule, first proposed in Sep 1969 and re-proposed in revised form in Mar 1970, to minimize the midair collision hazard around the nation's busiest airports. A TCA consisted of controlled airspace within which all aircraft would be subject to special operating rules and pilot and equipment requirements. Although the boundaries of each TCA would be determined separately, their general shape resembled an "inverted wedding cake" with its smallest layer touching the ground. TCAs were broken into two categories, with the most congested locations designated as Group I. The rules for Group I required:
	* Air traffic control clearance for all operations.
	* Large turbine-powered aircraft to stay above the TCA's floor unless otherwise authorized by air traffic control.
	* The speed limit beneath the TCA's lateral limits to be 200 knots (230 mph).
	* Takeoffs and landings by solo student pilots to be banned.
	* Aircraft to carry an operable two-way radio.

	* Fixed-wing aircraft to carry an operable receiver for VOR or TACAN (standard navigation aids), as well as a radar beacon transponder. The transponder requirement did not apply to instrument flight rules (IFR) operations to and from secondary airports within the TCA. For Group II TCAs, the rules were the same as for Group I except that solo student operations were not banned, and that aircraft using visual flight rules (VFR) need not carry transponders (see Jun 8, 1973). Because of this less stringent transponder requirement, air traffic control would provide added separation service--separation from VFR as well as IFR traffic--only when large turbine-powered aircraft were involved. Within Group I TCAs, by contrast, air traffic control would maintain separation between all traffic.
	FAA tentatively selected 10 locations as Group I TCAs and 14 as Group II. Because of varying local conditions, each was to be designated by a separate rule, beginning with those in Group I. FAA established the first TCA at Atlanta on the same day as the TCA concept itself. It established the second at Chicago on Jul 23. (See Feb 4, 1971.)
19700626	Jun 26, 1970: FAA completed the first field evaluation of ARTS (Automated Radar Terminal System) II at the Knoxville, Tenn., terminal area. A modular, non-tracking air traffic control system, ARTS II was designed for both low- and medium-density terminal control facilities. The evaluation, which had begun on Feb 9, encompassed three separate test phases: a numerics-only phase, an alphanumerics phase, and a two-display configuration phase. (See Oct 1, 1976.)
19700630	Jun 1970: Forty-seven percent of the adult U.S. population had flown on a scheduled airline, according to a poll taken this month by the Gallup Organization. (See Calendar year 1965.)
19700701	Jul 1, 1970: All Department of Transportation internal audit functions were consolidated in the Office of the Secretary. FAA's internal audit functions were directed to take guidance and direction from the Department's Director of Audit.
19700701	Jul 1, 1970: All Department of Transportation public information functions were consolidated in the Office of the Secretary. FAA's Office of Public Affairs was directed to take guidance and direction from the Department's Director of Public Affairs.
19700701	Jul 1, 1970: FAA discontinued the Notices to Airmen (NOTAM) code which had been in use for 31 years, substituting contracted English. This freed pilots and Flight Service Station specialists from encoding and decoding information transmitted on teletype circuits.
19700713	Jul 13, 1970: FAA announced an expansion of the air traffic controller training facilities at the Aeronautical Center. A new building would be constructed that would provide additional office space as well as additional classrooms for air traffic control training. (See Jun 30, 1989.)

19700717	Jul 17, 1970: New Orleans' Moisant International Airport became the first U.S. airport to subject all passengers to the FAA-developed antihijacking screening system. (See Jan 1969.) The system was based on a behavioral profile used in conjunction with weapons detection by magnetometer. If a person identified by the system as a possible risk did not satisfactorily resolve the question with airline personnel, he was further investigated by a U.S. marshal or deputy marshal. Previously, individual airlines had used the system only on selected flights. (See Feb 2, 1972.)
19700731	Jul 31, 1970: FAA issued to Pan American World Airways the first aviation war risk insurance premium policy under a new coverage plan. Previously, FAA's only war risk insurance for which a premium was charged was a standby plan that would make coverage available in the event of war between major powers (see Jun 14, 1951). The new plan was offered in response to the entry into airline service of the Boeing 747. Because of the high cost of this aircraft (some $24 million), commercial insurers would cover only about 60 percent of its value. FAA's new policy covered war risks for the commercially uninsurable portion of Boeing 747s flying international routes, and was later expanded to cover the aircraft's whole value.
	On Feb 4, 1971, FAA transferred the responsibility for administering the aviation war risk insurance program from its General Counsel to the Assistant Administrator for International Aviation Affairs. In Nov 1977, Public Law 95-163 expanded the scope of insurable risks to allow the FAA Administrator broad discretionary authority in extraordinary circumstances to insure air services deemed in the national interest. On Feb 4, 1984, the aviation insurance program was transferred from the Office of International Aviation to the Office of Aviation Policy and Plans. In 1992, legislation further expanded the scope of the program by allowing coverage for some domestic flight segments and certain services in direct support of flight operations.
	In addition to the 747 coverage mentioned above, examples of uses of the aviation insurance program have included both premium and non-premium coverage of: flights in the Vietnam area during 1967-75; Middle East flights during the 1990-91 Operation Desert Shield/Storm; and flights to Somalia in support of Operation Restore Hope in 1992-93.
19700802	Aug 2, 1970: The first hijacking of a wide-bodied airliner occurred as a Pan American 747 bound from New York to San Juan with 388 passengers was diverted to Havana.
19700803	Aug 3, 1970: FAA renamed its Office of Investigations and Security the Office of Air Transportation Security. At the same time, the agency established an Air Operations Security Division within the new office and gave it responsibility for dealing with hijacking security, bomb threats, aircraft and cargo security, and for developing and implementing deterrent systems for the prevention of criminal acts against air transportation. (See Nov 18, 1969 and Jun 11, 1974.)
	On Jun 15, 1970, the Secretary of Transportation had announced that the nine-member Task Force on the Deterrence of Air Piracy would be replaced by a permanent organizational component staffed with full-time specialists to deal not only with aircraft piracy, but also with sabotage and all other air transportation security problems (see Jan 1969).

19700806	Aug 6, 1970: FAA announced its first three grants under the new Airport Development Aid Program, or ADAP (see May 21, 1970). The awards went to Detroit Metropolitan-Wayne County Airport (Mich.), Hector Field (Fargo, N.D.), and Minneapolis-St. Paul International Airport (Minn.). On Oct 27, 1970, the Secretary of Transportation officially delegated the authority to administer the ADAP program to the FAA Administrator.
19700806	Aug 6, 1970: FAA transferred jurisdiction over agency hearing officers from the Regulatory Council to the Assistant Administrator for Appraisal. (See Jan 17, 1962.)
19700811	Aug 11, 1970: FAA withdrew a notice of proposed rulemaking requiring the use of protective smoke hoods. The agency had proposed on Jan 6, 1969, that these hoods be carried on all large airplanes for use by occupants during evacuation when fire or smoke was present. After further study, however, FAA decided that the hoods' use might produce unacceptable delays during evacuation. Rapid evacuation after a crash landing, the agency held, was the most vital element for survival.
19700812	Aug 12, 1970: FAA established a Technical Assistance Staff headquartered in the United States in the Office of International Aviation Affairs to provide a variety of short-term technical assistance in aviation to foreign countries anywhere in the world. During the first year of its existence, this staff dispatched 44 technicians on short-term assignments to 13 countries. At the same time, FAA abolished the Regional Aviation Assistance Group, which had provided assistance primarily to Latin American countries.
19700812	Aug 12, 1970: In a rule issued this date, FAA required an advanced type of Flight Data Recorder for those large transport aircraft over 12,500 lb. certificated after Sep 30, 1969, that were turbine-powered or certificated to operate above 25,000 feet. By Mar 18, 1974, such aircraft were required to carry a type of recorder able to provide accident investigators with over three times more information on an aircraft's control settings and other circumstances. (See Aug 5, 1957, and Mar 25, 1987).
19700829	Aug 29, 1970: The McDonnell Douglas DC-10 first flew. On Jul 29, 1971, FAA type-certificated the aircraft, a medium-to-long-range airliner with a maximum capacity of 345 passengers. Powered by three General Electric CF6-6D turbofan engines, the DC-10 became the first transport certificated by FAA to meet the reduced engine-noise levels for takeoff, approach, and taxiing operations specified in Part 36 of the Federal Aviation Regulations . American Airlines inaugurated scheduled DC-10 service on Aug 5, 1971, with a flight from Los Angeles to Chicago.

19700909	Sep 6-9, 1970: Members of the Popular Front for the Liberation of Palestine hijacked four airliners over Europe, blew them up, and held many passengers hostage. The hijackers originally planned to seize two Israeli, one Swiss, and one U.S. aircraft, and take the planes to a level stretch of Jordanian desert dubbed "Revolution Airstrip." The plan failed insofar as the Israeli aircraft were concerned. Front members were refused admittance to one of them, whereupon they hijacked a U.S. flight. When they learned that the wide-body jet was too large to land at Revolution Airstrip, they ordered it to Cairo, where they blew it up after deplaning its occupants. Front members succeeded in boarding the other Israeli airliner, but their hijacking attempt was foiled in flight. One hijacker was killed and another arrested by British authorities when the plane landed in London.
	The part of the original plan involving U.S. and Swiss airliners succeeded, and on Sep 6 these aircraft landed at Revolution Airstrip with all passengers. To gain bargaining power for the release of their member arrested in London, the Front hijacked a British airliner and forced it to land at Revolution Airstrip on Sep 9. The Front blew up the three empty airliners on Sep 12. All hostages except six were freed on Sep 27. Those six were freed two days later, in return for the release of the hijacker under arrest in London and six other Front members held by the Swiss and West Germans.
19700910	Sep 10, 1970: The Air Transport Association settled a $50 million damage suit against PATCO for its role in the 1970 strike. As part of the settlement, PATCO remained under a permanent injunction against any future job action. (See Apr 23, 1970, and Jan 29, 1971.)
19700911	Sep 11, 1970: President Nixon announced a comprehensive antihijacking program that called for:
	* The U.S. government to place specially trained, armed guards on American commercial airline flights.
	* Extending, under DOT auspices, the use of electronic and other surveillance techniques by U.S. flag carriers to all gateway airports in the U.S., and in other countries wherever possible.
	* Accelerated efforts by Federal agencies to develop security measures, including new methods for detecting weapons and explosives devices.
	* The State Department and other appropriate agencies to consult foreign governments and foreign carriers on antihijacking techniques.
	* All countries to accept the multilateral convention (to be considered at a conference held under the auspices of the International Civil Aviation Organization) providing for extradition or punishment of hijackers.
	In addition, the President called on the international community to suspend airline service to countries refusing to extradite or punish hijackers involved in international blackmail. He stated that it was U.S. policy to hold nations in which a hijacked plane landed responsible for appropriate steps to protect the lives and property of U.S. citizens. (See Sep 21, 1970, Oct 28, 1970, and Sep 23, 1971.)

19700921 Sep 21, 1970: The Department of Transportation announced the appointment of Lt. Gen. Benjamin O. Davis, Jr. (USAF-Ret), as Director of Civil Aviation Security for DOT. Davis advised the Secretary of Transportation on the Department's antihijacking program and coordinated the functions of the airport and airborne security force, composed of components from the Departments of Defense, Justice, Transportation, and Treasury, and other government agencies. (See Sep 11, 1970.)

19700925 Sep 25, 1970: The Departments of Justice and Transportation signed a memorandum of understanding dividing responsibilities for responding to hijackings. The FBI had jurisdiction when an aircraft was neither airborne nor moving on the runway for purposes of takeoff or landing. The pilot retained command at other times, and FAA's recommendations to him had precedence. A further agreement in Dec 1971 assigned the pilot the responsibility of signaling whether the aircraft should be disabled or stormed. On Feb 26, 1975, FAA and the FBI signed a new memorandum of understanding governing responsibilities during a hijacking. Following guidelines provided by the Anti-Hijacking Act of Aug 5, 1974 (see that date), the new agreement extended FAA jurisdiction to include the period from the closing of all external doors following embarkation until the opening of one such door for disembarkation. Both the FAA and the FBI agreed to fully consider each other's views, as well as the views of the airline and the pilot in command, before initiating law enforcement action.

19700930 Sep 30, 1970: FAA established a Civil Rights Committee. The 13-member committee served as a sounding-board for the discussion of equal employment opportunity problems and suggested methods for improving the employment environment, examined employment practices and procedures, reviewed proposed employment directives, and performed other specified advisory functions.

19701002 Oct 2, 1970: A chartered Martin 404 carrying members of the Wichita State University football team crashed near Silver Plume, Colo., killing 32 of the 40 persons aboard. The National Transportation Safety Board later cited the probable cause as the operation of the aircraft over a mountain valley route at an altitude from which the aircraft could not avoid obstructing terrain. Among factors listed as contributing to the accident was the charter company’s poor operational management. The accident called into question the business practices of charter and leasing firms, and Secretary of Transportation John A. Volpe on Oct 9 ordered an investigation of companies designated as commercial operators of large aircraft (see March 5, 1971). While this investigation proceeded, FAA on Oct 27 proposed a rule redefining the term "commercial operator" and requiring educational institutions and similar groups to hold an air travel club certificate when operating large aircraft over 12,500 pounds. The proposal would also have required operators of large aircraft to obtain a commercial operator's certificate for certain operations in the furtherance of business. Industry response to the proposal proved strongly negative. Meanwhile, another major crash of a charter flight occurred on Nov 14, 1970, when a Southern Airways DC-9 descended too low during a nonprecision approach at Huntington, WVa. The accident killed all 75 of the plane’s occupants, including the Marshall University football team. (See Mar 5, 1971.)

19701012 Oct 12, 1970: FAA announced adoption of a three-bar version of the visual approach slope indicator (VASI) system. VASI had been adopted as the U.S. national standard in 1961 and became the international standard shortly thereafter. The bicolor (red-white) light box system was located alongside the runway at its touchdown or aiming point. When the pilot was on the proper glide slope, the far indicator was red and the closer one was white. When the pilot was above the glide slope, both indicators were white; when below the glide path, both were red. The specialized three-bar VASI was primarily for runways which were not equipped with the Instrument Landing System and which served new, large jets, such as the Boeing 747, whose pilots sat high above the landing gear. Pilots flying these jets would use the second and third bars for reference, while pilots of smaller aircraft would use the first and second bars. (See Feb 8, 1985.)

19701014 Oct 14, 1970: Congress approved legislation implementing the Convention on Offences and Certain Other Acts Committed on Board Aircraft--the so-called Tokyo Convention. This legislation accomplished three objectives: it closed certain minor gaps in U.S. criminal jurisdiction over acts committed on aircraft of U.S. registry; it clarified the existing "air commerce" jurisdiction, which otherwise could have created serious constitutional and international problems; and it brought U.S. military aircraft under the "special aircraft jurisdiction of the United States." (See Dec 4, 1969.)

19701028 Oct 28, 1970: The Departments of Transportation and Treasury agreed that the Bureau of Customs would recruit and train a permanent force of customs security officers who would be assigned to FAA for service as sky marshals aboard commercial passenger flights (see Aug 10, 1961). The first class of these officers graduated on Dec 23, 1970; by May 1971, they had completely replaced an interim force organized in accordance with the program announced by President Nixon on Sep 11, 1970 (see that date). This interim force had consisted of both military personnel and civilian agents from the Treasury Department and other agencies, including FAA.

19701106 Nov 6, 1970: FAA established a national en route air traffic training program for beginning center controllers. The program, an outgrowth of a Corson Committee recommendation (see Jan 29, 1970), used the FAA Academy for qualification training and FAA facilities for proficiency training. Its objectives included shortening the training, reducing the high attrition rate among trainees, and making more efficient use of resources. Training was conducted in three phases. The first phase, indoctrination and precontrol, took place at an en route facility and covered noncontrol duties. The second, control, was conducted at the FAA Academy and consisted of a nine-week non-radar and radar control procedures course. The final phase, sector qualification, took place at an en route facility. Previously, controller trainees had been sent directly to the FAA Academy for a nine-week indoctrination course, and then to the centers for on-the-job training running from two to three years.

19701112 Nov 12, 1970: The National Transportation Safety Board released the results of a 1969 inquiry into the cause and prevention of midair collisions. The Board concluded that "no one solution is available to the aviation community which will result in the elimination of all midair collisions." The collision potential, however, could be reduced by (1) pilot education and pilot scanning techniques, (2) using collision avoidance systems and pilot warning indicators, (3) establishing standard traffic patterns for all airports, (4) separating high- and low-performance aircraft within terminal areas, (5) implementing area navigation throughout the National Airspace System, (6) increasing the conspicuity of aircraft, and (7) expanding the use of automation in air traffic control.

The Board recommended that FAA:

* Evaluate pilot qualification criteria and minimum airborne equipment requirements for operations into high-density terminal areas.

* Accelerate the program providing for the separation of high- and low-performance aircraft in high-density terminal areas.

* Encourage the development of an airborne collision avoidance system for air carrier and larger general aviation aircraft.

* Provide funds for the ground equipment necessary to support airborne collision avoidance systems.

* Sponsor the development of pilot warning indicator systems.

* Require the installation of collision avoidance and pilot warning indicator systems when they become available.

* Add scanning techniques to the pilot training syllabus.

* Require the installation of white anticollision lights on all aircraft.

* Accelerate the implementation of an area navigation system throughout the National Airspace System (see Mar 6, 1972).

19701116 Nov 16, 1970: The Lockheed TriStar L-1011 first flew. On Apr 14, 1972, FAA type-certificated the three-engine wide-body jet with a maximum capacity of 260 passengers. Eastern Air Lines inaugurated scheduled L-1011 service on Apr 26, with a flight from Miami to New York. On Dec 7, 1981, Lockheed announced a phasing out of Tristar production. The 250th and last L-1011 was rolled out on Aug 19, 1983. The company completed delivery during 1985, with the exception of a single L-1011 (the first one produced) retained by Lockheed until 1986. While ceasing to compete against Boeing and McDonnell Douglas in the commercial transport field, Lockheed remained a major producer of military aircraft.

19701130 Nov 30, 1970: FAA inaugurated a general aviation accident prevention program on a national level after its effectiveness had been demonstrated in a two-year test in FAA's Central and Southwest Regions (see Jul 1, 1968). The expansion of the program during fiscal 1971 involved placing accident prevention specialists in 83 general aviation and flight standards district offices, supplemented by one national and seven regional accident coordinators. The program's premise was that the number of general aviation accidents could be reduced by improving the attitude, behavior, proficiency, and knowledge of airmen, as well as by reducing environmental hazards.

19701203 Dec 3, 1970: The supersonic transport (SST) program suffered a reverse in Congress as the Senate adopted an amendment to delete from the Department of Transportation fiscal 1971 appropriations bill an administration request for $290 million to continue SST prototype development. Subsequently, House-Senate conferees restored $210 million of the administration's request to the bill. But the Senate balked again, and the House refused to take part in another conference. Accordingly, the two chambers passed a joint resolution continuing appropriations for the Department (including the SST project) through Mar 30, 1971, at the fiscal 1970 level; at the same time, they agreed to vote on the SST appropriation separately from the rest of the DOT appropriation early in the 92d Congress. (See Apr 22, 1970, and Mar 24, 1971.)

19701205 Dec 5, 1970: A rule prohibiting any person from acting as a crewmember of a civil aircraft within eight hours after consuming alcohol became effective. The previous rule had prohibited crewmembers from performing their duties while under the influence of alcohol, but specified no time period for abstinence. (See Apr 17, 1985.)

19701214 Dec 14, 1970: The Center for Development of Air Transportation, a private Italian organization founded in 1950, awarded the Leonardo da Vinci Prize for 1970 to FAA for contributions to worldwide knowledge and achievements in the fields of aerial navigation, airport development, and the promotion of flight safety.

19701216 Dec 16, 1970: The U.S. and 49 other nations signed the Convention for the Suppression of Unlawful Seizure of Aircraft (known as The Hague or Hijacking Convention) at a diplomatic conference held under the auspices of the International Civil Aviation Organization. The U.S. was an active participant in developing the convention, which declared the hijacking of civil aircraft to be an offense punishable by severe penalties. The convention obligated contracting states to extradite hijackers or to submit their cases to prosecutorial authorities. The U.S. Senate approved ratification on Sep 8, 1971, and the U.S. deposited its instruments of ratification on Sep 14. This completed the 10 ratifications needed to bring the convention into force among ratifying states 30 days later, and it became effective on Oct 14, 1971. Signatories to the convention depositing instruments of ratification before the U.S. were Japan, Bulgaria, Sweden, Costa Rica, Gabon, Hungary, Israel, Norway, and Switzerland.

19701222	Dec 22, 1970: FAA established the Office of Environmental Quality and simultaneously abolished the Office of Noise Abatement, which formed the nucleus of the new office. This organizational change reflected FAA's expanding responsibilities in such areas of environmental quality as aircraft noise abatement, sonic boom, smoke emission, exhaust pollution, and aircraft waste. FAA issued an order on Feb 19, 1971, transferring the aircraft noise abatement research program to the Systems Research and Development Service. (See Jul 21, 1967 and Sep 10, 1978.)
19701223	Dec 23, 1970: FAA established the Office of Systems Engineering Management in the Office of the Associate Administrator for Engineering and Development. This new office replaced the abolished Systems Engineering Management Staff.
19701229	Dec 29, 1970: The Occupational Safety and Health Act of 1970, enacted this date, required that most U.S. civil aircraft carry emergency locator transmitters (ELTs), also known as crash locator beacons, after Dec 30, 1973. The law also required ELTs on airplanes newly manufactured or imported after Dec 30, 1971. The requirement applied to most of the general aviation fleet, including supplemental air carriers, air taxis, and commercial operators. Exemptions included scheduled air carriers, rotorcraft, turbojets, experimental aircraft, agricultural planes, and training flights within 20 miles of the home base. The legislation was a response to concern over incidents in which persons survived an accident only to die because searchers were unable to locate the crash site. FAA implemented the legislation in a rule published on Sep 21, 1971. (See Mar 20, 1969, and Jan 2, 1974.)
19701231	Dec 31, 1970: FAA established a Defense Readiness Staff in the Office of the Associate Administrator for Operations; at the same time, it abolished the Defense Coordination Staff. The new staff directed its efforts to maintaining FAA's defense readiness and operational contingency plans, its post-attack and follow-on readiness plans, and liaison between FAA and other civil and military agencies regarding defense readiness. With the change in the organization of FAA's emergency readiness activity, the Associate Administrator for Plans assumed responsibility for coordinating defense matters with the Department of Defense and for monitoring significant DOD-FAA programs and plans. Subsequent changes regarding these responsibilities included the assignment of the emergency operations function to the Office of the Deputy Administrator on Aug 8, 1984.
19701231	Dec 31, 1970: Public Law 91-604, the Clean Air Amendments of 1970, gave the recently created Environmental Protection Agency (EPA) the responsibility to promulgate aircraft engine emission standards in order to control air pollution. Under the legislation, FAA would implement and enforce the standards if it deemed them to be technologically feasible and economically practicable. (See Jan 20, 1970, and Jul 6, 1973.)

19701231

Dec 31, 1970: The end of this day marked a calendar year in which there were no passenger or air crew fatalities in U.S. scheduled domestic airline service, the first such Jan-Dec period in Federal records. One person, however, was killed in a propeller accident on the ground, and two passengers died in scheduled international service. Certificated route air carriers in scheduled domestic and international passenger service recorded an unprecedented passenger fatality rate per l00 million passenger-miles flown of 0.00l. (See Aug 31, 1940, and Dec 31, 1980.)

1971

19710115	Jan 15, 1971: The Federal Aviation Administration transferred jurisdiction over its field offices and facilities in Kentucky from the Eastern Region Area Office at Cleveland to the Southern Region headquarters at Atlanta.
19710129	Jan 29, 1971: The Department of Labor stripped PATCO of its status as a labor organization because it had called a strike against the Federal government. PATCO was required to post a notice declaring that it would not engage in illegal job actions before it could be considered eligible for recognition as a labor organization. PATCO took this and other steps to comply with the Labor Department's decision. On Jun 4, the Department decided that PATCO was eligible to seek recognition as a labor organization under Executive Order 11491. Three days later, PATCO filed a new petition with Labor for exclusive recognition as the national representative for all air traffic controllers. (See Sep 10, 1970, and Feb 7, 1972.)
19710129	Jan 29, 1971: The Nixon administration proposed the sale of Washington National and Dulles International Airports in the Budget of the United States Government for fiscal year 1972. The Government asked $105 million for the two airports and made the sale subject to the approval of the Congress. (See Oct 30, 1986.)
19710204	Feb 4, 1971: FAA instituted the new "Keep-'Em-High" program to reduce noise in the vicinity of the nation's airports. Under the program, which had been announced in Oct 1970, the agency instructed controllers to keep flights as high as possible during landings and takeoffs, delaying turbojet aircraft in their
19710204	Feb 4, 1971: FAA permanently established a terminal control area (TCA) for Washington, D.C. (the Washington National/Andrews Air Force Base complex). A TCA had been established earlier for this location, on Aug 20, 1970, but rescinded the following day because of operational problems. The agency established a revised version on Oct 1, 1970, but adherence was purely voluntary until made mandatory by the Feb 4, 1971, rule. The Washington TCA was the third to be established. Two more TCAs were established on Sep 16, 1971, one for Los Angeles and one for the New York City airport complex. (See Jun 25, 1970 and Jan 1, 1974).
19710223	Feb 23, 1971: The Secretary of Transportation established a Transportation Safety Institute (TSI) at FAA's Aeronautical Center, Oklahoma City. Although initially operated by FAA, this school provided training in the investigation of accidents and incidents in all modes of transportation, and in related regulatory matters. In 1977, TSI became part of the new Research and Special Programs Administration (see Sep 23, 1977.)

The establishment of TSI followed the dissolution of the National Aircraft Accident Investigation School (NAAIS), which had been originally operated as a joint venture at the FAA Academy (see Sep 30, 1963) by FAA and the Civil Aeronautics Board. The National Transportation Safety Board (NTSB) assumed CAB's share of responsibility for the school when NTSB took over CAB's aircraft accident investigation functions on Apr 1, 1967. Subsequently, however, FAA decided to include enforcement-oriented training as part of the curriculum at NAAIS. As this added training would not be consistent with NTSB's mission, FAA and NTSB agreed to dissolve NAIS as of Jan 31, 1971. (On Mar 4, NTSB established its own National Aircraft Accident Investigation School at Dulles International Airport.)

19710302 Mar 2, 1971: The Civil Aeronautics Board approved the merger of Trans Caribbean Airways into American Airlines, effective this date. Trans Caribbean had begun as a charter carrier in Dec 1945, and had begun scheduled service between New York and Puerto Rico in Mar 1958.

19710305 Mar 5, 1971: DOT released the report of its investigation of air charter and leasing companies undertaken following an accident on Oct 2, 1970 (see that date). The investigating task force determined the key problem was the difficulty of enforcing the distinction in the safety regulations between large-airplane operators in private carriage for compensation or hire and other large-airplane operations in private carriage. Among the group's recommendations were: distributing to universities and other organizations flyers explaining the differences between leasing an aircraft and hiring a charter; incorporating a truth-inleasing clause in leases; and requiring that all large and complex airplanes be operated and maintained at a safety level comparable to that of air carriers. FAA immediately carried out the recommendation on the distribution of flyers, and later took action on the truth-in-leasing issue (see Jan 3, 1973). On Oct 7, 1971, however, FAA withdrew a proposed rule that would have placed certain new certification requirements on operators of large aircraft in private carriage. FAA took this action on the ground that the proposal would impose unnecessary administrative burdens on corporate or business aircraft operators, but the agency continued to consider ways to upgrade the safety of large general aviation aircraft. (See Oct 23, 1972.)

19710313 Mar 13, 1971: AN FAA rule upgraded airworthiness standards for small airplanes seating 10 or more passengers (excluding crew). The new rule required all such aircraft, regardless of weight, to be certificated in the air transport category. The rule reflected a trend toward increased numbers and types of small aircraft designed with relatively large passenger capacity, and it affected segments of aviation that included the growing air taxi industry. (See Sep 7, 1964, and Dec 1, 1978.)

19710315 Mar 15, 1971: FAA adopted a marking and lighting standard for identifying transmission lines and their support structures that could constitute a potential hazard to air navigation. The standard called for three sequentially flashing white lights of high intensity to be installed on transmission line support structures. Each light would flash 60 times per minute. These lights replaced unlighted spherical markers on transmission lines, which provided little or no help to pilots at night or in bad weather.

19710324	Mar 24, 1971: The Senate in effect terminated the U.S. civil supersonic transport (SST) program when it voted against the appropriation of $289 million to continue SST prototype development. The House of Representatives had voted down the SST appropriation on Mar 18, 1971. Later, in May 1971, pro-SST forces in the House seeking to revive the program succeeded by a vote of 201-197 in amending a Department of Transportation supplemental appropriations bill to include $85.3 million for SST development; however, the Senate struck out the amendment by a vote of 58-37. (See Dec 3, 1970, and Oct 12, 1971.)
19710325	Mar 25, 1971: A U.S.-Icelandic agreement provided that the United States would reimburse Iceland for flight inspection of U.S.-owned military air navigation aids within Iceland. The inspections had previously been performed by FAA, which since 1966 had been helping Iceland to establish a flight inspection unit.
19710329	Mar 29, 1971: The FAA Administrator delegated to the Federal Air Surgeon the authority to grant or deny airman petitions for a medical exemption under a rule effective this date. Previously, the Administrator granted or denied such petitions after receiving the recommendation of an advisory panel of medical specialists. Under the new rule, the services of this panel were no longer required; however, the Federal Air Surgeon consulted with medical specialists where appropriate. Petitions involving a policy determination were referred, with the Federal Air Surgeon's recommendations, to the Administrator for final action.
19710331	Mar 31, 1971: The first grant under the Airport Planning Grant Program went to the Massachusetts Aeronautics Commission for the development of a statewide comprehensive airport system plan. (See May 21, 1970.)
19710402	Apr 2, 1971: FAA realigned its regional field structure in the contiguous 48 States to conform generally with the President's plan for a common pattern of Federal regional boundaries and regional headquarters. In March 1969, the President had announced a plan calling for 10 standard Federal regions encompassing all 50 States to facilitate service to the public in matters cutting across departmental or agency lines. Conformance with this plan required FAA to establish four new regions--New England, Great Lakes, Rocky Mountain, and Northwest--and to realign the boundaries of four of its five preexisting regions in the contiguous 48 States. The resulting nine regions in the contiguous states, their regional headquarters, and the states each encompassed, were:
	* New England (Boston): Maine, New Hampshire, Rhode Island, Massachusetts, Connecticut, and Vermont.
	* Eastern (New York City): New York, Pennsylvania, Virginia, Maryland, West Virginia, Delaware, New Jersey, and the District of Columbia.
	* Southern (Atlanta): North Carolina, South Carolina, Georgia, Florida, Mississippi, Alabama, Tennessee, and Kentucky.
	* Great Lakes (Chicago): Illinois, Indiana, Minnesota, Michigan, Ohio, and Wisconsin.

	* Central (Kansas City): Missouri, Iowa, Kansas, and Nebraska.
	* Southwest (Fort Worth): Texas, Arkansas, Louisiana, Oklahoma, and New Mexico.
	* Rocky Mountain (Denver): Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.
	* Northwest (Seattle): Washington, Idaho, and Oregon.
	* Western (Los Angeles): California, Arizona, and Nevada.
	FAA was authorized certain deviations from the President's plan: (1) the agency did not establish a region headquartered at Philadelphia, but instead combined the states that the plan allocated to that region with those allocated to New York; (2) FAA's Alaskan Region was not combined with the region headquartered at Seattle; (3) and Hawaii continued as the main part of FAA's Pacific Region, headquartered at Los Angeles, rather than becoming part of a region headquartered at San Francisco. Thus, FAA had 11 regions for the 50 States. (See Jun 12, 1981.)
	At the same time that FAA's regional realignment went into force, FAA abolished its area offices in the contiguous 48 States (see Nov 22, 1968), and the responsibilities of the area managers were transferred to the appropriate regional directors. Area coordinators without line authority were stationed at seven locations formerly having area offices (Albuquerque, Houston, Memphis, Miami, Salt Lake City, San Francisco, and Washington, D.C.). In addition, Cleveland and Minneapolis each had a local coordinator with responsibility limited to the city's metropolitan jurisdiction. These coordinators served as a point of contact for the public on issues involving more than one program area, represented the regional director with the community on nonprogram matters, and advised and assisted program elements of FAA on activities that crossed program lines. In Alaska, FAA also closed the Fairbanks, Juneau, Nome, and King Salmon Area Offices (see May 22, 1969), and area coordinators assumed services formerly performed by those offices.
19710402	Apr 2, 1971: The Administrator gave air traffic control facilities increased flexibility in granting pilot routing and altitude requests for all types of aircraft. Conditions permitting, controllers were empowered to: relax the requirements for preferential routings; assign the most economical altitudes; discontinue standard instrument departures; and honor requests for direct radar vectors. These relaxed procedures were made possible by a temporary decline in air traffic during fiscal 1971 (the first such decline since fiscal 1961), which coincided with a general slowdown in the U.S. economy.
19710406	Apr 6, 1971: FAA required pilot familiarization with all available information concerning the runway lengths at airports of intended use, as well as with takeoff and landing distances appropriate to the aircraft being used. This mandatory preflight action replaced various general operating practices.
19710419	Apr 19, 1971: FAA issued its first type certificate for a West German helicopter, the MesserschmittBolkow-Blohm BO-105A.

19710419	Apr 19, 1971: The Soviet Union launched Salyut 1, the first of a series of orbiting space stations. Soviet cosmonauts used Soyuz spacecraft to reach these stations for increasingly long missions, including a stay of over 200 days aboard Salyut 7 in 1982. (See May 14, 1973.)
19710426	Apr 26, 1971: Intercom noted that Ruth M. Dennis would become the first woman to serve as chief of a Flight Service Station when she reported to the San Diego FSS during the week. Dennis had joined the Civil Aeronautics Authority in 1944.
19710429	Apr 29, 1971: FAA established four transcontinental high-altitude area navigation routes between New York City and Los Angeles and Oakland, Calif. (See Oct 1, 1969, and Mar 6, 1972.)
19710429	Apr 29, 1971: FAA established a V/STOL (vertical/short takeoff and landing) Special Projects Office under the Associate Administrator for Engineering and Development to stimulate and encourage the private development of economically viable V/STOL systems and provide a focal point for all of FAA's V/STOL development activities. The new office would formulate and maintain a comprehensive agency V/STOL development plan. (See Sep 23, 1968, Sep 17, 1971, and Jul 26, 1972.)
19710503	May 3, 1971: FAA's Management Training School at Cameron College, Lawton, Okla., admitted its first class. The school's establishment had been recommended by the Corson Committee (see Jan 29, 1970). FAA required all supervisors and middle managers to attend an appropriate three-week course, and refresher courses were offered. Some 50,000 FAA personnel attended the school before it closed on Jul 3, 1987. (See Jul 1, 1972 and Mar 14, 1986.)
19710514	May 14, 1971: In United States v. Lopez, the United States District Court for the Eastern District of New York declared FAA's antihijacking profile system constitutional (see Jul 17, 1970). The court found that the system had provided the "reasonable suspicion" required to justify a personal search. On another key point, that of the characteristics contained in the profile for identifying potential hijackers, the Court said that careful adherence to the absolute objectivity and neutrality of the system as designed would avoid discrimination on the basis of religion, origin, race, or political views.
	The case arose when two men preparing to board a New York-San Juan flight were arrested and charged with concealing a packet of narcotics. Charges against one of the men were dropped. The other man--the defendant in this case--was acquitted on a motion to suppress the evidence, which the court found had been gathered outside the government's system to deter and apprehend hijackers.
19710516	May 16, 1971: Gene D. Sims became the first woman to serve as chief of an FAA airport traffic control tower, taking over supervision of the Cuyahoga County (Ohio) Airport tower upon its commissioning. Sims, who had joined FAA in 1956,had served as a crew chief at the Akron-Canton (Ohio) Airport tower since 1962.

19710521	May 21, 1971: FAA established the Office of General Aviation, at the same time abolishing the Office of General Aviation Affairs, which formed the nucleus of the new office. (See Aug 31, 1962 and Sep 10, 1978.)
19710604	Jun 4, 1971: FAA issued the first supplemental type certificate approving installation of a nitrogen fuel-tank inerting system in a civil aircraft to protect against accidental ignition of fuel vapors. The agency installed the inerting system, developed under an FAA contract by Parker Hannifin Corporation, in a DC-9 aircraft. The type certificate applied to this specific aircraft only.
19710608	Jun 8, 1971: FAA established a Behavioral Sciences Division in the Office of Aviation Medicine. The new division, to which the agency transferred the functions of the Psychology Staff and the Psychiatric Assistant, provided advice on psychiatric and psychological matters in support of employee and occupational health programs, the air traffic control specialist health program, manpower management programs, and FAA's effort to combat aircraft piracy and sabotage, including the selection and training of air marshals.
19710608	Jun 8, 1971: FAA established the quality assurance systems analysis review (QASAR) program to improve surveillance activities of the quality control systems used by aviation-product manufacturers and their parts suppliers. This program provided for a systems analysis evaluation of the aeronautical manufacturer's total organization through in-depth and independent evaluations of the manufacturer conducted by the Flight Standards Service's QASAR teams, and continuing evaluations by Engineering and Manufacturing District Offices as part of their day-to-day certificate management responsibilities. On Oct 15, 1971, FAA established an Aeronautical Quality Assurance Field Office in the regions to carry out the responsibilities of the QASAR program as well as the functional responsibilities of the Systemsworthiness Analysis Program. (See Jun 1966.)
19710612	Jun 12, 1971: The first passenger death in a domestic hijacking incident occurred on a TWA aircraft bound from Albuquerque to New York. The hijacker had forced his way aboard the Boeing 727 aircraft during a scheduled stop at Chicago's O'Hare International Airport, seized a stewardess, and demanded to be flown to Vietnam. The passenger was killed attempting to aid the stewardess. When the medium-range aircraft landed at New York's Kennedy International Airport for substitution of a long-range aircraft, the hijacker was wounded and arrested. (See Mar 17, 1970.)
19710615	Jun 15, 1971: FAA moved its Southeast Asian International Field Office (IFO) from Manila, Republic of the Philippines, to Agana, Territory of Guam. (The Manila office was officially closed Jun 30, 1971.) This IFO provided aviation services to Burma, Cambodia, Indonesia, Laos, Malaysia, the Philippines, Singapore, South Vietnam, Thailand, Nauru, the Trust Territory of the Pacific Islands, and Guam.

19710618	Jun 18, 1971: FAA announced a joint program with the military services designed to minimize the number of military aircraft flying under visual flight rules (VFR). The purpose of the program was to enhance the efficiency of the common civil-military airspace system and reduce the midair-collision hazard by bringing military flights under the direct control of FAA's air traffic control facilities. To the maximum extent practicable, military flights in fixed-wing aircraft would be conducted in accordance under instrument flight rules (IFR). The danger of mixing of high-speed IFR and VFR traffic had been tragically illustrated by a midair collision on June 6, 1971, near Duarte, Calif., of a DC-9 airliner and a U.S. Marine Corps F-4B. All 49 occupants of the DC-9 and one of the two occupants of the F-4B were killed. The airliner was under IFR control; the military plane was flying VFR.
19710701	Jul 1, 1971: The production model of the Cessna Citation first flew. In February 1972, FAA type-certificated this 8-seat, pressurized, executive turbofan aircraft.
19710701	Jul 1, 1971: FAA's first modular airport traffic control tower went into operation, at the Owensboro-Davies County (Ky.) Airport. The prefabricated tower, designed primarily for low traffic activity airports, was erected at the airport in a matter of weeks. The tower was equipped with solid state communications equipment.
19710708	Jul 8, 1971: FAA put into operation a jet-propelled boat to conduct search and rescue operations in the event of a crash landing in the Potomac River near Washington National Airport. The 22-foot watercraft could accommodate all occupants of the largest airliner serving the airport.
19710727	Jul 27, 1971: FAA put into operation two mobile lounges that could be raised and lowered to accommodate varying aircraft floor heights at Dulles International Airport. The new lounges, which carried up to 150 passengers were designed to mate with the Boeing 747, Lockheed L-1011, and McDonnell Douglas DC-10, and other commercial aircraft. The older model mobile lounges had been fitted with a portable stairway to bridge the space between the lounge ramp and the newer and higher aircraft; however, this attachment did not protect passengers from adverse weather. (See Apr 2, 1959.)
19710731	Jul 1971: The Departments of Defense and Transportation and the National Aeronautics and Space Administration issued a national plan for developing a microwave landing system (MLS) for civil-military common use. The plan, designed to meet all civil and military needs for instrument landing systems at domestic and foreign airports during this century, outlined two complementary development efforts: an industry program to produce prototype equipment at the earliest possible date; and a series of government programs concerned with such issues as validation, the investigation of subsystem concepts and techniques, and the application of MLS to civil-military aircraft operations.

	MLS was intended to replace the instrument landing system (ILS), a unidirectional system employing VHF and UHF radio frequencies. The ILS, which had remained essentially unchanged since its introduction in the 1940s, suffered from limitations that included dependence on a fairly smooth airport surface to transmit an acceptable signal. Consequently, the system could not be installed in some areas without expensive reconfiguring of the terrain. The construction of a new hangar or even the accumulation of snow could adversely affect the system. MLS would provide precision, high-integrity guidance that would be relatively insensitive to the effects of terrain, structures, other aircraft, and weather. It could operate at airports where the conventional ILS could not operate because of terrain irregularities. Moreover, the new system would make more flight paths available because it would employ a wide-angle scanning beam, as opposed to the unidirectional beam of the old system.
	On Jul 26, 1972, the responsibility for developing the new system was entrusted to a newly formed Microwave Landing System Branch within FAA's Systems Research and Development Service. (See Jun 19, 1970, and Jan 27, 1972.)
19710804	Aug 4, 1971: Recognizing that noise was a major source of environmental pollution, the Department of Housing and Urban Development (HUD) issued guidelines for housing construction near high-noise areas, including airports. HUD hoped to discourage the construction of new dwelling units on sites that had, or were projected to have, an unacceptable noise exposure by withholding financial assistance for their development. For existing buildings located in a noisy environment, the Department encouraged soundproofing, provided a structure's life was not substantially increased.
19710810	Aug 10, 1971: FAA abolished the Bureau of National Capital Airports as a bureau, renamed it National Capital Airports, and attached it to the Airports Service, which assumed responsibility for operating Washington National and Dulles International Airports. (See Dec 5, 1966 and Jun 11, 1974.)
19710811	Aug 11, 1971: FAA expanded requirements for an anticollision system of flashing aviation-red or aviation-white lights for night operations. The agency mandated that the system be installed on all powered U.S. civil aircraft with a standard airworthiness certificate by Aug 12, 1972. (Aircraft with experimental, restricted, or provisional type certificates were exempted.) Previously, FAA had required the anticollision light system only on large aircraft and on certain small aircraft as specified in their airworthiness certificates. The agency required this system in addition to the position-light system carried by all aircraft on their tails and wingtips.
19710830	Aug 30, 1971: Effective this date, FAA required the fastening of safety belts by each occupant on U.S.- registered civil aircraft during takeoff and landing. The rule excepted occupants of airships and also children under two years if held by an adult. Previously, the only passengers that FAA had required to fasten their belts during takeoff and landing were those transported by scheduled air carriers and commercial operators of large aircraft. The new rule required the pilot in command to ensure that all persons aboard had been notified to fasten their safety belts prior to takeoff or landing.

19710904	Sep 4, 1971: An Alaska Airlines 727 struck a mountain slope while attempting a nonprecision instrument landing approach to Juneau airport, killing all 111 persons aboard. The National Transportation Safety Board determined the probable cause to be a display of misleading navigational information concerning the flight's progress along the localizer course, which resulted in premature descent.
19710914	Sep 14, 1971: FAA signed an agreement with NASA for joint participation in flight simulation research and development projects. Under the agreement, FAA provided technical personnel to coordinate the agency's R & D projects with NASA officials at the NASA Ames Research Center at Moffet Field, Calif. Included among the research projects were aircraft handling qualities and the development of certification criteria for new aircraft, such as short takeoff and landing (STOL) aircraft.
19710914	Sep 14, 1971: FAA transferred the air marking and skyway programs to the Office of General Aviation from the Facility Installation Service.
19710915	Sep 15, 1971: The Department of Transportation issued an in-depth study of general aviation safety, excluding "for hire" operations. The study was conducted by members of the staff of the Assistant Secretary of Transportation for Safety and Consumer Affairs, FAA officials, and general aviation consultants. Areas of concern identified were: inadequate pilot and flight instructor certification requirements; the lack of periodic pilot proficiency checks; the inability of flight service stations to meet the flight operation requirements of the general aviation community, especially its need for accurate and current weather data; and the lack of standard traffic patterns for uncontrolled airports.
	The study's recommendations included: conducting a biennial proficiency flight review of every pilot by a certificated flight instructor; placing increased emphasis on the general aviation accident prevention program; increasing the skill, knowledge, and experience requirements of flight instructors; implementing flight service station modernization and reconfiguration; improving the reporting of weather information to the general aviation pilot; strengthening general aviation's position in FAA's headquarters; publishing the Federal Aviation Regulations in separate parts, rather than the 11-volume format used at the time; and adopting the standard traffic-pattern rule at all uncontrolled airports.
19710916	Sep 16, 1971: The National Transportation Safety Board ruled that pilots who had suffered a stroke could not be automatically denied a first-class medical certificate. The Board stated that each pilot's case must be treated separately rather than on the basis of general stroke statistics and predections. The ruling reversed FAA's denial of a first-class medical certificate to a pilot who had suffered a "pure motor stroke" in 1964. The Board noted that the pilot had met the pertinent rules and standards since the stroke, and hence his general medical condition allowed him to safely exercise the privileges of the certificate.

19710917	Sep 17, 1971: The first grant related to vertical/short takeoff and landing facilities under the airport planning grant program went to the New Jersey Department of Transportation to study the development of a special facility to accommodate V/STOL aircraft. (See Apr 29 and Oct 17, 1971.)
19710923	Sep 23, 1971: The United States and 29 other nations signed the Convention for the Suppression of Unlawful Acts Against the Safety of Civil Aviation (known as the Sabotage or Montreal Convention) at a conference held under the auspices of the International Civil Aviation Organization (see Sep 11, 1970). This agreement was directed against offenders who commit acts of violence against persons aboard civil aircraft in flight, or who destroy or endanger such aircraft through means that include sabotage, interference with air navigation facilities, and communication of false information It placed an obligation on contracting states to extradite such offenders or submit their cases to prosecutorial authorities. The convention would go into force 30 days following deposit of instruments of ratification by 10 of the original signatory states. The U.S. deposited its instruments of ratification on Nov 1, 1972, and the treaty went into force on Jan 26, 1973.
19711001	Oct 1, 1971: FAA established the Airway Facilities Service, combining the Systems Maintenance and Facility Installation Services. This action brought the Washington headquarters in line with the regional organization. (See May 16, 1962 and Jan 19, 1970.)
19711004	Oct 4, 1971: FAA commissioned the first operational Automated Radar Terminal System (ARTS) III, at Chicago's terminal radar control facility at O'Hare International Airport. The basic ARTS III, when added to existing airport surveillance radars, permitted the display of such flight information as aircraft identity and altitude directly on the radarscopes for aircraft equipped with transponders. (See Feb 13, 1973.)
19711012	Oct 12, 1971: FAA abolished the Office of Supersonic Transport Development and established the Supersonic Transport Office under the Associate Administrator for Engineering and Development to continue SST engineering and research activities. The agency also established a SST Contracts Branch in the Logistics Service to perform the contracting and procurement functions for the negotiation, administration, and termination of SST contracts. (See Mar 24, 1971.)
19711014	Oct 14, 1971: FAA completed lowering the base of area positive control from 24,000 to 18,000 feet over the entire contiguous 48 States with the lowering of the base over the southeastern United States. The base had previously been lowered over the northeastern and north central United States on Nov 9, 1967; the northwestern and northern tier states on May 27, 1971; the west central states on Jul 22, 1971; and the central and southwestern states on Aug 19, 1971.

	The action meant that all aircraft flying between 18,000 and 60,000 feet over the contiguous United States would receive separation services under direct FAA air traffic control. The agency had considered the measure for a number of years, since the increasing closure speeds of aircraft reduced the time available for pilots operating under Visual Flight Rules to detect potential collisions and take evasive action. (See Nov 9, 1967.)
19711017	Oct 17, 1971: Opening of the first officially designated STOLport solely for short takeoff and landing aircraft took place at Disney World, near Orlando, Fla. (The term "STOLport" had previously been applied to that portion of an airport reserved for STOL aircraft, and not to the entire facility.) The facility was the first such site in a projected intrastate STOL transportation system. (See Aug 5, 1968, and Jul 26, 1972.)
19711118	Nov 18, 1971: Public Law 92-159 prohibited airborne hunting of birds, fish, and other animals. The act prescribed criminal penalties for shooting, attempted shooting, or harassing of wildlife from an aircraft.
19711123	Nov 23, 1971: A Federal arbitrator approved a two-man cockpit crew for Aloha's 737 flights, basing his decision on the low-density, fair-weather conditions under which Aloha operated. On May 8, 1973, however, a federal arbitrator's ruling in another dispute approved a three-man crew for the 737 flights of Wien Air Alaska. (See Jul 21, 1969 and Nov 18-27, 1974.)
19711124	Nov 24, 1971: The first in a series of hijackings involving extortion occurred when a passenger on a flight from Portland to Seattle successfully demanded $200,000 and four parachutes, then parachuted from the rear stairway of the Boeing 727. The hijacker--who used the name Dan Cooper, but became known as D.B. Cooper in the press--was never found. (In Feb 1980, however, tattered bills from his loot were discovered along the Columbia River in Washington.) Another incident involving a demand for ransom and parachutes occurred on Dec 24, 1971, and 17 more extortion attempts on U.S. air carriers were made during the next 6 months. (See Mar 7-9, 1972.)
19711127	Nov 27, 1971: An amendment to the Airport and Airway Development Act of 1970 (see May 21, 1970), Congress specified that:
	* No trust fund money could be appropriated to carry out any program or activity under the Federal Aviation Act other than "acquiring, establishing, and improving air navigation facilities. . ."
	* Any excess of trust fund receipts over airport-airway capital investments could be applied toward the cost of administering the airport and airway development programs.
	* Funds equal to the minimum amounts authorized for each fiscal year for airport and airway development must remain available in the trust fund until appropriated for airport-airway development.

Congress passed this amendment when the Nixon administration submitted a budget request for fiscal year 1972 that proposed to obligate less than the minimum annual levels specified in the Airport-Airway Act for airport-airway capital investments. The Department of Transportation, in a move dictated by the newly formed Office of Management and Budget, proposed to use the difference between the revenues generated by user charges and the amounts requested for airport-airway development to help meet the operational needs of air navigation and air traffic control. This proposed use of the trust fund for noncapital expenditures was substantial. For example, the submission proposed to pay the salaries of all but 6,253 of FAA's 54,550 employees with trust fund money generated by user taxes. Such use of trust fund money would have been in line with Congress's intent only if the administration had requested funds for airport and airways development at the minimum levels authorized by the act. The administration's requesting less than the minimum was seen by Congress as an attempt to raid the trust fund for operational expenses.

In addition, the amendment extended the deadline for submission to Congress of the report of the Aviation Advisory Commission for one year (see Jan 3, 1973), and also extended the deadline for certificating airports serving air carriers for one year (to May 21, 1973: see that date). (See Jun 18, 1973.)

19711202 Dec 2, 1971: FAA established a program to expedite departures of general aviation aircraft at certain airports when local weather conditions precluded VFR operations. Known as "card-a-clearance," this program used preprinted cards containing three standard departure clearances. By referring to these cards, pilots avoided long and repetitious clearances on congested frequencies and also reduced the possibility of misunderstanding of air traffic control instructions. The program was of special value at airports with a heavy volume of general aviation traffic and recurrent smog or fog problems. Prior to implementation of this program, FAA conducted a successful year-long test of the procedures at three general aviation airports in the Los Angeles Basin.

19711231 Dec 31, 1971: FAA terminated its four-year-old policy of granting immunity from enforcement action to airmen reporting near midair collisions. FAA had adopted this policy on Jan 1, 1968, to encourage full reporting of near midair collisions, and thus gather adequate data for developing midair collision prevention programs. In 1969, FAA published a midair collision report based on data collected during 1968; data collected in subsequent years substantiated the findings of the 1969 report. FAA saw no need, therefore, to continue its immunity policy. (See Jul 15, 1969, and Apr 8, 1975.)

1972

19720103 Jan 3, 1972: Under a policy change effective this date, certain privately owned public-use airports became eligible for FAA facilities such as control towers, airport surveillance radars, terminal navigation aids, instrument landing systems, visual approach aids, and related equipment and services. Previously, only publicly owned airports were eligible for this assistance. The agency described the new policy as a response to a shortage of facilities serving the growing civil air fleet and to mounting opposition to development of new airports.

19720105 Jan 5, 1972: Betty C. Dillon, a career civil servant, became the first woman to be sworn in as Minister of the U.S. Government to the International Civil Aviation Organization (ICAO).

19720121 Jan 21, 1972: FAA commissioned the first operational Category IIIa instrument landing system at Dulles International Airport. The system, a British-made STAN 37/38, allowed qualified crews flying properly equipped aircraft to land with a runway visibility range (horizontal visibility) of 700 feet and a decision height (vertical visibility) of zero. Previously, the lowest landing minimums had been a 100-foot decision height and a 1,200-foot RVR, the Category II criteria (see Nov 3, 1967). FAA outlined criteria that had to be met before Category IIIa minimums could be approved--airport and ground facilities, airborne systems, pilot training and proficiency requirement, operations procedures, and maintenance standards--in an advisory circular published on Dec 14, 1971. (The Lockheed L-1011 became the first newly certificated aircraft to be equipped with flight guidance equipment that met the Category IIIa criteria.) (See Sep 1972.)

19720126 Jan 26, 1972: FAA began a series of briefings for manufacturers as part of a new program to promote the export of U.S. aeronautical goods and services. The action was a response to requests by aeronautical manufacturers for the government to develop mechanisms to help them deal with stiffening foreign competition in world markets. The program involved: providing information on export opportunities through reports on the implementation of regional air navigation plans of the International Civil Aviation Organization; and formulating plans for eventual revision of bilateral airworthiness agreements as a way of facilitating U.S. exports and promoting worldwide commonality in airworthiness standards. (See Calendar year 1974.)

19720127 Jan 27, 1972: The Secretary of Transportation signed an agreement transferring certain emergency preparedness functions from the Civil Aeronautics Board (CAB) to FAA. The agreement applied to the air transportation activities and services provided by U.S. scheduled and supplemental air carriers operating under the economic regulatory authority of CAB and assigned to the War Air Service Program. It excluded air carrier services provided to the Department of Defense under the Civil Reserve Air Fleet Program. Under the agreement, FAA had responsibility for: assessing enemy-inflicted damage relating to air carriers; assisting air carriers in submitting claims for and restoring materials and services needed to resume air service deemed essential by CAB.

19720127	Jan 27, 1972: Secretary of Transportation John Volpe announced that FAA had awarded contracts to six companies for the initial phase of a planned five-year development program for a microwave landing system (MLS) for use by civil and military aircraft. (See Jul 1971 and Mar 14, 1973.)
19720131	Jan 1972: FAA announced the Executive Development Program to identify and develop individuals in supervisory and managerial positions (GS-14 and -15) who had potential for occupying the agency's executive positions. On Sep 17, an initial group of eight candidates began their training.
19720202	Feb 2, 1972: FAA published a rule requiring scheduled air carriers and certain commercial operators of large aircraft to implement a passenger and baggage screening system acceptable to the Administrator before Feb 6, 1972 (see Jul 17, 1970, and Mar 7-9, 1972). The agency stated its opinion that the "simple and inexpensive" system used by some carriers would have prevented the majority of recent hijackings if used to the fullest extent possible (see Jan 1969).
	On the same day, at FAA request, the Federal Communications Commission issued a notice which informed broadcasters and FCC licensees that the Communications Act of 1934 prohibited unauthorized broadcast of FAA air-to-ground communications. This action followed instances in which FAA's communications were monitored and rebroadcast, seriously hampering FAA's efforts to control aerial piracy.
19720207	Feb 7, 1972: FAA announced that air traffic controllers fired for their activist roles in the 1970 strike could apply for re-employment. Of the 52 controllers dismissed, 46 applied and were rehired. (See Jan 29, 1971, and Oct 20, 1972.)
19720210	Feb 10, 1972: FAA consolidated the National Airspace System Program Office (NASPO) with the Systems Research and Development Service. On Jul 26 FAA abolished NASPO, established in 1966 (see Apr 25, 1966). As the installation of NAS En Route Stage A at FAA's ARTCCs was proceeding satisfactorily, there was no further need for a separate office to manage this program. Also, effective Jul 26, FAA transferred NASPO's facilities systems and ARTCC building program functions to the Airway Facilities Service.
19720229	Feb 29, 1972: Following a nationwide election, the National Association of Air Traffic Specialists (NAATS) received Department of Labor certification as the national exclusive representative for all Flight Service Station specialists, some 3,000 employees. On Jun 1, 1972, FAA and NAATS concluded an agencywide collective bargaining agreement, the first such contract between FAA and a national labor organization and the first in a series of FAA/NAATS contracts.

19720306

Mar 6, 1972: FAA announced the establishment of an FAA-Industry Area Navigation Task Force to advise and assist the agency in the further application of its area navigation system. The action followed a Jan 24-25, FAA-sponsored international symposium on area navigation that pointed up a need to review FAA's program. In subsequent months the task force conducted in-depth studies and tests to assess the system's value and to determine how area navigation could most effectively be implemented. The test results generally confirmed the advantages previously supposed (see Oct 1, 1969) -- that area navigation provided cost benefits by allowing an aircraft en route to stay higher longer and thus conserve fuel, and to arrive at the descent point at precisely the correct time for a letdown without delays. In addition, by extensively analyzing terminal area operations, the tests confirmed that area navigation equipment could be used to move traffic at the same level of efficiency as radar vectors while reducing controller workload by restoring greater responsibility to the cockpit. By the end of fiscal 1973, a nationwide system of high-altitude area navigation routes had been established consisting of approximately 156 route segments.

19720309

Mar 7-9, 1972: Sabotage incidents prompted new security measures. On Mar 7, a bomb planted as part of an extortion plot against Trans World Airlines was discovered and defused aboard an airliner at New York's Kennedy Airport. On Mar 9, another bomb damaged a TWA airliner parked at Las Vegas, and a third was found aboard a United Air Lines jet at Seattle. That same day, President Nixon ordered into immediate effect an FAA rule published on Mar 7 that had required scheduled air carriers and certain commercial operators of large aircraft to submit written security programs no later than Jun 5, 1972. The President's directive required the airlines to implement their programs immediately, and to submit them for formal approval by May 8. The programs were to prevent or deter unauthorized persons, baggage, or cargo from entering the carrier's aircraft, and were to include the procedures the carrier intended to use in the mandatory passenger screening system (see Feb 2, 1972). The rule also specified certain procedures to be followed in the event of a bomb or air piracy threat.

On Mar 9, the President also ordered that new security rules for airport operators be expedited. On Mar 18, 1972, FAA published a rule applicable to operators of airports regularly served by air carriers using large aircraft. Such operators were required to take prescribed actions to prevent or deter unauthorized access to designated air operations areas, and to submit written security programs for FAA approval by Jun 16, 1972. (See Jan 3, 1989.)

On Mar 15, a cabinet-level task force formed by President Nixon and chaired by Transportation Secretary Volpe approved the following steps:

* Increased personnel for FAA's Security Task Force.

* Deployment of sky marshals from airborne duty to posts at major airports.

* Increased research and development funding for weapons and explosives detection systems.

* Use of trained dogs for detection of explosives at major airports and the training of additional dogs.

	* Expedited prosecution of extortion and hijacking suspects.
	(See Dec 5, 1972.)
19720407	Apr 7, 1972: The Washington Metropolitan Transit Authority Board gave final approval to a plan for elevated tracks and a station on the rapid rail transit line to run through Washington National Airport. FAA had preferred an underground station feeding directly into the airport's terminal, arguing that such an arrangement would be more convenient, aesthetically preferable, and would allow greater flexibility in future development. The Board countered that an underground station would cost $30 million more than the elevated route and would prevent completion of the system in time for the 1976 Bicentennial celebration.
	Because work could not begin without right-of-way permission from FAA, which operated the airport, the dispute threatened a costly delay in Metro's construction. The White House broke the impasse by approving the elevated plan, basing its decision on a recommendation by the Office of Management and Budget that emphasized budgetary considerations. The first stage of Washington's rapid rail system opened to the public on Jul 1, 1976, but the airport station did not open until after the close of the Bicentennial year.
19720411	Apr 11, 1972: FAA established the General Aviation Accident Prevention Industry Advisory Committee, implementing a recommendation of a 1971 DOT report on general aviation safety (see Sep 15, 1971) and providing an advisory body for FAA's General Aviation Accident Prevention Program (see Nov 30, 1970). The 16-member FAA-Industry panel was slated to function for two years, but was renewed for another term and was not officially terminated until Aug 30, 1976.
19720417	Apr 17, 1972: FAA placed the Office of International Aviation Affairs under the direction of the Associate Administrator for Plans, a change made to reduce the number of people reporting directly to the Administrator. In July 1973, however, FAA placed the office under an assistant administrator reporting directly to the Administrator, thus restoring the previous arrangement.
19720501	May 1, 1972: New crashworthiness and passenger evacuation standards for transport category aircraft became effective this date. The action upgraded requirements in areas that included: seats, berths, safety belts, and harnesses; stowage compartments; items in the passenger or crew compartments that might cause injury in turbulence or interfere with evacuation; cabin interior fire protection; emergency evacuation procedures; emergency exits (their arrangement, marking, lighting, and access); emergency lighting; briefing passengers before takeoff; and structural design to minimize fire hazard due to fuel spillage in the event of partial or complete failure of the landing gear. (See Sep 20, 1967, and Jun 26, 1978.)

19720516 May 16, 1972: President Nixon signed into law the Air Traffic Controllers Career Program Act (Public Law 92-297). The act, an outgrowth of a Corson Committee recommendation (see Jan 29, 1970), authorized controllers to retire after 25 years of active duty, or at age 50 if they had 20 years of active service. The new law also established a mandatory age for retirement at 56, with exemptions at the discretion of the Secretary of Transportation up to age 61. (Normal voluntary retirement for Federal employees came at age 55 after 30 years service, or at age 60 after 20 years; mandatory retirement came at age 70.) The act also provided for a "second career program" of up to two years of training at government expense for controllers who had to leave traffic control work because of medical or proficiency disqualification. The act became effective on Aug 14 and was implemented by FAA on Sep 8.

19720527 May 27, 1972: Transpo 72, a mammoth display of modern transportation technology, with more than 400 exhibits and demonstrations spread many acres, opened at Dulles International Airport. The Department of Transportation staged the public exposition to provide a marketing showcase for advanced transportation systems, equipment, and concepts, and to increase public awareness of the importance of the transportation industry. The show remained open until Jun 4.

19720615 Jun 15, 1972: Effective this date, FAA lowered the numbers of flight attendants required on airliners with certain seating capacities. One flight attendant was now required for planes with 10-50 passenger seats, while on larger aircraft the ratio would be one attendant for every 50 passenger seats or additional fraction of 50 seats. The previous rule had established a standard that began with one attendant for planes with 10-44 passenger seats (see Jun 7, 1965). FAA stated that the change was made possible by upgraded safety requirements for transport category aircraft adopted in recent years (see May 1, 1972).

19720619 Jun 19, 1972: A 24-hour worldwide stoppage of airline traffic declared by the International Federation of Air Line Pilots Associations took place. This action, intended to dramatize the need for sterner measures against hijackers, brought to a standstill domestic and international airline operations in more than 30 countries. The strike officially began at 2:00 a.m. (EST) and was supported by more than 40 of the Federation's 64 units in 62 countries; in the United States, however, following a Federal restraining order on Jun 18, only 10 percent of the Air Line Pilots Association's members joined in the job action. In addition, pilots in Australia, Japan, the Philippines, and most Arab and Communist countries refused to participate in the protest.

19720624	Jun 24, 1972: Responsibility for the civil administration of Wake Island was transferred from FAA to the Air Force (see Sep 4, 1962). This action followed a review of FAA's role on this island, once an important fueling stop for civil and military aircraft crossing the Pacific. With the advent of long-range jet aircraft, civil use of the island's facilities decreased and the Air Force became the principal user. In addition to its civil administration responsibilities on Wake, FAA had maintained the airport, airport traffic control tower, the international flight service station, and various air navigational aids. (After the transfer FAA continued to maintain the air navigation facilities on Wake and provide air traffic control services, until Jun 30, 1973.)
19720630	Jun 1972: Hurricane Agnes caused river flooding and massive property damage in Virginia, Maryland, Pennsylvania, and New York. FAAers throughout the country contributed to a fund to assist their colleagues affected by the storm, and air traffic controllers and other personnel organized an air lift to provide supplies. The Civil Air Patrol, airlines, and the military contributed to the air lift, which expanded from a mission to assist FAA people to include help for thousands of others in the flooded areas.
19720701	Jul 1, 1972: FAA transferred responsibility for its Management Training School from the Office of Training to the Aeronautical Center. (See May 3, 1971.)
19720701	Jul 1, 1972: New Federal Aviation Regulations (Part 152) prescribing policies and procedures for administering FAA's Airport Development Aid Program (ADAP) and Planning Grant Program (PGP) went into effect. The new rule included provisions concerning the economic, social, and environmental effects of airport expansion or site selection, as required by the legislation that had established the two programs (see May 21, 1970). FAA required coordination with state, local, and regional agencies on proposed airport construction projects, as well as public hearings on each project.
19720720	Jul 20, 1972: FAA redesignated the Pacific Region the Pacific-Asia Region. At the same time, the agency transferred the responsibility for the geographic area of the People's Republic of China to this region from the Europe, Africa, and Middle East Region. (See Apr 2, 1971.)
19720726	Jul 26, 1972: FAA retitled the V/STOL (vertical/short takeoff and landing) Special Projects Office the Quiet Short-Haul Air Transportation System Office. The new title better described the broadened functions of the office, which was charged with fostering a short-haul air transportation system acceptable to the public. (See Apr 29, 1971, and Jun 11, 1974.)
19720801	Aug 1, 1972: FAA implemented a new standard "Get-'Em-High Earlier" departure procedure to reduce jet aircraft noise over airport communities nationwide. The new departure procedure, developed jointly with the Air Transport Association, was to be used by 23 U.S. airlines while operating out of most of the nation's air carrier airports. The pilots would climb at full power to 1,500 feet, instead of 1,000 feet under the old system. Noise relief due to the higher alititude would be most noticeable from three to six miles from lift-off. The new "Get-'Em-High" procedure supplemented the existing "Keep-'Em-High" program. (See Feb 4, 1971, Dec 23, 1976, and Jan 19, 1979.)

19720801	Aug 1, 1972: FAA inaugurated the En Route Weather Advisory Service (EWAS) program at four Flight Service Stations: Seattle, Portland, Oakland, and Los Angeles. This service, designed to reduce weather-related general aviation aircraft accidents, provided en route pilots with currrent weather information along their intended route. Flight Service Station specialists trained in the collection and dissemination of aviation weather data manned the EWAS units. Each unit, in addition to obtaining weather information through normal teletype and facsimile channels, was linked by direct telephone line with the nearest National Weather Service forecast office. FAA completed the program in the summer of 1978, under the name En Route Flight Advisory Service (EFAS), when it commissioned the service at the last of 44 designated Flight Service Stations.
19720801	Aug 1, 1972: Northeast Airlines merged into Delta Air Lines. Northeast began as Boston-Maine Airways, which started operations on Aug 1, 1931, suspended flights in 1932, and resumed on Aug 11, 1933. The airline had adopted the name Northeast on Nov 19, 1940.
19720821	Aug 21, 1972: FAA placed its Office of Appraisal under the executive direction of the Associate Administrator for Administration. Previously, this office reported directly to the Administrator. The Administrator had announced on Jun 16 his intention to make this organizational change as part of a continuing effort to reduce the number of offices reporting directly to him. (See Apr 17, 1972, and Jun 11, 1974.)
19720915	Sep 15, 1972: A 17-nation anti-hijacking conference sponsored by the Legal Subcommittee of the International Civil Aviation Organization was concluded. The conference, convened in response to the persisting high incidence of aircraft hijackings during 1972, had attempted to draw up a treaty imposing economic sanctions against those nations that provided havens to aircraft hijackers and saboteurs. The failure to agree on a draft resolution cosponsored by the U.S. and Canada, however, brought the meeting to an end.
19720917	Sep 17, 1972: Effective this date, CAB replaced the 12,500 gross weight limit for air taxi aircraft with a 30-seat, 7,500 payload limit. This change in CAB's system of economic regulation was intended to help the development of service by those scheduled air taxis now designated commuter airlines (see Jul 1, 1969). CAB also hoped to encourage the development of a short takeoff and landing (STOL) transportation system in high density areas.
19720930	Sep 1972: Trans World Airlines received FAA's first authorization to operate at Category IIIa weather minimums. Under the new landing minimums, TWA could operate their Lockheed L-1011 aircraft at Dulles International Airport down to a minimum visibility of 1,000 feet runway visual range (RVR), and after gaining operational experience at this altitude, apply for minimums as low as 700 feet RVR. (See Jan 21, 1972.)
19721020	Oct 20, 1972: The Federal Labor Relations Council certified PATCO as the sole bargaining unit for air traffic controllers. (See Feb 7, 1972, and Mar 17, 1973.)

19721023	Oct 23, 1972: Effective this date, FAA tightened the safety operating standards for large airplanes, and for turbine-powered airplanes with more than one engine, in private carriage. The new requirements included: survival and radio equipment for extended overwater operations; provisions regarding minimum altitudes; passenger briefings; a fuel reserve of 30 minutes for Visual Flight Rules operations; icing equipment; a flight engineer and a second-in-command pilot on certain airplanes; a flight attendant on an airplane with over 19 passengers on board; and an aircraft inspection program. The new rule was part of a series of actions following an accident on Oct 2, 1970 (see that date and Jan 3, 1973.)
19721027	Oct 27, 1972: Enactment of Public Law 92-574, the Noise Control Act of 1972, defined the respective responsibilities of FAA and the Environmental Protection Agency (EPA) in the control of aircraft noise. EPA's role under the act was to recommend noise standards to FAA based on considerations of public health and welfare. FAA, in turn, considered the recommendations, and determined whether the standards proposed by EPA were consistent with safety, economically reasonable, and technologically practicable, and subsequently take appropriate action to implement and enforce them. (See Jul 21, 1968.)
19721029	Oct 29, 1972: Four fugitives killed a ticket agent and hijacked an Eastern Air Lines Boeing 727 at Houston, Tex., and forced it to fly to Cuba. This was followed by an even more sensational incident on Nov 10-12 when three wanted criminals hijacked a Southern Airways DC-9 at Birmingham, Ala. During the following 29 hours, they flew to: Jackson, Miss.; Cleveland, Ohio; Toronto, Ont.; Lexington, Ky.; Chattanooga, Tenn.; Havana, Cuba; Key West, Fla.; and Orlando, Fla. In a desperate attempt to keep the DC-9 on the ground at Orlando, FBI agents shot out its tires. The hijackers responded by seriously wounding the copilot and ordering a takeoff. The pilot succeeded in clearing the runway and making a second and final landing in Havana. The four hijackers were initially imprisoned in Cuba, but were released. U.S. officials subsequently arrested all four, the last being sentenced in 1994. This incident contributed directly to issuance of an anti-hijacking rule (see Dec 5, 1972), and to negotiation of a hijacking agreement between the Nixon Administration and Cuba (see Feb 15, 1973).
19721031	Oct 31, 1972: FAA and the Office of Minority Business Enterprise signed an agreement to promote greater participation by the minority business community in the operation of concessions at the nation's public airports. Under the agreement, FAA would require airports receiving Airport Development Aid Program funds to inform OMBE of all pending contracts and potential new contracts and to cooperate with OMBE in affirmative action.
19721122	Nov 22, 1972: President Nixon lifted a 22-year-old restriction on travel of U.S. airliners to the People's Republic of China as part of a general rapprochement between the two countries. Such flights had been banned since 1950 by an Excutive Order issued by President Truman during the Korean War.

19721205 Dec 5, 1972: A landmark FAA antihijacking emergency rule issued this date required U.S. air carriers, beginning on Jan 5, 1973, to inspect all carry-on baggage for weapons or other dangerous objects and scan each passenger with a metal detector (magnetometer) before boarding or, if a detector was not available, conduct a physical search, or pat down. (See Aug 5, 1974.) If a passenger refused to consent to a search, he or she would not be permitted to board. The rule further required, beginning on Feb 5, 1973, that the nation's 531 air carrier airports have a law enforcement officer in the boarding area during the screening and boarding process. The critical difference between this rule and previous antihijacking measures was the universality of the new regulation. Previously, FAA had required air carriers to conduct a weapons scan of only those passengers who fitted a hijacker profile--about one percent of the 500,000 passengers boarding airliners daily. (See Oct 29, 1972.)

19721217 Dec 17, 1972: FAA Administrator John H. Shaffer received the Wright Brothers Memorial Trophy, presented by the National Aeronautic Association for outstanding contributions to aviation. Shaffer was the first FAA chief to win the prestigious award while holding office.

19721218 Dec 18, 1972: FAA commissioned the first of 64 standardized, prefabricated airport towers, ordered in April, at the Chino, Calif., airport. FAA planned to complete installation of all 64 towers at low and medium activity airports within 15 months.

19721226 Dec 26, 1972: A National Transportation Safety Board study group investigating the safety of air taxi and commuter aircraft operations released its findings and recommendations to the public. The study group was formed after a series of air taxis accidents in late Oct 1971 claimed 39 lives. The panel recommended more stringent safety requirements for the industry, including higher qualifications for air taxi and commuter pilots, more thorough training for maintenance personnel, and improved oversight by FAA. (See Dec 1, 1978.)

19721229 Dec 29, 1972: An Eastern Air Lines Lockheed L-1011 crashed in the Everglades northwest of Miami, killing 99 of the 176 persons aboard. Two survivors died later as a result of their injuries in this first fatal crash of a wide-body airliner. The National Transportation Safety Board cited the probable cause as the flight crew’s failure to monitor flight instruments. Preoccupied with a malfunction of the landing gear position indicator, they allowed the aircraft to descend unnoticed.

19721231

Dec 31, 1972: The crash of a DC-7 on takeoff from San Juan, Puerto Rico, killed baseball star Roberto Clemente and four other persons on a relief mission to Nicaragua. Relatives and representatives of passengers killed sued the Federal government, alleging that FAA employees negligently failed to warn that the aircraft was overweight and lacked proper flight crew. The plaintiffs cited an order by the director of FAA's southern region concerning inspection of large turbine-powered aircraft. A U.S. district court found the government liable. On Dec 16, 1977, however, an appeals court reversed the decision, ruling that the regional director's order did not give rise to legal obligation sufficient to support the plaintiff's claim. While recognizing FAA's safety mission, the court ruled that Congress could not have intended to authorize such FAA officials to create a legal duty of care between the Federal government and a particular class of passengers. The Court drew a distinction between an aircraft inspector and an air traffic controller, who "owes a duty to those dependent on the quality of his performance."

1973

19730103	Jan 3, 1973: FAA issued a truth-in-leasing clause requirement for leases and conditional sales contracts involving large civil aircraft so that all concerned parties would know who had responsibility for the operation and maintenance of the aircraft and for complying with applicable Federal Aviation Regulations. (See Oct 2, 1970.) Later, a rule published on Nov 3, 1977, required the lessee or conditional buyer of a large civil aircraft to give notification 48 hours before its first flight to enable FAA to conduct the necessary surveillance or inspection.
19730103	Jan 3, 1973: Chairman Crocker Snow submitted to Congress the report of the Aviation Advisory Commission, which had been established by the Airport and Airway Development Act of 1970. Sworn in on Dec 17, 1970, the commission members had spent two years developing their report on the long range needs of U.S. aviation. Their recommendations included establishment of an Under Secretary of Transportation for Aviation with responsibility for a National Aviation Plan.
19730106	Jan 6, 1973: The Federal Aviation Administration announced that it had awarded a contract for an electronic voice switching (EVS) system, which would increase communications efficiency at air route traffic control centers and would eventually replace all existing FAA radio control and signaling equipment at the center and remote sites. In Aug 1974, however, FAA Administrator Alexander Butterfield cancelled the contract because of increasing cost estimates and schedule delays.
19730131	Jan 1973: Frontier Airlines hired Emily Howell (later Emily Warner) as the first woman member of a flight deck crew on a trunk or regional air carrier since Helen Richey's brief career with Central Airlines in 1934-35.
19730202	Feb 2, 1973: Claude S. Brinegar became Secretary of Transportation. He succeeded John A. Volpe, who left the Department effective this date to become Ambassador to Italy. President Nixon had announced his intention to nominate Brinegar, an executive of a California oil company, on Dec 7, 1972. The Senate confirmed the appointment on Jan 18. (See Dec 18, 1974.)
19730205	Feb 5, 1973: FAA Administrator John H. Shaffer established the Executive Committee (EXCOM) to review and establish agency policies. A year later, in a move intended to increase accountability among managers, Administrator Butterfield suspended the EXCOM, as well as the Agency Review Board and the Regulatory Council. Citing the three committees' usefulness in promoting communication and orderly decision making, Acting Administrator James E. Dow reinstated them in April 1975. On Aug 31, 1977, however, Administrator Langhorne Bond abolished the EXCOM, and on Dec 9, 1977 abolished the Agency Review Board. Bond also discontinued the Regulatory Council. (See Jan 24, 1989.)

19730213 Feb 13, 1973: Ceremonies at the Memphis Air Traffic Control Center celebrated the center's switch over to computer processing of flight-plan data, completing Phase One of the NAS En Route Stage A, FAA's decade-long program to automate and computerize the nation's en route air traffic control system (see Sep 26, 1964). With the new computer installation at Memphis, all twenty ARTCCs in the contiguous 48 states gained an automatic capability to collect and distribute information about each aircraft's course and altitude to all the sector controllers along its flight path. Pilots still had to file flight plans at flight service stations and military operations offices, but now computers would handle the centers' "bookkeeping functions" of assigning and printing out controller flight strips. The new computers also had the ability to record and distribute any changes registered in aircraft flight plans en route. The system eventually tied in with the Automated Radar Terminal System (ARTS III) units then being installed at major airports (see Oct 4, 1971 and Feb 15, 1973). Phase Two of the en route automation program was still under way; it would provide controllers at the twenty centers with new radar displays that would show such vital flight information as altitude and speed directly on the screen. (See Feb 18, 1970 and Jun 14, 1973.)

19730215 Feb 15, 1973: The United States and Cuba signed an anti-hijacking agreement calling for the two nations to extradite or punish any person "who seizes, removes, appropriates or diverts from its normal route or activities an aircraft or vessel" of one country and takes it to the other. The pact was to run for five years, but Cuba abrogated it on Oct 15, 1976, on grounds of alleged American involvement in the explosion of a Cuban airliner. (See Oct 29, 1972.)

19730215 Feb 15, 1973: FAA announced that production had been completed on all 64 of the new computerized automated radar terminal systems (ARTS III), marking an important milestone in the agency's air traffic control automation program. (See Feb 13, 1973 and Aug 13, 1975.) The ARTS III system electronically tagged radar blips on the controller's scope with luminous letters and numbers called alphanumerics that provided the target aircraft's identiry and altitude.

19730314 Mar 14, 1973: The Department of Transportation announced that four companies had been selected to continue development of a common civil-military microwave landing systems (MLS). Under this Phase II of the MLS developmental program, each contractor had to demonstrate the feasibility of its proposed system design to meet the full range of civil and military requirements. (See Jan 27, 1972, and Jun 7, 1973.)

19730314 Mar 14, 1973: Alexander P. Butterfield became the fifth FAA Administrator, succeeding John H. Shaffer (see Mar 24, 1969), whose resignation was one of many accepted by President Nixon in a reorganization of the Executive Branch. Butterfield's selection had been announced on Dec 19, 1972, and his nomination submitted to the Senate on Jan 4, 1973. Questions were raised about his eligibility, however, since he was a retired Air Force colonel and the FAA Administrator was prohibited by law from having a military affiliation. When congressional exemption from this statute appeared unlikely, Butterfield resigned his Air Force commission. His nomination was resubmitted to the Senate on Feb 26 and confirmed on Mar 12.

	Born in Florida in 1926, Butterfield spent much of his youth in California and attended UCLA for two years before receiving his B.S. degree from the University of Maryland. (He later earned an M.S. degree in international affairs from George Washington University and graduated from the National War College.) During 20 years with the Air Force, Butterfield had flown as a command pilot and member of a jet aerobatic team. His decorations included the Legion of Merit and Distinguished Flying Cross. Butterfield had commanded the USAF's low and medium level air reconnaissance operations in Southeast Asia. His staff positions included duty as senior aide to the Commander in Chief Pacific Air Forces, and Military Assistant to the Special Assistant to the Secretary of Defense. He was serving as the senior U.S. military representative to Australia when he retired from the Air Force in 1969 to become Deputy Assistant to President Nixon. Butterfield moved from this post to FAA, serving as Administrator for just over two years (see Mar 25, 1975).
19730317	Mar 17, 1973: Negotiators signed the first labor contract between FAA and the Professional Air Traffic Controllers Organization (PATCO). Approved and effective on Apr 4, the one-year agreement contained 56 articles that included provisions on a variety of issues including payroll deduction of union dues and “familiarization flights” by controllers in airline cockpits. (See Oct 20, 1972, and May 7, 1975.)
19730427	Apr 27, 1973: An FAA rule imposing a virtual ban on civilian supersonic flights over the United States went into effect. The rule, first proposed on Apr 10, 1970, prohibited any operator of a civil aircraft from exceeding the speed of sound (Mach 1) when flying over the land mass or territorial waters of the United States, except when such operations would not cause a "measurable sonic boom overpressure to reach the surface." This wording left room for certain authorized operations at the lower end of the supersonic speed range. The rule was not seen as a bar to planned operations of the Anglo-French supersonic transport Concorde, which was expected to fly subsonic over U.S. territorial waters and mainland. (See Feb 4, 1976.)
19730430	April, 1973: Federal Express began flight operations from its base at Memphis, Tenn., offering door-to-door package delivery by air express, a popular service that soon inspired immitators. The company expanded rapidly as airline deregulation began in the late 1970s, and it grew even more when it acquired the Flying Tiger Line on Jan 31, 1989.
19730430	Apr 1973: FAA World reported that the last airway light beacon, on Whitewater Hill near Palm Beach, Calif., had been decommissioned. This type of beacon had reached its peak in 1946, when 2,112 were in service. Their number declined during the 1950s, but a few had remained to mark obstructions or passes. (See Dec 7, 1926.)
19730510	May 10, 1973: The Civil Aeronautics Board published the first rule regulating smoking on aircraft for reasons of consumer comfort and protection. The Board required airlines to provide separate sections for smokers and nonsmokers. Subsequent modifications to the rule included a 1981 requirement that airlines guarantee a seat in the nonsmoking section to every nonsmoker who met the check-in deadline. (See Mar 19, 1970, and Jun 20, 1984.)

19730514 May 14, 1973: In Burbank v. Lockheed Air Terminal, the U.S. Supreme Court prohibited states and municipalities from using their police powers to impose curfews on jet aircraft operations. The City of Burbank, Calif., had passed an ordinance banning turbojet takeoffs and landings between 11 p.m. and 7 a.m. at the Hollywood-Burbank Airport, a privately owned and operated facility. Pointing to the Noise Control Act of 1972 (see Oct 27, 1972), the Supreme Court concluded that the noise-regulatory powers granted by Congress to FAA and the Environmental Protection Agency (EPA) were so pervasive that the Federal government had preempted state and local authority. The Court also noted that upholding the ordinance could lead to "fractionalized control" of takeoffs and landings that would severely limit FAA's flexibility in controlling air traffic. Under the Federal Aviation Act, air traffic control had been preempted by FAA. Thus, the Court concluded, it was "not at liberty to diffuse the powers given by Congress to FAA and EPA . . . . If that change is to be made, Congress alone must do it." In what came to be known as the "Burbank exception," however, the Court stated that the Burbank decision applied to the exercise of police power, and did not pertain to "what limits, if any, apply to a municipality as a proprietor." (See Mar 5, 1962, and Oct 17, 1977.)

19730514 May 14, 1973: The National Aeronautics and Space Administration's Project Skylab orbited the first U.S. space station, designated the Orbital Workshop (see Apr 19, 1971). The Workshop was damaged during the launch, but astronauts were able to make repairs during the first of three flights to the station during 1973. The station later disintegrated when it entered the atmosphere on Jul 11, 1979, scattering debris along a path from the Indian Ocean to western Australia.

19730521 May 21, 1973: By this date, U.S. airports serving scheduled air carriers that held CAB certificates of public convenience and necessity were required to have FAA operating certificates. The regulation (which implemented provisions of the Airport and Airway Development Act of 1970, as amended Nov 27, 1971) set standards for: the marking and lighting of areas used for operations; firefighting and rescue equipment and services; the handling and storing of hazardous materials; the identification of obstructions; and safety inspection and reporting procedures. It also required airport operators to have an FAA-approved operations manual. FAA awarded the first operating certificate to Boston Logan airport on Sep 1, 1972, and had certificated nearly 500 airports by the May 21, 1973, deadline. (See Aug 21, 1974, and Oct 18, 1977.)

19730603 Jun 3, 1973: The crash of a Tupolev TU-144 during a demonstration flight at the Paris Air Show dealt a serious blow to the Soviet supersonic transport program. (See Dec 31, 1968, and Dec 26, 1975.)

19730604 Jun 4, 1973: FAA published a rule requiring aircraft in designated airspace to carry an improved radar beacon transponder with Mode C automatic altitude reporting capability, as well as the ability to transmit identity codes (see Jun 25, 1970). The implementation schedule was: in Group I terminal control areas (TCAs), Jul 1, 1974; in Group II TCAs, Jan 1, 1975 (see Apr 14, 1975); and above 12,500 ft MSL, Jul 1, 1975. (See Nov 1, 1985.) Due to equipment supply problems, FAA later granted a 6-month extension of the deadlines concerning TCAs. (See Jan 1, 1974.)

19730607 Jun 7, 1973: A rule published this date and effective July 6 required air carriers and air taxi operators to establish training programs for personnel having responsibilities for the safe carriage and handling of hazardous cargo. After Dec 6, only personnel who had completed this training would be allowed to perform such duties. The regulation also required that the pilot in command be notified in writing by the operator of the presence of hazardous cargo aboard an aircraft. FAA issued the rule against a background of growing public and congressional concern about transport of hazardous materials by air. The dangerous potential of “hazmat” was confirmed when a Pan American 707 freighter crashed on Nov 3 at Boston with the loss of all three persons aboard. Smoke, probably caused by leaking acid, had almost blinded the crew and prevented them from coordinating their actions during the landing. (See Jan 3, 1975.)

19730607 Jun 7, 1973: To fulfill a near term requirement for an approach guidance system for airports, FAA announced that it had decided to proceed with the selection of an interim standard microwave landing system (ISMLS), pending completion and implementation of the MLS development program. On Aug 28, 1974, FAA announced that it had selected the ISMLS designed by Tull Aviation Corp. (See Mar 14, 1973, and Feb 27, 1975.)

19730614 Jun 14, 1973: The Los Angeles ARTCC became the first center to achieve initial operational capability with computer-driven radar displays capable of showing identity and three-dimensional position information on aircraft targets. Radar data processing began Phase Two of the ARTCC automation program. (See Feb 13, 1973 and Aug 26, 1975.)

19730618 Jun 18, 1973: President Nixon signed into law the Airport Development Acceleration Act of 1973 (Public Law 93-44), which further amended the basic Airport and Airway Development Act of 1970 (see May 21, 1970). It was the second time the act had been amended in its three-year existence (see Nov 27, 1971). The 1973 amendment: increased the annual funding level of the Airport Development Aid Program (ADAP) from $280 million to $310 million; raised the Federal share for ADAP development of general aviation airports, reliever airports, and the smaller air carrier airports (identified as those that enplaned less than 1 percent of the passengers enplaned by all the air carriers certificated by the CAB) from 50 percent to 75 percent; and obligated the Federal government to pay 82 percent of the costs of safety equipment required for airport certification, as compared to the 50 percent for which it had previously taken responsibility. The amendment also prohibited states and localities from levying a "head tax" on passengers. (See Jun 30, 1975.)

19730619 Jun 19, 1973: The U.S. and U.S.S.R. signed an agreement on joint cooperation in the field of transportation calling for exchanges of information in areas that included the safety and efficiency of civil aviation. As a result of the pact, FAA officials and their Soviet counterparts held meetings on a variety of technical subjects. The agreement was one of a series signed by officials during a summit meeting between President Nixon and Soviet leader Leonid Brezhnev. The last of these agreements, signed on Jun 23, provided for an expansion of direct airline flights between the two countries. Previously, Pan American and Aeroflot had each been allowed two round-trip flights per week between New York and Moscow. The two airlines were now permitted up to three flights per week, and Pan Am received authorization to land at Leningrad, and Aeroflot at Washington. During 1978, however, Pan American discontinued operations in the U.S.S.R. as part of a cutback on its European flights. Under President Carter, Aeroflot service was reduced to two flights per week, effective Jan 13, 1980, as part of a response to Soviet military actions in Afghanistan. (See Jun 15, 1968, and Dec 29, 1981)

19730629 Jun 29, 1973: FAA discontinued the position of Associate Administrator for Manpower (see Mar 4, 1970) following the retirement of the incumbent on this date; however, the agency did not officially abolish the post until Dec 4, 1974. The Associate Administrator for Administration assumed most of the functions of the position.

19730706 Jul 6, 1973: The Environmental Protection Agency issued air pollution standards for aircraft engines and a timetable for their implementation. Formulated in consultation with FAA, the new standards applied to nearly all civil subsonic aircraft, and limited emission of smoke, carbon monoxide, hydrocarbons, and nitrogen oxides. EPA specified a timetable for compliance that was less stringent than that outlined in its original proposal. To begin implementation of the standards, FAA published a rule on Dec 28, 1973, with an effective date of Feb 1, 1974. The rule required improved combustors to reduce smoke from the JT8D engines used on DC-9 and Boeing 727 and 737 aircraft, and also prohibited fuel venting from turbine engines with thrust of 8,000 lb. or greater. This regulation was followed by several others implementing the EPA standards. (See Dec 31, 1970, and Jan 7, 1980.)

19730708 Jul 8, 1973: FAA commissioned the Flight Inspection National Field Office (FINFO) at Oklahoma City. Established to oversee the operation of the entire flight inspection program within the contiguous 48 States, as well as the Caribbean and North Atlantic areas, FINFO reported directly to the Director, Flight Standards Service. Previously, flight inspection of terminal and air route navigation facilities and communications equipment had been carried out by 17 flight inspection district offices under the jurisdiction of five FAA regions. These district offices were consolidated into a smaller number of Flight Inspection Field Offices (FIFOs) under the new arrangement, which was expected to save $8 million annually.

	(In 1975, FINFO became part of the Flight Standards National Field Office. Subsequently, the flight inspection program was placed under the Office of Flight Operations in 1979, then in 1982 transferred to the Aviation Standards National Field Office, which was renamed the Office of Aviation System Standards in 1992. The FIFOs were renamed Flight Inspection Area Offices in 1993.)
	In addition to establishing FINFO, FAA updated its flight inspection fleet by replacing 47 DC-3s and Convair T-29s with light twin-engine jets: 5 Jet Commanders (delivery starting in Jun 1974) and 15 Saberliner 80s (delivery starting in Apr 1975). Faster and capable of flying longer distances, the new jets were expected to save many flight hours annually. Unlike a group of 5 Saberliner 40 jets that FAA had begun receiving in 1968, these new aircraft were to be equipped with the newly developed Automated Flight Inspection System (AFIS). The AFIS system greatly expanded productivity when the first of the new aircraft began operations in Nov 1974. In addition to Saberliners and Jet Commanders, FAA's worldwide flight inspection fleet by the early 1980s included 3 Convairs (upgraded to the 580 configuration), one Boeing 727, one Fairchild C-123, and a single remaining DC-3 in occasional use. (See Jan 1962 and Oct 23, 1986.)
19730711	Jul 11, 1973: An in-flight cabin fire originating in a lavatory area killed 123 persons aboard a Boeing 707 operated by the Brazilian airline Yarig as the aircraft neared Paris. In partial response to NTSB recommendations following the tragedy, FAA ordered periodic inspections of lavatory trash receptacles to ensure fire containment capability, as well as preflight briefings and other steps aimed at preventing passengers from smoking in lavatories. (See Jun 2, 1983, and Jun 19, 1984)
19730716	Jul 16, 1973: In public testimony before the Senate Select Committee on Presidential Campaign Activities, FAA Administrator Alexander P. Butterfield disclosed the existence of a White House audio taping system, a revelation that became instrumental in implicating President Nixon in the Watergate coverup.
19730723	Jul 23, 1973: An Ozark Airlines Fairchild-Hiller 227B crashed 2.3 miles from St. Louis airport, killing 38 of the 44 persons aboard. The National Transportation Safety Board cited the probable cause as encounter with a downdraft following the captain’s decision to conduct an instrument approach during a thunderstorm. This decision was probably influenced by lack of a timely severe weather warning from the National Weather Service and the improper assessment of weather conditions by flightcrew and flight dispatcher. The Board’s recommendations included a system to improve the dissemination of severe weather information. (See May 19, 1977.)
19730727	Jul 27, 1973: FAA issued a rule requiring air carriers, air travel clubs, and air taxi operators to have electronic public address systems and interphone systems in all aircraft with more than 19 passenger seats. The rule was intended to help keep crew and passengers informed during emergencies. The deadline for compliance was Sep 8, 1975. (See Oct 20, 1989.)

19730907 Sep 7, 1973: On this date, FAA issued the first National Airport System Plan (NASP). The plan forecasted that 700 new airports would be needed in the United States over the next 10 years to keep pace with the projected growth of air traffic. FAA estimated that the overall cost of building the new airports and upgrading existing facilities at $6.3 billion. The Airport and Airway Development Act of 1970 required FAA to prepare the NASP as a guide for future airport development (see May 21, 1970). The NASP replaced the former National Airport Plan (NAP), last published in 1967. (See Aug 2, 1985.)

19730910 Sep 10, 1973: FAA gave its Office of Public Affairs new functions and redesignated it as the Office of Information Services, effective this date, as part of an effort to introduce greater economy and efficiency into the agency (see Jun 19, 1969). The new office consolidated public and employee information activities that had been dispersed over six office elements. It assumed (l) the agency's public affairs functions, (2) the employee communication functions of the Associate Administrator for Manpower, (3) the women's aviation activities of the Office of General Aviation, (4) the audiovisual and public inquiry functions of the Office of Headquarters Operations, (5) the congressional liaison functions of the Deputy Administrator, and (6) the history functions of the Office of Management Systems. (See Jul 12, 1976.)

19730913 Sep 13, 1973: FAA abolished the Office of Headquarters Operations, effective this date, assigning its functions and responsibilities to other offices and services: (l) accounting to a new Office of Accounting and Audit; (2) personnel to the Office of Personnel; (3) security to the Office of Air Transportation Security; (4) data processing to the Office of Management Systems; (5) property management to the Logistics Service; (6) information functions to the new Office of Information Services. (See Jul 1, 1963.)

19730926 Sep 26, 1973: As mandated by Airport and Airway Development and Revenue Acts of 1970, DOT submitted to Congress a Cost Allocation Study on how the Federal costs of the airport and airway system should be shared among the various users. The report concluded that proportion should be about 50 percent for air carriers, 30 percent for general aviation, and 20 percent for the public sector. It also concluded that present taxes failed to recover more than 55 percent of the total costs, with the general aviation sector accounting for the largest short-fall. The study recommended that at least a high percentage of the short-fall be recovered through user fees. A follow-up Part II report was planned but not issued.

19731006 Oct 6, 1973: War broke out between Israel and its Arab neighbors, leading to an Arab oil embargo against the U.S. and other nations deemed to support Israel. The embargo worsened a spreading fuel shortage. On Nov 7, President Nixon asked Congress for new conservation legislation and called for a Project Independence to give the nation the potential to be energy self-sufficient by 1980. (See Nov 20, 1973.)

19731026	Oct 26, 1973: FAA published a rule requiring newly produced aircraft of older type designs, such as the DC-9 or Boeing 727, to meet noise standards for turbojet and transport aircraft. The standards had previously applied only to newly type-certificated aircraft, under a rule effective Dec 1, 1969 (see that date). The new rule became effective in three phases between Dec 1, 1973, and Dec 31, 1974. (See Jan 6, 1975.)
19731116	Nov 16, 1973: Friendship International Airport was renamed Baltimore Washington International. The airport had originally opened on Jun 24, 1950.
19731120	Nov 20, 1973: A seven-point jet fuel conservation plan designed to save up to 20,000 barrels (840,000) gallons of jet fuel per day went into effect. Implemented in response to President Nixon's national campaign to conserve fuel in the aftermath of the Arab petroleum embargo (see Oct 6, 1973), the plan:
	*Revised gate holding procedures to reduce the time aircraft spent with engines running while awaiting takeoff.
	*Revised air traffic flow procedures to reduce time spent aloft in holding patterns.
	*Encouraged increased use of optimum aircraft cruising speeds.
	*Advised controllers to effect fuel savings wherever possible by holding aircraft at high altitudes, assigning optimum altitudes, and minimizing circuitous routings.
	*Encouraged taxiing aircraft to shut down one or more engines where possible.
	*Endorsed the increased use of simulators for airline training and check flights.
	*Encouraged airports to expedite certain runway and taxiway improvements.
	As part of this plan, FAA also advised airport operators to coordinate all construction and maintenance activities with the agency to avoid unnecessary disruptions that might result in excess fuel consumption.
	On Nov 25, the Nixon Administration released a fuel allocation plan under which air carriers would be cut 5 percent below their 1972 usage level on Dec 1, and 15 percent below this level on Jan 7, 1974. In other categories of aviation, planned cuts ranged from 20 percent for activities such as air taxi operations to 50 percent for recreational flying. The reductions met vigorous opposition from the aviation community, and were softened in the rule published on Jan 2, 1974. No restrictions were placed on regional and commuter airlines, air taxis, and certain other commercial and industrial activities. Air carriers were cut by only 5 percent, business flying by 20 percent, and pleasure and instructional flying by 30 percent. Later in Jan, the cut for business flying was changed to only 10 percent, and various types of personal flying received allocations that were no more than 15 percent below previous usage. The fuel shortage eased after the end of the Arab embargo in Mar 1974. (See Dec 26, 1973.)

19731217	Dec 17, 1973: Arab terrorists used incendiaries to kill 30 passengers aboard a Pan American airliner at Rome's Leonardo Da Vinci Airport. They then killed a guard, hijacked a Lufthansa jet, murdered a passenger in Greece, and eventually surrendered in Kuwait.
19731217	Dec 17, 1973: An Iberia Airlines DC-10 crashed on landing at Boston's Logan Airport, causing injuries but no fatalities. Information from the aircraft's digital flight data recorder helped the National Transportation Safety Board establish the presence of wind shear (an abrupt shift in wind speed or direction). Study of the accident led to a new understanding and awareness of the wind shear hazard. (See Jun 24, 1975.)
19731220	Dec 20, 1973: New airworthiness standards became effective for small aircraft (12,500 lbs. or less) applying for type certification after this date. The new rules contained almost 200 changes affecting flight characteristics, structures, design and construction, powerplants, equipment, and operating limitations.
19731226	Dec 26, 1973: President Nixon used a commercial airliner instead of Air Force One to fly from Washington to Los Angeles for a post-Christmas holiday, a move designed to show his concern for fuel savings during the energy crisis. (See Oct 6, 1973.)
19731231	Calendar year, 1973: Not a single airliner was hijacked in the U.S. in 1973, a record traceable at least in part to the stringent airport security measures implemented early in the year. (See Dec 5, 1972.)

1974

19740101 Jan 1, 1974: The Federal Aviation Administration established the first Group II terminal control area (TCA) at St. Louis. Group II TCAs were designed for locations with a lower level of enplaned passengers and aircraft operations than at Group I sites. On Jan 13, the agency completed establishment of nine Group I TCAs when the Dallas-Fort Worth TCA became operational. The other Group I TCAs were at Atlanta, Chicago, Washington, New York, Los Angeles, San Francisco, Boston, and Miami. (See Jun 4, 1973, Aug 1, 1975)

19740102 Jan 2, 1974: Public Law 93-239, enacted on this date, extended the deadline for installation of emergency locator transmitters (ELTs) in certain types of aircraft from Dec 30, 1973, to Jun 30, 1974. The law also added certain new categories of operation, such as flights incident to design and testing, to the list of exceptions to the ELT requirement. (See Dec 29, 1970, and Mar 16, 1978.)

19740113 Jan 13, 1974: Scheduled airline service began at the new Dallas-Fort Worth Regional Airport, which had been dedicated on Sep 22, 1973. Decentralized in design, the $700 million complex was the world's largest airport. (See Sep 1965.)

19740124 Jan 24, 1974: A U.S. appeals court issued a decision upholding the Age-60 rule (see Mar 15, 1960). The court held that FAA rules that apply generally, even though they affect individuals, do not require an adjudicatory proceeding before being adopted. The case grew out of a petition filed with FAA on Jun 5, 1970, by the Air Line Pilots Association. The petition charged that the rule was invalid and requested that it be revoked and that FAA hold "public evidentiary proceedings for the development of a record" that could be used to decide the rule's legality.

Subsequent years saw further legal challenges to the Age-60 rule, but courts continued to uphold it. On Dec 19, 1978, for example, a U.S. appeals court affirmed FAA’s decision to deny the petition of an airline pilot for exemption from the rule. The pilot had argued that his physical condition met medical standards, but the court found that FAA’s application of the age-60 criterion was reasonable. (See Aug 4, 1977.)

19740130 Jan 30, 1974: A Pan American Boeing 707 crashed short of the runway during a rain storm at Pago Pago, American Samoa. The impact force only slightly exceeded that of a normal landing, and only the copilot received traumatic injuries. Yet only 10 of the 101 persons aboard escaped the post-crash fire. Six of these survivors died within nine days. Like two accidents in Chicago in late 1972, the crash helped to renew interest in controlling toxic fumes and other fire hazards. FAA issued four rulemaking proposals on these issues during 1974 and 1975 (see Jun 26, 1978).

	In its initial finding on the probable cause of the accident, the National Transportation Safety Board concluded that the crew had failed to adequately monitor their instruments during the approach (see Apr 26, 1974). Following complaints by the Air Line Pilots Association, the Board issued a revised report in 1977. The new report gave somewhat more emphasis to the presence of visual illusion and wind shear.
19740212	Feb 12, 1974: FAA inaugurated a new program aimed at providing a general review of airworthiness regulations every two years to see that such rules were promulgated or amended in a more timely and systematic manner. The process was to be carried out with the full participation of other Federal agencies, the U.S. aviation industry, and foreign governments, which were invited to submit rulemaking proposals. The suggestions were processed and considered at a Biennial Airworthiness Review Conference, held in Washington on Dec 2-11, 1974. The success of this event lead to the establishment, on Feb 26, 1975, of a similar program for operational rules, and to a Biennial Operations Review Conference in Dec 1975. The two review programs eventually resulted in hundreds of rule changes. It proved impossible to complete the process within a two-year period, however, and a biennial cycle was not established.
19740217	Feb 17, 1974: A soldier flew a stolen Army helicopter to the White House, where guards open fire with shotguns. Wounded in the legs, the soldier landed on the lawn and was taken into custody.
19740222	Feb 22, 1974: At Baltimore-Washington International Airport, a former mental patient killed two persons and seriously wounded another in an attempt to hijack a DC-9 and crash it into the White House. The gunman committed suicide when wounded by a policeman.
19740303	Mar 3, 1974: A McDonnell Douglas DC-10 wide-body airliner crashed shortly after takeoff from Paris, France, killing all 346 people on board in the worst air disaster up to that time. The Turkish Airlines jet had reached an altitude of about 12,000 feet when its rear bulk-cargo door opened, producing explosive decompression. The resulting collapse of the floor over the cargo compartment disabled vital flight-control cables.
	McDonnell-Douglas had known of difficulties with the latching mechanism of the DC-10 cargo doors, and had introduced modifications. On Jun 12, 1972, however, an improperly secured cargo door opened on an American Airlines DC-10 flying over Windsor, Ontario. The resulting decompression disrupted some control cables running through the floor beams, but the aircraft landed safely at Detroit. Following this event, McDonnell Douglas issued a series of FAA-approved service bulletins aimed at controlling the problem. On Oct 25, 1973, the manufacturer issued a final service bulletin that introduced a “closed-loop” system as a definitive solution.

	The "closed-loop" modification had not yet been applied to the Turkish DC-10 that crashed near Paris. The French accident report also indicated that the manufacturer had failed to complete one of the earlier improvements contained in a service bulletin issued before it delivered the aircraft in Dec 1972. The report further concluded that improper in-service modifications and adjustments were among the factors that permitted the ground crew's defective closing of the door before the ill-fated flight.
	Following the Paris crash, FAA issued two airworthiness directives dated Mar 6 and Mar 22, 1974. These directives required implementation of the various modifications contained in the manufacturer's service bulletins, which did not carry the force of law. Shortly thereafter, FAA Administrator Alexander P. Butterfield announced that the agency would henceforth employ airworthiness directives in all situations involving a design change to correct unsafe conditions. (See Dec 27, 1974.)
19740303	On Jul 7, 1975, FAA issued an airworthiness directive requiring the manufacturers to ensure that the floors of all wide-body jets could withstand the effects of rapid in-flight decompression caused by sudden appearance of an opening of up to 20 square feet in the lower deck cargo compartment. This could be achived by strengthening the floors and/or installing relief vents between the passenger cabin and aft cargo compartment.
19740426	Apr 26, 1974: FAA began an in-depth inspection of the worldwide flight operations of Pan American World Airways following the Apr 22 crash of a Pan Am Boeing 707 into a mountain in Bali, Indonesia. The Bali accident, in which all 107 persons aboard died, followed three other Pan Am 707 crashes: Tahiti, Jul 23, 1973; Boston, Nov 3, 1973 (see entry for Jun 7, 1973); and Pago Pago, Jan 31, 1974 (see that date).
19740509	May 9, 1974: FAA signed the Memorandum of Understanding for a joint international program to test, evaluate, and demonstrate the use of aeronautical satellites to provide improved communications and air traffic services over the North Atlantic. The aeronautical satellite program, known as AEROSAT and jointly operated by the 10 countries of the European Space Research Organization (ESRO), Canada, and the United States, was intended to furnish the information upon which to base a follow-on operational system expected to be required in the mid-1980s. On Aug 2, representatives from Canada and ESRO signed the Memorandum. (See Nov 12, 1974.)
19740529	May 29, 1974: FAA announced a new advisory circular on safety parameters for hang gliding, which included recommendations not to fly: over 500 feet above general terrain; in clouds; in controlled airspace, or within five miles of an uncontrolled airport without proper notification; in restricted or controlled areas without prior permission; over or within 100 feet horizontally of buildings, populated areas, or crowds. Hang gliding, a sport involving unpowered, kite-like craft, had grown rapidly in recent years. In announcing the circular, Administrator Butterfield stated his hope that observance of the guidelines would make it unnecessary to regulate the sport. FAA also advised hang gliding clubs to establish training and safety programs, and urged manufacturers to ensure quality control. (See Sep 2, 1982.)

19740530 May 30, 1974: FAA certificated the Airbus A-300, the first of a series of wide-body transport aircraft produced by Airbus Industrie, an international consortium established in Dec 1970 with French, West German, British, Spanish, Dutch, and Belgian partner companies. The emergence of Airbus Industrie signaled greater competition for U.S. aircraft manufacturers. (See Apr 6, 1978.)

19740611 Jun 11, 1974: A headquarters reorganization established the positions of: Associate Administrator for Aviation Safety, with control of the Flight Standards Service and the Civil Aviation Security Service; Associate Administrator for Airports, with control of the Airports Service and of the new Metropolitan Washington Airport Service, which operated Washington National and Dulles International Airports; and the Associate Administrator for Air Traffic and Airway Facilities, with control of the Air Traffic Service and Airway Facilities Service. The Associate Administrator for Plans was redesignated the Associate Administrator for Policy Development and Review. The post of Associate Administrator for Operations, which had controlled the Flight Standards, Air Traffic, and Airports Services, was abolished. The Office of Appraisal and the Quiet Short-Haul Air Transportation System Office were also eliminated. An Office of Investigations and Security was established under the Associate Administrator for Administration (See Aug 3, 1970), and the Office of Personnel and Training was created from two formerly separate offices. The reorganization achieved Administrator Butterfield's aim of placing the flight standards and air traffic functions under separate Associate Administrators, but only partially fulfilled his goal of grouping safety-related functions under the Associate Administrator for Aviation Safety. On Jun 12, the press reported the retirement of Oscar Bakke, the experienced official designated for the Aviation Safety post, who was disappointed by the scope of the new position.

19740615 Jun 15, 1974: FAA launched Operation Ground Assist, a 30-day general aviation safety program, to raise the level of safety consciousness among general aviation pilots and ground personnel with safety responsibilities. The program was designed to help reverse a continued rise in the number of accidents in personal flying. It entailed visits to selected general aviation airports by FAA field personnel, who looked for unsafe practices, made suggestions, and encouraged a candid exchange of ideas between airmen and the aviation agency.

19740712 Jul 12, 1974: FAA announced a contract with Honeywell for 10 Central Control and Monitoring Systems for use at air route traffic control centers and the Aeronautical Center. The computerized devices were designed to to keep watch on electrical, mechanical, and fire alarm systems. They would alert technicians in case of trouble, and also effect savings by reducing or turning off power to certain equipment at off-peak periods. FAA announced a contract for an additional 11 systems on Jan 30, 1976, and a total of 9 were installed by the end of that year.

19740731	Jul 31, 1974: A Delta Air Lines DC-9 crashed against a sea wall while making an instrument approach to Logan International Airport in Boston, Mass., with the loss of 89 lives. The National Transportation Safety Board attributed the accident to flight crew error. Although the Board also named "nonstandard" air traffic control service as a contributory factor, a U.S. district court cleared FAA of liability.
19740805	Aug 5, 1974: President Nixon signed the Anti-Hijacking Act of 1974 into law. Under its provisions, the act:
	* authorized the President to suspend air transportation between the United States and nations that aided terrorist groups who used the illegal seizure of aircraft as an instrument of policy.
	* empowered the Secretary of Transportation, with the approval of the Secretary of State, to impose sanctions against the carriers of nations that failed to maintain minimum security standards in the transportation of persons, property, and mail, as required by the Convention on International Civil Aviation.
	* required air carriers to refuse to carry persons unwilling to submit to personal search, and any article that a passenger did not allow to be inspected.
	* required FAA to continue in effect passenger and baggage screening procedures (see Dec 5, 1972).
	* allowed FAA to use, for as long as needed, Federal personnel, including FAA personnel, to supplement state, local, and private law enforcement officers in airport security programs. (In anticipation of this responsibility, FAA had established a new unit, the Civil Aviation
	Security Service, out of what had been the anti-hijacking and cargo security section of the Office of Air Transportation Security: see Jun 11, 1974.)
	The passenger screening program and other precautionary measures continued to be effective in combating the hijacking menace. For the second consecutive year (see Calendar year 1973) not one successful hijacking occurred on a scheduled U.S. air carrier aircraft.
19740809	Aug 9, 1974: James E. Dow became FAA's Deputy Administrator. The appointment was among the last official acts of President Nixon, who had nominated Dow on Jul 24.

	A native of East Machias, Maine, Dow was a graduate of the University of Maine. He entered the Federal service in 1943 as an air traffic controller in CAA's Central Region. After several promotions in the field, Dow transferred to CAA's Washington headquarters in 1956, where he served successively as Assistant Chief of both the Systems Engineering and Systems Management Divisions, Chief of the Plans Division, and Director of the NAS Special Projects Office. Following a year at Princeton University on a fellowship in the Woodrow Wilson School for Public and International Affairs, he became Director of the Office of Budget in July 1967. In August 1972, Dow became Associate Administrator for Administration. He became Acting Deputy Administrator in July 1973, assuming on a collateral basis the responsibilities of an post that had been vacant since the departure of Kenneth M. Smith on Jul 15, 1972. (See May 11, 1970, and Mar 31, 1976).
19740809	Aug 9, 1974: Richard M. Nixon resigned the Presidency and was succeeded by Vice President Gerald R. Ford.
19740814	Aug 14, 1974: The Operations Committee of the Air Transport Association (ATA) decided that, effective Sep 1, its member airlines would withdraw from the familiarization flight (SF 160) program under which an air traffic controller could make up to eight free flights per year as a cockpit observer. Members of the Professional Air Traffic Controllers Organization reacted by conducting work slowdowns that continued until ATA reversed its decision on Oct 16. (See May 7, 1975.)
19740821	Aug 21, 1974: FAA announced a rule providing for issuance of "limited" airport operating certificates to airports serving CAB-certificated air carriers conducting only unscheduled operations or operations with small aircraft. FAA allowed airports in this category to operate under previously-issued provisional certificates until Dec 15. (See May 21, 1973)
19740826	Aug 26, 1974: Charles A. Lindbergh died in Maui, Hawaii, at the age of 72. (See May 20-21, 1927)
19740904	Sep 4, 1974: The U.S. and Mexico announced an agreement on air traffic services adjacent to their common border. The culmination of over 15 years of negotiation, the pact authorized air traffic facilities in 6 pairs of cities to enter into agreements on coordinating air traffic control.
19740905	Sep 5, 1974: FAA shut down the last four-course radio range still in operation, at Northway, Alaska, after more than 40 years of service. The four-course range was the first navigation system that enabled pilots to fly "blind"--that is, fly a direct line between airports when visibility was poor or nonexistent (see Jun 30, 1928). Beginning in the late forties, FAA replaced the system with the more efficient very-highfrequency omnidirectional range (VOR). The VOR's higher frequency reduced static and its omnidirectional signal afforded guidance to pilots on any bearing from the transmitter. (See Mar 17, 1982.) The center antenna of the Northway range, now designated for use with a nondirectional beacon, remained in operation.

19740908	Sep 8, 1974: A bomb exploded in the aft cargo compartment of a Trans World Airlines Boeing 707. The flight had originated in Tel Aviv, stopped over at Athens, and was bound for Rome and then New York. The explosion disabled the aircraft's control system, and the 707 crashed into the Ionian Sea with the loss of all 88 persons aboard. Floating debris and 24 bodies were recovered, but the wreckage was not raised from the sea bottom.
19740911	Sep 11, 1974: An Eastern Air Lines DC-9 crashed 3.3 miles short of a runway at Charlotte, N.C., while approaching through patchy fog. All but 10 of the 82 persons aboard lost their lives. The National Transportation Safety Board attributed the accident to "lack of altitude awareness" due to "poor cockpit discipline." Eastern Air Lines and 19 insurance companies sued four FAA air traffic controllers for $35 million each in connection with the accident. In Dec 1979, a jury in Charlotte found in favor of the controllers, who were defended by the Federal government.
19740918	Sep 18, 1974: Transportation Secretary Claude S. Brinegar announced the Ford Administration's decision not to ask Congress to subsidize the nation's financially troubled flag carriers, Pan American and Trans World Airlines. Instead, the Administration continued to pursue an "action plan" to assist the two airlines through a variety of means that did not involve subsidy or new legislation. Congress, however, passed the International Air Transportation Fair Competitive Practices Act of 1974. As signed on Jan 3, 1975, this law included provisions designed to raise overseas mail rates, require Federal agencies to use U.S. flag carriers whenever possible, and control rebates by shippers and ticket agents. The law mandated negotiations aimed at protecting U.S. flag carriers from discriminatory landing fees and airport charges, and directed the Secretary of Transportation to impose retaliatory fees against the airlines of nations that failed to respond. (See Feb 15, 1980)
19740919	Sep 19, 1974: FAA commissioned the first of a new-generation Power Conditioning System for the 20 Air Route Traffic Control Centers in the contiguous U.S. at the Los Angeles ARTCC. The system processed all incoming power, ensuring that it remained at the proper voltage level and frequency. In the event of commercial power failure, it also provided battery power until emergency generators could take over. The system was designed to replace less sophisticated versions in use at some ARTCCs. (See Jun 27, 1969 and Jul 13, 1977.)
19741001	Oct 1, 1974: Effective this date, FAA reduced the minimum separation distance for simultaneous Instrument Landing System (ILS) approaches to parallel runways. The change from 5,000 feet to 4,300 feet allowed certain airports to add parallel runways when needed to handle increasing traffic.
19741101	Nov 1, 1974: Tougher new rules covering the training, testing, and certification of pilots in nearly all categories except airline transport pilot went into effect. For the first time, FAA required a biennial flight review for all pilots not engaged in airline or other commercial operations for which FAA already required periodic flight checks. Other new provisions included:

	* Student pilots were required to show overall piloting proficiency in all flight operational areas before their instructors could find them eligible for the prescribed check flight.
	* Flight instructor certificate requirements were upgraded to include a commercial pilot certificate, an instrument rating, ground instruction as well as flight instruction capability, and a class rating for instruction given in multi-engine airplanes and helicopters.
	* Private pilot certificate requirements included increased emphasis on flight instruction in night and operational problem areas. The required flight time remained at 40 hours, but the mandatory hours of flight instruction from a certified flight instructor were raised from 3 to 20.
	* Commercial pilot certificate applicants were required to have an instrument rating to qualify for unrestricted privileges. Flight time for a commercial license was raised from 200 to 250 hours, although 50 of these hours could be logged in a ground trainer.
	Other new requirements included: more skills to be demonstrated for an Instrument Flight Rules (IFR) rating; IFR checks for instrument-rated pilots with recent IFR experience lapses; and annual proficiency checks for pilots-in-command of aircraft certificated for more than one pilot.
19741101	Nov 1, 1974: New certification and operating standards for FAA-approved pilot schools went into effect. In an amendment to FAR Part 141, FAA upgraded standards while giving these schools increased responsibilities in pilot training and testing. Schools granted examining authority by FAA could recommend graduates for pilot certificates and ratings without those graduates having to pass FAA-administered flight or written tests. The new rules also set forth standardized curriculums for each course of approved training, thus assuring that graduates trained at different locales received the same quality of instruction.
19741112	Nov 12, 1974: For the first time in history an aircraft was given routine air traffic control instructions via aeronautical satellite relay. The milestone occurred when an ATC demonstration project controller at the National Aviation Facilities Experimental Center (NAFEC) issued a route change to an FAA KC-135 aircraft during a test using the ATS-6 satellite. NAFEC's Experimental Oceanic Air Traffic Control Laboratory was the ground test facility for the ATS-6 ATC communications demonstrations, part of the joint Aerosat project involving the United States, Canada, and the European Space Research Organization (ESRO). (See May 9, 1974, and Sep 15, 1977.)
19741113	Nov 13, 1974: In an action to reduce the bird hazard to aviation, FAA announced guidelines aimed at banning garbage dumps or sanitary landfills within 10,000 ft. of runways used by turbojets and 5,000 ft. of those used by piston-engine aircraft. FAA personnel were instructed to inform airport operators that dumps or landfills closer than these limits should be closed. Those that could not be closed within a reasonable period of time should be operated under guidelines prescribed by the Environmental Protection Agency and Department of Health, Education and Welfare, to minimize their attractiveness to birds.

19741127	Nov 18-27, 1974: The Air Line Pilots Association (ALPA) board of directors determined that the DC-9-50 was a "stretched" aircraft within the meaning of ALPA's by-laws (see Nov 20-29, 1966). This decision, which reversed a previous finding by ALPA's executive board, meant that the union would not necessarily oppose operation of the DC-9-50 by a two-pilot crew. At the same time, however, the board amended its by-laws to provide for three pilots on all turbine-powered transports, including stretched versions, certificated after Jan 1, 1975. (See Nov 23, 1971 and Feb 21, 1976.)
19741201	Dec 1, 1974: A Northwest Airlines Boeing 727 crashed near Thiells, N.Y., killing all three persons aboard. Icing had blocked the aircraft's pitot heads, causing erroneous air speed and Mach readings that contributed to a low-speed stall. On Mar 13, 1978, FAA published a rule requiring the installation within three years of a pitot heat indication system in all transport category aircraft having flight instrument pitot heating systems, and making such an indication system a type certification requirement for such aircraft.
19741201	Dec 1, 1974: Approaching Dulles International Airport under conditions of poor visibility, a Trans World Airlines Boeing 727 descended too soon and crashed into a mountain near Berryville, Va., killing all 92 persons aboard.
	Unfamiliar with terrain to the immediate west of Dulles, the TWA captain interpreted a controller's "cleared for approach" instruction to mean that he could descend to the final approach altitude of 1,800 feet immediately, although his chart indicated mountain peaks and a prescribed minimum altitude of 3,400 feet. The controller had assumed the pilot knew he was not to descend to 1,800 feet until he had cleared the mountains. Soon after the accident, FAA took steps to clarify pilot responsibilities for maintaining safe altitude by issuing a notice, followed by a regulatory amendment. This new rule explicitly required that in-bound pilots maintain their assigned altitude until they were given a new one or became established on a published route. FAA also issued additional guidance intended to ensure that controllers informed radar arrivals of any applicable altitude restrictions at the time that they issued an approach clearance. (See Jan 1, 1976.)
	With FAA still under scrutiny for its handling of the DC-10 cargo door problem (see Mar 3, 1974), the TWA crash added to intense criticism of the agency (see Dec 27, 1974). The accident underscored the need for a cockpit device to alert pilots if they strayed too close to terrain, and FAA speeded work on a proposed rule to make a terrain warning system mandatory (see Dec 24, 1974). Other FAA actions in the wake of the TWA crash included the appointment of a Special Air Safety Advisory Group, composed of six retired airline captains, which submitted a variety of safety recommendations on Jul 30, 1975. Meanwhile, DOT established a task force on FAA's safety mission (see Jan 28, 1975).
19741218	Dec 18, 1974: Secretary of Transportation Claude S. Brinegar announced his resignation, effective Feb 1, 1975. (See Feb 2, 1973.)

19741224	Dec 24, 1974: FAA published a rule requiring installation of the Ground Proximity Warning System (GPWS) on large turbojet and turboprop airliners. The equipment was to provide both visual and aural signals when the aircraft was less than 2,500 feet above the ground. The rule's implementation deadline of Dec 1, 1975, was subsequently extended due to persisting technical difficulties, but all major airlines were in compliance by the end of 1976. A rule published on Oct 10, 1978, extended the GPWS requirement to smaller commuter airline turbojets if able to seat as many as ten passengers. (See Dec 1, 1974, and Mar 17, 1992.)
19741227	Dec 27, 1974: A House subcommittee chaired by Rep. Harley O. Staggers (D-W.Va.) issued a report criticizing FAA as sluggish, insufficiently strict in its aircraft certification procedures, and too solicitous of the interests of the aviation industry. Cases cited by the committee included the agency's handling of the DC-10 cargo door problem (see Mar 3, 1974). The committee also faulted FAA for slowness in requiring the Ground Proximity Warning System on airliners, a criticism underlined by the recent crash of a TWA jet (see Dec 1, 1974). On Dec 28, public confidence in FAA was further weakened by an ABC television broadcast, prepared by science editor Jules Bergman, that portrayed the agency as lax on postcrash survival and other safety issues.
19741231	Calendar year, 1974: FAA launched a program aimed at the renegotiation of bilateral airworthiness agreements with major aeronautical manufacturing countries. Previous U.S. bilateral agreements did not cover the export or import of all aviation products--engines, appliances, propellers, and other components. Since export sales frequently depended on foreign countries producing selected aircraft components, the lack of such agreements tended to inhibit the sale of U.S. aircraft abroad. (See Jan 26, 1972.)

1975

19750103 Jan 3, 1975: President Ford signed the Transportation Safety Act of 1974. Title I of this law, the Hazardous Materials Transportation Act, gave the Secretary of Transportation new regulatory and enforcement authority to combat the risks of transporting hazardous materials in commerce (see Jul 1, 1976). (Title II pertained to railroad safety, and Title III concerned the status of the National Transportation Safety Board: see April 1, 1975). Title I specifically limited radioactive materials that could be shipped on commercial passenger aircraft to those intended for research or medical use. AN FAA rule implemented this provision, effective May 3, 1975.

Effective Mar 7, meanwhile, FAA prohibited air carriage of hazardous material unless its container had been inspected to determine that, in all outward respects, it complied with packaging and marking requirements. In the case of radioactive materials, FAA also required scanning with a radiation monitoring instrument, after Jun 30, 1975 (a deadline later extended to Jan 1, 1976). The rule was based on a proposal published shortly after an incident on Apr 5-6, 1974, in which improperly shielded radioactive material had exposed airline passengers to unnecessary radiation.

19750106 Jan 6, 1975: FAA published a new regulation setting maximum noise levels for small propeller-driven aircraft that were newly produced or newly type-certificated. The rule was effective Feb 7, 1975, and applied to all propeller-driven airplanes under 12,500 pounds, with the exception of those used in agricultural and firefighting operations (which frequently required all available engine power to carry large loads). (See Oct 26, 1973, and Dec 23, 1976.)

19750121 Jan 21, 1975: FAA announced that it would study the effects of high-altitude flight on the earth's atmosphere, building upon DOT's recently-ended Climatic Impact Assessment Program, which had begun in 1971 in response to concern about environmental consequences of the fleets of supersonic transports then anticipated. FAA's study, the High Altitude Pollution Program (HAPP), ended in 1982. Its final report, published in Jan 1984, concluded that the effects of civilian aircraft on ozone depletion and climactic change were not a cause of immediate concern at that time.

19750125 Jan 25, 1975: Approaching Washington National Airport, a Beech King Air executive turboprop came in too low and crashed into a broadcasting tower at American University, killing all five aboard. The accident occurred in the wake of the crash of a TWA jetliner on approach to Washington Dulles airport, and it added to mounting criticism of FAA. (See Dec 1 and 27, 1974.)

19750128	Jan 28, 1975: The Secretary's Task Force on the FAA Safety Mission convened to examine FAA's organizational structure, management, and performance on safety issues. Secretary Claude S. Brinegar had appointed this special ten-person panel in response to criticism of FAA on such matters as the crash of TWA Flight 514 and the DC-10 cargo door problem (see Dec 1 and Dec 27, 1974). The task force was headed by Lt. Gen. Benjamin O. Davis, Jr., Assistant Secretary of Transportation for Environment, Safety, and Consumer Affairs. (See Apr 8 and Apr 30, 1975.)
19750131	Jan 1975: FAA shut down the Fairbanks ARTCC, after 31 years of operation and transferred its functions to the Anchorage ARTCC.
19750219	Feb 19, 1975: FAA announced that it had ordered air taxi operators using business-type jets to equip these aircraft with Cockpit Voice Recorders and Flight Data Recorders by May 15, 1975. (See Aug 5, 1957, Jun 26, 1964, and Mar 25, 1987.)
19750227	Feb 27, 1975: The Microwave Landing System (MLS) Executive Committee, a group of experts representing various Federal agencies, chose the time reference scanning beam (TRSB) technique over the Doppler scanning technique as the U.S. candidate for the international standard microwave landing system. The action by the committee ratified a recommendation made in late 1974 by the MLS Central Assessment Group (a recommendation participated in 140 experts assembled by FAA from around the world) and cleared the way for submission of the time reference scanning beam technique to the International Civil Aviation Organization (ICAO) as the U.S. candidate for adoption as the international precision landing system of the future. (See Jun 7, 1973, and Jul 22 1975.)
19750307	Mar 7, 1975: William T. Coleman, Jr., became Secretary of Transportation. An attorney from Philadelphia, Coleman was the second black Cabinet member in American history. On Jan 14, President Ford had declared his intention to nominate Coleman to replace Claude S. Brinegar, who had announced his resignation on Dec 18, 1974. Coleman served the remainder of the Ford Administration, resigning effective Jan 20, 1977.
19750321	Spring 1975: U.S. air carriers conducted extensive civil aviation operations in Southeast Asia as the United States wound down its Indochinese commitment with a final spurt of activity. Requiring close cooperation between FAA, the State Department, and the Department of Defense, the operations ranged from airlifting rice and munitions into Pnom Penh, Cambodia, to the climactic evacuation of U.S. civilians from Saigon, Vietnam, in late April.
19750325	Mar 25, 1975: Alexander P. Butterfield announced his resignation as FAA Administrator, effective Mar 31, after publicized differences with recently departed Secretary of Transportation Claude S. Brinegar and amid sharp criticism of FAA's recent safety record. President Ford had asked for his resignation in a move some interpreted as retribution for Butterfield's role in helping uncover the Watergate scandal (see Jul 16, 1973). Deputy Administrator James E. Dow (see Aug 9, 1974) became Acting Administrator. (See Nov 24, 1975.)

19750327	Mar 27, 1975: AN FAA DC-3 crashed on takeoff from Boise, Pa., injuring all 11 persons aboard. In determining the probable cause, the National Transportation Safety Board cited the inexperience of the pilot, who was not qualified for that type of aircraft. The pilot, a Regional Director, received a reprimand and 30-day suspension, and was later transferred to another position.
19750401	Apr 1, 1975: Effective this date, the National Transportation Safety Board (NTSB) was separated entirely from the Department of Transportation, in accordance with Title III of the Transportation Safety Act of 1974. Previously, NTSB had been an independent agency lodged within the Department for administrative purposes. In enacting Title III, Congress declared that the NTSB could not properly conduct its responsibility of determining the probable cause of transportation accidents without total separation and independence. (See Oct 15, 1966.)
19750404	Apr 4, 1975: A regulation governing the installation and safe operation of X-ray devices for screening carry-on luggage at airports became effective this date. The rule had been proposed on Jun 21, 1974, after a U.S. District Court judge declared that FAA acted illegally by allowing the X-ray machines to be installed without certifying as to their safety. The new regulation required testing to ensure that the devices complied fully with radiation level standards set by the Food and Drug Administration, and also provided for the training and protection of operators of this equipment.
19750408	Apr 8, 1975: Acting Administrator James E. Dow announced the establishment of the Aviation Safety Reporting Program (ASRP), designed to provide the agency with information on potentially unsafe conditions in the National Airspace System, effective May 1, 1975. To encourage the reporting of violations, the program granted immunity from disciplinary action to pilots or controllers who filed a timely report. No immunity was granted, however, in the case of "reckless operations, criminal offenses, gross negligence, willful misconduct, and accidents." FAA remained free to take corrective or remedial action necessary for air safety.
	Although such immunity programs had been instituted before (see Jan 1, 1968), the ASRP was the first not limited to reports of near midair collisions. The program's establishment anticipated one of the recommendations being prepared by the Secretary's Task Force on the FAA Safety Mission (see Jan 28, 1975), of which Dow served as Executive Secretary. The Air Line Pilots Association, skeptical of the ASRP, preferred a system in which a third party would process reports and protect their confidentiality. (See Aug 15, 1975.)

19750414	Apr 14, 1975: FAA eliminated the proposed requirement for altitude reporting transponders (Mode C) on all aircraft operating in Group II Terminal Control Areas (TCAs) 45 days before it was to go into effect (see Jun 8, 1973 and Jan 29, 1987). However, FAA still required aircraft operating to and from primary and secondary airports within the twelve Group II TCAs to carry a transponder capable of providing discrete identity information to air traffic controllers. In addition, the agency required aircraft to obtain authorization prior to entering the Group II TCAs, and to maintain two-way radio communications with controllers. The requirement for altitude reporting equipment had been strongly opposed by general aviation operators and by such general aviation organizations as the Aircraft Owners and Pilots Association. (See Jan 1, 1974, and Aug 1, 1975.)
19750430	Apr 30, 1975: The Secretary's Task Force on the FAA Safety Mission (see Jan 28, 1975) submitted its report. The Task Force commended FAA for having reestablished a no-fault aviation safety reporting program (see Apr 8, 1975), and made recommendations including:
	* That FAA should continue to rely on industry for safety compliance inspections required in the certification process, but should strengthen its technical staff and improve its ability to monitor the performance of those delegated safety responsibilities. In addition, FAA should insist on more comprehensive design reviews in major aircraft and engine certification.
	* That FAA should conduct audits in cooperation with the National Transportation Safety Board to ensure that problems cited by NTSB were worked out satisfactorily.
	* That FAA's rulemaking process, judged too slow, should be expedited by means of a priority system; the agency should also improve the clarity of the rules themselves and speed up their legal review.
	* That FAA should take steps, including use of flight data monitoring systems, to improve aircrew performance.
	* That air traffic controllers should give more attention to preventing collision with the ground, and that a standing group of FAA and aviation community representatives should review air traffic control procedures with the aim of increasing clarity and standardization.
	* That FAA should continue as part of the Department of Transportation, but should not be subject to undue supervision by the Office of the Secretary.
	* That an intensive review should be made of the FAA headquarters organization with the object of reducing the number of elements reporting to the Administrator. The task force recommended also that (1) a similar study be made of the FAA regional organization, with a view to consolidating regional functions and reducing the regions in number, and (2) that regional Engineering and Manufacturing (E & M) personnel engaged in aircraft certification be transferred from the regions to one or more E & M technical field centers that would report to FAA Headquarters at a level just below the Administrator.

	* That FAA should strengthen its long-range research and development activity and establish one or more technical advisory committees.
19750507	May 7, 1975: FAA and PATCO reached agreement on a two-year contract (signed and effective Jul 8). The contract's 74 articles included a guarantee of controller inclusion in the Aviation Safety Reporting Program (see Apr 8, 1975) and affected such matters as an expansion of familiarization flight privileges (see Aug 14, 1974), working conditions, and career enhancement. (See Mar 17, 1973, and Jul 28-31, 1976.)
19750509	May 9, 1975: FAA announced the beginning of a new airspace program to better delineate areas of military training activities. As of Jul 1, when requested by the military, the FAA began establishing Military Operations Areas (MOAs) for conducting such military flight actitivities such as familiarization training, intercept practice, and air combat maneuvers. FAA Flight Service Stations in the vicinity would inform visual flight rules (VFR) pilots when a given MOA was to be used for military purposes and how to traverse or circumnavigate it safely. Properly instructed VFR aircraft operated within an active MOA without special restrictions, while instrument flight rules (IFR) aircraft were afforded appropriate separation service. By the end of fiscal 1987, 354 MOAs were in existence.
19750529	May 29, 1975: Secretary of Transportation William T. Coleman, Jr., announced that FAA's National Aeronautical Facilities Experimental Center (NAFEC) would remain at Atlantic City, N.J. On Jan 15, 1974, a study team had recommended that NAFEC be combined with the Aeronautical Center at Oklahoma City. (See May 29, 1980.)
19750624	Jun 24, 1975: An Eastern Air Lines 727 crashed into approach lights while attempting to land during a thunderstorm at New York's Kennedy airport, causing fatal injuries to 113 of the 124 persons aboard. The National Transportation Safety Board's report stated that the crew probably relied too much on visual clues rather than instruments in assessing their altitude, but adverse winds may have been too strong for a successful approach even if they had avoided this error. The Board criticized air traffic control personnel for continued use of the runway after reports of wind shear from several incoming pilots.
	Wind shear, a sudden change in wind speed and/or direction, may be produced by thunderstorms or even cloud formations that appear harmless. Large gust fronts can last for more than an hour and extend for several miles. In studying the Kennedy crash, however, the University of Chicago's Dr. Theodore Fujita concluded that several separate cells of intense downdrafts had occurred in the vicinity of the 727's approach path. He termed such phenomena "downbursts," and later coined the term "microburst" to describe a small downburst (see May 15-Aug 13, 1982).

	The Kennedy accident spurred FAA's efforts to develop wind shear detection equipment for use both in the cockpit and on the ground, as well as improved methods for pilots to cope with the hazard. The agency tested measuring devices, and in Nov 1976 began a six-month test of forecasting techniques in cooperation with the National Weather Service. In 1977, FAA began operational testing of a ground-based wind shear detection system called the Surface Wind Monitoring System (SWIMS), later renamed the Low Level Wind Shear Alert System (see Sep 1978).
19750630	Jun 30, 1975: The original five-year funding authority of the Airport and Airway Development Act of 1970 lapsed (see May 21, 1970). The Subcommittee on Aviation of the House Committee on Public Works and Transportation had opened hearings in Mar 1975 on extending the act's funding authority, but did not report out a bill before the funding cutoff. A proposal by the Senate seeking a 90-day delay of the cutoff failed. (See Jul 12, 1976)
19750630	Jun 1975: FAA received the first of the new ASR-8 airport surveillance radars. Features of the ASR-8 included a dual beam for expanded low-level coverage and a klystron transmitter tube that increased power output. (See Aug 25, 1960 and Sep 30, 1983.)
19750722	Jul 22, 1975: FAA announced that it had awarded contracts to the Bendix Corp. and Texas Instruments to build, test, and evaluate prototypes of the new microwave landing system (MLS) under Phase III of the MLS development program. Each contractor was to build two models of the system--the small community airport configuration and the basic configuration---using a time reference scanning beam signal format. (See Feb 27, 1975, and Jun 1976.)
19750801	Aug 1, 1975: The establishment of a Group II Terminal Control Area (TCA) at the new Kansas City International Airport completed the creation of 12 airport areas in this category. FAA defined each TCA after consultation with airport users. General aviation operators, in particular, registered many objections to proposed TCA rules and limits. Since the original concept in 1970, FAA reduced the number of Group II TCAs from 14 to 12. The locations were: St. Louis, Seattle, Minneapolis, Houston, Denver, Cleveland, Detroit, Pittsburgh, and Las Vegas; and Philadelphia, New Orleans, and Kansas City. (See Apr 14, 1975, and May 15, 1980.)
19750813	Aug 13, 1975: FAA completed its longstanding program to implement the ARTS III automated radar terminal system at the nation's busiest terminals on this date with the commissioning at the Dallas-Fort Worth Regional Airport. All 61 ARTS III systems were now operational in the contiguous states, as well as one in Hawaii and one in Puerto Rico. The basic ARTS III contract had been signed in Feb 1969, and the first ARTS III procured under it became operational at Chicago O'Hare airport (see Feb 15, 1973). The sixty-second ARTS III, which went into operation in Jul 1975 at Atlanta Hartsfield airport, replaced an ARTS I--the prototype ARTS--which had been in operation there since 1965. (See Aug 10, 1976.)

19750815 Aug 15, 1975: FAA and the National Aeronautics and Space Administration (NASA) signed an agreement under which NASA would operate a third-party reporting system guaranteeing anonymity to persons providing information about safety hazards and incidents (see Apr 8, 1975). This system was designed to overcome fears that FAA's Aviation Safety Reporting Program would not provide genuine immunity. NASA agreed to: receive and process reports; delete information that would reveal the identity of the informants; analyze and interpret the data; and provide the results to FAA and the aviation community. Information concerning criminal offenses, however, would be referred directly to FAA and the Justice Department. The system was to become operational by Apr 15, 1976 (see that date.)

19750825 Aug 25, 1975: In Senate testimony, Lockheed's chairman stated that his company paid "kickbacks" to officials of foreign governments to encourage purchase of L-1011 aircraft, an admission that was followed by a series of revelations about the questionable overseas sales practices of Lockheed, Boeing, and McDonnell Douglas.

19750826 Aug 26, 1975: The commissioning of the computerized radar data processing system (RDP) at the Miami Air Route Traffic Control Center marked the end of the final phase of the completion of NAS En Route Stage A, FAA's program of automating and computerizing the nation's en route air traffic control system, an effort covering more than a decade (see Feb 13, 1973). Miami was the last of the 20 ARTCCs to receive RDP capability.

The RDP system consisted of three key elements: radar digitizers located at long-range radar sites that converted raw radar data and aircraft transponder beacon signals into computer-readable signals transmitted to the centers' computers; computer complexes in each center able to relay this information to the controllers' screens; and new screens that displayed the information to the controllers in alphanumeric characters.

19750902 Sep 2, 1975: FAA released an analysis of Federal grants issued in the first five years of the Airport and Airway Development Act of 1970 (see May 21, 1970). For the period, $37.5 million had been obligated under the Planning Grant Program (PGP) and $1.3 billion under the Airport Development Aid Program (ADAP). (This was a vast increase compared to the $1.2 billion disbursed during the entire 24-year history of the earlier Federal-aid airport program: see May 13, 1946). A total of 1,059 planning grants had been approved during the five-year period. Authorized funding for ADAP--initially $280 million annually and increased to $310 million in 1973 (see Jun 18, 1973)--had made it possible for FAA to approve aid for 2,434 development projects. With the help of these funds, 85 new airports were built and more than 1,000 received improvements that included: 178 new runways; 520 new taxiways; 201 runway extensions; 28 instrument landing systems, 141 runway end identifying lighting systems (REILS), 471 visual approach slope indicators (VASIs); security fencing; and equipment for crash, firefighting, and rescue.

19751101 Nov 1, 1975: New procedures went into effect requiring air traffic controllers to provide an extra mile of separation between small aircraft landing behind large and heavy aircraft capable of generating hazardous wake turbulence (see Mar 1, 1970). Reflecting the findings of two special studies, the new procedures required that small aircraft be separated by 4 miles when landing behind large aircraft and by 6 miles when landing behind heavy aircraft. The "small" aircraft category (12,500 lbs. or less) included most of the country's air taxis and general aviation aircraft. The "large" category (12,500-300,000 lbs.) included certain business aircraft such as the Sabreliner and Jetstar, the smaller DC-8s and Boeing 707s, and the Boeing 727 and 737. (The Boeing 757 also joined the “large” category after its certification in 1982.) The "heavy" category (300,000 lbs. or more) included the C-5A, DC-10, L-1011, Boeing 747, and the larger versions of the DC-8 and 707. (See Spring 1976 and Dec 19, 1992.)

19751124 Nov 24, 1975: Dr. John L. McLucas became the sixth FAA Administrator, succeeding Alexander P. Butterfield (see Mar 14, 1973). The President had persuaded McLucas to give up his portfolio as Secretary of the Air Force in favor of the FAA post. McLucas had been nominated by Ford on Oct 20 and confirmed by the Senate on Nov 13.

Born in Fayetteville, N.C., in 1920, McLucas held degrees from Davidson College and Tulane University. After serving as a Navy radar officer during World War II, he earned a doctorate in physics with a minor in electrical engineering at Pennsylvania State University in 1950. McLucas authored numerous scientific articles and held ten patents. He became vice president and later president of a private electronics firm, then joined the Defense Department in 1962 as Deputy Director of Defense Research and Engineering. Two years later, he became Assistant Secretary General for Scientific Affairs at NATO headquarters. In 1966, McLucas became president and chief executive officer of the MITRE Corporation, a nonprofit research organization established at the Massachusetts Institute of Technology to work on technical problems for the government. He became Under Secretary of the Air Force in 1969, and was promoted to Secretary in 1973. McLucas served as FAA Administrator for 16 months, including the remainder of the Ford Administration and two months under President Jimmy Carter. (See Apr 1, 1977.)

19751226 Dec 26, 1975: The Soviet Union inaugurated the world's first regular supersonic airline service, with the departure of a Tupolev-144 from Moscow for Alma-Ata in the Kazakh Republic. The plane carried only mail and cargo over the 2,500-mile route. (See Jan 21, 1976).

19751229

Dec 29, 1975: A high-intensity bomb exploded in a coin-operated locker at New York's La Guardia Airport, killing 11, injuring 54, and doing extensive damage to the main terminal building. The incident, provoking national concern and leading to the creation of a special government-industry task force, caused FAA to issue a rule (effective Apr 15, 1976) requiring that checked baggage be screened for inspection under a "profile" system. FAA also accelerated efforts to develop automatic equipment capable of detecting explosives in lockers and cargo holds (see Sep 1985). In the meantime, the agency stepped up its Explosive Detection K-9 Dog Handler Team program begun in 1972 (see Nov 29, 1977). Following the La Guardia bombing, lockers at nearly all U.S. airports were placed in areas where they could be under surveillance.

1976

19760101 Jan 1, 1976: The Federal Aviation Administration issued a new air traffic control handbook, representing a consolidation of two formerly separate manuals--one on terminal and the other on en route air traffic control. To improve controller-pilot communications, FAA on Apr 26 announced publication of a new air traffic control glossary four times the length of that previously included in the Airmans Information Manual. The National Transportation Safety Board had recommended issuance of such a glossary after a crash at Berryville, Va. (see Dec 1, 1974).

19760109 Jan 9, 1976: As of this date, FAA implemented a conflict alert system, capable of warning air traffic controllers of less-than-standard separation between aircraft under their control, at all 20 air route traffic control centers in the contiguous U.S. FAA added the new conflict alert capability to the radar data processing system of the NAS En Route Stage A center computers (see Aug 26, 1975). The new system projected the flight paths of all aircraft on the controllers' radar sector for two minutes ahead, and flashed the relevant aircraft data tags if the projection showed the paths approaching closer than the required horizontal and vertical minimums. The controller could then radio appropriate orders to the aircraft to avoid a collision. The conflict alert system initially operated only above 18,000 feet, but by Dec 1978 all 20 centers had implemented it from the ground up. FAA later installed a similar capability in the Automated Radar Terminal System (ARTS) computers (see Jan 10, 1978).

19760121 Jan 21, 1976: British Airways and Air France began the world's first scheduled supersonic passenger service (see Dec 26, 1975) with simultaneous takeoffs of Anglo-French Concorde SST aircraft from London and Paris for flights to Bahrain and Rio de Janeiro. The London-Bahrain flight, normally 6 hours 30 minutes by subsonic jet, took 4 hours 10 minutes. The Paris-Rio flight, scheduled to take 7 hours 5 minutes (compared with a subsonic time of 11 hours 10 minutes), arrived 40 minutes late. (See Feb 4, 1976.)

19760204 Feb 4, 1976: Secretary of Transportation William T. Coleman, Jr., announced his decision to permit the Anglo-French supersonic transport Concorde to land in the U.S. on a temporary, restricted basis. Air France and British Airways had made application in Jan 1975 to conduct limited commercial operations with the SST into New York Kennedy and Washington Dulles airports, proposing a maximum of four flights daily into Kennedy and two daily into Dulles. In an environmental impact statement issued in draft in Mar 1975 and in final on this date, FAA recommended granting the application on the grounds that the limited operations could not significantly harm the environment. Secretary Coleman authorized the proposed service for a trial period not to exceed 16 months.

	Working with the National Aeronautics and Space Administration, the Environmental Protection Agency, and the Office of the Secretary, FAA developed plans for noise, sonic boom, and low altitude pollution monitoring of the Concorde to determine its environmental impact during the trial period. Devices to monitor noise and emissions were installed at Washington Dulles and surrounding communities, and most were in operation when Concorde service to Dulles began on May 24, 1976. Intense opposition from environmental and citizen groups in the New York area and a ban by the Port Authority of New York and New Jersey delayed Concorde service at Kennedy. (See Apr 27, 1973, Sep 23, 1977, and Oct 17, 1977)
19760215	Feb 15, 1976: FAA transferred the personnel and functions of its office at Beirut, Lebanon, to the office at Frankfurt, Germany, because of the continuation of the civil war that began in late 1975. The Beirut office had consisted basically of three inspectors who made sure that U.S.-registered aircraft operating in the Mediterranean and Middle East were airworthy and complied with Federal regulations (see Jun 30, 1965). An office later established at Rome, Italy, took over these functions.
19760221	Feb 21, 1976: In exchange for higher salaries and shorter work hours, the pilots of Frontier Airlines accepted a contract calling for the elimination of the flight engineer from the crew of the Boeing 737. The Air Line Pilots Association executive board tried, but failed, to expel Frontier pilots from the union for violating the union's by-laws. (See Nov 18-27, 1974, and May 7, 1977.)
19760229	Feb 1976: The Washington, D.C., Flight Service Station moved to the Air Route Traffic Control Center (ARTCC) at Leesburg, Va., and FAA announced that it had ordered an AWANS (aviation weather and notice to airmen system) for installation at Leesburg. AWANS was computer-aided system to assist flight service specialists by displaying weather and aeronautical information on viewing screens. It had been under test at the flight service station (FSS) in Atlanta, Ga., since July 1975. Once operational, FAA expected the Leesburg AWANS to take over the functions of the FSSs at Richmond and Charlottesville. This prototype would then be used to demonstrate the feasibility of consolidating several manual FSSs into a single automated station, and of collocating FSS and ARTCC facilities. The long-range plan was to establish AWANS-equipped FSS hubs at all 20 ARTCCs in the contiguous United States. (See Feb 4, 1964, and Sep 1977.)
19760301	Mar 1, 1976: A rule published on this date required removal of side-facing flight attendant seats from all airliners by May 1. In issuing the rule, FAA noted that flight attendants occupying side-facing seats were likely to receive more serious injuries during survivable accidents than passengers in forward-facing seats, and hence might be incapacitated at a time when their performance of emergency duties was most needed. (See Feb 15, 1980.)

19760304 Mar 4, 1976: FAA announced a contract for the development of three engineering model Discrete Address Beacon System (DABS) ground sensors and 30 compatible transponders. This new advanced radar beacon system was designed to eventually replace ATCRBS, the existing air traffic control radar beacon system (see Dec 27, 1963). The chief advantage of DABS was its ability to interrogate and receive a transponder reply from a specific aircraft rather than from all aircraft in the zone of coverage. This would help eliminate the problem of overlapping and garbling of transponder replies from aircraft flying in close proximity to one another. Since DABS would address aircraft on an individual basis, it would also provide a vehicle for automatic communications between aircraft and the ground. This data link capability was seen as the basis for future implementation of a ground-based collision avoidance system called Intermittent Positive Control (IPC), later designated the Automatic Traffic Advisory and Resolution System (ATARS). (See Mar 1976.)

19760321 Mar 21, 1976: Effective this date, FAA required foreign air carriers operating large aircraft to and from the United States in scheduled passenger operations to maintain security programs which would insure: that all passengers and property carried aboard their aircraft were subject to effective weapons screening procedures prior to boarding; that there was no unauthorized access to their aircraft; that no unauthorized weapons, bombs, or incendiary devices were carried aboard; that appropriate baggage security measures were in place; and that they were in compliance with the FARs in dealing with bomb threats and threats of hijacking. In addition, each foreign carrier was to provide the FAA Administrator upon his request information on the status of its screening program.

In addition, as of Aug 23, 1976, the FAA also required foreign carriers: to deny boarding to passengers refusing to permit their persons or property to be screened for weapons; ensure that their x-ray equipment in use at U.S. airports met minimum U.S. safety and effectiveness standards; and provided that the prohibition against carrying weapons aboard a foreign aircraft would not apply if the weapons, after inspection by the carrier, were in checked baggage and inaccessible to the passenger.

19760321 Spring, 1976: FAA installed a prototype wake vortex advisory system (VAS) at Chicago O'Hare airport (see Nov 1, 1975). The prototype’s computer was designed to analyze wind measurements collected in the runway area in order to predict aircraft wake turbulence, or give assurance of its absence. This would making it possible for controllers to safely reduce the separation distances between landing aircraft and thereby expand airport capacity. FAA subsequently removed the VAS, however, concluding that it did not provide sufficient data for the purpose. (See Dec 18, 1992.)

19760331	Mar 31, 1976: Several organizational changes became official this date at the FAA Headquarters. The Office of the Associate Administrator for Airports and the Airports Service were abolished and replaced by the Office of Airport Programs, headed by an assistant administrator who reported directly to the Administrator. The Metropolitan Washington Airports Service was converted to a field element headed by a director who also reported to the Administrator. Finally, the Office of the Associate Administrator for Aviation Safety lost its two largest components--the Flight Standards Service and the Civil Aviation Security Service, which now reported directly to the Administrator--and was renamed the Office of Aviation Safety, a small staff unit headed by an assistant administrator who reported to the Administrator. (See Nov 2, 1978 and Jun 13, 1979.)
19760331	Mar 31, 1976: FAA Deputy Administrator James E. Dow retired after 32 years of Federal service, all with CAA and FAA (see Aug 9, 1974). Dow had been Deputy or Acting Deputy since Jul 1973, and had served as Acting Administrator between the tenures of Administrators Butterfield and McLucas. (See Mar 25, 1975, Nov 24, 1975, and May 4, 1977.)
19760331	Mar 1976: Responding to public and congressional concern about near collisions in the air, Administrator John L. McLucas announced a five-point separation assurance program: continued enhancement of ground-based air traffic control; consideration of increased use of Instrument Flight Rules and radar beacon surveillance; possible additional requirements for carriage of radar beacons (transponders) with altitude reporting capability; development of the Beacon Collision Avoidance System (BCAS); and development of Intermittent Positive Control (IPC), which would allow automatic transmission of collision warnings from ground facilities (see Mar 4, 1976).
	The inclusion of BCAS represented a milestone in the long search for an airborne collision warning device that had been begun by the Air Transport Association in 1955. FAA began participating in 1959 by sponsoring a government-industry advisory group, but by the early 1970s was under fire for failure to achieve prompt deployment of such a system. At congressional request, the agency in 1972 undertook an evaluation of three forms of Airborne Collision Avoidance System (ACAS) developed by Honeywell, McDonnell-Douglas, and RCA. Within FAA, however, opinion tended to favor the BCAS system, which made use of radar transponders and was more compatible with the ground-based air traffic control system. On Feb 9, 1976, McLucas reported to Senator Howard Cannon that, although Honeywell's system was the best of the three ACAS versions, increased separation assurance could best be achieved by other means, including development of BCAS. (See Dec 27, 1978.)

19760415	Apr 15, 1976: The National Aeronautics and Space Administration (NASA) implemented a system for processing reports of aviation hazards and safety-related incidents while preserving the reporters' anonymity (see Aug 15, 1975). FAA made certain modifications to its Aviation Safety Reporting Program (ASRP) that took effect on the same date that NASA's participation began. Under the new policy, FAA would waive disciplinary action against all those involved in an incident provided a timely report was filed with NASA and certain other stipulations were fulfilled. FAA would not use reports for disciplinary purposes even if they involved reckless operation, gross negligence, or willful misconduct (although disciplinary action might be taken in such cases on the basis of information obtained independently). As before, no form of immunity was provided in cases involving accidents or criminal offenses, and FAA remained free to take remedial action to ensure safety. (See Mar 16, 1979.)
19760427	Apr 27, 1976: An American Airlines Boeing 727 crashed on landing at Charlotte Amalie on St. Thomas in the Virgin Islands, killing 37 of 88 persons aboard. The accident, the third crash of a jetliner at St. Thomas's Truman Airport in less than 8 years, revived criticism of the airport as unsafe because of a short runway (4,650 feet), mountainous surroundings, and tricky winds. Later in the year, Transportation Secretary William T. Coleman announced that grants would be provided to assist in building a longer runway.
19760505	May 5, 1976: The United States, France, and the United Kingdom concluded an agreement providing for the monitoring of ozone levels in the stratosphere and cooperation to ensure that the ozone layer was not degraded by emissions from supersonic transports. (See Feb 4, 1976, and Sep 23, 1977.)
19760524	May 24, 1976: The FAA Depot at Oklahoma City completed a highly successful emergency resupply of the FAA Center/Approach Control (CERAP) facility on Guam following the destruction wrought three days earlier by Typhoon Pamela. The depot primarily resupplied air traffic control equipment lost when winds of up to 170 miles per hour swept the island.
19760602	Jun 2, 1976: In a suit brought by a citizens group known as Virginians for Dulles, the U.S. Court of Appeals for the Fourth Circuit held that the "vastly expanded use" of Washington National and Dulles International Airports over recent years required FAA to file Environmental Impact Statements concerning the operations of these airports. (See Mar 23, 1978.)
19760606	Jun 6, 1976: The air route traffic control center at Great Falls, Mont., closed after 34 years of service. Great Falls was the last of 10 centers phased out in a program begun in the early 1960s to consolidate en route air traffic control. Its closing left only 20 modernized ARTCCs within the contiguous U.S. FAA had been reducing the airspace controlled by Great Falls since 1970. (See Appendix V.)

19760630 Jun 1976: FAA received delivery of the first prototype microwave landing system (MLS). The program--a high-priority undertaking begun in 1971 and participated in by FAA, DOD, and NASA--was considered a key element of the upgraded third generation air traffic control system (see Jul 1971). FAA planned to test the prototypes at the National Aviation Facilities Experimental Center, in Atlantic City, and at a NASA base in California. (See Jul 22, 1975, and Mar 16, 1977.)

19760701 Jul 1, 1976: The principal provisions of FAA's hazardous materials rules became incorporated into the regulations of DOT's Materials Transportation Bureau. The change resulted from legislation that gave the Secretary of Transportation increased regulatory and enforcement authority over the movement of hazardous materials in all the transportation modes (see Jan 3, 1975). DOT had accordingly established the Materials Transportation Bureau, and transferred the authority for regulation of hazardous materials from the various administrations, including FAA, to the new Bureau (see Sep 23, 1977).

19760712 Jul 12, 1976: FAA put into effect a national beacon code allocation plan under which pilots flying in the contiguous U.S. would be able to keep the same radar beacon identification code from takeoff to landing, without having to change codes as had previously been required when they flew from one area or altitude to another.

19760712 Jul 12, 1976: President Ford signed Public Law 94-353, the Airport and Airway Development Act Amendments of 1976, ending a one-year lapse in authorization for Federal airport aid (see Jun 30, 1975). The legislation marked the third time that the Airport and Airway Development and Revenue Acts of 1970 were amended (see May 21, 1970, Nov 27, 1971, and Jun 18, 1973). The new law sharply raised the Airport Development Aid Program (ADAP) funding levels to a total of $2.73 billion for the five-year period 1976-1980. It also increased the Federal share for ADAP grants from 50 percent to 75 percent for the nation's 67 largest airports. For smaller airports, the Federal share rose from 75 percent to 90 percent for fiscal 1976-78 and 80 percent for fiscal 1979-80. The Federal share for planning grants rose from 66 2/3 percent to 75 percent, with some exceptions. The new law simplified funding procedures and expanded the types of projects eligible for ADAP assistance to include snow removal equipment as well as equipment, barriers, landscaping, and land acquisition for the purpose of airport noise abatement.

In addition, the legislation authorized appropriations from the Airport and Airway Trust Fund during fiscal 1976-80 of : $1.3 billion for establishing and improving Federal air navigation facilities; $1.5 billion for maintaining such facilities; and $1.275 million to assist the states in developing their own general aviation airport standards. Other provisions of the law included authorizing the Secretary of Transportation to select four states to receive demonstration grants for administering the general aviation portion of the ADAP program (see Nov 24, 1976). The law also established commuter service airports, a new class of air carrier airport not served by carriers holding CAB certificates of public convenience and necessity. (See Sep 30, 1980.)

19760712 Jul 12, 1976: FAA redesignated its Office of Information Services the Office of Public Affairs, its name prior to a 1973 reorganization (see Sep 10, 1973). This change also transferred from Public Affairs the congressional correspondence function to the Executive Secretariat and the congressional liaison function to the Special Assistant for Legislative Affairs.

19760728 Jul 28, 1976: Capt. Eldon W. Joersz, USAF, piloted a Lockheed SR-71A "Blackbird" at 2,193.16 mph near Beale Air Force Base, Calif., setting a Federation Aeronautique Internationale absolute world record for speed over a straight course. (See Oct 3, 1967.)

19760731 Jul 28-31, 1976: A slowdown by PATCO-affiliated air traffic controllers disrupted traffic around the country. PATCO president John F. Leyden had ordered the slowdown to protest the U.S. Civil Service Commission's delay in completing a pay reclassification study for controllers. Leyden had also protested a Civil Service proposal to downgrade controllers at certain low-activity facilities. The slowdown ended when the Civil Service Commission agreed to reconsider its position and expedite the review, while FAA Administrator John L. McLucas publicly confirmed his support of upgradings at certain facilities. FAA took no disciplinary action against PATCO. (See May 7, 1975, and Nov 12, 1976.)

19760810 Aug 10, 1976: FAA announced a contract for enhancement of its ARTS III automated terminal radar systems (see Aug 13, 1975). Of the 65 existing ARTS III systems, 29 would be upgraded to ARTS IIIA installations by the addition of certain capabilities. The ARTS IIIA would provide radar tracking of aircraft not equipped with transponders, and enable controllers to place alphanumeric data tags on the scope to allow automatic reporting of identity and altitude for these targets (whereas the basic ARTS III displayed data tags only for transponder-equipped aircraft). The ARTS IIIA would also possess improved computer efficiency, as well as capacity for additional radar displays and for continued operations with reduced capabilities in the event of component failure (see Mar 1978). In addition, the contractor agreed to upgrade all 65 existing ARTS installations to permit air traffic control operations to be continuously recorded on magnetic disks.

The contract also called for the installation of a special ARTS IIIA system at the new New York terminal radar control room (TRACON). Ground-breaking for the building to house the TRACON had taken place during July at Long Island's Mitchel Field. The new facility would replace the Common Radar Room at Kennedy International, which controlled traffic approaching and departing New York's three major airports and several smaller airports. (See Jan 10, 1981.)

Finally, the contract provided for installation of four en route automated radar tracking systems (EARTS) at air route traffic control centers in Alaska, Hawaii, and Puerto Rico, as well as at Nellis Air Force Base (see Aug 4, 1980).

19760902	Sep 2, 1976: CAB approved Advance Booking Charter fares, available to anyone who paid 30 days in advance (or 45 days in advance for certain destinations) and not restricted to members of pre-existing "affinity groups." Like the approval of One Stop Inclusive Tour Charters during the previous year, this move was part of a trend to liberalize charter regulations. The new competition from charter operators helped stimulate scheduled carriers to begin offering deeply discounted prepaid fares during 1977. (See Jun 10, 1977).
19760910	Sep 10, 1976: A British Airways Trident and a Yugoslav DC-9 collided over Zagreb, Yugoslavia, killing all 176 occupants of the two airplanes, a higher toll than in any previous civil midair collision. In May 1977, a Yugoslav court sentenced an air traffic controller to 7 years in prison for negligence in handling the two aircraft, the first known criminal prosecution of a civilian controller for negligent performance of duties.
19760910	Sep 10, 1976: The first successful hijacking of a scheduled American air carrier aircraft since comprehensive security measures were instituted on Dec 5, 1972, occurred when five Croatian nationalists commandeered a TWA jetliner en route from New York's La Guardia Airport to Chicago. The hijackers seized the plane by threatening to blow it up with realistic-looking "bombs" they had assembled in a lavatory from an assortment of innocuous objects brought aboard on their persons and in their carry-on luggage. To bolster their deception, they revealed the location of a real bomb in a New York subway locker. That device exploded after removal to a disposal area, killing one policeman. The hijackers demanded that newspapers publish a pro-Croatian manifesto and that aircraft drop leaflets over cities in the U.S., Canada, England, and France. This was complied with, and the hijackers eventually surrendered in France.
19761001	Oct 1, 1976: Fiscal year 1977 began for the Federal government.This was the first Federal fiscal year to begin on Oct 1 instead of Jul 1. Fiscal 1976 had ended on Jun 30, 1976, and the following three months had been designated a transition quarter.
19761001	Oct 1, 1976: FAA began to receive the first prototypes of the ARTS II automated radar terminal system for testing and evaluation. Developed under contracts concluded in Aug and Dec 1974, FAA programmed the system for installation at 71 terminals whose traffic volume did not warrant the more highly automated and much more costly ARTS IIIs in use at the major hubs. Designed around a relatively low-cost minicomputer, the ARTS II lacked certain capabilities of the ARTS III but could provide controllers using it at airports with direct alphanumeric readouts of the identity, heading, and altitude of the transponder-equipped aircraft they were tracking. (See Dec 12, 1978)

19761005 Oct 5, 1976: The Labor Department certified the Federal Aviation Science and Technological Association (FASTA), a National Association of Government Employees union, as the exclusive bargaining representative of some 7,700 airway facilities employees. The employees had selected FASTA as their representative in an April 1976 election, but certification had been delayed by an objection by the American Federation of Government Employees. FAA and FASTA signed a national labor agreement in September 1977. (See Dec 31, 1981.)

19761015 Oct 15, 1976: A new nationwide standardized format went into effect for Pilot Reports (PIREPS), reports by en route pilots describing in-flight weather conditions as they encountered them. FAA, the National Weather Service, and Department of Defense personnel received and encoded PIREPS into the new format and fed them into a teletypewriter network for distribution to civil and military aviation facilities around the country. Replacing earlier informal reports given by the pilots in no particular order, the new format facilitated the reading and relay of PIREPS, and made them more adaptable for use with several automated weather communication systems FAA had under development.

19761105 Nov 5, 1976: FAA commissioned the first Minimum Safe Altitude Warning (MSAW) system, an add-on computer software feature specially devised for use with the ARTS III radar terminal system, at Los Angeles International Airport. MSAW had the capacity to spot unsafe conditions by automatically monitoring aircraft altitudes and comparing them to terrain maps stored in the computer's memory. If aircraft descended dangerously close to the ground, aural and visual alarms on their consoles alerted controllers who could then radio warnings to pilots (see Oct 28, 1977). Sperry Rand's UNIVAC division developed MSAW under a contract announced by FAA on Jul 17, 1974. The need for such a system had been highlighted by the crash of an L-1011 near Miami (see Dec 29, 1972).

19761112 Nov 12, 1976: The U.S. Civil Service Commission, in a reversal of a position taken earlier, announced its support for upgrading air traffic controllers at 8 of the nation's busiest air traffic control facilities from GS-13 to GS-14. The Commission also approved the upgrading of controllers of lower grades at approximately 23 other installations, but insisted on downgradings at a few facilities. PATCO continued to demand better terms, backing its position with the threat of renewed slowdowns. On Jan 13, 1977, the Commission dropped its insistence on downgradings and approved promotions at some 45 facilities, including the GS-14 level at 8 locations. (See Mar 15, 1978.)

19761124 Nov 24, 1976: The Secretary of Transportation chose Arizona, Pennsylvania, South Dakota, and Michigan to participate in a four-state demonstration program mandated by Congress (see Jul 12, 1976). The chosen states administered Federal grants for the development of general aviation airports within their borders for fiscal 1977-78 to determine whether state agencies could manage these funds more effectively than FAA. Although FAA recommended that the demonstration be extended beyond fiscal 1978, Congress allowed the program to expire. (See Oct 1, 1989.)

19761210

Dec 10, 1976: FAA announced completion of the conversion of the airway intersection and waypoint identifiers on en route aeronautical charts to five-letter code names specifically designed for use in the filing of computerized flight plans. Under the old system, pilots had listed the identifier using a geographic name based on a nearby terrain feature or town, making it necessary for persons receiving the flight plan to change the name to a computer code--a task that took time and greatly increased the chance for coding error. On the same date, FAA also announced a similar program to convert the fix names on approach and departure charts within 2 to 3 years.

19761221

Dec 21, 1976: FAA deemed contact lenses permissible to meet the distance visual acuity requirements for all classes of airman medical certificates, by a rule effective this date. Previous FAA regulations governing medical certification had allowed for visual correction by eye glasses only, with exceptions being made under a time-consuming waiver process. The new rule eliminated the waiver procedure. It did not affect the eye glass requirement for correcting near visual acuity.

19761223

Dec 23, 1976: FAA published a rule establishing deadlines for phased compliance of all jet transport aircraft with the noise standards already established for new aircraft types (see Oct 26, 1973). The agency gave operators whose fleets included aircraft that did not meet the standards the option of modifying or replacing them. FAA also required all two- and three-engine jets exceeding 75,000 lb. to comply within six years (by Jan 1, 1983), with half the total in each airline fleet to be in compliance at the end of four years. Aircraft in this category included the BAC-111, DC-9, Boeing models 727, 737, and 747-100. Non-complying four-engine jets were to meet the standards within eight years, with one-fourth of them complying within four years and one-half within six years. This category included the Convair 990, DC-8, and Boeing 707.

The rule did not immediately apply to foreign-flag aircraft or U.S. aircraft on international routes, since FAA was working with the International Civil Aviation Organization to establish world-wide noise standards. If no agreement was reached by Jan 1, 1980, however, the agency would take regulatory action to ensure compliance by at least Jan 1, 1985 (see Nov 28, 1980).

The rule followed President Ford's Oct 21, 1976, announcement that noise standard compliance must be achieved within eight years. It also implemented a major provision of an FAA-DOT noise policy dated Nov 18, 1976. Other elements of the policy included: a new rule, published Nov 29, requiring the use of noise abatement flap settings; a decision not to prescribe the two-segment approach procedure, which was considered to involve unacceptable risks; and implementation of a Local Flow Traffic Management system aimed at reducing low-altitude jet flying time, rather than the minimum altitude regulations proposed by the Environmental Protection Agency. In accordance with another element of the policy, FAA during fiscal 1977 issed grants to four airports to participate in a noise control and land use planning demonstration program. (See Mar 3, 1977, Jan 19, 1979, and Feb 18, 1980.)

1977

19770110 Jan 10, 1977: FAA published a rule raising the maximum number of transport aircraft passenger seats per main (Type A) emergency exit from 100 to 110, effective Feb 10, 1977. The change cleared the way for certification of Boeing 747s seating over 500.

19770120 Jan 20, 1977: Jimmy (James E.) Carter became President, succeeding Gerald R. Ford.

19770201 Feb 1, 1977: Brock Adams became Secretary of Transportation, succeeding William T. Coleman, Jr., with the change in administrations. Adams had been a Democratic congressman from the State of Washington since 1964 and a leading transportation authority in the House of Representatives. (See Jul 20, 1979.)

19770303 Mar 3, 1977: FAA published a rule establishing three "stages" of aircraft noise levels for subsonic large transport aircraft and subsonic turbojets. Stage 1 aircraft were those that did not meet current noise standards and hence must be modified or replaced according to a previously established schedule (see Dec 23, 1976). Stage 2 aircraft met the current standards, while Stage 3 aircraft were able to meet the more rigorous noise standards for the next generation of jet transports prescribed by the rule.

The agency judged that improved noise-reduction technologies made it economically reasonable to apply the new standards, which were effective on Oct 1, 1977 and covered all large (over 75,000 pounds) aircraft for which application for new type certificates had been made after May 5, 1975. Noise limits on landing approaches were reduced from the old standard of 102-108 effective perceived noise decibels (EPNdB) to 98-105 EPNdB, depending on aircraft weight. For the first time, the standards for takeoff and sideline noise levels were based on number of engines as well as weight. Takeoff limits were reduced from the old standard of 93-108 EPNdB to 90-106 for four-engine jets, 90-104 for three engines, and 89-101 for one and two engines. Sideline noise limits were reduced from 102-108 EPNdB to 96-103 for three and four engines and 94-103 for one and two engines. In addition, the measuring points for sideline noise were altered. The new noise limits were not retroactive to aircraft types already certificated. (See Feb 18, 1980.)

19770316 Mar 16, 1977: The All-Weather Operations Panel of the International Civil Aviation Organization (ICAO) recommended to ICAO's Air Navigation Commission the adoption of the U.S.-Australian Time Reference Scanning Beam (TRSB) technique as the world standard for a microwave landing system (MLS). The vote was six for the U.S-sponsored system and one for the British Doppler system, with three abstentions (Britain, France, and West Germany). Britain protested the decision as biased and technically flawed, and hence the debate about MLS continued pending a final decision in 1978 by the full All-Weather Operations Division of ICAO. (See Jun 1976, and Apr 19, 1978.)

19770327 Mar 27, 1977: Two Boeing 747s collided on a runway at Tenerife, Canary Islands, under conditions of limited visibility. One of the aircraft, a Pan American jet, was moving down the runway toward an assigned taxiway. The other, belonging to Royal Dutch Airlines (KLM), had been assigned to wait at the end of the same runway. The Dutch crew was approaching the legal flight duty time limit. Their captain apparently misinterpreted a message from the tower as clearance to take off. Disregarding the doubts of a crew member, he began the takeoff roll. The resulting collision killed all 248 persons aboard the KLM jet and 335 of the 396 persons aboard the Pan American. The fatality total of 583 was the worst that had occurred in any aviation accident. Most of the casualties were caused by the intense fires that engulfed both aircraft. The accident stimulated interest in fire safety (see Jun 26, 1978) and in airport surface detection equipment (see Jul 5, 1977).

19770330 Mar 30, 1977: Secretary of Transportation Brock Adams announced the withdrawal of Federal support for a proposed new St. Louis airport near Waterloo, Ill. His predecessor, William T. Coleman, Jr., had given conditional approval to the Waterloo site in Sep 1976, but Adams, in reversing this decision, said that pressing ahead on a new airport there was "premature." He acknowledged that his choice had been influenced by strong political opposition in Missouri to the project, as well as by the recent signing of longterm leases by major airlines at the existing Lambert-St. Louis Municipal Airport. (Langhorne M. Bond, who became FAA Administrator on May 4, 1977, had been a leading advocate of the Illinois site while he was Illinois Secretary of Transportation. Bond agreed during his confirmation hearings not to take part in a decision on the issue.)

19770401 Apr 1, 1977: John L. McLucas' resignation as Federal Aviation Administrator became effective. The post of Acting Administrator was assumed by Quentin S. Taylor, an FAA executive who was President Carter's nominee for Deputy Administrator. (See entries for May 4, 1977.)

19770404 Apr 4, 1977: A Southern Airways DC-9 crashed near New Hope, Ga. The pilot attempted an emergency landing on a highway, but the aircraft broke apart and caught fire. The accident killed 62 of the 85 persons aboard, as well as 8 persons on the ground. In addition, one passenger and one person injured on the ground died about a month later. The National Transportation Safety Board cited the probable cause of the crash as the total and unique loss of thrust after the engines ingested massive amounts of water and hail as the aircraft penetrated an area of severe thunderstorms. As contributory causes, the NTSB listed: failure of the airline's dispatch system to provide up-to-date severe weather data; the captain's reliance on airborne weather radar to enter a thunderstorm area; and FAA's lack of a system for disseminating real-time hazardous weather warnings. (See May 19, 1977.)

19770430 Apr 1977: FAA set up a unique transport unit of the Miami General Aviation District Office to provide greater oversight of non-certificated air cargo operations concentrated in the northwest corner of Miami airport. Recent accidents had given rise to FAA concerns about the safety of these operators of private-carriage cargo aircraft for lease.

19770504 May 4, 1977: Langhorne M. Bond became the seventh Administrator of the Federal Aviation Administration, succeeding John L. McLucas (see Mar 31, 1977). Bond had been nominated by President Carter on Mar 30 and confirmed by the Senate on Apr 27.

Born in Shanghai, China, in 1937, Bond was the son of a vice president of Pan American Airways. After earning an A.B. (1959) and law degree (1963) at the University of Virginia, he went on to study at the Institute of Air and Space Law at McGill University, the London School of Economics, and Oxford University. Bond was a member of the task force that developed the legislation establishing the U.S. Department of Transportation, and then served one-year stints as special assistant to the first DOT Secretary, Alan S. Boyd, and as Assistant Administrator for Public Affairs in DOT's Urban Mass Transportation Administration. He left Federal service in 1969 to become Executive Director of the National Transportation Center, a nonprofit research organization in Pittsburgh that managed bus technology projects for transit authorities. In Mar 1973, Bond was named Secretary of Transportation for the State of Illinois, the position he held when tapped for the FAA job. He served as FAA Administrator for the remaining three years and eight months of the Carter Administration. (See Jan 20, 1981.)

19770504 May 4, 1977: Quentin S. Taylor became FAA's Deputy Administrator, succeeding James E. Dow (see Mar 31, 1976). A career civil servant, the 41-year-old Taylor was Director of FAA's New England Region when President Carter nominated him for the Deputy post on Mar 30, 1977.

Born in Front Royal, Va., he held degrees from Howard University in electronic engineering and Syracuse University in political science. Taylor joined FAA in 1959 as an electronics engineer assigned to the Airway Facilities Service and served successively as a staff specialist in the Office of Appraisal, Special Assistant to the Associate Administrator for Administration, FAA's first Director of Civil Rights, and Deputy Director of the Alaskan Region. His appointment to the New England Region's top post in Feb 1975 made him the first African American to head an FAA region.

Taylor served as Deputy Administrator for the remainder of the Carter Administration, resigning on Jan 20, 1981. He continued his FAA career, serving as Consultant to the Office of the Administrator, then Director of the Office of International Aviation, and later Deputy Assistant Administrator for Airports. (See Aug 1, 1981.)

19770507 May 7, 1977: The pilots of Wien Air Alaska went on strike when the company determined to reduce its Boeing 737 cockpit crew to two pilots (see Nov 23, 1971). The strike lasted 21 months, but Wien maintained partial operations by hiring nonunion pilots. On Nov 2, 1978, President Carter created a Presidential Emergency Board to help settle the dispute. Three months later, on Feb 9, 1979, the board reported that both parties had agreed to accept a two-man crew for 737 operations. This settlement left only United and Western among U.S. airlines with a three-man crew for the 737. (See Feb 21, 1976 and Mar 27, 1980.)

19770512	May 12, 1977: Administrator Bond imposed an agency-wide hiring and promotion freeze. At FAA's national Headquarters and its Metropolitan Washington Airports office, the freeze affected both external and internal hiring. Field offices, however, could fill positions from within FAA, as long as promotions were not involved. The few exceptions to these rules included hiring required to meet air traffic training schedules. To further trim back Washington Headquarters personnel, Bond later instituted a field placement program between Mar 27 and Oct 24, 1978. Under the program, field offices could not fill vacancies until it was determined that qualified candidates were available at the Washington Headquarters. During his tenure, Bond succeeded in reducing overall FAA employment from 58,081 at the end of fiscal year 1977 to 55,340 on Dec 30, 1981. During the same period, Washington Headquarters personnel fell from 2,683 to 2,069.
19770516	May 16, 1977: A Sikorsky S-61L helicopter parked atop New York's Pan Am Building rolled on its side due to collapse of a landing gear. Rotating blades killed four boarding passengers, and one pedestrian on a street below died when struck by a separated blade portion. Originally opened in 1965, the controversial heliport had closed in Feb 1968 because of a contract dispute, then reopened on Feb 1, 1977. The facility closed permanently after the accident.
19770516	May 16, 1977: Regulations regarding airline transportation of disabled passengers went into effect after several years of discussion and debate. Noting increasing complaints on the subject, CAB had in 1971 referred the issue to FAA for determination of relevant safety parameters. After a series of hearings, FAA had in Jul 1974 proposed a comprehensive, detailed set of safety regulations. Public reaction was strongly negative, largly because many believed that the proposed rules placed unfair restrictions on disabled travelers.
	Guided by research and tests by the Civil Aeromedical Institute (CAMI), FAA adopted a more flexible approach in its Mar 1977 rule. The agency ordered each air carrier to develop its own set of procedures, appropriate to its particular aircraft and operations. FAA would then review these procedures and direct any changes needed for safety or the public interest. Airlines were prohibited from denying passage to anyone who met the criteria in its FAA-approved plan. In addition, the new rule specifically prohibited airlines from barring a passenger because of his or her inability to sit up in an airline seat, and required individual briefings on evacuation procedures for all disabled persons before takeoff. (See Mar 2, 1990.)
	FAA had originally proposed to require that canes and crutches be readily available for use during evacuation. The agency decided against this, however, citing CAMI research indicating that canes and crutches might actually hamper evacuation and might puncture inflatable evacuation slides. (See Nov 20, 1981.)

19770519

May 19, 1977: FAA issued a rule requiring each air carrier to obtain approval by year's end for its system of gathering and disseminating information on adverse weather that might affect safety. Current rules already required airlines to supply flight crews with pertinent weather data, but contained no provision for FAA approval of these weather information systems. In proposing this rule in a notice published on Nov 15, 1976, FAA cited factors that included an accident at St. Louis (see Jul 23, 1973). Following this proposal, the need for such a rule was highlighted by an accident in Georgia (see Apr 4, 1977).

19770610

Jun 10, 1977: The Senate confirmed Alfred E. Kahn as Chairman of the Civil Aeronautics Board (CAB). A former economics professor at Cornell, Kahn was a long-time champion of free market competition. Although the effort to increase competition in air transportation had begun before President Carter appointed him (see Sep 2, 1976), Kahn carried it much further. During his 15 months at CAB, the Board approved major fare reductions and awarded many new routes and services, such as the transatlantic Skytrain (see Sep 16, 1977). Kahn's policies at CAB helped pave the way for legislation that virtually ended the economic regulation of airlines. (See Nov 9, 1977.)

19770616

Jun 16, 1977: FAA published a rule requiring the installation of shoulder harnesses on the front seats of new small airplanes weighing 12,500 pounds or less that were manufactured after Jul 18, 1978. This rule upgraded safety standards included in an Aug 1, 1969, rule that required manufacturers of small aircraft to provide protection against head injuries for all occupants. This protection was to be achieved through seat belts in combination with either harnesses, energy-absorbing rests, or the elimination of injurious objects within striking radius of the head. The added requirement concerning harnesses for front seats stemmed from a Jan 1973 rulemaking proposal that followed recommendations by the National Transportation Safety Board and a petition from consumer advocate Ralph Nader. (See Nov 13, 1985.)

19770705

Jul 5, 1977: FAA announced award of a contract for an engineering model of a new generation of Airport Surface Detection Equipment, designated ASDE-3. ASDE surface radar had been in service at U.S. airports since Sep 1960 (see that date). FAA planned to use ASDE-3 as a replacement for the ASDE-2 systems in use at 13 airports, as well as to install ASDE-3 at additional locations. The new equipment would provide clearer outlines of runways and taxiways while at the same time suppressing radar returns from buildings and rainfall. In Apr 1977, FAA had ordered display enhancement units for the ASDE-2 as an interim measure.

FAA ordered the ASDE-3 engineering model a few months after a ground collision in the Canary Islands caused 583 deaths (see Mar 27, 1977). Deficiencies in surface radar had earlier been cited by the National Transportation Safety Board as a factor in a crash in fog involving a North Central Airlines DC-9 and a Delta Airlines Convair 880 that killed 10 passengers on the night of Dec 20, 1972, at Chicago's O'Hare International Airport. (See Aug 1979.)

19770713 Jul 13, 1977: FAA gave uninterrupted air traffic control service during a massive electric power failure that left approximately 9 million people in the New York City area without electricity for periods ranging from 5 to 25 hours. The uninterrupted service was possible because of the continuous power airport program that FAA had begun after an earlier massive blackout, in 1965, initially selecting 50 key airports to be equipped with standby engine generators. (See Sep 19, 1974.)

19770721 Jul 21, 1977: FAA issued an advisory circular on ozone irritation in aircraft cabins. Beginning in the winter of 1976, persons on high-altitude flights had reported such symptoms as shortness of breath, coughing, and eye irritation. By Mar 1977, FAA had concluded that ozone was the probable cause. Although the main atmospheric ozone layer lies above altitudes normally used by airliners, concentrations of the gas occasionally descend lower, particularly at high latitudes and during certain seasons of the year. FAA recommended that pilots descend to lower altitudes if effects of ozone contamination were noted. If pilots experienced significant exposure to the gas, they were advised to breathe pure oxygen before landing to counteract ozone's known effect on night vision. FAA also undertook research on more permanent ways of dealing with the problem. (See Feb 20, 1980.)

19770723 Jul 23, 1977: The United States and the United Kingdom signed the "Bermuda II" agreement governing civil air services between the two countries. Negotiations had been completed a month earlier, only shortly before an impending cessation of U.S.-U.K. air travel. On Jun 22, 1976, the British had given a year's notice of the termination of the original, landmark Bermuda pact (see Feb 11, 1946). Among their objectives were to increase their share of transatlantic passenger revenue by instituting capacity restrictions and to curtail American air carriers' "fifth freedom" rights to fly passengers east from London and west from Hong Kong. The U.S. negotiating team, led by former Secretary of Transportation Alan S. Boyd, argued for open competition. The resulting compromise: placed limits on American fifth-freedom rights; restricted situations in which more than one U.S. carrier served the same U.S.-U.K. route; and established a procedure that governments might use to control capacity. On the other hand, the treaty opened new routes for airlines of both countries, allowed the entrance of new carriers into the U.S.-U.K. market, and resulted in lower fares. (See Sep 26, 1977 and Mar 10, 1978.)

19770804 Aug 4, 1977: FAA Administrator Bond signed a policy paper reaffirming the age-60 rule on mandatory retirement of airline pilots (see Mar 15, 1960). Bond had promised to review the rule during his confirmation hearings. Citing a new study by FAA's Office of Aviation Medicine, the policy paper concluded that medical examination could not sufficiently predict the future health and functional capacity of a pilot who reached age 60. (See Dec 29, 1979.)

19770823	Aug 23, 1977: In the desert at Shaffer, Calif., Bryan Allen made the first flight propelled by human muscle through a one-mile, figure-eight course. Allen pedaled the course in the Gossamer Condor, a heavier-than-air craft weighing less than 70 pounds that had been designed by Paul MacCready. Nearly two years later, on Jun 12, 1979, Allen made the first human-powered flight across the English Channel, pedaling the MacReady-designed Gossamer Albatross.
19770829	Aug 29, 1977: FAA published a notice in the Federal Register announcing the elimination of seven of eleven FAA advisory committees as the result of a review conducted under President's Carter's order for a strict evaluation of such committees. The elminated committees were: the Citizens Advisory Committee on Aviation; the Microwave Landing System Advisory Committee; the U.S. Advisory Committee on Obstacle Clearance Requirements; the U.S. Advisory Committee on Visual Aids to Approach and Landings; the U.S. Advisory Committee on Terminal Instrument Procedures; the Flight Information Advisory Committee; and the Southern Region Air Traffic Control Committee. The remaining committees were: the Air Traffic Procedures Advisory Committee; the Radio Technical Commission for Aeronautics (RTCA); the Technical Advisory Committee, later terminated on Mar 1, 1978; and the High Altitude Pollution Program Technical Advisory Committee, later terminated on Jul 1, 1982.
19770907	Sep 7, 1977: The Aircraft Loan Guaranty Program lapsed on this date as Congress had failed to provide funds for program, which had guaranteed loans of $307 million during its 20-year existence. (See Jun 13, 1968, and Oct 24, 1978.)
19770909	Sep 9, 1977: FAA abolished the Executive Secretariat in the Office of the Administrator and transferred all of its functions, except administrative support and correspondence control and review, to other national headquarters elements.
19770915	Sep 15, 1977: The dynamic simulation radar controller training laboratory (DYSIM) became operational at the Denver Air Route Traffic Control Center, the last of the 20 centers to be so equipped. FAA had determined that it was better to train new center controllers on a simulator than on an operational ATC sector, and began a program in 1975 to provide the centers with training equipment that duplicated all the conditions experienced on operational NAS En Route Stage A display equipment.
19770915	Sep 15, 1977: FAA formally notified the U.S.-European Aerosat council that the United States was withdrawing from the satellite project, following a congressional cut-off of funds for the program. Aerosat's objective was to increase the communications capacity over the North Atlantic. Originally a European idea, the project had long been marked by controversy over shared ownership, radio bands, and costs. (See Nov 12, 1974.)
19770916	Sep 16, 1977: FAA closed the Airport District Offices at Denver, Salt Lake City, and Pierre, South Dakota, and transferred their services to Colorado, Wyoming, Utah, and South Dakota to the Rocky Mountain Regional Office at Aurora, Colorado.

19770923

Sep 23, 1977: At the end of the 16-month trial of the Anglo-French Concorde supersonic transport at Dulles International Airport (see Feb 4, 1976), Secretary of Transportation Brock Adams announced proposed permanent rules for civil supersonic transport (SST) operations in the United States. Most of these related to the new noise restrictions adopted in 1977. Secretary Adams proposed to exempt the 16 Concordes manufactured before Jan 1, 1980, from retrofit requirements for older jet transports (see Dec 23, 1976), while requiring future SST's to meet all noise standards for newer subsonic aircraft (see Mar 3, 1977). In view of the exceptional loudness of the Concorde, however, the ban on Concorde operations between 10 p.m. and 7 a.m. was retained, as was the absolute prohibition on supersonic flight over land. In addition, the Concorde was granted permission to land at Washington, New York, and 11 other American cities.

These proposed regulations became final on Jul 31, 1978, after several more public hearings on the subject. At that time, FAA justified its "grandfather clause" for the first 16 Concordes by noting that they constituted the entire production run of the aircraft. (Because of its high fuel costs and limited payload, the Concorde had been purchased only by the state airlines of France and Britain.) FAA felt that modifications that would bring these aircraft into compliance with subsonic noise standards were neither technologically practicable nor economically reasonable. On the other hand, some restrictions on the Concorde were justified by thorough analysis of FAA test results on the plane's loudness, which showed that the perceived noise generated by a Concorde on its takeoff path was double that of a Boeing 707, four times that of a Boeing 747, and eight times that of a DC-10. FAA also reviewed a number of environmental concerns that had been expressed about SSTs, the most important of which was the fear that emission from SST engines might damage the ozone layer of the earth's atmosphere (see May 5, 1976). Citing a number of recent research studies, including one submitted by the National Academy of Sciences, FAA concluded that the possibility of such damage from the Concordes was too small to be an immediate concern.

19770923

Sep 23, 1977: The Research and Special Programs Administration (RSPA) came into being as a new element of the Department of Transportation. RSPA received responsibility for many issues common to all transportation modes, and for a variety of special programs. Its responsibilities included: ensuring the safe movement of hazardous materials and the safe operation of pipelines; improving cargo security; facilitating cargo movement; and conducting research in support of a range of Departmental programs. Organizations placed under RSPA included: the Materials Transportation Bureau (see Jul 1, 1976); the Transportation Safety Institute (see Feb 23, 1971); and the Transportation Systems Center, which had conducted much of DOT's multimodal research since its creation in 1970. (On Sep 18, 1990, the Transportation Systems Center was renamed the Volpe National Transportation Systems Center.) After 1984, RSPA assumed responsibility for collecting air carrier economic data (see Dec 31, 1984).

19770926

Sep 26, 1977: Laker Airlines' low-cost "Skytrain" transatlantic service made its first flight from New York to London, signalling the start of a revolution in international air fares. The new standby fare for the British airline had been a part of the new Bermuda II treaty (see Jul 23, 1977). On the same day, President Carter moved to regain the initiative for the United States by approving a package of new low-cost standby and reserved fares for U.S. scheduled transatlantic flag carriers. On Dec 21, he also moved to increase the extent of transatlantic service, approving new routes for 11 American cities. (See Mar 10, 1978.)

19770930

Sep 1977: The new consolidated Washington Flight Service Station (co-located with the Air Route Traffic Control Center at Leesburg, Va.) became operational after the installation of a computerized data-retrieval system. The new station handled all the flight services previously provided by the stations at Washington, Richmond, and Charlottesville. Instead of the experimental AWANS computer system (see Feb 1976), the new Leesburg station used another system, called Meteorological and Aeronautical Presentation System (MAPS), which was more compatible with the ARTCC's computers. The AWANS originally ordered for Leesburg was installed at another co-located FSS at the Indianapolis ARTCC. After testing both modernized stations, the FAA concluded that FSS consolidation offered the prospect of significant improvements in cost and service. (See Jan 1978.)

19771017

Oct 17, 1977: A U.S. Supreme Court decision ended the long dispute over landing rights for the Anglo-French Concorde supersonic transport at New York Kennedy airport. In 1976, Secretary of Transportation William T. Coleman had allowed a 16-month trial of the Concorde at Washington and New York (see Feb 4, 1976); however, the Port Authority of New York and New Jersey, operator of Kennedy airport, had banned the Concorde pending further study of its environmental impact. During the spring of 1977, citizens concerned about the Concorde's potential noise conducted demonstrations that included the deliberate snarling of automobile traffic by driving cars very slowly down Kennedy's access roads.

Meanwhile, on May 11, 1977, a Federal District Court ruled that the Port Authority's landing ban was illegal because it was in "irreconcilable conflict" with Federal prerogatives. A month later, on Jun 14, the U.S. Court of Appeals for the Second Circuit modified this ruling, holding that the Port Authority had the right to establish "fair, reasonable, and nondiscriminatory" noise standards. The Court of appeals sent the case back to the District Court to determine whether the Port Authority's actions met the "fair, reasonable, and nondiscriminatory" test. On Aug 17, the District Court ruled that the Port Authority's long delay in formulating noise standards constituted unreasonable and discriminatory treatment of the Concorde. It was this decision that the Supreme Court upheld. Concorde passenger service from New York to London and Paris began on Nov 22, 1977.

19771018	Oct 18, 1977: FAA required operators of certificated airports to provide emergency medical plans for medical assistance, transportation, and crowd control for an emergency involving the largest aircraft that might reasonably be expected to serve their airports. FAA based the action on deficiencies discovered in a random review of airport emergency plans. (See May 21, 1973, and Nov 9, 1987.)
19771028	Oct 28, 1977: FAA announced that Minimum Safe Altitude Warning (MSAW) was operational at all 63 major U.S. airports equipped with ARTS III automated terminal radar systems. (See Nov 5, 1976 and Sep 30, 1981.)
19771109	Nov 9, 1977: President Carter signed legislation virtually ending economic regulation of air cargo operations. The President stated his hope that this was the first of many such steps to reduce regulation. (See Jun 10, 1977, and Oct 24, 1978.)
19771120	Nov 20, 1977: Teams of dogs specially trained to detect explosives were in place at a network of 29 U.S. airports chosen so that no airliner flying over the United States would be more than 30 minutes away from one of the designated facilities. The placement of dog teams at San Juan airport marked the complete implementation of a joint FAA-Law Enforcement Assistance Administration (LEAA) program begun in 1972 (see Dec 29, 1975). Between 1972 and 1977, dogs had detected the presence of explosives in aircraft cargo on 21 occasions. FAA assumed full financial support for the program after Jul 1, 1981, when LEAA terminated its participation.
19771201	Dec 1, 1977: A new air route system between Hawaii and the U.S. mainland permitting more direct flight paths and greater fuel economy on the 2,500-mile trip became permanent, following a successful six-month test that began in May 1976. The new system provided six great circle routes between Hawaii and the U.S. west coast in place of the previous four essentially parallel routes. The increase in routes was made possible by the use of composite separation criteria that permitted lateral separation of as little as 50 miles instead of the previous 100, so long as the aircraft had at least 1,000 feet vertical separation. The procedure had been used successfully on North Atlantic routes for some time.

1978

19780110 Jan 10, 1978: A conflict alert system designed to warn air traffic controllers of potential midair collisions in busy terminal areas became operational at Houston International Airport, the first Automated Terminal Radar System (ARTS III) to be so equipped. The terminal conflict alert system was similar to the one installed in the 20 Air Route Traffic Control Centers (see Jan 9, 1976). In Apr 1980, FAA completed the commissioning of conflict alert at 62 designated terminals.

19780120 Jan 20, 1978: Fulfilling one of President Carter's campaign promises, the Federal Aviation Administration and other executive agencies used the Zero Based Budget (ZBB) process in submitting its fiscal year 1979 budget proposal. In applying ZBB principles, the Office of the Secretary of Transportation divided FAA's budget into 16 "decision units" which were expected to facilitate budget choices. For each unit, FAA developed four "decision packages," reflecting four different funding levels, and then ranked the packages in priority order. ZBB continued during the Carter years but was discontinued under the Reagan Administration.

19780131 Jan 1978: FAA and the Office of the Secretary of Transportation submitted to Congress a new master plan for the long-delayed modernization of FAA's 292 flight service stations (FSSs). The plan involved a three-stage process to complete system automation. The first stage involved the installation of semi-automated computer equipment at the 43 busiest stations. The second involved a choice between: the eventual consolidation of all 292 stations into 20 large ones, co-located at the 20 Air Route Traffic Control Centers (ARTCCs), and modernization of up to 150 of the existing stations at their present sites. The decision on this stage could be postponed until 1982. The third stage would add the capacity for pilot self-briefings, thus completely automating the most important FSS function. FAA estimated that if the FSS system was left unchanged, up to 11,500 specialists would be needed to operate it by 1995, as opposed to only 4,500 in 1978. (See Sep 1977 and Jun 1979.)

19780222 Feb 22, 1978: Secretary of Transportation Brock Adams nominated the terminal building at Dulles International Airport for the National Register of Historic Places. Long recognized for the excellence of its design (see Jun 28, 1966), the terminal was ranked third on a list of important structures of the nation's first 200 years in a 1976 poll sponsored by the American Institute of Architects. Concerns about FAA's aesthetic stewardship of the terminal increased in 1977, when the agency announced plans for a large addition and stated its unwillingness to nominate the building to the National Register. After considerable public discussion, the proposed addition (for waiting rooms on the side of the terminal facing the airfield) was generally approved by critics. Inclusion on the National Register guaranteed that any future modifications would be submitted for review by the President's Advisory Council on Historic Preservation. Before actually placing the Dulles terminal on the National Register in May 1978, the Secretary of the Interior granted it a special exception from the Register's rule excluding buildings less than 50 years old.

19780310 Mar 10, 1978: The United States and the Netherlands signed a new international aviation agreement, based on the principle of free competition and regarded as a model for similar understandings that the United States hoped to negotiate. On Mar 17, the United States also announced a new agreement with the United Kingdom, within the context of the Bermuda II treaty (see Jul 23, 1977), making possible a range of lower fares between the two nations. During 1978, the United States concluded liberal new aviation agreements with Israel and several other nations. In an Aug 21 statement explaining its negotiating stance, the Carter Administration declared that "maximum consumer benefits can be best achieved through the preservation and extension of competition between airlines in a fair market place."

19780315 Mar 15, 1978: A three-year labor-management agreement between PATCO and FAA went into effect. Since the controllers' pay had recently been adjusted in their favor by the Civil Service Commission (see Nov 12, 1976), the agreement dealt primarily with working conditions. The contract contained 75 articles, including provisions for overtime pay. In addition, FAA agreed to pay controllers' salaries while on foreign as well as domestic familiarization flights. Previously, only controllers who handled international flights were eligible for overseas familiarization trips. In the past airlines had always provided free familiarization flights for eligible controllers, but now the principal overseas air carriers balked at the prospect of providing cockpit space on international flights for all air traffic controllers at the GS-10 or higher level. Even domestic familiarization flights were difficult to arrange in 1978 because of the airlines' own active training programs. (See May 25, 1978.)

19780316 Mar 16, 1978: In a regulation effective on this date, FAA permitted temporary operation of an aircraft without the required emergency locator transmitter (ELT). The rule responded to an amendment to the legislation that had mandated ELT use on most civil aircraft (see Dec 29, 1970). Because the equipment frequently malfunctioned, emitting false signals and causing other problems, Congress changed the law to permit operation of an aircraft for up to 90 days while its ELT was being inspected, modified, repaired, or replaced. (See Mar 28, 1979.)

19780323 Mar 23, 1978: In response to a Federal court order (see Jun 2, 1976), FAA issued draft Environmental Impact Statements concerning the operation of Washington National and Dulles International Airports and published a notice of proposed policy for these airports. After comments on this proposal had been considered, Secretary of Transportation Neil Goldschmidt announced a new policy for National Airport on Aug 15, 1980. The new policy included: a 17 million cap on the number of passengers permitted at National per year; retaining the 60 slots per hour provided by the High Density Rule (see Jun 1, 1969), while reducing the share of slots for Part 121 air carriers from 40 to 36; prohibiting all departures between 10:30 pm and 7:00 am, and all arrivals between 11:00 pm and 7:00 am; lifting the ban on 2- and 3-engine widebody jets; and extending the nonstop service perimeter rule from a radius of 650 to 1,000 miles, with no exceptions (see Apr 24, 1966).

The new policy was scheduled to take effect on Jan 5, 1981, but its implementation was delayed. Because Congress attached a rider to DOT's fiscal 1981 appropriations act that prohibited FAA from reducing the number of Part 121 airline slots until Apr 26, 1981, FAA decided to postpone the entire policy until after that date. Shortly after his inauguration, President Ronald Reagan pushed the effective date back again by his Feb 17, 1981, executive order that postponed final approval of pending regulations until the issuing agencies had reconsidered their actions. Because of this order, the new Secretary of Transportation, Drew Lewis, on Mar 25 ordered a review of the Goldschmidt policy and postponed its effective date until Oct 25, 1981. (See Nov 3, 1980, and Dec 6, 1981.)

19780328 Mar 27-28, 1978: In an extreme example of opposition to new airports, about 6,000 demonstrators rioted at the new Tokyo Airport near Narita, Japan, on the eve of its scheduled opening, some smashing equipment inside the control tower. Protesting farmers and students had already delayed the airport opening for five years, largely by erecting tall towers along the flight paths. The airport eventually opened on May 20.

19780331 Mar 1978: The first ARTS-IIIA, an improved model of the Automated Radar Terminal System III, became operational at the FAA Academy in Oklahoma City (see Aug 10, 1976). Features of the new model included the capacity to track and identify planes not equipped with transponder beacons, and a backup system to maintain alphanumeric tags on controllers' screens in case of a computer failure in the primary circuits. (See Dec 1979.)

19780406 Apr 6, 1978: Eastern Air Lines signed a $778 million contract to add 23 Airbus Industrie A-300 aircraft to its fleet. FAA Administrator Langhorne Bond called the airplane "the strongest challenge to the U.S. aircraft industry in years," reflecting widespread concern about the absence of an American entry in the market for smaller wide-body jets to replace the aging first generation of jet transports. Airbus Industrie had mounted an aggressive campaign to secure the Eastern order, allowing the airline to operate four A-300s on a six-month cost-free lease, with the manufacturer paying for all legal fees, tariffs, certification charges, maintenance, and repairs. Airbus Industrie provided $96 million in financing and promised to compensate Eastern for certain operating costs.

19780417 Apr 17, 1978: National Weather Service meteorologists began working at 13 of FAA's Air Route Traffic Control Centers under a recently signed agreement between the two agencies. At each of those centers, a team of three NWS meteorologists provided information on hazardous weather throughout the day to center controllers, as well as to FAA towers and flight service stations. FAA provided each center with new equipment for receiving data from NWS weather radar and satellites. This new program was part of a general effort to provide pilots with more en route weather information, since the lack of accurate knowledge of hazardous weather, particularly thunderstorms, had been found responsible for several air crashes (see May 19, 1977). NWS meteorologists were already on duty at FAA's national flow control center in Washington, and by Nov 1980 they were stationed at all U.S. mainland en route centers.

19780419

Apr 19, 1978: The All-Weather Operations Division of the International Civil Aviation Organization (ICAO) voted to adopt the FAA-sponsored time reference scanning bean (TRSB) microwave landing system for future use at the world's airports. A special technical panel had earlier recommended the U.S.-sponsored system (see Mar 16, 1977), but the small size of the panel and the heated nature of its deliberations had partially discredited its conclusion. As a result, backers of the competing British and U.S.-Australian systems staged worldwide lobbying campaigns to support the adoption of their system. When the ICAO body began its meeting in early April, the decision appeared to be further complicated by the late entry of a West German MLS based on distance-measuring equipment (DME). The FAA delegation, however, agreed to begin research on how to incorporate the 360-degree azimuth coverage of the DME system into the TRSB. This helped to clear the way for the selection of TRSB by a vote of 39 to 24, with 8 abstentions. Although the TRSB was now referred to the Air Navigation Council of ICAO for the definition of standards, Third World nations at the conference succeeded in gaining agreement to a ten-year extension (from 1985 to 1995) of the period during which existing instrument landing systems would be protected. (See Jan 28, 1982.)

19780420

Apr 20, 1978: FAA proposed a new and much higher schedule of user fees for certificating airmen and for aircraft registrations. The agency based the proposal on an existing government policy, contained in a statute of 1952, that individuals or groups receiving special services from Federal agencies should pay their cost. In 1967, FAA had proposed a new fee schedule, but withdrew the proposal after the General Accounting Office pointed out that it did not entirely meet the costs of the services supplied. The April 1978 proposal encountered considerable opposition from within the aviation community, and Congress adopted legislation prohibiting FAA from implementing the proposed fees without prior congressional approval. FAA withdrew the proposal on May 8, 1981, stating that the data on which it was based were no longer valid.

19780525

May 25, 1978: PATCO began intermittent slowdowns to protest the refusal of some U.S. flag carriers to provide controllers with overseas familiarization flights. The slowdowns lasted until May 26 and were renewed on Jun 6-7. Delays were especially severe because of the increased air travel resulting from new low transatlantic and domestic fares (see Mar 15, 1978, and Jun 21, 1978).

19780619

Jun 19, 1978: President Jimmy Carter signed a law renaming the FAA Aeronautical Center at Oklahoma City the Mike Monroney Aeronautical Center. A. S. ("Mike") Monroney represented Oklahoma in both houses of Congress for 30 years, and served as chairman of the Senate Aviation Subcommittee from 1955 until his retirement in 1969. He was a principal sponsor of the Federal Aviation Act (see May 21, 1958), the Airport and Airways Development Act (see May 21, 1970), and many other pieces of aviation legislation. The Aeronautical Center, located in Oklahoma City through Monroney's efforts, was then the largest FAA facility, incorporating the FAA Academy, the central records center for aircraft and airmen's certificates, a major FAA supply depot, and the Civil Aeromedical Institute (see Dec 13, 1959). On Oct 13, 1978, Administrator Bond presided over ceremonies rededicating the facility.

19780621

Jun 21, 1978: The Professional Air Traffic Controllers Organization (PATCO) agreed to obey a Federal-court injunction and end a "work to rule" slowdown by its members that had intermittently snarled air traffic during the spring, particularly during the period May 25-26 and Jun 6-7 (see May 25, 1978). PATCO also agreed to pay a fine of $100,000 to the Air Transport Association for violating the permanent injunction won by the ATA in 1970 against air traffic slowdowns (see May 4, 1979).

19780626

Jun 26, 1978: FAA established the Special Aviation Fire and Explosion Reduction (SAFER) Advisory Committee to examine the topic of post-crash survival of aircraft cabin occupants. The committee’s 24 members were drawn from airlines, aircraft manufacturers, universities, research organizations, as well as flight and cabin crews. Formation of the committee resulted from two hearing held by FAA during 1977 regarding four rulemaking proposals concerning fire hazards in transport aircraft. The hearings reflected a concensus that the issues addressed in the four rules were interrelated and should be addressed systematically as one problem.

In view of the SAFER committee’s establishment, FAA on Aug 24 published a notice withdrawing the four rulemaking proposals. One of these, published on Apr 4, 1974, would have required fuel tank explosion prevention systems. The other three concerned the effects of fire on compartment interior materials: toxic gas emission standards (published Dec 30, 1974); smoke emission standards (Feb 12, 1975); and replacement of existing materials that did not meet flammability standards (Jul 11, 1975). FAA expressed confidence that it would be able to develop comprehensive standards in the near future due to ongoing research and the SAFER committee’s work.

Issuance of the four proposed rules during 1974 and 1975 had followed a fiery crash at Pago Pago (see Jan 30, 1974). The collision at Teneriffe further demonstrated the destructive potential of fire (see Mar 27, 1977). During 1977, FAA intensified its research on post-crash fire, and signed an agreement with the United Kingdom on cooperation in developing anti-misting kerosene fuel, known as AMK. In Nov 1978, FAA also announced that a new test laboratory for fire research would be built at its National Aviation Facilities Experimental Center. (See Sep 10, 1980)

19780717

Jul 17, 1978: At an economic summit conference in Bonn, the leaders of United States, West Germany, France, Great Britain, Japan, Canada, and Italy announced a joint resolution to isolate from international air traffic all countries harboring air hijackers. In the resolution, they stated their intent to stop all flights to any country that refused to extradite or prosecute those who have hijacked an aircraft and/or failed to return such an aircraft. The resolution also called for a ban on incoming flights from an offending nation, as well as a ban on any traffic to it by airlines of participating countries. The conferees informally agreed to make no exceptions, not even for persons escaping from totalitarian governments. Diplomatic efforts were begun to gain the agreement of as many other countries as possible.

The Bonn Resolution followed the doubling of hijacking attempts throughout the world in 1977 -- the death toll in hijackings for that year was 129 persons. In Dec, a Malaysian Airlines Boeing 737 crashed after being hijacked, killing all 100 persons aboard. The most spectacular incident of 1977, however, was the five-day odyssey of a Lufthansa B-737 hijacked in Oct over the Mediterranean and flown to various places in the Near East. The hijackers murdered the pilot, and later, in Somalia, threatened to massacre the other 86 people on board. Just 90 minutes before their deadline, West German commandos stormed the aircraft and rescued all the hostages. After this episode, the International Federation of Air Line Pilots threatened a two-day international pilots' strike unless the United Nations took immediate action on air piracy. In Dec, the Flight Engineers International Association urged extradition or prosecution of hijackers held in four countries.

19780725

Jul 25, 1978: A new FAA regulation extended to both domestic and international charter operations security screening procedures long in effect for scheduled airlines. Although no charter aircraft operating from American airports had ever been hijacked, FAA took this action in response to two recent developments: the worldwide increase in hijacking attempts (see Jul 17, 1978), and rulings of CAB that relaxed many of the regulations that governed charter operations. The old requirement that only "affinity" groups could qualify for reduced charter fares had heretofore been regarded as a protection against hijackers, but that was among the rules no longer applied by CAB.

19780804

Aug 4, 1978: The Department of Transportation Appropriation Act signed by President Carter on this date discontinued funding for the Air Traffic Controllers Second Career Program (see May 16, 1972). FAA Administrator Bond said later that congressional anger over recent controller slowdowns (see Jun 21, 1978) may have cost them their special rehabilitation program, but it had in fact been under attack for some time. Two studies--by the House Appropriations Committee staff and by the General Accounting Office--were begun in 1977 and issued to Congress in 1978. The GAO report revealed that about 50 percent of the 2,580 controllers eligible to participate in the program since 1972 either declined or withdrew from training, and only 7 percent of those who had completed training actually entered the new careers they had prepared for. The cost for each successful participant had averaged $370,000. About 1,900 former controllers had enrolled in the program, and its total cost since fiscal year 1973 had been $104 million. The House Appropriations Committee report suggested that controllers who had been incapacitated on the job should seek rehabilitation services under the auspices of the Office of Worker's Compensation. FAA agreed that the program had not been a success and did not contest the conclusions of either report. An attempt to restore the program failed in the House of Representatives in December 1979.

19780810

Aug 10, 1978: A five-year, FAA-funded study of the health problems of air traffic controllers challenged the generally held view that unusually high incidences of ulcers, psychiatric problems, and other serious stress-related diseases were to be found among controllers. A team of researchers, led by Robert Rose from the University of Texas, did find higher-than-normal rates of hypertension, social drinking, and minor psychological problems among controllers. They concluded, however, that these did not lead to incapacitating conditions. The most common psychological problem they discovered was "impulse control difficulties"-- i.e., dealing with sudden emotions like anger. The researchers found that a more serious mental problem, controller burnout, was mostly limited to those controllers who expected it to occur. Despite the abnormal rates of social drinking, controllers had lower rates of alcoholism than the national average. As for hypertension, researchers cautioned against the conclusion that it was directly related to the work of controlling air traffic, since other "risk factors" were also important. The findings of the Rose Report, or officially the Air Traffic Controller Health Change Study, confirmed similar ones in studies by the FAA's Civil Aeromedical Institute. (See Mar 5, 1969.)

19780817

Aug 11-17, 1978: Ben L. Abruzzo, Maxie L. Anderson, and Larry M. Newman made history's first balloon crossing of the Atlantic. Flying in a helium-filled balloon dubbed the Double Eagle II, they lifted off from Presque Isle, Maine, and landed near the village of Miserey, France, 50 miles west of Paris.

19780827 Aug 27, 1978: FAA issued a type certificate under FAR Part 23 for the twin-turboprop Bandeirante aircraft manufactured by Embraer of Brazil, thus clearing the way for export to the United States. The Bandeirante was one of several foreign airplane types expected to see service on expanding U.S. commuter airline routes. The airplane could carry up to 19 passengers, and was the only non-pressurized, non-STOL airliner of its size still in production.

19780910 Sep 10, 1978: The following changes in the Washington Headquarters organization became effective on this date:

* The Office of General Aviation was abolished. The aviation education program was transferred to the Office of Aviation Policy.

* The Associate Administrator for Policy Development and Review was redesignated as the Associate Administrator for Policy and International Aviation Affairs.

* The Office of International Aviation Affairs was placed under the executive direction of the Associate Administrator for Policy and International Aviation Affairs. The position of Assistant Administrator for International Aviation Affairs was retitled Director of International Aviation Affairs.

* The Office of Environmental Quality was renamed the Office of Environment and Energy to reflect the newly assigned responsibility for national aviation policy concerning energy matters (see Dec 22, 1979).

19780925 Sep 25, 1978: A midair collision over San Diego between a Pacific Southwest Airlines Boeing 727 and a Cessna 172 caused more fatalities than any previous civil aviation accident within U.S. airspace. All 137 persons aboard the two aircraft and seven on the ground were killed. Both aircraft were transponder-equipped and were operating in clear weather under local air traffic control when they collided at 2,600 feet. Both pilots had been warned of the presence of the other aircraft. The PSA pilot, which was overtaking the smaller plane, had received clearance for visual, "see-and-avoid" separation procedures after reporting to controllers that he had the Cessna in sight.

The National Transportation Safety Board (NTSB) concluded that the accident's probable cause was the PSA crew's failure to comply with the provisions of a maintain-visual-separation clearance, including the requirement to inform the controller if they no longer had the other aircraft in sight. The Board cited as a contributing factor the procedures that allowed controllers to authorize visual separation procedures when the capability to provide radar separation was available.

NTSB member Francis H. McAdams dissented, citing the use of visual air traffic control (ATC) procedures as part of the probable cause rather than merely contributory. He also listed a number of contributing factors, mostly inadequacies of the ATC system. Among these were failure to resolve an automated conflict-alert alarm that the approach controller had disregarded on the assumption that the pilots were maintaining visual separation. (NTBS later adopted McAdams' viewpoint in an Aug 1982 amendment that included both ATC and pilot failings in the probable cause finding.)

	The San Diego accident followed another midair collision that had occured on May 10, 1978, between a Falcon Jet and a Cessna 150 over Memphis, Tenn., with the loss of six lives The NTSB's finding of probable cause in that case cited the failure of controllers to maintain proper separation as well as the pilots' failure to see and avoid each other. The two accidents set off intense criticism of FAA's ATC program and the pace of its plans to develop an airborne collision-avoidance system. (See Dec 27, 1978.)
19780926	Sep 26, 1978: A Special Federal Aviation Regulation (SFAR 37) permitted persons who were not in the air transportation business to receive payment for the carriage of candidates in Federal elections. The SFAR responded to a Federal Elections Commission requirement that candidates pay for air transportation. As a result of the election rule, owners of private and business aircraft who offered transportation to candidates were required to comply with the rules for commercial operations (i.e., Federal Aviation Regulations Part 135 instead of the less demanding Part 91). Air taxi and charter operators strongly criticized the SFAR, which lapsed in June 1980.
19780930	Sep 1978: FAA's Low Level Wind Shear Alert System (LLWAS) became operational on a full-time basis at seven major airports. The agency announced that 17 other airports would be similarly equipped during 1979. The new system detected the severe downdrafts and wind changes associated with the phenomenon of wind shear (see Jun 24, 1975) by means of sensors around the airport periphery that measured wind speed and direction. A mini-computer compared the readings from these detectors with readings at the center of the airport and, when significant differences were found, sounded an alarm in the tower. Controllers could then warn pilots of the problem. In Oct 1979, FAA announced a contract for 34 more units, which would bring the number of LLWAS-equipped airports to 58. (See Jul 9, 1982.)
19781012	Oct 12, 1978: President Carter signed Public Law 95-452, establishing Offices of Inspector General in the Department of Transportation and several other departments and agencies. The independent offices were to conduct objective audits and investigations of programs and operations.
19781024	Oct 24, 1978: President Carter signed the Airline Deregulation Act of 1978 allowing immediate fare reductions of up to 70 percent without CAB approval, and the automatic entry of new airlines into routes not protected by other air carriers. CAB's authority over fares, routes, and mergers was to be phased out entirely before 1983, and, unless Congress acted, CAB itself would shut down by Jan 1, 1985. The prospective abolition of CAB brought to a culmination the work of Chairman Alfred E. Kahn at that agency (see Jun 10, 1977). Moreover, by Oct 1978, the major emphasis of deregulation had changed from an ideological campaign against government regulation to a key element in the President's effort to curb inflation. This was highlighted by the President's appointment of Kahn as head of his anti-inflation program, which was announced on this date.

	This day also ended the week-long vigil of twenty-two airline representatives who had lined up outside CAB headquarters to submit first-come-first-serve applications for dormant airline routes under the terms of the new act. By the end of the year, CAB had awarded 248 new airline routes to these applicants. Smaller communities, from which the airlines might wish to shift their operations, were guaranteed essential air services for 10 years under the act, with a government subsidy if necessary. Along with the subsidies for smaller-city service, the act provided for the inclusion of commuter airlines in the FAA equipment loan guarantee program and in uniform methods for establishing joint fares between air carriers. It also authorized the use of larger aircraft by commuter airlines. These special provisions for commuter airlines boosted their already-booming growth rates, and led to important new FAA regulations later in 1978 (see Dec 1, 1978).
	The Airline Deregulation Act also revived the aircraft loan guaranty program (see Sep 7, 1977), raising the total amount that could be guaranteed for any eligible participant from $30 million to $100 million, expanding the eligible participants to include charter air carriers, commuter air carriers, and intrastate air carriers, and extending the term of eligible loans to 15 years. Congress withdrew authority for the program in 1983, however, and FAA ceased issuing new loan guarantees after Jun 30 of that year. Over its life, the program had guaranteed 106 loans totaling $900 million. Twelve airlines had defaulted on 23 of the loans for a loss of $182 million, but FAA had been able to recover $132 million.
19781029	Oct 29, 1978: Pan American World Airways discontinued most of its European services, withdrawing from Amsterdam, Ankara, Lisbon, Paris, Moscow, Vienna, and all of Eastern Europe except Warsaw. Denouncing the new "open skies" policy (see Mar 10, 1978) as a "giveaway," the airline shifted its attention to finding a domestic merger partner.
19781102	Nov 2, 1978: FAA officially established the Office of the Associate Administrator for Aviation Standards, with the Office of Aviation Safety, the Civil Aviation Security Service, and the Flight Standards Service placed under its executive direction (see Jul 10, 1979). The agency retitled the position of Assistant Administrator for Aviation Safety the Director of Aviation Safety.
19781120	Nov 20, 1978: In a joint program to deal with the hazards posed by birds and other animals to aircraft, FAA and the Fish and Wildlife Service of the Department of Interior agreed to improve training programs for airport personnel and conduct more sophisticated research on the problem. FAA estimated that, since 1940, bird collisions had led to 140 aviation deaths, and that 1,200 bird strikes in an average year caused approximately $20 million in damage to military and civilian aircraft.

19781201

Dec 1, 1978: Effective this date, FAA promulgated a comprehensive revision of Federal Aviation Regulations Part 135, governing air taxi and commuter airline operations, the fastest growing segment of the air transportation business. Since the Civil Aeronautics Board had created the designation "commuter airlines" (see Jul 1, 1969), the number of passengers on these lines had increased at an average annual rate of over 10 percent; the growth rate in 1977 was 16.5 percent. The new competitive environment created by airline deregulation (see Oct 24, 1978) was expected to bring ever greater increases.

As the commuter airline and air taxi business had grown in the 1960s and 1970s, FAA had tried to tailor new regulations for it; however, serious doubts remained about the safety of the industry (see Dec 26, 1972). An important aim of the revised Part 135 was to bring the safety level of the commuter airlines more closely in line with that of the major airlines operating under Part 121. The new rules required pilots of virtually all multi-engine commuter airliners to hold an airline transport pilot's rating. Depending on the size of their operations and aircraft, commuter airlines were required to have a director of operations, a chief pilot, and a director of maintenance, as well as more stringent programs of maintenance and pilot training and testing. Again depending on size, FAA also required commuter airliners to have such equipment as a ground proximity warning indicator, a third attitude gyro, and thunderstorm detection equipment. The safety upgrade, and the fact that requirements were tied to the size and complexity of operations, permitted FAA to raise the maximum size of aircraft included under Part 135. Commuter airlines and commercial operators could now use aircraft with a seating capacity of up to 30 passengers or a payload of up to 7500 lb.

19781212

Dec 12, 1978: The first production model of the Automated Radar Terminal System (ARTS) II began service at Toledo, Ohio (see Oct 1, 1976). The device was developed for airports whose traffic volume did not warrant the much more costly ARTS III in use at major hubs. Designed around a minicomputer, the ARTS II lacked the full-scale system's ability to predict where a target would be on the next radar scan, and to calculate its ground speed. Like the ARTS III, however, it provided controllers with alphanumeric tags that indicated the identity, heading, and altitude of transponder-equipped aircraft. In addition, the ARTS II allowed controllers to record and receive flight data from adjacent air route traffic control centers. Developed by the Burroughs Corp. under contracts concluded in 1974, ARTS II was eventually installed at over 80 airports. It replaced engineering models developed by other manufacturers that had been in service at Wilkes-Barre, Pa., and Knoxville, Tenn. (See Jul 24, 1985.)

19781227

Dec 27, 1978: FAA Administrator Bond and Secretary of Transportation Brock Adams announced a regulatory program to reduce the risk of midair collisions by 80 percent. Formulated in response to criticism of FAA after the San Diego midair collision (see Sep 25, 1978), and submitted as a notice of proposed rulemaking, the program included:

	* Establishing new voluntary Terminal Radar Service Areas (TRSAs) at 80 air carrier airports (see Dec 22, 1983), and establishing new Terminal Control Areas (TCAs) at 44 additional airports.
	* Lowering the floor of positive area control from 18,000 feet to 10,000 feet over the States east of the Mississippi and much of California, and to 12,000 feet over the rest of the contiguous 48 States.
	* Establishing a new flight category, controlled visual flight rules, for positive airspace below 18,000 feet, which would allow non-instrument rated pilots to use the airspace above 10,000 feet with radar separation provided by air traffic controllers.
	* Requiring all aircraft operating in TRSAs and TCAs to have altitude-reporting transponders installed by Jul 1981. All transponders installed after Jul 1982 would have to incorporate the new Discrete Area Beacon Systems (DABS), which would provide an automatic data link with a ground-based collision avoidance system (see Mar 4, 1976 and Jun 23, 1981).
	* Requiring all airliners and air taxi aircraft to carry an airborne "active" Beacon Collision Avoidance System (BCAS) by Jan 1985. A proposed national standard for such systems had been issued earlier in December. (See Jun 23, 1981.)
	These proposals elicited a massive negative public response, much of it orchestrated by the Aircraft Owners and Pilots Association (AOPA). On Sep 7, 1979, Administrator Bond announced he had withdrawn all the en route proposals. Although the general plan to increase the number of TCAs temporarily remained in effect, FAA gradually withdrew most of the proposed new TCAs. (See May 15, 1980.)
19781228	Dec 28, 1978: Administrator Bond established a Light Transport Airplane Airworthiness Review looking to the adoption, in December 1980, of a new FAR Part 24 that would establish separate airworthiness standards for airplanes intended for commuter operations. FAA had airworthiness standards for two basic designations of airplanes: Part 23 for airplanes 12,500 pounds or under that seated up to nine passengers, and Part 25 for transport category airplanes. FAA proposed to apply the new certification category to airplanes that carried up to 60 passengers and had a maximum takeoff weight of 50,000 pounds. In Dec 1980, however, FAA withdrew the proposal. Foreign manufacturers, already manufacturing commuter aircraft under the more stringent Part 25 standards, opposed the new rule. FAA also determined that the savings in costs between manufacturing airplanes under the proposed standards and the existing Part 25 standards would be minimal.

19781231

Calendar year, 1978: Aircraft of U.S. registry experienced eight hijacking attempts during 1978--the highest level since the screening of passengers and carry-on luggage was instituted in early 1973. None of the hijackers, however, had been able to slip firearms or explosives through airport screening points. Their claims to have a gun or bomb in their possession proved to be false in every case. The eight hijacking attempts were the most since 1972, when 27 attempts were made, eight of them successful. In the six years since beginning mandatory screening, hijackers had attempted to commandeer U.S. airlines on 25 separate occasions. None involved the smuggling of weapons through a screening point, and only one was successful.

1979

19790108 Jan 8, 1979: The Federal Aviation Administration and Panama's Department of Civil Aviation signed an agreement under which FAA's air traffic facilities would be gradually turned over to the Republic of Panama over a five-year period. The transfer process began on Oct 1, when the Panama Canal Treaty went into effect. The agreement affected over 125 FAA personnel employed at the International Flight Service Station (IFSS), the Center and Terminal Radar Approach Control (CERAP), and in related operational and maintenance responsibilities. As part of the agreement, FAA helped to train Panamanian personnel for their new air traffic responsibilities.

The presence of FAA and its predecessor agency in Panama dated back to 1942, when the Civil Aeronautics Administration established a communications station there at the request of the Navy. A 1949 agreement called for the U.S. to provide air traffic control services for Panama, a function initially performed by the Air Force but transferred to FAA after its creation in 1958.

In a ceremony on Apr 22, 1983, FAA turned over the CERAP, its last facility in Panama to the government of that country. Only four FAA technicians then remained to perform maintenance and training for another year.

19790114 Jan 14, 1979: Braniff Airlines began flying leased Concorde supersonic airliners between Washington Dulles and Dallas-Fort Worth airports, under the terms of a unique interchange agreement with British Airways and Air France. Since the Concordes carried passengers between two American cities, they had to be registered in the United States. This involved FAA certification of the Concorde and a special FAA rule allowing the speedy re-registration of the planes between the two European carriers and Braniff. The Braniff flights were over land and therefore had to be flown at subsonic speeds under U.S. environmental rules, but nevertheless cut the flight time between Dallas-Fort Worth and Europe. The service did not prove to be profitable, however, and Braniff terminated it on Jun 1, 1980.

19790119 Jan 19, 1979: To reduce airport noise levels nationwide, FAA recommended a two-segment departure profile for jet aircraft of 75,000 pounds or more. Aircraft using the new procedure would climb under full power to 1,000 feet to get up quickly over airport communities, thus minimizing the noise reaching the ground. At that altitude, they reduced their climb angle to pick up speed and permit retraction of flaps and other high-lift devices before continuing to climb to 3,000 feet under reduced power. The new procedure was intended to replace a variety of practices at many airports, under which the power cutback points varied from 450 to 1,500 feet. FAA did not make the procedure mandatory because safety considerations sometimes dicate that pilots employ other departure procedures. (See Aug 1, 1972.)

19790316 Mar 16, 1979: FAA Administrator Bond announced his plan to eliminate the "blanket immunity" provisions of the Aviation Safety Reporting Program (ASRP) while continuing to provide anonymity to those using the program to report hazards and safety-related incidents (see Apr 15, 1976). The Administrator said he wished to close "the loophole that makes it possible for a violator to escape punishment even if the offense is committed in full public view." On Mar 21, Bond issued a notice that the change would take effect on Apr 30. Before the effective date, however, a sharp reaction in the aviation community produced a compromise under which modified immunity provisions became effective Jul 1. Reports of hazards or incidents submitted under the ASRP could not be used in any disciplinary action except in cases of accidents or criminal offenses. When FAA learned of a violation of safety regulations from another source, it would take appropriate enforcement action. If the violator had filed a prompt report with NASA, however, FAA would impose no penalty provided the violation was inadvertent and not deliberate, did not involve an accident or criminal offense, or disclose a lack of competency, and the person had committed no prior violation since the initiation of the ASRP. A later modification, effective Mar 1, 1985, applied the no-prior-violation requirement to only the five years before a reported incident. These provisions did not apply to air traffic controllers involved in incidents reported to NASA, whose cases were governed by internal FAA regulations. An important difference between the new system and the old was that immunity now applied only to the reporter rather than to all those involved in an incident.

19790328 Mar 28, 1979: Effective this date, FAA required the removal of lithium sulfur dioxide batteries from U.S. civil aircraft. The batteries were used primarily to power emergency locator transmitters, known as ELTs (see Dec 29, 1970). The agency acted because of incidents in which the batteries exploded, burned, or leaked gas that formed corrosive acid. The order affected approximately 60,000 aircraft, most of them privately owned. In September, FAA issued new standards for the batteries, including requirements that they be heremetically sealed and be replaced every two years. The agency ordered users of lithium batteries to reinstall their ELTs by Mar 28, 1980, but later extended the deadline to Oct 15, 1980, because of a shortage of the improved batteries.

19790329 Mar 29, 1979: Effective this date, FAA revised its rules for airport security. In a departure from previous rules (see Dec 5, 1972), the agency permitted police officers assigned to security checkpoints in some airports to patrol other areas of the terminal, as long as they could respond quickly to trouble at their checkpoints (see Sep 11, 1981). In another major change, FAA made it a Federal offense for anyone, passenger or not, to carry guns or explosives into the "sterile" areas beyond the checkpoints. Before, regulations only prohibited carrying weapons on board air aircraft. FAA had originally proposed banning unauthorized guns and explosives from all areas of airport terminals, but relaxed the provision after a negative response from various sporting groups. The revised airport-security regulations represented increased concern, since the bomb explosion at La Guardia Airport (see Dec 29, 1975), for the safety of people in airport terminals as well as aboard airliners.

19790404 Apr 4, 1979: A Trans World Airlines 727 flying at 39,000 feet over Michigan entered an uncontrolled spiral dive and descended to about 5,000 feet in about 63 seconds before the flight crew regained control. Eight passengers received minor injuries. The crew denied that they had caused the dive or erased the Cockpit Voice Recorder tape, most of which was found to be blank. In a June 1981 report, however, the National Transporation Safety Board described the probable cause of the mishap as the crew's manipulation of the flap/slat controls.

19790406 Apr 6, 1979: FAA announced award of a contract for acquisition of second generation common radar digitizers, equipment that converts radar returns into computer-readable digital messages that are then transmitted to the appropriate air traffic control facility. The major advantage of the new common digitzers, known as CD-2s, was the addition of a second channel to permit the equipment to keep working if one channel failed or was shut down for maintenance. The contract provided for 106 of the CD-2s to be installed at long range radar sites, while three would be used in conjunction with airport radars, and seven would be used for training and support services. (See Mar 1986.)

19790504 May 4, 1979: The regional director of the Washington Office of the Federal Labor Relations Authority ruled that a strike fund established by PATCO was legal. His ruling held that while strikes or other overt job actions by Federal employees were prohibited by statute, strike funds were not. PATCO had established a National Controller Subsistence Fund in May 1978, "to provide for the financial support of members whose participation in a nationally sanctioned job action has resulted in suspension and/or dismissal." FAA, believing the fund was a war chest for financing illegal job actions, filled an unfair labor practice complaint against PATCO. The three-member FLRA panel upheld the regional director's ruling in Dec 1980. (See Jun 21, 1978, and Jan 7, 1980.)

19790525 May 25, 1979: An American Airlines DC-10 crashed into an open field near Chicago's O'Hare airport after its left engine and pylon assembly separated from the aircraft on takeoff. The engine and pylon rotated up and over the left wing, taking part of the wing's leading edge with them and damaging the control system. The ensuing crash and fire killed all 272 persons aboard the flight and two people on the ground, an unprecedented toll for an airline accident within U.S. airspace.

Early in its investigation, the National Transportation Safety Board discovered the presence of a fatigue fracture of a pylon forward thrust link attach bolt. On May 28, FAA Administrator Langhorne Bond ordered all airlines to keep their DC-10s on the ground until they had completed certain visual inspections. The next day, after learning that these checks were turning up potentially dangerous deficiencies in the pylon mountings, Bond grounded the entire U.S. DC-10 fleet pending a more comprehensive inspection. His order included U.S.-certificated Airbus A-300s because of the similarity of their pylon to the DC-10's.

	As these inspections progressed, evidence mounted that the problem might lie in American Airline's non-standard use of a forklift to dismount and remount engine and pylon as a single unit during maintenance. Similar cracks had been found on DC-10s operated by Continental Airlines, the only other carrier using the forklift method. On Jun 5, however, the discovery of cracks that appeared unrelated to the forklift procedure strengthened evidence that seemed to suggest the existence of some more fundamental problem. On Jun 6, Bond suspended the DC-10's type certificate indefinitely. He then ordered three parallel investigations into the DC-10 issue.
	Thirty-seven days later, FAA's investigative teams concluded that the aircraft destroyed in Chicago had indeed been damaged by the forklift procedure. This was also the cause of the other cracks found in the pylons of DC-10s operated by American and Continental. (The two airlines later received civil penalties of $500,000 and $100,000 respectively for using the procedure.) Other findings of the teams supported the conclusion that the DC-10 should be returned to service, and FAA therefore lifted the grounding order. The agency required a stringent program of inspections, however, and directed the manufacturer to redesign certain engine mount components.
19790531	May 1979: A Fokker Company workman discovered a soft spot in aluminum plate manufactured by Reynolds Metals, leading FAA in August to issue a general notice establishing an inspection program to be conducted by FAA-approved production holders and their suppliers. FAA discontinued the program after Reynolds discovered the cause of the problem in early fiscal 1981.
19790613	Jun 13, 1979: The following changes in the FAA Washington Headquarters organization became effective on this date:
	*A new Office of Associate Administrator for Airports was established.
	*The Office of Airport Programs and the position of Assistant Administrator for Airports Programs were abolished.
	*The Office of Airport Standards and the Office of Airport Planning and Programming were established and placed under the executive direction of the Associate Administrator for Airports.
	*Metropolitan Washington Airports were placed under the executive direction of the Associate Administrator for Airports.

19790625	Jun 25, 1979: The first of a new generation of air route surveillance radars (ARSR-3s) went into operation. The solid-state ARSR-3 was the first new en route radar system acquired in 20 years (see Nov 20, 1956). It improved radar tracking range by 25 percent, to 200 nautical miles, and could track aircraft flying as high as 61,000 feet. The new radar could also display weather formations without interference with aircraft targets, providing a much clearer picture for controllers. FAA eventually deployed twenty-two ARSR-3s along high density segments of the en route system, commissioning the last in Jan 1983. An additional unit, delivered in Feb 1978, was installed at the Aeronautical Center for training purposes. FAA also purchased four mobile units. With their antenna capable of operating from a flat-bed truck, they could be rushed to any location where the existing radar had failed. (See Sep 1986.)
19790630	Jun 1979: FAA signed a contract with Western Union Telegraph Company to lease a new telecommunications system for 150 of the busiest flight service stations. The new computer-based equipment featured cathode-ray-tube displays and high-speed printers. It would replace teletypewriters used for Service A transmission of weather and aeronautical information (see Jan 16, 1961). The lease was to be an interim step, pending implementation of full flight service modernization. (See Jan 1978 and Jan 25, 1980.)
19790701	Jul 1, 1979: Southern Airways and North Central Airlines merged to form Republic Airlines, which in turn acquired Hughes Air West on Oct 1, 1980. (See Jan 23, 1986.)
19790710	Jul 10, 1979: FAA reorganized the offices and services under the Associate Administrator for Aviation Standards (dee Nov 2, 1978):
	*The Flight Standards Service was abolished.
	*A new Office of Flight Operations was established and all functions affecting flight operations were lodged under it.
	*A new Office of Airworthiness was established and all functions affecting airworthiness were lodged under it.
	*The Civil Aviation Security Service was renamed the Office of Civil Aviation Security.
	*A Safety Regulations Staff was established in the Office of the Associate Administrator and given all flight standards safety regulation functions.
19790720	Jul 20, 1979: Brock Adams resigned as Secretary of Transportation. Adams had voiced concerns about the Carter Administration's transportation policies and his own need for access to the President. After resigning, he stated to the press that he took the action rather than comply with White House demands that included dismissal of one of his aides. Adams' resignation was part of a Cabinet shakeup that involved the departure of four other secretaries.

19790725	Jul 25, 1979: FAA abolished the Europe, Africa, and Middle East Region. The agency assigned the executive direction of the Europe, Africa and Middle East Office to the Associate Administrator for Policy and International Affairs. On the same day, FAA transferred the responsibility for the flight inspection program in the North Atlantic, European, African and Middle Eastern areas from the Europe, Africa and Middle East Region to the Flight Standards National Field Office.
19790815	Aug 15, 1979: Neil E. Goldschmidt became Secretary of Transportation, succeeding Brock Adams, who had resigned on Jul 20. Goldschmidt, who had been the mayor of Portland, Ore., at the time of his selection by President Carter, received a recess appointment. The Senate eventually confirmed him on Sep 21, and he took the oath a second time on Sep 24. Goldschmidt served the remainder of the Carter Administration and resigned effective Jan 20, 1981.
19790831	Aug 1979: An engineering model of a new generation of Airport Surface Detection Equipment (ASDE3) was delivered to FAA for testing and concept evaluation. (See Jul 5, 1977, and Dec 23, 1983.)
19791018	Oct 18, 1979: The first prototype of the McDonnell Douglas MD-80 series made its initial flight. Originally designated the DC-9 Super 80, the aircraft was a “stretched” derivative of the DC-9. The MD-80 received FAA type certification on Aug 26, 1980, and the first production aircraft was delivered to Swissair on Sep 12, 1980.
19791028	Oct 28, 1979: Allegheny Airlines changed its name to USAir, reflecting the growing route system of this former local-service carrier. (See Jan 11, 1949.)
19791101	Nov 1, 1979: Midway Airlines began service from Chicago's Midway Airport. The new airline was the first all-jet air carrier created to take advantage of the new era inaugurated by the Airline Deregulation Act (see Oct 24, 1978). Midway began with DC-9 flights to Cleveland, Kansas City, and Detroit, with more routes to be added later. (See Nov 13, 1991.)
19791102	Nov 2, 1979: FAA redesignated the Office of Accounting and Audit the Office of Accounting. FAA's audit functions had earlier been transferred to the newly created Office of Inspector General in the Office of the Secretary of Transportation.
19791106	Nov 6, 1979: FAA proposed a civil penalty of $1.5 million against Braniff Airways for numerous maintenance violations. The fine was the largest that the agency had proposed to that date. In Jan 1981, however, FAA accepted a settlement of $400,000, stating that its decision was influenced by Braniff’s safety improvements.
19791229	Dec 29, 1979: Enacted on this date, Public Law 96-171 required the National Institutes of Health to produce a study of FAA’s Age-60 rule (see Mar 15, 1960) in consultation with DOT. Within one year, NIH was to submit to Congress a study examining questions that included “whether an age limitation which prohibits all individuals who are sixty years of age or older from serving as pilots is medically warranted.”

The issue had come to a head because more airline pilots were reaching 60 than ever before, a trend that was expected to increase. The Pilots Rights Association, a group of some 300 older airline pilots, had waged a strong campaign against the rule. The Air Line Pilots Association (ALPA) was divided on the question, with many members (especially younger ones) favoring the rule. (Later, ALPA's board endorsed the Age-60 rule in a Nov 1980 vote that reversed the union's longstanding position on the issue.) Another factor that may have influenced the congressional debate was a fatal in-flight heart attack suffered by a 59- year-old Braniff captain on Mar 13, 1979. The outcome was a legislative mandate for a study rather than a change in the rule.

In response to P.L. 96-171, NIH requested the Institute of Medicine, National Academy of Sciences, to prepare a study. Released to the public on Apr 2, 1981, this report did not recommended either retaining or abandoning the Age-60 rule. It did recommend, however, that FAA institute "a more rigorous and comprehensive medical examination" if it discontinued the rule. In August 1981, the National Institute on Aging also submitted a report to Congress with three basic recommendations: that the age-60 rule be retained for major airline pilots; that FAA extend the rule to all other pilots engaged in carrying passengers for hire; and that FAA conduct a systematic program to collect the medical and performance data necessary to consider relaxing the rule. (See Mar 30, 1984.)

19791231

Dec 1979: At Minneapolis-St. Paul International Airport, FAA installed the first operational ARTS IIIA automated radar terminal system, one of 29 produced under a contract announced on Aug 10, 1976 (see that date and Mar 1978). This initial group of ARTS IIIA systems at first used the same A1.01 software package employed at ARTS III facilities, pending completion of computer programs able to realize the full potential of the new equipment. While this software development continued, FAA in Nov 1980 awarded a contract to upgrade the other 34 operational ARTS III units to the IIIA hardware level. In Oct 1982, Seattle-Tacoma International Airport became the site of the first ARTS IIIA able to track aircraft not equipped with transponders, a capability made possible by the new A3.01 software (see Oct 1985). Since Dec 1978, meanwhile, Tampa International Airport had been the site of operational testing of an ARTS IIIA that used all-digital processing. FAA commissioned this unique system on Sep 7, 1982, but it did not become a model for use at other locations.

1980

19800101 Jan 1, 1980: Effective this date, Administrator Langhorne Bond established the lead region concept under which designated Federal Aviation Administration regions assumed certain responsibilities on a nationwide basis. FAA assigned "lead regions" to perform national headquarters staff functions relative to various aspects of aircraft certification, while "certificating regions" held final certification authority for certain categories of aircraft, parts, or materials. The lead regions were: Central (for aircraft under 12,500 lbs.); Southwest (for rotorcraft); Great Lakes (for propellers); and New England (for engines). In addition, the agency designated New England as the first certificating region, with certification authority for all foreign engines as well as all domestically-manufactured turbojet engines of 15,000 lbs. thrust or greater. Later in 1980, two more of the original lead regions were designated certificating regions for their categories of special responsibility: Great Lakes, effective Jul 1, 1980; and Central, effective Jan 15, 1981. In addition, Northwest became the lead region for transport aircraft with gross takeoff weights of 12,500 pounds or more, as well as the certificating region for foreign transport aircraft and domestically-manufactured transports of 75,000 lb. or greater, effective Nov 1, 1980. (See Nov 1, 1981.)

19800107 Jan 7, 1980: John F. Leyden resigned as president of the Professional Air Traffic Controllers Association (PATCO) after a bitter struggle for control of the organization with Robert E. Poli, a regional vice president. Both Poli and Leyden had submitted their resignations to the PATCO board, but the board accepted only Leyden's resignation. Leyden resigned effective Feb 1, and Poli became interim president on that day. Poli subsequently was elected to a three-year term on Apr 24. (See May 4, 1979, and Apr 15, 1980.)

19800107 Jan 7, 1980: Effective this date, the Environmental Protection Agency (EPA) established a new schedule for reducing air pollution from older transport aircraft using the JT3D jet engine (mostly DC-8s and Boeing 707s). The standards were to be applied according to a timetable that would involve the replacement of one-fourth of these engines by Jan 1, 1981; one-half by Jan 1, 1983; and all by Jan 1, 1985. This postponed earlier requirements (see Jul 6, 1973), but was designed to be more compatible with a similar timetable for noise standards (see Dec 23, 1976), thereby saving airlines the cost of two successive engine retrofittings on the same aircraft. Unlike the noise rule, the emissions standards applied to foreign-owned aircraft serving U.S. airports. On Jan 20, 1983, however, EPA published a rule eliminating the requirement that the remaining in-use JT3D engines be retrofitted to meet the standards. (See Dec 23, 1983.)

19800107 Jan 7, 1980: Pan American World Airways signed a merger agreement with National Airlines, which formally ceased to exist on Oct 26. (The defunct carrier's name was revived on May 15, 1994, when Private Jet Expeditions began using the designation National Airlines.) The merger with National gave Pan American a long-sought domestic system to feed its international routes.

19800118 Jan 18, 1980: Two air traffic controllers alledgedly erased flight data information on a Soviet Aeroflot jet making its final approach to New York Kennedy airport with Soviet Ambassador Dobrynin aboard. Unaware of the erasure, the controller who was handling the flight misidentified the Soviet aircraft and ordered it to make an early descent through unprotected airspace. The plane nevertheless landed safely. The incident reportedly stemmed from a local PATCO protest over the Soviet invasion of Afghanistan. After reviewing the case, FAA decided on Jan 16, 1981, to reprimand one of the controllers implicated in the data erasure and to suspend the other for 60 days.

19800121 Jan 21, 1980: FAA published a rule limiting the amount of ozone gas that might be present in airliners flying above 18,000 feet (see Jul 21, 1977). The agency restricted ozone concentration in the cabin to a maximum of 0.25 parts per million at any point in time. In addition, the average exposure on flights of more than four hours was to be no more than 0.1 parts per million. FAA left the airlines the choice of achieving these standards through air filters, use of engine heat to break down ozone, or selection of routes that avoided ozone concentrations. The agency expected, however, that about 500 large transport aircraft used at high altitudes in northern latitudes would require modification. The deadline for compliance was Feb 20, 1981. The same rule amended airworthiness standards for new transport aircraft to provide protection against ozone irritation.

19800125 Jan 25, 1980: Armed with a pistol and pretending to have a bomb, a hijacker who identified himself as a Black Muslim diverted a Delta Airlines L-1011 to Cuba. He demanded to be flown to Iran, but eventually surrendered to Cuban authorities. This was the first U.S. air carrier hijacking in which real weapons or high explosives passed through the passenger screening system since the implementation of strict new airport security measures on Dec 5, 1972 (see that date and Jul 22, 1980).

19800125 Jan 25, 1980: DOT announced the award of competitive contracts to three companies to design computer systems for automating FAA's network of flight service stations (FSS). The winning design was expected to improve upon AWANS and MAPS, two systems already tested in use at certain FAA facilities (see Sep 1977). Computers were to be located at air route traffic control centers and linked by telephone lines to the FSS sites. (See Jun 1979 and Apr 2, 1980.)

19800215 Feb 15, 1980: FAA announced improved standards for the seats of airline crew members. The new rule required the flight attendant seats to be equipped with combination seat belts and safety harnesses, and that the seats themselves have energy-absorbing backs. The rule also required the seats of the cockpit crew to be equipped with a combination seat belt and shoulder harness so designed that the harness need not be unbuckled during takeoff or landing. The standards for flight attendant seats were effective on Mar 6, 1980, and those for the cockpit crew, a year later. The rule also upgraded certain other safety standards for large passenger aircraft concerning storage and service compartments, waste containers, and non-slip floors. (See Sep 10, 1980.)

19800215	Feb 15, 1980: Signed into law on this date, the International Air Transportation Competition Act of 1979 reduced the Civil Aeronautics Board's power to regulate U.S. international airlines, while authorizing the Board to retaliate against the airlines of nations that discriminated against U.S. carriers. Other provisions: revised the rules governing Federal use of foreign air carriers; and defined circumstances under which foreign-registered aircraft might operate on U.S. domestic routes. As a result of the law, an FAA rule effective Oct 16 permitted U.S. airlines to fly passengers and mail in foreign-registered aircraft. The airlines were allowed to use such leased or chartered aircraft on both foreign and domestic flights.
	Section 29 of the law limited scheduled airline operations at Love Field, Dallas, Tex., to aircraft seating 56 passengers or less, except for service within Texas and states bordering on Texas. This provision was known as the “Wright Amendment” after Rep. James C. Wright, Jr. (D-Tex.) of Fort Worth.
19800218	Feb 18, 1980: President Carter signed the Aviation Safety and Noise Abatement Act of 1979. The law gave airlines more time to comply with Stage 2 aircraft noise standards insofar as they applied to two-engine jets over 75,000 lb (see Dec 23, 1976, and Mar 3, 1977). These two-engine aircraft had been required to comply by Jan 1, 1983, but that deadline was extended, with exceptions: until Jan 1, 1985, for those with over 100 seats; and until Jan 1, 1988, for those with 100 seats or fewer (see Dec 31, 1987). In other matters, the new legislation authorized funds for noise planning and land use compatibility projects (see Feb 28, 1981) and, in certain circumstances, barred suits for damages due to airport noise.
	The act also authorized the FAA to regulate the access to public areas at Washington National and Dulles International by individuals or groups soliciting funds or distributing materials. The law prohibited solicitors, including those representing religious groups, from interfering with airport users or using threatening or abusive language. FAA adopted rules, effective Jul 28, requiring solicitors at the two airports to have permits and placing certain limits on their number and the areas in which they could operate (see Jun 26, 1992).
19800301	Mar 1, 1980: AN FAA emergency rule on experience requirements for commuter airline pilots became effective. The pilot-in-command of a two-pilot crew was required to have logged between 10 and 25 hours of flight time in the particular aircraft make and model under the supervision of a qualified check pilot. The agency keyed the number of hours required to the complexity of the aircraft in question. Pilots of commuter aircraft approved for single-pilot operations with the aid of an autopilot were required to have 100 flight hours in the particular make and model of aircraft. FAA based its action on an analysis of 13 fatal commuter airline accidents that occurred during 1979.
19800305	Mar 5, 1980: FAA abolished the Office of Investigations and Security and transferred its internal security functions to the Office of Civil Aviation Security. Earlier, the fraud and abuse investigative functions of the Office of Investigations and Security had been transferred to the new Office of Inspector General, in the Office of the Secretary of Transportation.

19800327	Mar 27, 1980: The Boeing Company revealed plans for flight decks accommodating two-member crews for the fuel-efficient new generation 757 and 767 twin-engine jets. The new decks would include an engine indicating and crew alerting system (EICAS) to centralize all engine displays and provide automatic monitoring of engine operation. (See May 7, 1977 and Aug 26, 1980.)
19800402	Apr 2, 1980: Administrator Bond announced a proposed revision to the master plan for automating the flight service stations (see Jan 1978). A feature of that plan had been the ultimate consolidation of the entire network of FSS sites into 20 automated stations co-located with air route traffic control centers (ARTCCs). Instead, Bond called for eventual consolidation into 61 automated stations. Although linked by telephone lines to computers at the air route traffic control centers, these sites would be housed in new buildings at airports that were centers of general aviation activity. Bond rejected the co-location of FSSs and ARTCCs (see Sep 1977), stating that this experiment had isolated flight service stations from general aviation pilots while showing no cost or operational advantages. (See Jan 25, 1980, and May 28, 1981.)
19800415	Apr 15, 1980: PATCO distributed to its members an “educational package” that many in FAA considered a “strike plan.” The materials provided: information on how to establish communications networks and committees on security, welfare, and picketing; recommendations for a variety of financial preparations in case of the loss of wages during a job action; and advice to local PATCO organizations to make arrangements for bail bondsman and for other legal services. (See Jan 7, 1980, and Aug 15, 1980.)
19800430	Apr 30, 1980: Effective this date, FAA required a triennial aircraft registration report. Aircraft certificate holders were to submit the report whenever three years elapsed since the Registry received information indicating continued registration eligibility. The procedure was less burensome to the public than an earlier annual report requirement (see Mar 7, 1970).
19800512	May 12, 1980: Maxie and Kris Anderson, father and son, completed what is considered the first nonstop balloon crossing of the North American continent, after a four-day flight from Fort Baker, Calif. They landed at Matane, on Quebec's Gaspe Peninsula, about 160 miles from the Gulf of St. Lawrence.
19800515	May 15, 1980: FAA established a terminal control area (TCA) at San Diego as part of the agency's response to a midair collision that killed 144 persons (see Mar 1976). FAA established another TCA at Honolulu on Nov 27. These new Group II TCAs brought the total in this category to 14, in addition to 9 Group I TCAs at the nation's busiest locations. (See Aug 1, 1975 and Aug 31, 1986.)

19800516	May 16, 1980: A U.S. district court decision put FAA's medical exemption system on temporary hold by enjoining the agency from issuing medical certificates to airmen with a history of any of nine "absolutely disqualifying conditions," including myocardial infarction, angina pectoris, or alcoholism. Henceforth, FAA could issue medical exemptions to airmen with a history of these disqualifying conditions only after "a proper finding that such an exemption was in the public interest." In addition, the court enjoined the Federal Air Surgeon from placing any functional limitation on any medical certificate on the grounds that the authority to do this had not been properly delegated to this official from the FAA Administrator.
	The decision arose from a suit by Delta Airlines, which opposed FAA's policy of issuing certificates with functional limitations to pilots who had suffered heart attacks. This practice often enabled such pilots to serve as flight engineers, and thus ran counter to Delta's policy that flight engineers must possess a first class medical certificate. By mid-1982, FAA had adopted regulatory language for medical exemptions that satisfied the public-interest criteria of the court and allowed the process of granting pilot medical exemptions to continue.
19800518	May 18, 1980: Washington state's Mt. St. Helens erupted, destroying over 100 square miles of timber and leaving at least 61 persons dead or missing. Ash from the volcano caused widespread disruption, but did not close FAA facilities in the area. The agency informed airmen of the location of the volcanic cloud, which damaged several aircraft, and issued a maintenance checklist for planes that had entered suspected areas. FAA also set up a mobile air traffic control tower to assist military missions of reconnaissance, search, and rescue. Interest in the threat of volcanoes to aircraft increased in 1982, when two Boeing 747s lost all engine thrust temporarily as they encountered ash from an Indonesian volcano. (See Dec 14, 1989.)
19800529	May 29, 1980: FAA changed the name of its National Aviation Facilities Experimental Center (NAFEC) to the FAA Technical Center, and at the same time dedicated a new complex of buildings at the New Jersey facility (see May 29, 1975). Under an agreement signed in 1976, the Atlantic City Improvement Authority had constructed the new complex for lease to FAA. On May 28, the agency had also dedicated a new heliport at the facility, and on Jun 20 dedicated the Center's large new fire research building.

19800626 Jun 26, 1980: The Committee on FAA Airworthiness Certification Procedures, popularly known as the Blue Ribbon Panel on Aircraft Certification, issued its report. The panel had been formed at the request of Secretary of Transportation Neil Goldschmidt in response to congressional concerns after the Chicago DC-10 accident (see May 25, 1979). The National Research Council selected a 13-person committee of experts, headed by George M. Low, president of Rensselaer Polytechnic Institute, and including among its members former FAA Administrator John L. McLucas. While concluding that the agency's system of assuring the airworthiness of U.S.-built aircraft had worked satisfactorily in the past, the committee believed that FAA must upgrade its certification staff's technical proficiency and familiarity with current developments. The panel's recommendations included that FAA: establish a central engineering group responsible for type certification and participation in rulemaking; improve the type certification process through a series of milestone reviews; develop a rule requiring that aircraft be designed to continue to fly despite structural failure; increase surveillance of airline maintenance operations; and accelerate development of a system for gathering safety-related data.

19800722 Jul 22, 1980: Holding what was reported to be a small handgun to the back of a flight attendant, a man diverted a Delta Air Lines L-1011 to Cuba, beginning a series of hijackings by Cuban refugees who had arrived in the U.S. during the boat lift from the port of Mariel that began in Apr 1980 (see Jan 25, 1980). Mariel refugees returned to their homeland in 10 hijackings between Aug 10 and Sep 17. During the last quarter of 1980, however, no successful "Marielista" hijackings occurred. Factors in this improvement were special FAA security measures, coupled with the immediate return of two hijackers by the Cuban government. The phenomenon continued, however, and one successful Marielista hijacking took place in 1981. During 1982, three airliners were diverted to Cuba by Spanish-speaking men (at least one of whom was a Marielista) using flammable liquid as their weapon. The threat to ignite real or alleged flammable liquid had been used in every successful hijacking to Cuba since Aug 13, 1980. (See May 1, 1983.)

19800804 Aug 4, 1980: FAA commissioned the first En Route Automated Radar Tracking System (EARTS) at the air route traffic control center at Anchorage, Alaska. The system was the product of contracts with Sperry Rand's Univac Division announced by FAA in Jul 1974 and Aug 1976 (See Aug 10, 1976). Developed for the special needs of the widely dispersed centers at Anchorage, Honolulu, and San Juan, EARTS was simpler and less costly than the automated systems used to track en route traffic at centers within the contiguous U.S. It was essentially an expanded Automated Radar Terminal System (ARTS III) modified for en route operations by adding a plan view display component. FAA commissioned Hawaii's EARTS in Jul 1982 and Puerto Rico's in Dec 1982. (See Mar 1984.)

19800815	Aug 15, 1980: PATCO-affiliated controllers at O'Hare International Airport conducted a one-day traffic slowdown that caused 616 delays of 30 minutes or more and cost air carriers more than $1 million in wasted fuel. The slowdown followed FAA's turning down a demand by O'Hare controllers for an annual tax-free bonus of $7,500. (See Apr 15, 1980, and Oct 20, 1980.)
19800819	Aug 19, 1980: An in-flight fire on a Saudi Arabian Airlines L-1011 killed all 301 persons aboard. Smoke inside the aircraft prompted a return to Riyadh shortly after takeoff. The aircraft landed normally, but was destroyed by fire on the taxiway. Saudi investigators concluded that the fire probably began in the aft pressurized cargo compartment, but were unable to determine its cause. The accident was followed by development of improved liner material for L-1011 cargo compartments, and by FAA action to upgrade cargo compartment safety standards (see May 16, 1986).
19800826	Aug 26, 1980: FAA type-certificated the McDonnell Douglas DC-9-80 for operation with a two-pilot crew. The Air Line Pilots Association challenged the certification in a law suit, ultimately without success, and picketed the White House in October to protest FAA's position. (See Mar 27, 1980, and Dec 29, 1980.)
19800910	Sep 10, 1980: The Special Aviation Fire and Explosion Reduction (SAFER) Advisory Committee (see Jun 26, 1978) released its final report. The committee reported that, over the past 15 years, fatalities due to post-crash fire or its effects in U.S. scheduled air carrier operations had averaged about 32 per year. It concluded that, with the exception of toxic hazards assessment, aircraft fire research had been reasonably well funded since the early- to mid-1970s. The SAFER group's most urgent recommendation was to expedite the investigation and validation of anti-misting kerosene, known as AMK (see Dec 1, 1984). Among the numerous additional recommendations were: mandatory fuel tank vent protection; maximizing the probability of engine fuel shut-off in potential fire situations; research on lowering the flashpoint of kerosene fuels; improved accident investigation and reporting; research to establish the contribution of cabin interior materials to the post-crash fire hazard; development of fire-blocking layers for seats; accelerated toxicity research; radiant heat resistance standards for evacuation slides; and development of improved fire-resistant cabin windows. In conclusion, the committee's report urged FAA to create a standing advisory committee to provide regular expert advice in the field of fire and explosion research. FAA set up working groups to examine the SAFER recommendations and take rulemaking action when feasible. (See Oct 26, 1984.)

19800930 Sep 30, 1980: The Airport Development Aid Program lapsed as of midnight on this date due to Congress' failure to extend or replace legislative authorization (see Jul 12, 1976). Congress also failed to authorize the collection of user taxes paid into the Airport and Airway Trust Fund. As a result, some of these taxes expired, while others were reduced to the levels collected before Jul 1, 1970. Taxes eliminated completely included the 5 percent air cargo tax, the $3 international departure fee, the aircraft use tax, and the jet fuel tax. The 8 percent passenger ticket tax was reduced to 5 percent, and was now paid into the Treasury's general fund. The general aviation gasoline tax was reduced from seven to four cents per gallon, and was paid into the Highway Trust Fund, which also received revenues from continuing taxes on aircraft tires and tubes. Although it no longer received any tax revenues, the Airport and Airway Trust Fund continued to exist and to receive interest payments on the Treasury bills in which its liquid assets were invested. While FAA ceased to award grants from the Fund, the agency continued to liquidate obligations previously made under the grant program. The Trust Fund also continued to provide support for FAA facilities and equipment, as well as for the agency's research, development, and engineering. (See Aug 13, 1981.)

19801002 Oct 2, 1980: Recognizing the changing nature of airline operations under deregulation, the Civil Aeronautics Board adopted a report that led to new system of classifying air carriers for statistical and financial analysis. The carriers were described as either Majors, Nationals, Large Regionals, or Medium Regionals, depending on the amount of their annual operating revenue. After CAB became defunct at the end of 1984, the Research and Special Projects Administration continued this general system, although the amounts of revenue required for the various categories were periodically adjusted.

19801009 Oct 9, 1980: FAA published a new Federal Aviation Regulations Part 125, representing a substantial upgrade of safety standards for certain large airplanes. The new Part 125 established a uniform set of certification and operating rules for large airplanes capable of carrying 20 passengers or more, or a payload of 6,000 lbs. or more, and used for any purpose other than common carriage.

19801020 Oct 20, 1980: Republican presidential candidate Ronald Reagan wrote to PATCO president Robert E. Poli, saying: "You can rest assured that if I am elected President, I will take whatever steps are necessary to provide our air traffic controllers with the most modern equipment available and to adjust staff levels and work days so that they are commensurate with achieving a maximum degree of public safety." On Oct 23, the PATCO executive board endorsed Reagan for President. At the same time, the union charged President Carter with ignoring serious safety problems that jeopardized the nation's air traffic control system. (See Aug 15, 1980, and Dec 15, 1980.)

19801103 Nov 3, 1980: FAA published a special rule allocating reservations, or "slots," for takeoffs and landings under instrument flight rules at Washington National Airport. The rule applied to air carriers, except air taxis, and was effective Dec 1, 1980, to Apr 26, 1981. The slots had previously been assigned by an air carrier scheduling committee, the system used at the other high density airports subject to flight restrictions in force since Jun 1, 1969 (see that date). Since the Airline Deregulation Act of 1978, however, the number of carriers seeking slots at National had increased and the committee found it more difficult to reach agreement. On Oct 14, 1980, the body advised FAA it was deadlocked, necessitating government intervention. (See Mar 23, 1978, and Dec 6, 1981.)

19801128 Nov 28, 1980: FAA published a rule requiring foreign operators of aircraft over 75,000 lb. serving the U.S. to comply with the same noise standards as U.S. operators (see Dec 23, 1976). The rule generally required final compliance by 1985.

19801215 Dec 15, 1980: A U.S. District Court judge in Illinois, dismissed a court action brought by FAA against PATCO and its Chicago O'Hare Local No. 316 for a slowdown which had begun on Aug 15, 1980 (see that date). On Aug 17, FAA had brought suit for a preliminary and permanent injunction against the controllers. The following day, a U.S. District Court judge had issued a temporary restraining order prohibiting PATCO and its O'Hare affiliate from taking part "in any work stoppage or slowdown." Subsequently, FAA pressed its plea for permanent injunctive relief. In ruling that the case was not properly before his court, the judge held that a slowdown was an unfair labor practice and that Title VII of the Civil Service Reform Act of 1978 gave original jurisdiction in such controversies to the Federal Labor Relations Authority, not to U.S. district courts. (See Mar 15, 1981.)

19801219 Dec 19, 1980: New York Air began operations, competing against Eastern Air Lines' Washington-New York shuttle. The new, non-union regional carrier was a creation of Texas Air, a holding company created by Frank Lorenzo in 1980. Texas Air also owned Texas International Airlines, which Lorenzo had headed since 1972. (See Aug 6, 1981, and Feb 1, 1987.)

19801222 Dec 22, 1980: FAA placed the Office of Aviation Medicine under the executive direction of the Associate Administrator for Aviation Standards. Although no longer reporting directly to the Administrator, the Federal Air Surgeon retained delegated responsibilities for medical determinations.

19801229	Dec 29, 1980: The Air Line Pilots Association (ALPA) organized a "public awareness" campaign called Operation USA (Unity for Safe Airtravel). Shortly thereafter, the union threatened a general one-day work stoppage in March unless the President appointed a panel of independent experts to examine the question of crew complement. On Mar 5, 1981, President Reagan appointed a three-man task force headed by former FAA Administrator John L. McLucas to review FAA's certification of the DC-9-80 for operation with a minimum cockpit crew of two pilots (see Aug 26, 1980). On Jul 2, the task force reported that the certification was proper and that a third crew member was not be justified in the interest of safety. The board also noted that safe operation by a two-pilot crew would be permitted by the designs of Boeing's new 757 and 767 aircraft, and of the A-310 aircraft being developed by the European consortium, Airbus Industrie. On Jul 14, ALPA's executive board voted unanimously to accept the findings of the task force.
19801231	Dec 31, 1980: The end of this day marked the completion of the first calendar year without a fatal accident for major U.S. airlines (Part 121) in scheduled service, including the flag, trunk, and local service categories. The only fatal accident involving Part 121 operators engaged in any type of service was an incident in which a parachutist was struck by a military contract cargo flight. (See Dec 31, 1970, and Dec 31, 1981.)

1981

19810110 Jan 10, 1981: The New York terminal radar control room (TRACON) became operational at Hempstead, Long Island. The building had been completed in Jan 1978, after which the Federal Aviation Administration had begun installing electronic equipment. Commissioning of the facility had been delayed, however, until the closing of a nearby resource recovery plant ended FAA's concern about unhealthful emissions. The TRACON replaced the Common Radar Room (also called the "Common IFR" or "Common I") at Kennedy International. Initially, the new facility handled approaches and departures at New York's three major airports, but was scheduled to later take over responsibility for numerous smaller airports in area. The TRACON's special ARTS IIIA system had 44 displays, 91 keyboard stations, and a track capacity of 1,200 aircraft (see Aug 10, 1976, and Mar 26, 1986). In contrast, the Common Radar Room's ARTS IA had only 12 displays.

19810119 Jan 19, 1981: FAA announced that it had begun a program to improve navigational charts used by pilots flying under visual flight rules. The improvements were based on recommendations of an agency working group established in Sep 1980, and were to be implemented in cooperation with the Inter-Agency Cartographic Committee.

19810120 Jan 20, 1981: Ronald Reagan became President, succeeding Jimmy Carter. The resignations of Langhorne M. Bond as FAA Administrator and Quentin S. Tayor as Deputy Administrator became effective, although Taylor accepted another post with FAA (see May 4, 1977). Charles E. Weithoner, Associate Administrator for Administration, became Acting Administrator. (See Apr 22, 1981.)

19810123 Jan 23, 1981: Drew Lewis became Secretary of Transportation, succeeding Neil E. Goldschmidt with the change of administrations. President Reagan had nominated Lewis on Dec 11, 1980, and the Senate had confirmed the nomination on Jan 22, 1981. A business management specialist from Philadelphia, Lewis first came to national attention in 1974, when he made an unsuccessful run for governor of Pennsylvania. He had served as Deputy Chairman of the Republican National Committee prior to accepting the Transportation cabinet post. (See Dec 28, 1982.)

19810130 Jan 30, 1981: FAA announced the adoption of new security rules making commuter aircraft with a seating capacity of 60 or more passengers subject to the same anti-hijacking programs as the aircraft of larger airlines.

19810202	Feb 2, 1981: FAA commissioned the first Direct Access Radar Channel (DARC) at the Salt Lake City air route traffic control center. By Jun 28, when FAA commissioned DARC at the Minneapolis ARTCC, all 20 en route centers within the contiguous 48 states had been equipped with the system (see Apr 5, 1988) As a result of development begun in the late 1970s, the Raytheon Company produced DARC as a backup system to be switched on when the primary radar processing system failed or was turned off for maintenance. DARC provided a sharper display than the noncomputerized broadband backup system that it replaced. Whereas the broadband system had presented only an unmarked "blip" for each radar target, DARC provided a limited data bloc that gave a discrete code for each aircraft equipped with a discrete beacon code transponder, as well as the altitude of those equipped with an altitude-encoding transponder. The discrete code helped controllers to identify quickly the targets when changeover from the primary system occurred. Initially, however, controllers using DARC were still obliged to keep track of targets by moving plastic markers across the radar display, and hence were required to shift their scopes to a horizontal position. In Fib 1984, therefore, FAA began installing RAH01 software that made it possible for DARC to provide full data blocs that remained on the display between radar scans even if the radar missed the target. Meanwhile, the agency awaited delivery of a 1982 order for a more advanced hardware and software enhancement designated E-DARC. As compared to RAH01, E-DARC's advantages included predicted position tracking and the capability to present composite displays using returns from several radar sites. E-DARC also allowed an individual controller to switch back and forth between primary and backup systems at the touch of a button, and permitted non-verbal handoffs of aircraft between sectors within a center. FAA commissioned the first E-DARC system at the Seattle center on Nov 26, 1986.
19810228	Feb 28, 1981: Effective this date, a new Part 150 of the Federal Aviation Regulations established requirements and procedures for airport operators participating in a voluntary noise compatibility planning program as authorized by the Aviation Safety and Noise Abatement Act (see Feb 18, 1980). The new regulations provided standardized methods for measuring noise, identified land uses compatible with various noise levels, and set forth criteria for FAA approval of the plans.
19810315	Mar 15, 1981: The labor contract between FAA and PATCO expired. In accordance with Article 75 of the agreement, however, all its provisions but one (immunity under the aviation safety reporting program) remained in force until a new agreement was reached. (See Dec 15, 1980, and Apr 28, 1981.)
19810412	Apr 12, 1981: The United States launched space shuttle Columbia on the first shuttle orbital flight.
19810422	Apr 22, 1981: J. Lynn Helms became the eighth FAA Administrator, succeeding Langhorne M. Bond (see May 4, 1977). President Reagan had made the nomination on Mar 3, and the Senate confirmed it on Apr 8.

Born in 1925 in DeQueen, Ark., Helms attended the University of Oklahoma. He received his flight training as part of the U.S. Navy's V-5 program during World War II, then entered the Marine Corps to serve as both a test pilot and instructor pilot. After leaving the Marine Corps with the rank of Lt. Colonel in 1956, he went to work as a design engineer for North American Aviation. In 1963, he joined the Bendix Corp., eventually becoming vice president, then accepted the presidency of the Norden Division of United Aircraft in 1970. He joined Piper Aircraft Corp. in 1974, serving as president, chairman, and chief executive officer before retiring from the company in 1980. Helms was an active pilot holding a commercial pilot's certificate. His honors included selection as General Aviation Man of the Year for 1978, and he had been chairman of the General Aviation Manufacturers Association in 1979. Helms served as FAA Administrator for two years and nine months. (See Dec 23, 1983.)

19810428 Apr 28, 1981: After 37 negotiating sessions with FAA, PATCO representatives walked out of the contract talks, claiming that the agency was not responsive to their proposals. PATCO had submitted its bargaining proposals to FAA in early January 1981, and negotiations had begun the following month. PATCO's proposals for a 32-hour work week and separate pay scale for controllers, embodied in legislation before Congress, were opposed by the Office of Management and Budget. (See Mar 15, 1981, and May 23, 1981.)

19810506 May 6, 1981: FAA issued an Advisory Circular concerning the new Supplemental Structural Inspection Program (SSIP) under which manufacturers developed special programs to ensure the continued airworthiness of their older types of large transport aircraft. The background of the SSIP included the 1977 loss of a British 707 in Zambia due to structural failure. Continued concern about the airworthiness of aging aircraft reflected a tendancy for operators to retain older planes for longer periods. This trend was due to such factors as a slackened demand for the fuel-efficiency offered by new aircraft and the competitive pressures of airline deregulation. Effective Jul 5, 1985, FAA made the inspections developed under SSIP mandatory for certain Boeing 707s with high in-service time. Similar directives for other aircraft types soon followed. (See Apr 28, 1988.)

19810523 May 23, 1981: At its annual convention, in New Orleans, PATCO set a Jun 21 deadline for reaching agreement on a new contract with FAA. PATCO President Robert Poli said if agreement was not reached by that date the union would poll its members for a strike vote. Newspapers quoted Poli as vowing that the "the skies will be silent" if FAA's negotiators did not "come to their senses." (See Apr 28, 1981, and Jun 18, 1981.)

19810526 May 26, 1981: FAA banned any new long-haul airline flights to or from Washington National Airport pending issuance by the Department of Transportation of a new Metropolitan Washington Airports Policy. The ban preserved a policy, begun in 1966 and continued voluntarily, under which nonstop flights to and from National were limited to a perimeter with a 650-mile radius, with certain exceptions. FAA acted to preserve National's traditional role as a short-haul airport in the face of a decision by three carriers--American, Pan Am, and Braniff--to inaugurate nonstop flights into National from Houston and Dallas, each of which would have exceeded 1,000 miles. (See Sep 1, 1966, and Dec 6, 1981.)

19810528 May 28, 1981: At a meeting on this date, Administrator Helms directed a change in policy on acquisition of space for the planned Automated Flight Service Stations, known as AFSSs (see Apr 2, 1980). In addition to building and owning the facilities, FAA would also lease space at airports from municipalities, airport operators, private parties, or government agencies at the state or Federal level. FAA would seek competitive bids to obtain the most favorable rates. (See Oct 2, 1981, and Nov 1982.)

19810612 Jun 12, 1981: FAA announced a planned regional consolidation, to be effective Jul 1, that would reduce the number of regional headquarters from eleven to six (see Apr 2, 1971). The headquarters at New York, Chicago, Denver, Los Angeles, and Honolulu would be phased out, and their functions merged with the remaining sites. Boston would take over the functions of New York, and Kansas City would assume those of Chicago. Seattle would take over the functions of Denver, Los Angeles, and Honolulu. The regional offices at Anchorage, Atlanta, and Fort Worth would remain essentially unchanged. The plan aroused political opposition, and FAA agreed to review the decision. (See Sep 4, 1981.)

19810617 Jun 17, 1981: PATCO rejected a Reagan Administration contract proposal as inadequate and broke off informal talks with representatives of FAA. The informal talks, conducted irregularly since the break in formal talks on Apr 28, were held under the aegis of the Federal Mediation and Conciliation Service. (See Jun 18, 1981, and Jun 22, 1981.)

19810618 Jun 18, 1981: The U.S. District Court rejected a PATCO motion to vacate the injunction restraining the union from engaging in illegal job actions or strikes (see Jun 21, 1978). PATCO moved to have the injunction lifted on the grounds that it had been superceded by the Civil Service Reform Act of 1978, which gave the Federal Labor Relations Authority original jurisdiction in Federal labor-management disputes. (See May 23, 1981, and Jun 17, 1981.)

Secretary of Transportation Drew Lewis and PATCO President Robert Poli had gone back to the bargaining table Friday evening, Jun 19, at the behest of Representative James J. Howard (D-N.J.), chairman of the House Public Works Committee. The resumption of talks may also have been prompted by a letter to Poli from 36 U.S. Senators, stating that a strike by PATCO "will do nothing to further your goals of increased pay and changes in working conditions." The bargaining sessions, which took place at the offices of the Federal Mediation and Conciliation Service and were joined in by Federal mediator Kenneth Moffett, lasted more than 25 hours, with the last session running past 3 a.m., Monday.

The agreement contained four key provisions, which the Reagan Administration agreed to recommend to Congress:

* A "responsibility" differential that would give controllers 42 hours pay for each normal 40- hour week worked.

* An increase in the night differential from 10 to 15 percent of base pay.

* The exclusion of overtime, night differential, and Sunday and holiday pay from the limitations of the Federal pay cap.

* A retraining allowance equivalent to 14 weeks of base pay for controllers who became medically disqualified after five consecutive years of service at the journeyman level or above and who were ineligible for retirment or disability compensation.

The first-year cost of the total package, which included a cost-of-living raise of 4.8 percent due Federal civil service employees in October, came to approximately $40 million or, on the average, $4,000 per controller per year. PATCO had been seeking a package that would have cost the government, initially, in excess of $700 million per year. (See Jun 17, 1981, and Jul 2, 1981.)

19810622 Jun 22, 1981: Department of Transportation and PATCO representatives reached agreement on a tentative new contract after a marathon bargaining session, thus averting a threatened nationwide strike by PATCO-affiliated controllers that had been scheduled to begin at 7 a.m., Monday, Jun 22.

19810623 Jun 23, 1981: Administrator Helms announced FAA's decision to adopt the Threat Alert and Collision Avoidance System, soon renamed the Traffic Alert and Collision Avoidance System (TCAS). The TCAS system was an evolutionary improvement of the Beacon Collision Avoidance System (BCAS) that the agency had been developing (see Mar 1976). Like BCAS, TCAS would work in conjunction with the Air Traffic Control Radar Beacon System (ATCRBS) transponder already in wide use. It would also be compatible with the next-generation transponder, originally designated the Discrete Address Beacon System (DABS) and later known as Mode S (see Dec 27, 1978, and Oct 5, 1984).

Two types of the new collision avoidance system were planned. TCAS I, intended for general aviation use, would in its basic form simply alert the pilot to the proximity of another aircraft carrying TCAS I or a conventional ATCRBS transponder. More expensive TCAS I versions would have some ability to provide certain data on the altitude and/or "o'clock" position of threat aircraft. TCAS II would provide more sophisticated advisories, including data on range and bearing of transponder-equipped aircraft. When the transponder aboard the threat aircraft had altitude-reporting capability, TCAS II's advisories would also include altitude data. In the case of two aircraft equipped with TCAS II, coordinated advisories would be provided. TCAS II would suggest vertical escape manuevers. If feasible, the system might be enhanced to include both vertical and horizontal escape manuevers, a version later designated TCAS III. TCAS was expected to overcome a fundamental limitation of BCAS by its ability to operate effectively even in the highest air traffic densities. This modified the need for a new ground-based collision avoidance system, and led to discontinuance of the Automatic Traffic Advisory and Resolution System (ATARS) project, originally known as Intermittent Positive Control (see Mar 4, 1976).

On Nov 13, 1981, FAA announced a contract with Bendix Corporation to provide two TCAS II engineering models to be tested and then enhanced to advise pilots of horizontal escape manuevers. (See Mar 18, 1987.)

19810702 Jul 2, 1981: PATCO's nine-member executive board recommended unanimously that the union's members reject the tentative contract agreed to on Jun 22 by PATCO President Robert Poli and Secretary of Transportation Drew Lewis. Poli also voted to reject the contract, although he had stated that he was pleased with the settlement at the time of its negotiation. On Jul 29, PATCO announced that its members rejected the tentative contract by a vote of 13,495 to 616. Two days later, on Jul 31, PATCO President Robert Poli announced at a press conference in Washington that his union would go on a nationwide strike beginning on Monday, Aug 3, unless the government met PATCO's demands. (See Jun 22, 1981, and Aug 3, 1981.)

19810730 Jul 30, 1981: In San Diego Unified Port District v. Gianturco, the U.S. Court of Appeals for the Ninth Circuit struck down an attempt by the State of California to impose more stringent noise rules at Lindbergh Field than those imposed by Lindbergh's proprietor. The court's decision included a rationale for the "Burbank exception" (see May 14, 1973). Noting that the U.S. Supreme Court had held in Griggs v. Allegheny that airport proprietors can be held liable for the noise produced by aircraft using their facilities (see Mar 5, 1962), the Court observed that "fairness dictates that they must also have power to insulate themselves from that liability." At the same time, the Court set forth criteria that determine airport proprietorship, including "ownership, operation, promotion, and the ability to acquire necessary approach easements." If a local or state entity possessed these characteristics, then it also possessed power to regulate noise. In the case of Lindbergh Field, however, the State of California did not possess these characteristics, having entrusted them to the San Diego Unified Port District.

On Sep 23, 1981, in Santa Monica Airport Association v. City of Santa Monica, the same Court reaffirmed the "Burbank exception" by upholding aircraft-noise abatement ordinances and a night curfew on takeoffs and landings imposed by the City of Santa Monica, which owned and operated the local airport. In reaching this decision, the Court again emphasized that "municipal airport owners needed some means of limiting their liability under Griggs." The Court did strike down, however, a categorical ban on all jet aircraft as violating the Commerce and Equal Protection clauses of the Constitution. (See Aug 24, 1983.)

19810801 Aug 1, 1981: Michael J. Fenello became FAA's Deputy Administrator, succeeding Quentin S. Taylor (see May 4, 1977). A native of Rochester, N.Y., Fenello was a graduate of Buffalo State Teachers College and held a Master's degree in Administration and Supervision from New York University. He was a junior high school teacher before starting a 38-year career with Eastern Air Lines in Jan 1943. Fenello began as a copilot, rose to captain, and later served as a flight instructor and supervisor of flying before being promoted in 1963 to Assistant Operations Manager in New York. The following year, he was named Director of Administration for Flight Operations, with headquarters in Miami. In 1968, Fenello became Assistant to the Vice President, Operations Group, and in 1972 was promoted to Vice President, Operations Control. From 1976 until his retirement from Eastern in Feb 1981, he served as Vice President for System Operations and Safety. Fenello was FAA's Deputy Administrator for two years and 9 months, resigning effective May 1, 1984. (See Dec 23, 1983, and Dec 13, 1984.)

19810803 Aug 3, 1981: Nearly 12,300 members of the 15,000-member Professional Air Traffic Controllers Organization (PATCO) went on strike, beginning at 7 a.m., EST, grounding approximately 35 percent of the nation's 14,200 daily commercial flights. The controllers struck after the failure of eleventh hour negotiations, which began 2 p.m. Sunday, Aug 2, and continued, with one break, past 2 a.m. Monday, Aug 3. Shortly before 11 a.m. on Aug 3, at an impromptu news conference, President Reagan issued the strikers a firm ultimatum: return to work within 48 hours or face permanent dismissal. The government moved swiftly on three fronts -- civil, criminal, and administrative -- to bring the full force of the law to bear on the strikers. In a series of legal steps, Federal officials:

* Asked the Federal Labor Relations Authority (FLRA) to decertify PATCO as the bargaining agent for the 17,200 controllers and controller staff members.

* Moved to impound the union's $3.5 million strike fund.

* Filed criminal complaints in Federal courts in eleven cities against twenty-two PATCO officials.

* Sought restraining orders against the strikers in thirty-three courts.

Even before the 7 a.m. walkout, a U.S. District Court for the District of Columbia signed an order directing the controllers to return to work. Late in the evening on Aug 3, another judge of the same court found the union in contempt for failing to obey the first order and imposed an accelerating schedule of fines totaling $4.7 million if the controllers failed to report to work ($250,000 for Tuesday, August 4; $500,000 for Wednesday; $1 million a day for the next four days). That judge also fined PATCO President Robert Poli $1,000 a day for each day the strike continued, through Sunday, Aug 9. Approximately 875 controllers returned to work during the 48 hour grace period granted. After expiration of the grace period, about 11,400 controllers were dismissed. Most of those fired appealed the action, and 440 were eventually reinstated as a result of their appeals.

The strike and dismissals drastically curtailed FAA's controller workforce. According to DOT's FY1982 annual report, the firings reduced the number of controllers at the full performance or developmental level from about 16,375 to about 4,200. To keep the airways open, approximately 3,000 ATC supervisory personnel worked at controlling traffic. FAA assigned assistants to support the controllers, and accelerated the hiring and training of new air traffic personnel. Military controllers arrived at FAA facilities soon after the strike began, and about 800 were ultimately assigned to the agency. The combined force was sufficiently large to handle traffic without activating the National Air Traffic Control Contingency Plan, which called for FAA itself to establish rigid, severely curtailed airline schedules and to prescribe routes and altitudes.

The day the strike began, FAA adopted Special Federal Aviation Regulation (SFAR) 44, establishing provisions for implementing an interim air traffic control operations plan (see Feb 18, 1982). That plan allowed FAA, among others things, to limit the number of aircraft in the national airspace system. Hence, on Aug 5, the agency implemented a plan dubbed "Flow Control 50," whereby air carriers were required to cancel approximately 50 percent of their scheduled peak-hour flights at 22 major airports. FAA maintained an en route horizontal spacing between aircraft under instrument flight rules of up to 30 miles. Aircraft were kept on the ground, as necessary, to maintain this spacing. FAA gave priority to medical emergency flights, Presidential flights, flights transporting critical FAA employees, and flights dictated by military necessity. General aviation flights operated under the severest restrictions. Aircraft with a gross takeoff weight of 12,500 pounds or less were prohibited from flying under instrument flight rules; moreover, aircraft flying under visual flight rules were prohibited from entering terminal control areas. Other general aviation aircraft were served, as conditions permitted, on a first-come-first-served basis. (See Jul 2, 1981, and Sep 4, 1981.)

19810806 Aug 6, 1981: The Civil Aeronautics Board approved acquisition of Continental Airlines by Texas International, a subsidiary of Frank Lorenzo's holding company, Texas Air. The transaction was consumated in Oct 1981. A year later, Lorenzo merged Texas International's operations into those of the much larger Continental. (See Sep 24, 1983)

19810813	Aug 13, 1981: President Reagan signed the Fiscal Year 1981 Airport Development Authorization Act (Title XI of P.L. 97-35) which briefly renewed the Airport Development Aid Program. The law authorized $450 million in grants from the Airport and Airway Trust Fund for airport development, planning, and noise compatibility projects during fiscal 1981. It also specified that at least $25 million be used for noise compatibility grants, and forbade future authorization in excess of $600 million for fiscal 1982.
	FAA had only until the end of Sep 30, 1981, to allocate the $450 million, plus another $9 million resulting from adjustments to prior year's grants. The agency approved 622 new grants and 181 amendments to previous grants, for a total of $450.4 million. FAA was unable to allocate the whole amount because one airport sponsor did not use all the money specifically set aside for it in the legislation. (See Sep 3, 1982).
19810904	Sep 4, 1981: FAA announced a revised regional consolidation plan under which the number of regions would be reduced from eleven to nine. The original plan would have resulted in only six regions (see Jun 12, 1981), but FAA stated that this had been modified due to the more pressing need to rebuild the air traffic control system in the wake of the PATCO controllers strike (see Aug 3, 1981). The consolidation was detailed in a notice issued on Sep 29. Under the new plan, FAA combined the existing Pacific-Asia and Western Regions into a new Western-Pacific Region with headquarters in Los Angeles, and closed the Honolulu regional office. The agency also combined the existing Rocky Mountain and Northwest Regions into a new Northwest Mountain Region with headquarters in Seattle, and closed the Denver regional office. It also reassigned the states of North and South Dakota from the Rocky Mountain to the Great Lakes Region. Operations under the new concept began on Oct 1, and all physical relocation was scheduled for completion by the end of Aug 1982.
19810904	Sep 4, 1981: FAA announced it would hire approximately 1,500 temporary employees, including furloughed airline pilots, to assist in replacing air traffic controllers fired for striking. The temporary employees would not control traffic, but would perform duties related to flight strip distribution and other controller support functions. (See Aug 3, 1981, and Oct 2, 1981.)
19810911	Sep 11, 1981: Federal Aviation Regulation Part 108, a new rule on airline security, went into effect. The regulation levied airline security requirements according to the perceived threat facing different types of operations and sizes of aircraft, and established security safeguards appropriate to the various types of commercial passenger operations. Also on this date, FAA approved a new concept allowing airport operators to position law enforcement officers farther from passenger screening checkpoints provided certain conditions were fulfilled (see Mar 29, 1979).

19810926	Sep 26, 1981: The twin-engine Boeing 767 made its first flight. On Jul 30, 1982, FAA certificated the aircraft, the first entirely new U.S. commercial transport design in more than a decade. The 767 began its first revenue service on Sep 8 of that year with United Air Lines. On Jul 14, 1978, United Airlines had placed the largest order to date for a single commercial airplane, when it made a $1.2 billion order for the airliner.
19810930	Sep 30, 1981: During fiscal year 1981, which ended on this date, FAA added two major new capabilities to the en route air traffic control system: minimum safe altitude warning (MSAW), already a feature of the ARTS III terminal system (see Oct 28, 1977); and arrival metering, a function that provided the controller with computer advisories to help in managing the flow of traffic into congested terminal areas.
19811002	Oct 2, 1981: FAA announced the award of two contracts to E-Systems for computer systems for 61 automated flight service stations (AFSS). The agency planned that the existing network of over 300 stations would eventually be consolidated into the 61 automated facilities. The equipment to be produced by E-Systems would provide flight service specialists with rapid retrieval of data needed to brief pilots, presenting the information on television-like displays. Production was to be in two stages. Model 1, with capability of displaying weather and aeronautical alphanumeric data, would be implemented at 41 sites. Later, all 61 sites would get Model 2, which would add a second display for weather radar, charts, and other graphics. Model 2 would also include the capability for demonstrating direct access by pilots to the computer data base from remote computer terminals. The computers for both models were to be installed at air route traffic control centers and connected by leased telephone lines to the flight service stations. (See May 28, 1981, and Nov 1982.)
19811002	Oct 2, 1981: FAA announced a $10 million contract with the University of Oklahoma to help train new air traffic controllers to replace those fired for participating in the illegal strike. The University would provide FAA-certificated instructors as supplemental staffing for the FAA Academy. The agreement proved to be the first in a series of controller training contracts with the University. (See Sep 4, 1981, and Oct 22, 1981.)
19811006	Oct 6, 1981: Blanche W. Noyes died. One of the nation's early female pilots, she was probably the first woman pilot to have a career in the U.S. government. Noyes was known for her work in the air marking program during 35 years with FAA and its predecessors. She participated in many aviation events and races, winning the 1936 Bendix Air Race, was a founder of the Ninety-Nines, Inc., an organization established to encourage women in aviation. Her many awards included the Department of Commerce's gold medal for exceptional service in 1956, and induction into the Aviation Hall of Fame in 1970.

19811006 Oct 19, 1981: FAA placed a General Aviation Reservation (GAR) plan in effect, because the number of private aircraft flying in the system increased substantially after the controllers' strike. General aviation pilots who wished to fly under air traffic control were required to make reservations under a quota based on the percentage of flights that aircraft in their category had flown prior to the PATCO strike of Aug 3, 1981 (see that date). The restriction became necessary as non-airline pilots, some of whom had refrained from using the air traffic control system at the strike's beginning, began to increase operations. After two weeks under the GAR plan, FAA announced that the number of private aircraft flying in the system had been reduced to approximately the pre-strike level, and that the plan had helped to cut delays for both airline and private flights. (See Dec 31, 1983.)

19811022 Oct 22, 1981: The Federal Labor Relations Authority decertified the Professional Air Traffic Controllers Association, depriving the union of the right to represent its members. Following a temporary stay by a Federal Appeals Court, the decertification became effective on Oct 27. (See Oct 2, 1981, and Dec 31, 1981.)

19811101 Nov 1, 1981: Effective this date, Administrator Helms designated four aircraft certification directorates. The directorates assumed the certification responsibilities previously assigned to the lead and certificating regions under the lead region concept (see Jan 1, 1980). They also received additional responsibilities to strengthen and streamline the certification process. The directorates were managed by the directors of the following regions: Central (for aircraft under 12,500 lbs.); Northwest Mountain (for transport aircraft); Southwest (for rotorcraft); and New England (for engines and propellers). The authority of the directorates extended beyond regional boundaries. For example, aircraft certification offices in the Central, Southern, and Great Lakes regions reported directly to the Small Airplane Certification Directorate at the Central Region headquarters. FAA formally established the directorates by an order dated Feb 1, 1982, and on Mar 9 issued a news release stating that the directorate system had become operational.

19811102 Nov 2, 1981: Effective this date, FAA reestablished 12 inches as the required height for registration marks (N-numbers) on fixed-wing aircraft. This size requirement had originally been established by a rule published on Jan 6, 1961. In 1977, however, the size of the N-numbers was reduced to 3 inches for small airplanes with speeds not greater than 180 knots. The agency permitted this reduction in response to the Experimental Aircraft Association's concern to improve the aesthetic appearance of small aircraft. FAA reestablished the 12 inch height after complaints from citizens, law enforcement agencies, and the Defense Department demonstrated that timely and positive visual identification was compromised by the smaller markings. To avoid undue cost, however, FAA allowed owners of existing and certain newly-manufactured aircraft to display the smaller N-numbers until the aircraft was repainted or its marks were restored, repainted, or changed. The new requirement for 12 inch numbers did not affect existing rules on special marking procedures for certain aircraft that were amateur-built, unusually configured, over 30 years old, or operated for exhibition.

19811112 Nov 9-12, 1981: Ben L. Abruzzo, Larry Newman, Ron Clark, and Rocky Aoki made the first balloon crossing of the Pacific, a trip from Nagashima, Japan, to near Covelo, Calif., in Double Eagel V.

19811120 Nov 20, 1981: Effective this date, FAA permitted blind airline passengers to use certain approved methods of storing their canes at their seats. The agency had declined to permit this in an earlier rule (see May 16, 1977), deciding instead that the long utility canes should be handed over to flight attendants to be secured during takeoff and landing. This policy aroused considerable opposition, particularly from the National Federation of the Blind (NFB). The NFB petitioned FAA on the issue, and filed suit when the petition was denied. Meanwhile, more than 100 blind persons and their supporters picketed FAA's national headquarters on Jul 5, 1978, to protest the cane policy. In Jan 1979, a U.S. court granted FAA's request for time to reconsider the issue. After testing by the agency's Civil Aeromedical Institute (CAMI), FAA in Nov 1980 proposed a rule permitting accesible storage of the canes. The agency announced the final rule on Jul 24, 1981.

19811130 Nov 30, 1981: FAA "decombined" the last domestic combined station/tower (CS/T). Located at Valdez, Alaska, the CS/T had been the final survivor of a program begun by the Civil Aeronautics Administration under which air traffic control towers were consolidated with airway communication stations, the forerunners of flight service stations (see Aug 8, 1950). The number of CS/T's had been declining since 1958.

19811206 Dec 6, 1981: A new Metropolitan Washington Airports Policy became effective. In the making since 1978 (see Mar 23, 1978), the new policy differed only in a few respects with the policy proposed by the Carter Administration in 1980. The overall objectives of both the Carter and Reagan policies were to reduce the noise impact of operations at Washington National, maintain National's longstanding status as a short-haul airport, and promote better utilization of Dulles. The policy placed no restrictions on Dulles, while putting the following limitations on National:

* A 16 million cap on the number of passengers enplaning and deplaning per year (compared to 17 million under the Carter plan).

* A maximum of 60 landing slots per hour distributed as follows: Part 121 air carriers, 37; Part 135 commuter air carriers and air taxis, 11; general aviation, 12. (Compared to the Carter plan, this gave Part 121 operators one more slot and Part 135 operators one less.)

* Extension of the nonstop service perimeter rule from a radius of 650 to 1,000 miles (see Oct 30, 1986).

Whereas the Carter plan would have lifted the ban on 2- and 3-engine widebody jets at National, the Reagan plan retained the ban. Moreover, the new administration eliminated the Carter plan's restrictions on night-time arrivals and departures; instead, it limited operations at National between 10:00 p.m. and 7:00 a.m. to aircraft that generated no more noise than 73 dBA on takeoff and 85 dBA on approach. The noise limitations, which become effective on Mar 1, 1982, initially had the effect of excluding jet operations at the airport during the specified hours. (See Aug 31, 1983.)

19811209	Dec 9, 1981: President Reagan rescinded a three-year prohibition of any Federal employment of controllers dismissed for participation in the PATCO strike (see Aug 3, 1981); however, the fired controllers were still barred from employment with FAA.
19811229	Dec 29, 1981: President Reagan suspended the U.S. landing rights of the Soviet airline Aeroflot as part of sanctions enacted in response to repression in Poland. The action came soon after a temporary one-week suspension of Aeroflot's U.S. operations imposed during November because of violations of the prescribed routes. (See Jun 19, 1973, and Apr 29, 1986)
19811231	Dec 31:, 1981 The Federal Labor Relations Authority certified the Professional Airway Systems Specialists (PASS) as the exclusive representative of FAA's electronics technicians. In a July election, PASS had defeated the Federal Aviation Science and Technological Association, known as FASTA (see Oct 5, 1976); however, PASS's certification was delayed by objections filed by FASTA. FAA and PASS concluded a national labor agreement during fiscal 1984. (See May 1, 1991.)
19811231	Dec 31, 1981: Robert E. Poli resigned as president of PATCO. (See Oct 22, 1981, and Jul 2, 1982.)
19811231	Dec 31, 1981: The end of this day marked the completion of the second consecutive calendar year with no fatal airplane crashes by scheduled air carriers operating under Federal Aviation Regulations Part 121--an unprecedented two-year record. Despite the absence of fatal crashes, however, Part 121 operations involved four varied mishaps in and around aircraft that each claimed one life in 1981. (See Dec 31, 1980, and Dec 31, 1993.)

1982

19820113 Jan 13, 1982: A Boeing 737 operated by Air Florida crashed near Washington National Airport shortly after taking off during snowfall. The aircraft hit a bridge, killing 4 persons in vehicles, and plunged into the icy Potomac River. Of the 79 persons aboard the jet, only four passengers and one flight attendant survived. The National Transportation Safety Board determined that the probable cause of the crash was the crew's failure to use the engine anti-icing system during ground operation and takeoff, their decision to take off with snow/ice on the airfoil surfaces, and the captain's failure to abort takeoff when his attention was called to anolomous engine instrument readings. Contributing to the accident were: prolonged delay between deicing by ground crew and takeoff, during which the aircraft was exposed to continual snowfall; the known pitchup characteristics of the 737 when the leading edge was contaminated by even small amounts of snow or ice; and the crew's limited experience in jet transport winter operations. As a result of the accident, FAA and the aviation industry took a number of actions to increase awareness of cold weather hazards and the proper response to them. (See Dec 12, 1985.)

19820123 Jan 23, 1982: In a night landing too far down an icy runway at Boston's Logan airport, a World Airways DC-10 slid over the edge of a seawall and into shallow harbor water. The nose section separated from the fuselage, and two passengers seated at the separation point were later found to be missing and presumed drowned. In its original report on the accident, the National Transportation Safety Board listed pilot error as a contributory factor, but found the probable cause to be the pilot's lack of information on the slippery runway conditions. The Board blamed this lack on the airport management and on FAA, citing inadequate regulation and air traffic controllers' failure to relay runway condition reports. After protests from FAA and the airport authority, the Board issued a revised finding that placed somewhat more emphasis on pilot error.

19820128 Jan 28, 1982: FAA released a National Airspace System Plan (NAS Plan or NASP), a comprehensive 20- year blueprint for modernizing the nation's air traffic control and air navigation system. The 450-page document had been printed the previous month and bore the date Dec 1981. It spelled out specific improvements to be made to facilities and equipment to meet the projected demands of air transportation. Key elements of the plan included:

* Computers: FAA would first replace the IBM 9020 computers at the air route traffic control centers with more powerful computers that could use the existing programs or "software packages." The agency would then proceed with development of new software as well as new consoles and displays known as "sector suites." (See Aug 30, 1982.)

* Facility consolidation: air route traffic control centers and terminal radar control rooms would be consolidated from approximately 200 into about 60 by the year 2,000 (see Mar 22, 1983). Flight service stations would be consolidated from about 300 into 61 automated facilities. (See Oct 2, 1981.)

	* Radars: a new secondary radar system would interrogate aircraft transponders on an individual basis, paving the way for automatic "data link" air-ground communications. This Mode S equipment ("S" for "selective address"), in combination with a new generation of Doppler weather radar, would also permit the replacement of the existing primary en route radar system. Primary radar would be retained in terminal areas, however, and be improved with the addition of a separate weather channel. (See Oct 5, 1984.)
	* Weather services: were to be upgraded by such means as direct pilot access to computer weather data via remote terminals or touchtone telephones (see Mar 14, 1984). Automated sensors at airports would generate radio broadcasts on surface conditions, improving safety and allowing lower weather minimums for landing (see Jan 26, 1983).
	* The Microwave Landing System (MLS): full production procurement was to be initiated in fiscal 1983, with over 1,250 to be in place before century's end (see Apr 19, 1978 and Jan 12, 1984). FAA expected the new equipment to provide precision guidance over a much broader area than the existing Instrument Landing Systems, thus allowing greater operational flexibility.
	Following the publication of this initial NAS Plan, FAA issued updated editions annually (see Feb 8, 1991).
19820218	Feb 18, 1982: A special rule issued this date amended the Interim Operations Plan for air traffic control (see Aug 3, 1981). The new rule provided procedures to be used Apr 25-Oct 30 in scheduling and in allocating airport landing reservations ("slots") at the 22 airports at which operations were limited due to the PATCO strike. New entrants were more clearly defined, and a system initiated that accorded such carriers high priority in awarding such additional capacity as became available. A random draw was implemented for determining the order in which carriers' requests for more slots were processed. (See Mar 6, 1984.)
19820219	Feb 19, 1982: The Boeing 757 first flew. On Dec 21, 1982, FAA certificated the first version of the Boeing 757, a narrow-body jet capable of carrying up to 219 passengers in short/medium range flights and designed to replace the Boeing 727, the single most popular jetliner model produced to date, but obsolescent in terms of noise, fuel efficiency, and flight crew productivity. Powered by two Rolls-Royce 535C engines, the 757 was the first Boeing airliner launched with foreign-made engines. Eastern Air Lines and British Airways had placed orders for the medium-range airliner on Aug 31, 1978.
19820315	Mar 15, 1982: The Safety Regulations Staff in FAA's Office of the Associate Administrator for Aviation Standards was abolished and its functions were transferred to a new Safety Regulations Division established in the Office of Aviation Safety.

19820317	Mar 17, 1982: FAA announced that it had received the first of 950 new radio navigation aids (VORs and VORTACs) with solid state construction and other advanced features for installation during the next three years. The National Airspace System Plan called for replacement of all vacuum tube radio navigation aids with the reliable solid state equipment over the next 20 years. (See Sep 5, 1974 and Aug 3, 1982.)
19820422	Apr 22, 1982: Tighter rules for aircraft entering the south Florida area through off-shore Air Defense Identification Zones (ADIZs) became effective. Previously, aircraft flying at less than 180 knots had not been required to file flight plans and make regular position reports in any ADIZ off the coast of the continental U.S. Now all aircraft entering an ADIZ south of the 30th parallel and east of the 86th meridian had to comply with these requirements, regardless of their airspeed. In addition, FAA now required pilots flying into any ADIZ to report if their aircraft carried a transponder--and if so, what kind. The agency mandated changes in response to increased flights by drug smugglers. (See Sep 1, 1987.)
19820510	May 10, 1982: FAA began an experimental program of allowing airlines to buy, sell, and transfer airport landing "slots" among themselves. The program included a "use or lose" provision and restrictions on transfer by carriers allotted slots on the basis of essential air service. On Jul 6, FAA announced that it was suspending the buy-sell policy, but would continue to allowed the exchange or trade of slots. On Aug 5, the agency announced that it was easing certain restrictions on this slot trading. (See Mar 6, 1984, and Dec 20, 1985.)
19820512	May 12, 1982: Braniff International Airways suspended operations, quickly filing for protection under Chapter 11 of the bankruptcy code. (See Mar 1, 1984.)
19820607	Jun 7, 1982: The National Airspace Review (NAR) program convened the first two of 16 task groups organized to study various aspects of the airspace system. FAA had introduced the NAR concept in Apr 1981 with the announcement of a meeting to allow airspace users to participate in formulating the program, and had published a proposed plan for the review on Aug 10, 1981. Composed of representatives of FAA, the military, and the civil aviation community, the task groups submitted a host of recommended improvements, such as the Airport Radar Service Area (ARSA) concept (see Dec 22, 1983), for the FAA Administrator's consideration. By the Dec 4, 1984, final meeting of the Executive Committee that had guided the NAR during its initial stage, the NAR had generated 850 recommendations, over 500 of which had already been implemented or approved for implementation. During its next phase, the NAR focused on the future rather than the present system, and the Office of Management Systems assumed responsibility for guiding the program.

19820702 Jul 2, 1982: The Professional Air Traffic Controllers Organization filed a request for liquidation under Chapter 7 of the Federal Bankruptcy Act. According to Gary Eads, who had become PATCO's president on Jan 1, 1982, the union had about $5 million in assets but owed $40 million, including $33.4 million to the airlines for violating a 1970 Federal court anti-strike injunction. Last Nov 25, PATCO had filed a motion in Federal court seeking to freeze its assets while it reorganized under Chapter 13 of the Bankruptcy Act. After filing to liquidate under Chapter 7, Eads declared, "It is over for PATCO. The union is gone." (See Dec 31, 1981, and Jun 19, 1987.)

19820702 Jul 2, 1982: Truck driver Larry Walters reached a reported 16,000 ft. over Long Beach, Calif., during a 45- minute flight in a lawn chair tied to balloons, crashing into a power line on descent but alighting unharmed. FAA fined Walters $1,500 for the escapade.

19820704 Jul 4, 1982: Following a ten-month interagency review, President Reagan issued a decision directive stating that expansion of U.S. private sector involvement in civil space activities was a national goal. As the government phased out certain expendable launch vehicles (ELVs), private interest in commercial operation of these systems was rising. On Nov 16, 1983, the President chose DOT as the lead organization for ELV commercialization. On Feb 24, 1984, Executive Order 12465 formally designated DOT as the lead agency for encouraging, facilitating, and licensing commercial ELV activities. DOT entrusted these duties to a new Office of Commercial Space Transportation that it had begun to organize during 1983 (see Aug 7, 1995). Congress affirmed and expanded these actions through the Commercial Space Launch Act, enacted on Oct 30, 1984. This legislation made DOT responsible for enumerated activities to encourage and regulate U.S. commercial space launches.

19820709 Jul 9, 1982: A Pan American 727 crashed shortly after takeoff from New Orleans International Airport, killing all 145 aboard and 8 persons on the ground. The National Transportation Safety Board listed the accident's probable cause as the airplane's encounter with microburst-induced wind shear, which imposed a downdraft and a decreasing headwind. As a contributory factor, the Board listed the limited ability of the current Low Level Wind Shear Alert System (LLWAS) to provide definitive guidance for controllers and pilots in avoiding the hazard (see Sep 1978). Although the pilot was aware that LLWAS alerts were occurring periodically around the airport, the system did not detect the wind shear that affected the Pan Am flight until after takeoff began.

Concerned over the accident, Congress in Dec 1982 passed legislation requiring FAA to contract with the National Academy of Sciences for a study of the wind shear hazard. The resulting report, completed by the Academy's National Research Council in Sep 1983, urged that FAA establish an integrated wind shear program to address all aspects of the problem. The report's recommendations included the improvement and wider use of LLWAS, which it considered the only detection system available in the near term for operational use. In Oct 1983, FAA announced that it had ordered another 51 of the systems. (See Aug 2, 1985.)

19820709	Jul 9, 1982: In City of Houston v. Federal Aviation Administration, the United States Court of Appeals for the Fifth Circuit held that the perimeter rule prohibiting air carriers from operating nonstop flights to and from Washington National beyond a 1,000-mile radius was neither arbitrary nor capricious and, therefore, a valid exercise of power. (See Apr 24, 1966, Dec 6, 1981, and Oct 30, 1986).
19820729	Jul 29, 1982: FAA certificated the Bell 222B, the first transport category helicopter certificated for single-pilot instrument flight rules (IFR) operation without stabilization equipment.
19820803	Aug 3, 1982: FAA commissioned the first of a new generation of very high frequency omnidirectional radio range (VOR) navigational aids at the North Philadelphia, Pa., Airport. The new installation was the first in FAA's program to replace VORs using vacuum tubes with more reliable solid-state equipment. (See Mar 17, 1982.)
19820813	May 15-Aug 13, 1982: The National Center for Atmospheric Research and the University of Chicago conducted a field experiment in the vicinity of Denver as part of the Joint Airport Weather Studies (JAWS) Project. FAA and many other agencies and research groups participated in JAWS, which employed Doppler radars and a variety of other data sources. The project resulted in new understanding of wind shear microbursts, yielding information on their formation, duration, decay, severity, and movement. (See Jun 24, 1975, and Jul 9, 1982.)
19820823	Aug 23, 1982: United Parcel Service began “Next Day Air” package delivery between Los Angeles and San Francisco. The service was extended to 24 metropolitan areas during the following month, and by Jun 1985 it covered all the states except Alaska. UPS air freight had traveled primarily in the cargo holds of passenger aircraft through 1980, but thereafter the company relied increasingly on its growing fleet of cargo aircraft.
19820830	Aug 30, 1982: FAA established an Advanced Automation Program Office, which reported directly to the Administrator. The office had responsibility for the Advanced Automation Program, that element of National Airspace System modernization concerned with developing a replacement for NAS En Route Stage A and ARTS air traffic control systems. (See Jan 28, 1982 and Jul 25, 1983.)
19820902	Sep 2, 1982: FAA published a rule covering two types of recreational equipment that had emerged during the 1970s: unpowered hang gliders (see May 29, 1974), and powered airplanes of extremely light weight. For regulatory purposes, FAA defined machines of both these types as "ultralight vehicles" rather than aircraft; therefore, they were not subject to the agency’s requirements on registration, airworthiness certification, and pilot licensing. To qualify for the new category, a hang glider must weigh less than 155 lbs., and a powered vehicle less than 254 lbs. In addition, a powered ultralight must not exceed: a fuel capacity of 5 gal.; a top speed of 55 knots; and a power-off stall speed of 24 knots. The agency limited both powered and unpowered ultralights to a single occupant.

The new regulation subjected ultralights to certain operating restrictions, including right-of-way and minimum visibility requirements. Ultralight operators were responsible for maintaining separation from other aircraft on a "see and avoid" basis. FAA banned flights over congested areas, and permitted operations in certain controlled airspace only with the prior approval of the appropriate air traffic control facility. The new rule also authorized on-the-spot safety inspections by FAA personnel.

The question of whether ultralights required further regulation remained controversial. During 1984, Congress heard testimony on the subject, and FAA held a series of meetings to obtain public comment. On Feb 5, 1985, the National Transportation Safety Board urged stronger safety regulation, citing its investigation of 88 fatal ultralight accidents that occurred between between Mar 1983 and Sep 1984. FAA subsequently drafted a rulemaking proposal on the registration and marking of powered ultralights, as well as the licensing of their pilots. The proposal was not published, however, because of objections by the Office of Management and Budget.

19820903

Sep 3, 1982: President Reagan signed the Tax Equity and Fiscal Responsibility Act (P.L. 97-248), general tax legislation that increased aviation user taxes. The act: raised the airline passenger ticket tax from 5 to 8 percent; increased the general aviation gasoline tax from 4 to 12 cents per gallon; levied a jet fuel tax of 14 cents per gallon; and reimposed the 5 percent air cargo tax and the $3 international departure fee. These taxes were earmarked as renewed funding for the Airport and Airway Trust Fund, which had received no tax revenues since Sep 30, 1980 (see that date).

Title V of the tax bill, designated the Airport and Airway Improvement Act of 1982, reestablished FAA's airport grants program for development and noise compatibility projects. Formerly known as the Airport Development Aid Program (ADAP), this function had been inactive since the end of fiscal 1981 (see entry for Aug 13, 1981). It was now renamed the Airport Improvement Program (AIP), and authorized to draw on the Trust Fund in the following amounts: $450 million for fiscal 1982; $600 million, 1983; $793.5 million, 1984; $912 million, 1985; $1.017 billion, 1986; and $1.017 billion, 1987. Unused authorizations could be carried over to succeeding years. (An additional $475 million was authorized for airport projects in 1983-85 as part of P.L. 97-429, the Surface Transportation Assistance Act of 1982.)

The Airport and Airway Improvement Act stipulated formulas for apportioning airport development funds between primary, commuter, reliever, and general aviation airports, including a guarantee that reliever airports receive at least 10 percent of available funds. For the first time, privately owned airports in the reliever and commercial categories became eligible to receive grants. Other provisions of the law specified that not less than 1 percent of available funds be set aside for airports system planning grants, and directed FAA to publish a national plan of integrated airport systems (see Aug 2, 1985).

	The Airport and Airway Improvement Act also authorized FAA to use a total of 6.327 billion from the Trust Fund for airway facilities and equipment over the six years beginning with fiscal 1982. This funding helped to finance the planned modernization of the National Airspace System (see Jan 28, 1982). In addition, $1.169 billion from the Trust Fund was authorized for the agency's research, engineering, and development activities during the same six years. The law also significantly increased the amount that FAA could draw from the Trust Fund for operations and maintenance. It authorized $800 million in 1982, and established formulas for the succeeding five years based on the level of funds made available for airport development. (See Dec 30, 1987.)
19820908	Sep 8, 1982: FAA retitled the Associate Administrator for Policy and International Aviation Affairs the Associate Administrator for Policy and International Aviation. The agency also retitled the Office of International Aviation Affairs as the Office of International Aviation.
19820915	Sep 15, 1982: Glen A. Gilbert died at age 69. An important pioneer in the conceptual development of air traffic control, Gilbert was manager of the airlines' Chicago air traffic control center at the time that it came under the control of the Commerce Department (see Jul 6, 1936). He subsequently became Chief of the Airway Traffic Control Section and later held other Federal aviation positions before joining the staff of the International Civil Aviation Organization in 1951. Gilbert worked as an aviation consultant from 1957 until his death. He also authored several books on air traffic control.
19820920	Sep 20, 1982: FAA published a proposal to implement "Regulation by Objective" (RBO) in regulating airlines. Under this concept, "how to do it" regulations would be replaced by broadly stated objectives, and the airlines would be allowed the flexibility to meet these objectives in the most efficient and cost-effective manner possible. FAA would pass judgement on new methods of compliance, however, and the agency would use a computer system to track the requirements that applied to each airline. A single Federal Aviation Regulation Part 120 would replace two existing operating regulations, Part 121 for operators of large aircraft and Part 135 for commuter and air taxi operators. Response to the proposal included many negative comments on RBO's practicality, cost, and consistency with FAA's mandate. The agency withdrew the proposal on Jun 16, 1983, stating that to pursue the concept would be less productive than to proceed with a review of Parts 121 and 135.
19820930	Sep 30, 1982: H. Ross Perot, Jr., and Jay Coburn landed their Bell 206L-1 LongRanger II in Dallas, Tex., after completing the first helicopter flight around the world in 29 days, 3 hours, 8 minutes. On Aug 5, 1982, meanwhile, Dick Smith had departed from Fort Worth, Tex. in a Bell 206B JetRanger III on the first solo helicopter flight around the world. Smith, an Australian businessman, completed his unhurried trip on Jul 22, 1983.

19821026 Oct 26, 1982: FAA announced a contract with Burroughs Corp. to equip the agency's district safety offices with a computerized information processing system that would allow safety inspectors to spend more of their time on field work rather than on preparing and analyzing reports. This Work Program Management Subsystem (WPMS) was implemented during 1983. WPMS was part of an Aviation Safety Analysis System (ASAS) being developed to apply computer technology to the support of a variety of FAA tasks and decisions. ASAS continued to grow in scope and complexity during succeeding years.

19821029 Oct 29, 1982: Changes in the FAA headquarters organization became officially effective. The position of Associate Administrator for Air Traffic and Airway Facilities was abolished, and the Air Traffic Service now reported directly to the FAA Administrator. (The title of this service's Director was later changed to Associate Administrator for Air Traffic, effective Dec 25, 1983.) The Airway Facilities Service was abolished, as were the Associate Administrator for Engineering and Development position and its subordinate services, the Systems Research and Development Service and Office of Systems Engineering Management. The abolished elements were replaced by an organization under a new Associate Administrator for Development and Logistics. Reporting to this Associate Administrator were a new Systems Engineering Service, headed by the former director of the abolished Airway Facilities Service, and a new Program Engineering and Maintenance Service. The Logistics Service was retitled the Acquisition and Materiel Service and remained under the Associate Administrator for Administration.

19821105 Nov 5, 1982: FAA announced that it would accept applications for air traffic controller positions from certain categories of specially qualified persons from 31 to 35 years old. Previously, all controller applicants had to be less than 31 years old at the time of appointment. The change would apply during the Nov 8-30 application period, and any future application periods before the end of 1984.

19821130 Nov 1982: FAA commissioned its first Automated Flight Service Station (AFSS) building at Denver. Although the agency planned to link groups of AFSS sites into "family" units linked by an automated central data processing system, the Denver facility and other early AFSS buildings were commissioned individually without the new equipment. The Denver site was FAA-owned and not part of the lease program begun on May 28, 1981 (see that date). The first AFSS building commissioned under the lease program took place at Bridgeport, Conn., on Mar 3, 1984. (See Oct 2, 1981, and Feb 12, 1986.)

19821207 Dec 7, 1982: FAA announced the creation of a Rotorcraft Program Office to oversee the agency's activities affecting helicopters. The agency formally established the new office, which reported directly to the Associate Administrator for Aviation Standards, on Apr 28, 1983. (See Oct 31, 1986.)

19821228 Dec 28, 1982: Secretary of Transportation Drew Lewis announced his resignation, effective Feb 1, 1983. Lewis, who stated that he had originally planned to remain as Secretary only two years before returning to private life, became chief executive of a cable television company.

19821228

Dec 28, 1982: Witnesses reported that a 737 flew dangerously close to a tall building in Rosslyn, Va., as it approached Washington National Airport. On Mar 24, 1983, the National Transportation Safety Board (NTSB) reported that the aircraft had flown nearer the building than normally should occur, and that low-flying aircraft were not unusual in the locality. NTSB recommended that FAA change the approach path and take certain other actions. FAA rejected these recommendations, but on Nov 21, 1983, NTSB asked the agency to reconsider. On Dec 21, FAA responded that it would institute a new instrument approach course farther from Rosslyn, upgrade electronic equipment on the approach already in use, and place an additional limit on how low pilots using a third approach course could descend before sighting the airport. FAA also tested new lead-in lights and later installed them on Potomac River bridges. (See Mar 8, 1984.)

1983

19830104 Jan 4, 1983: Effective this date, FAA increased the minimum qualifications for air traffic controllers who provide on-the-job training (OJT). As before, FAA required such controllers to be certificated on the position for which they served as an OJT instructor. In addition, they were now required to have operated in the position for a minimum of 30 solo hours after certification, and to have received certification as an OJT instructor based on a supervisor's observation of actual performance at the position.

19830126 Jan 26, 1983: FAA announced that a year-long demonstration of the Automated Weather Observing System (AWOS) would begin at selected airports later in the year. The demonstration was a step toward FAA's goal of developing an unmanned weather station that would employ standard weather sensors working in tandem with data processing equipment to produce weather observations for dissemination to pilots, controllers, and other users. The agency had begun testing a prototype in 1978, and awarded contracts for demonstration systems in 1982. The airport demonstration program was completed in 1984. On Apr 11, 1986, FAA issued an advisory circular containing standards for AWOS systems for non-Federal acquisition. The agency also planned to acquire AWOS systems for Federal use. (See Feb 28, 1989.)

19830131 Jan 31, 1983: FAA published new airworthiness standards for the certification of newly designed helicopters, effective Mar 2. One important provision required helicopters carrying ten or more passengers to be multi-engine aircraft capable of continued safe flight if one engine failed during climb, cruise, or descent. For helicopters carrying less than ten passengers, the new standards permitted greater flexibility of use. This was achieved by relaxing “height velocity” provisions that had required, in effect, that these aircraft maintain enough altitude and airspeed to allow them to land safety by auto-rotating (the helicopter equivalent of gliding). Other changes dealt with certification for instrument flight rule operations and for flight in icing conditions. The new standards resulted from FAA's continuing Rotorcraft Regulatory Review Program, begun with a Jan 5, 1979, invitation for proposals which were subsequently considered at a series of public conferences.

19830207 Feb 7, 1983: Elizabeth Hanford Dole became Secretary of Transportation. Dole had directed the President's Committee for Consumer Interests under the Johnson Administration. She remained at that post after Nixon succeeded Johnson in 1969, then moved to other posts, including a seat on the Federal Trade Commission. Originally a Democrat, she registered as an independent on taking the FTC post in 1973, and became a Republican about the time of her marriage to Senator Robert Dole (R-Kan.) in Dec 1975. She resigned from the FTC in Mar 1979 to campaign for her husband in his unsuccessful bid for the Republican presidential nomination, then participated in the Reagan campaign. In 1981, she became Assistant to the President for Public Liaison, and remained in that position until accepting the cabinet post. (See Oct 1, 1987.)

19830322 Mar 22, 1983: In congressional testimony, Administrator Helms outlined a new approach to facility consolidation which was to be reflected in a revised National Airspace System (NAS) Plan published the following month. The original plan had called for a reduction in the number of Air Route Traffic Control Centers (ARTCCs) in the continental U.S. from 20 to 16. It had also envisioned the consolidation of the 188 existing TRACON (terminal radar approach control) and TRACAB (terminal radar approach control in the tower cab) facilities. These 188 facilities were to have been consolidated into about 30 regional or hub TRACONs. In the revised plan, all 20 ARTCCs would be retained, redesignated Area Control Facilities (ACFs), and given the added responsibility of providing terminal radar services for virtually the entire nation (see Apr 19, 1993). Individual airport towers would continue to direct takeoffs and landings, but TRACONs and TRACABs would be consolidated into the ACFs. The existing ARTCC sites would be augmented as necessary to perform their new responsibilities as ACFs. Three additional ACFs (one in Alaska, one in Hawaii, and one in the continental U.S.) would bring the total number of these sites to 23. Evolution of the ACF concept was dependent upon the development and acquisition of such air traffic control technology as the advanced automation system (see Jul 26, 1985) and the voice switching and control system (Oct 21, 1986).

19830328 Mar 28, 1983: The U.S. launched a weather satellite carrying Search and Rescue Satellite-Aided Tracking (SARSAT) as part of its equipment, making it the first American satellite capable of receiving Emergency Locator Transmitter (ELT) signals. SARSAT was developed as a joint project of the U.S., Canada, and France. In parallel with this effort, the U.S.S.R. developed a compatible capability, called COSPAS, incorporated in satellites that they launched in June 1982 and the spring of 1983. The U.S. placed a second satellite with with SARSAT capability in orbit in Dec 1984, providing an optimum system to minimize alerting time from the occurence of an accident. The ELT signals relayed via satellite to the ground allowed the approximate position of the ELT to be determined. Additional satellites with COSPAS/SARSAT were periodically launched to ensure adequate system capability. In 1984, the sponsors of COSPAS and SARSAT signed the first agreement on maintaining the system beyond the 1980s.

19830501 May 1, 1983: A hijacker succeeded in reaching Havana by locking himself in a lavatory during an airline flight and issuing notes threatening to blow up the aircraft. The incident began a renewed upsurge of hijackings to Cuba, many perpetuated by Mariel boat lift refugees (see Jul 22, 1980). By Sep 22, hijackers had diverted 10 additional airliners to Cuba, prompting FAA to increase security measures at airports in selected areas. Hijackings to Cuba began to decline in the last quarter of 1983, although three such diversions took place in 1984. No hijackers succeeded in reaching Cuba from the U.S. during 1985 or 1986.

19830505 May 5, 1983: All three engines of an Eastern Air Lines L-1011 failed over the Atlantic, but the pilot restarted one engine and landed safely at Miami. The cause of the incident was oil loss due to mechanics' failure to install O-ring seals.

19830523

May 23, 1983: The first aircraft to navigate across the Atlantic entirely by use of the Global Positioning System (GPS) landed at Paris. The Rockwell International Saberliner had made en route stopovers due to the lack of continuous satellite coverage by the experimental system, which the Defense Department had been developing since the 1970s. In the Apr 1984 edition of the National Airspace System (NAS) Plan, FAA noted that GPS would serve as a future supplemental navigation system for civil aviation, in addition to its primary military role. The Plan therefore included FAA deployment of GPS signal monitors. (See Apr 1, 1991.)

19830602

Jun 2, 1983: An in-flight fire aboard an Air Canada DC-9 filled the cabin with smoke and prompted an emergency landing at Greater Cincinnati airport in Covington, Ky. A flash fire enveloped the aircraft interior about 60 to 90 seconds after the exits were opened, killing 23 of the 46 persons aboard. The National Transportation Safety Board was unable to determine the cause of the fire, which originated in the aft lavatory. The Board concluded that an underestimate of the seriousness of the fire and misleading reports of its progress delayed the captain’s decision to land and contributed to the accident's severity. (See Mar 29, 1985.)

19830614

Jun 8-14, 1983: A Joint System Program Office (JSPO) representing the National Weather Service, FAA, and the Air Force awarded two competitive contracts to develop pre-production models of the Next Generation Weather Radar (NEXRAD). The contracts would remain in effect until July 1986, after which one of the firms would be selected for production. NEXRAD would have the ability to "see" inside storms and measure the velocity and direction of wind-driven precipitation and other particles suspended in the air. The system was based on the Doppler effect, which permits an object's speed and direction to be determined by the lengths or frequency of the light, sound, or radio waves it emits.

The U.S. government had been investigating the potential of Doppler radar since the 1950s. In Apr 1977, joint NEXRAD testing was begun by the Air Force and the Commerce Department's National Weather Service. FAA formally joined the program in Dec 1977, due to the tests' success and perhaps also the crash of a DC-9 in a thunderstorm (see Apr 4, 1977). In Aug 1979, the Departments of Commerce, Transportation, and Defense formed a Joint System Program Office with the goal of developing a national network of NEXRAD radars and processing equipment. The Commerce Department, which planned to buy and operate most of the radars, was given the lead role (see Feb 28, 1994).

	Initially, NEXRAD had been intended to cover both en route and airport needs, but Project JAWS (see May 15-Aug 13, 1982) produced data on wind shear microbursts that prompted FAA to conclude that separate airport systems would be needed. To learn more about how Doppler radar could by applied to the low-level wind shear hazard, FAA conducted Project CLAWS (for classify, locate, and avoid wind shear) in the Denver area from Jul 7 to Aug 13, 1984. FAA contracted with the National Center for Atmospheric Research to provide daily microburst forecasts, Doppler radar surveillance, and real-time advisories of microburst activities. During CLAWS, pilots gave detailed feedback on the effectiveness of the system. On Sep 16, 1985, FAA signed an agreement with the Commerce Department under which FAA would contract with the Sperry and Raytheon corporations to identify how NEXRAD systems would need to be modified to develop terminal Doppler radar. (See Aug 2, 1985.)
19830630	Jun 1983: The first Integrated Communications Switching System (ICSS) became operational at Houma, La. ICSS, a flexible voice communications control and switching system, included three versions: Type I (like the Houma system), for small air traffic control towers and terminal radar approach control facilities (TRACONs); Type II, for larger towers and TRACONs; and Type III, for Automated Flight Service Stations. By the end of fiscal 1986, FAA had installed 86 Type I, 15 Type II, and 30 Type III systems.
19830707	Jul 7, 1983: The Office of Personnel Management gave FAA final approval to proceed with its Airway Science Curriculum program on a five-year demonstration basis, effective after a 90-day congressional review period ending on Oct 10, 1983. FAA had first submitted a proposal for such a project in 1978. In early 1981, Administrator Helms began discussions with selected colleges to explore the possibility of their offering courses to help provide the agency with better-trained candidates for certain occupations. In 1982, he wrote to a list of colleges and universities asking them to consider such courses, and many of the schools expressed interest. The program established a curriculum, leading to a bachelor's degree, that provided a broad foundation in mathematics, science, and management topics, as well as in aviation. Major areas of specialization included aviation management, computer science, aircraft operations and flight technology, and the installation and operation of aviation facilities. Institutions recognized as offering such a curriculum became eligible to apply for airway science grants.
19830713	Jul 13, 1983: FAA announced that its program to improve aircraft braking and direction control on wet runways through grooving the runway surface and other techniques had resulted in the upgrading of nearly 500 runways at 360 airports in the last six years. (See Apr 23, 1967.)
19830725	Jul 25, 1983: FAA placed the Advanced Automation Program Office under the executive direction of the Associate Administrator for Development and Logistics. (See Aug 30, 1982.)

19830731 Jul 1983: After testing in the areas of the Jacksonville and Miami Air Route Traffic Control Centers, FAA adopted the Hazardous Inflight Weather Advisory Service (HIWAS) for national implementation. HIWAS was designed to provide continuous broadcast of information on dangerous weather. FAA first implemented the system in the area where it had been tested, and in Sep 1985 expanded it to the Houston center's airspace. By Sep 1989, the agency had completed nationwide delivery of sufficient HIWAS equipment to provide coverage at or above 4,000 feet.

19830824 Aug 24, 1983: In United States v. The County of Westchester, the U.S. District Court for the Southern District of New York struck down an all-night curfew instituted by Westchester County at its airport. Citing the Concorde case (see Oct 17, 1977), the court said that local airport proprietors were "vested only with the power to promulgate reasonable, nonarbitrary and non-discriminatory regulations that establish acceptable noise levels." In instituting its curfew, however, Westchester County had failed to conduct any study to determine the location of noise-impacted areas or to quantify the level of noise from any source. Moreover, the curfew banned all flights at the Westchester County Airport between the hours of midnight and 7 a.m.--regardless of the degree of noise produced by individual aircraft. As a result, in the opinion of the Court, the curfew did not pass the test of reasonableness and was an "over-broad exercise of power." (See Nov 5, 1990.)

19830831 Aug 31, 1983: An American Airlines DC-9 Super 80 became the first scheduled jet airliner to arrive after 10:00 p.m. at Washington National Airport since the imposition of nightime noise limits (see Dec 6, 1981). The Super 80 landed without violating the limit of 85 decibels.

19830901 Sep 1, 1983: A Soviet interceptor shot down Korean Air Lines flight 007, a 747 that penetrated the Soviet Union's airspace during a flight bound for Japan from Alaska. All 269 persons aboard, including Rep. Larry P. McDonald (D-Ga.) and 60 other Americans, were killed. An International Civil Aviation Organization (ICAO) report issued in June 1993 concluded: that the Korean crew unknowlingly flew into Soviet airspace because they improperly operated their naviation equipment; and that the Soviets assumed that the 747 was an intelligence aircraft and did not make exhaustive efforts to identify it.

On Mar 6, 1984, the governing council of ICAO condemned the destruction of KAL 007, and on May 10 the ICAO assembly amended the Convention on International Civil Aviation to ban the use of weapons against civil aircraft. The KAL tragedy also led to negotiations between the U.S., U.S.S.R., and Japan aimed at enhancing the safety of civil aircraft on Northern Pacific routes. The three nations signed a Memorandum of Understanding on Jul 29, 1985, followed by an implementing agreement on Nov 19 of that year. In addition to procedures for correcting the course of straying aircraft and for emergency landings in Soviet territory, the agreement included improved communications between air traffic controllers. The new communications link became operational on Aug 15, 1986, providing a dedicated voice circuit between air traffic control centers in Tokyo and Khabarovsk, U.S.S.R. American controllers at Anchorage could also communicate with Khabarovsk by patching through the Tokyo center.

19830922 Sep 22, 1983: FAA announced the award of two competitive contracts for design of a new mainframe computers to replace the IBM 9020 computers at Air Route Traffic Control Towers as part of the agency's Advanced Automation Program. (See Jan 28, 1982 and Jul 26, 1985.)

19830924 Sep 24, 1983: Continental Airlines filed for bankruptcy protection under Chapter 11 and suspended flights. Frank Lorenzo (chairman of the airline and its parent company, Texas Air) announced on Sep 26 that a "new Continental" was resuming operations, on a discount-fare basis, to about a third of the cities formerly served. He offered to rehire 4,200 of the firm's 12,000 employees at salaries below those paid under their union contracts. Continental's pilots and flight attendants began a strike on Oct 1, but failed to shut down the airline. By the end of 1983, the company employed approximately 700 pilots and 800 flight attendants. (See Feb 6, 1984.)

19830930 Sep 30, 1983: FAA awarded a contract for a new generation of solid-state Airport Surveillance Radars, designated ASR-9, to replace vaccum-tube radars in use at U.S. airports. (See Jun 1975 and May 2, 1989.)

19830930 Sep 30, 1983: During the fiscal year that ended on this date, key equipment was installed for the National Airspace Data Exchange Network (NADIN), a new interfacility communication system being established under a contract awarded in 1980. Under the NADIN system, messages originating at an air traffic control facility would go to the nearest of some 20 regional concentrators (computerized communication equipment sites). The message would then go to one of two major switching centers, located at Atlanta and Salt Lake City. These switches would disseminate the data, bypassing failed or saturated areas when required. Each switch would handle messages for half the country, but would possess the ability to manage the entire system if necessary. During FY 1982, the first of the switches was installed at Salt Lake City, and the first of the concentrators was installed at the FAA Technical Center. The Atlanta switch and the remaining 20 concentrators were installed in FY 1983, moving NADIN closer to commissioning. (See May 5, 1989.)

19831007 Oct 7, 1983: A Wall Street Journal article accused FAA Administrator Helms and his associate, Vincent Roggio, of questionable practices in their private business dealings during the past 8 years. The article proved the beginning of highly publicized difficulties for Helms, who in Mar 1984 filed a damage suit against Roggio and other business associates, then petitioned for bankruptcy. In 1987, Roggio received a prison sentence for fraud. (See Dec 23, 1983.)

19831011 Oct 11, 1983: An Air Illinois commuter flight crashed near Pinckneyville, Ill., killing all ten persons aboard. The National Transportation Safety Board later reported that the accident was caused by the pilot's decision to continue the flight after loss of electrical power from both generators of his Hawker-Siddley 748. As contributory factors, the Safety Board cited inadequate aircrew training and FAA failure to prevent this inadequacy. Following the crash, FAA made changes designed to improve in its inspection procedures and inspector training.

	On Dec 2, 1983, FAA announced a special surveillance of Air Illinois, and grounded the airline's two largest aircraft on Dec 14. The next day, Air Illinois voluntarily ceased operations. FAA enforcement activity subsequently resulted in a series of other groundings of commuter and charter air carriers, some as a result of the National Air Transportation Inspection (see Mar 4, 1984).
19831024	Oct 24, 1983: FAA began testing a "scatter plan" aimed at more equitable distribution of noise from operations at Washington National Airport. Implemented at the request of the Metropolitan Council of Governments, the plan resulted in a high level of complaints from areas that had previously experienced little noise. Even after the test's end on Jan 7, 1984, some citizens claimed that the flights had not returned to their normal routes along the Potomac River.
19831222	Dec 22, 1983: FAA established the first Airport Radar Service Area (ARSA) at Austin, Tex., followed on Jan 19, 1984, by the second at Columbus, Ohio. A recommendation of the National Airspace Review (see Jun 7, 1982), the ARSA concept was developed for airports with insufficient traffic to warrant a Terminal Control Area (TCA). Within ARSAs, air traffic control provided: separation between IFR aircraft; traffic advisories and conflict resolution for IFR and VFR traffic so that targets do not merge at the same altitude; and traffic advisory service to all participating aircraft as well as arrival sequencing at the primary airport. ARSAs were intended to replace Terminal Radar Service Areas (TRSAs) nationwide, and differed from TRSAs in that their shape was standardized to the maximum extent possible. Radio contact with air traffic control was mandatory for all aircraft in an ARSA, whereas participation was voluntary in a TRSA. Controllers were required to provide traffic advisories to all pilots in an ARSA. In a TRSA, by contrast, controllers provided traffic advisories concerning non-participating VFR aircraft on a workload-permitting basis. After validating the ARSA concept at Austin and Columbus, FAA began establishing additional ARSAs in 1985. There were 121 ARSAs in operation in Sep 1993, when FAA began using its new airspace classifications (see Dec 17, 1991), at which point TRSAs and ARSAs were no longer separate airspace classifications.
19831223	Dec 23, 1983: In response to clean air standards adopted by the Environmental Protection Agency, FAA published revised rules on aircraft engine exhaust emissions. Beginning Jan 1, 1984, FAA extended smoke limitations already in effect for some classes of engines to cover all civil aircraft jet engines. As of the same date, the agency also required all commercial aircraft jet engines manufactured for use in the United States and rated at 6,000 lb. of thrust or more to meet new regulations on unburned carbons, a contributor to regional air pollution problems. (See Jul 6, 1973.)

19831223 Dec 23, 1983: Attempting to takeoff at Anchorage, a Korean Airlines cargo DC-10 collided on the ground with a Piper Navajo operated as a commuter by SouthCentral Air. Disoriented in heavy fog, the DC-10 captain had selected the wrong runway. The accident caused no fatalities, but seriously injured three persons and destroyed both aircraft. To Donald D. Engen, who headed the National Transportation Safety Board's investigation team, the collision illustrated the need for better surface control. Soon after becoming FAA Administrator (see Apr 10, 1984), Engen ordered that Airport Surface Detection Equipment (ASDE) being used for research at FAA's Technical Center be transferred to Anchorage (see Aug 1979). In addition, he directed the agency to speed its procurement of the more advanced ASDE-3 system. On Oct 10, 1985, FAA announced a contract for 17 ASDE-3 units, with an option for 13 more. (See Dec 3, 1993.)

19831223 Dec 23, 1983: J. Lynn Helms resigned as FAA Administrator, effective Jan 31, 1984. Helms stated that his objectives as Administrator were largely accomplished and he wished to return to the private sector. Deputy Administrator Michael J. Fenello became Acting Administrator. (See Apr 10, 1984.)

19831231 Dec 31, 1983: The General Aviation Reservation (GAR) system came to an end. FAA had imposed the GAR as part of the air traffic restrictions resulting from the air traffic controllers' strike (see Oct 19, 1981). Initially, all general aviation pilots who wished to fly under Instrument Flight Rules had to obtain reservations. In June and July of 1982, FAA had lifted this requirement between airports within airspace controlled by the Seattle, Salt Lake City, and Alburquerque air route traffic control centers. Later, FAA grouped the centers into four geographic areas and allowed pilots to fly without reservation between airports in the same group. On Oct 1, 1983, the agency permitted unrestricted flights between the two western groups, and on Oct 31 the southeastern group was included with the western groups. During the final two months of 1983, the reservation system remained in effect only for pilots who wished to enter the northeastern group, which included the New York, Boston, Minneapolis, Chicago, Indianapolis, and Cleveland centers.

19831231 Dec 31, 1983: Operational use of an IBM 4341 computer began at the Central Flow Control facility at FAA's Washington headquarters. Physically located at the agency's Technical Center in Atlantic City, N.J., the new computer was connected by landline to terminals used by Central Flow personnel at headquarters. The IBM 4341 had 14 times more memory and was 70 percent faster than the IBM 9020A that it replaced. In addition, it allowed two-way data communication between the Flow Control facility and en route control centers (previously, this type of communication had been one-way from the en route centers). The computer was used to monitor the number of aircraft in flight, as well as their destinations and times of arrival, as part of Central Flow’s mission of keeping air traffic running smoothly. (See Apr 27, 1970, and May 17, 1987.)

1984

19840112	Jan 12, 1984: The Federal Aviation Administration awarded a contract to Hazeltine Corporation for 178 Microwave Landing Systems (MLSs). (See Jan 28, 1982, and May 20, 1987.)
19840204	Feb 4, 1984: FAA transferred the aviation education program from the Office of Aviation Policy and Plans to the Office of Public Affairs. Later, the program was reassigned to the Office of Training and Higher Education, which was under the Assistant Administrator for Human Resource Management, effective Oct 4, 1992.
19840206	Feb 6, 1984: FAA conducted an intensive inspection of Continental Airlines, lasting through Mar 9. The Air Line Pilots Association (ALPA) was on strike against Continental (see Sep 24, 1983), and accused it of unsafe practices. The FAA report cited discrepancies but concluded that overall safety was adequate. (Two members of the inspection team later charged that higher officials had altered their report to make it more favorable to the airline; however, an FBI investigation found no basis to prosecute for impropriety.) In Jun 1984 congressional hearings, ALPA charged that FAA was covering up safety violations by Continental, while FAA testified that the airline was safe. (See Mar 18, 1985.)
19840213	Feb 13, 1984: In a speech to the National Press Club, Secretary of Transportation Elizabeth Dole outlined an agenda for aviation that included a safety review such as she had ordered for the other transportation modes. Dole announced that FAA would step up surveillance of airlines and other elements of aviation (see Mar 4, 1984), and that the agency's inspector workforce would be increased by 25 percent. She also stated that she had recommended Donald D. Engen as FAA's next Administrator (see Apr 10, 1984).
19840301	Mar 1, 1984: Braniff resumed commercial flights. Now known as Braniff, Inc., the company operated on a smaller scale than before its suspension of flights (see May 12, 1982). To assist the airline's recovery, FAA allocated it landing reservations at five airports where operations were limited by the high density rule and/or restrictions imposed due to the air traffic controllers' strike. (See Sep 28, 1989.)
19840304	Mar 4, 1984: FAA began a 90-day National Air Transportation Inspection (NATI) of 237 major and commuter airlines and 25 air transportation support organizations (see Feb 13, 1984). NATI began with "white glove" examinations to identify deificiencies that became the focus of in-depth inspections during the second phase of the program, which ran April 7-Jun 5. On Dec 12, 1984, the Department of Transportation announced that NATI had shown 95 percent of the airlines to be in compliance with safety rules. Sixteen airlines had deficiencies sufficient to warrant revocation or voluntary surrender of their certificates, suspension or curtailment of their operations, aircraft groundings, or withdrawal of pilots from service for a period of time.

In addition to NATI, FAA undertook a Safety Activity Functional Evaluation (Project SAFE), a review of the agency's safety inspection program. During the course of SAFE, the project's scope broadened from an initial focus on inspectors to a comprehensive review of the Flight Standards function. The findings of the review, announced on Nov 6, 1985, included a plan for revamping the safety inspection program. The plan, portions of which had already been implemented, included: increased standardization of inspection practices and interpretation of rules; a high-priority effort to update safety regulations; increased use of the automated Aviation Safety Analysis System (see Oct 26, 1982); and strong management oversight. (See Jun 19, 1984, and Aug 16, 1985.)

19840306 Mar 6, 1984: FAA published an amendment to the High Density Rule under which four of the nation's busiest airports had long been subject to flight quotas during certain hours (see Jun 1, 1969). Effective Apr 1, the new rule increased the hours that limitations at Chicago's O'Hare were applicable, yet increased the number of operations permitted at the airport. It also slightly increased the operations allowed at New York's La Guardia and Kennedy, while restrictions at Washington National remained unchanged. Hourly quotas on IFR operations were: O'Hare, 155; La Guardia, 68; and Washington National, 60. At Kennedy, hourly quotas varied between 77 and 93. (See Dec 20, 1985.)

As of this date, only four of the nation's airports remained subject to strike-related restrictions imposed under the Interim Operations Plan: O'Hare, La Guardia, Denver's Stapleton, and Los Angeles International. On Apr 1, 1984, these limitations ended at Stapleton, La Guardia, and O'Hare, although the latter two remained subject to the High Density Rule. The nation's last strike-related landing restrictions ended on Aug 26, 1984, at Los Angeles, where runway repairs and Olympic Games traffic had delayed return to normal operations.

19840308 Mar 8, 1984: Several aircraft descended too low while approaching Washington National airport in snowy conditions, according to the National Transportation Safety Board. Seven days later, Transportation Secretary Dole announced an acceleration of planned steps to improve the safety of the approach. Later, on Apr 17, Dole stated further that a new electronic landing aid would be installed in Anacostia to permit pilots to follow a bad-weather approach path that was less difficult and further from tall buildings in Rosslyn, Va. (See Dec 28, 1982.)

19840314 Mar 14, 1984: FAA announced the award of a contract for the Interim Voice Response System (IVRS). The system provided a computerized voice message giving weather information to pilots who called their local IVRS number on a touch-tone telephone. This was expected to reduce the time required for flight service stations to provide complete preflight weather briefings. In October 1985, FAA announced that IVRS was available to pilots in 24 cities. Meanwhile, FAA was also developing the Direct User Access Terminal Service (DUATS). This system allowed pilots to obtain weather information and file a domestic flight plan using computers equipped with a modem for communication via telephone lines. The agency's Technical Center began developing DUATS in 1983, and a test of the system began at ten sites during the following year. (See Feb 13, 1990.)

19840330 Mar 30, 1984: FAA withdrew an advance notice of proposed rulemaking relating to the Age-60 rule (see Mar 15, 1960). The agency had issued the notice on Jun 23, 1982, partly in response to a recommendation made to Congress by the National Institute on Aging (see Dec 29, 1979). The notice solicited information on whether to establish a program to determine if persons age 60 or older could safely serve as pilots of major airplanes. It also asked for views on whether the age-60 rule should be extended to apply to flight engineers, an action advocated by United Air Lines. In withdrawing the notice, FAA noted that it agreed with experts who contended that "there are currently no methods to obtain medical and performance data on older pilots that would provide significantly meaningful data to consider relaxing the age-60 rule." The agency also stated that there was insufficient data available to support the extension of the rule to flight engineers. (See Apr 8, 1993.)

19840331 Mar 1984: Sperry Corporation received a contract to upgrade the En Route Automated Radar Tracking System (EARTS) at the Anchorage, Honolulu, and San Juan Centers, as well as at Nellis Air Force Base (see Aug 4, 1980). The contractor would provide radar mosaic to allow EARTS controllers to view the best data from multiple radars on a single screen, a capability similar to that available at Centers with NAS En Route Stage A systems. In Apr 1985, Sperry received another contract to enhance the EARTS facilities by providing confilict alert (see Jan 9, 1976) and minimum safe altitude warning (MSAW) capabilities (see Nov 5, 1976). FAA accepted delivery of the combined conflict alert/MSAW software package in Aug 1987. By fiscal year 1991, all the upgraded operational EARTS had been commissioned.

19840410 Apr 10, 1984: Vice Admiral Donald D. Engen (USN, Ret.) became the ninth FAA Administrator, succeeding J. Lynn Helms (see Apr 22, 1981). The Senate had received the nomination on Mar 12 and confirmed it on Apr 5. Congress enacted Public Law 98-256 to exempt Engen from the statute prohibiting military officers from serving as FAA Administrator.

Engen was born in 1924 in Pomona, Calif. He held a B.A. from George Washington University, and had graduated with distinction from the Naval War College. Engen began flying with the Navy during World War II and participated in the air and sea battles that accompanied the recapture of the Philippines and attacks on Iwo Jima, Okinawa, and other Pacific Islands. Among his 29 wartime decorations was the Navy Cross, the Navy's highest award for valor. After a brief return to civilian status following the war, Engen rejoined the Navy in 1946. He flew combat missions in the Korean War, became an engineering test pilot, and served in positions that included command of an aircraft carrier. He was Deputy Commander-in-Chief of the U.S. Atlantic Command and U.S. Atlantic Fleet at the time of his retirement from the Navy in 1978. Engen was General Manager of the Piper Aircraft Corporation plant in Lakeland, Fla., 1978-80, and then became a Senior Associate with Kentron, a consulting firm in Alexandria, Va. He was appointed a member of the National Transportation Safety Board in June 1982, and remained in that position until joining FAA. During his military and civilian career, Engen had flown more than 220 different aircraft, including the Navy's first jets. He served as FAA Administrator for three years and two months. (See Mar 18, 1987.)

19840520 May 20, 1984: Former Federal aviation official Oscar Bakke died at age 64. Bakke joined the Civil Aeronautics Board in 1946, became Director of its Bureau of Safety in 1956, and was influential in establishing area positive control (see May 28, 1958). He transferred to FAA in 1960 as Director of the Flight Standards Service, and became Eastern Region Director the following year. Appointed Associate Administrator for Plans in 1967, he led a task force that produced recommendations that influenced subsequent legislation on airport and airway development. In 1971, Bakke went to Brussels as Assistant Administrator for the Europe, Africa, and Middle East Region. After returning to Washington, he headed an FAA panel to investigate the DC-10 crash of Mar 14, 1974 (see that date). Bakke retired from the agency during that same year, following the failure of plans to place him in charge of all safety programs (see Jun 11, 1974). He became executive director of the Newark Transportation Council and later of a charitable foundation.

19840524 May 24, 1984: In a move intended to sharpen FAA's focus on safety, Administrator Engen announced that the Office of Aviation Safety would now report directly to him instead of to the Associate Administrator for Aviation Standards. A directive dated Aug 6, 1984, formally implemented the change. (See Nov 26, 1991.)

19840608 Jun 8, 1984: Transportation Secretary Dole proposed that Washington National and Dulles International airports be transferred from the Federal government. She announced the appointment of an advisory commission to make recommendations on the establishment of a state, local, or interstate body to assume operation of the airports. On Dec 18, 1984, the commission recommended leasing the airports to a regional authority. On Apr 22, 1985, Dole submitted a bill reflecting these recommendations to Congress. (See Oct 30, 1986.)

19840619 Jun 19, 1984: The Supreme Court reversed an appeals court decision holding FAA liable for negligence in its certification and inspection program. The case grew out of the Yarig Airlines in-flight fire (see Jul 11, 1973), and a 1968 fire aboard a DeHaviland Dove. The respondents charged that FAA had negligently determined that the aircraft met fire-protection standards. In deciding against the respondents, the Court ruled that "the duty to ensure that an aircraft conforms to FAA safety regulations lies with the manufacturer and operator, while FAA retains the responsibility for policing compliance." The Court noted that the law allowing suites against the government makes an exception for such regulatory policing and other activities that involve broad exercise of administrative discretion. (See Dec 31, 1972.)

19840619 Jun 19, 1984: Transportation Secretary Dole announced that FAA would conduct a General Aviation Safety Audit. The inspections, which began on Jul 22, focused on: pilot schools, instructors, and examiners; repair stations; non-airline operators of large aircraft; older large jet aircraft scheduled to be phased out because of failure to meet the new noise standards (see Dec 23, 1976); and on-demand air taxis. During the program, a number of operators voluntarily surrendered their certificates. FAA submitted the results of the audit to DOT between Aug 1985 and Feb 1986. Four percent of the detailed findings prepared reported significant unsatisfactory conditions, many of which involved air taxis. As a result of the safety audit, FAA revised its guidelines to include stepped-up inspections of air taxis, repair stations, and such operators of large aircraft as travel clubs, contract cargo carriers, and corporations with executive fleets.

19840620 Jun 20, 1984: The Civil Aeronautics Board published additional rules regulating smoking on aircraft (see May 10, 1973). The provisions included a ban on smoking in air carrier aircraft with fewer than 30 passenger seats, except for on-demand air taxis, and a total ban on smoking in airliners while on the ground. After the Board ceased to exist at the end of 1984, the Office of the Secretary of Transportation administered these rules. (See Aug 13, 1986.)

19840731 Jul 1984: FAA conducted an agency-wide Employee Attitude Survey as part of a drive for improvements in employee/management relations. Some 26,000 persons responded to the questionnaire, which a Civil Aeromedical Institute research team prepared and analyzed. Preliminary results announced on Nov 27 showed most employees to be generally challenged by their work, satisfied by their pay and job security, but less than positive about FAA's human relations skills and certain related issues. Four questions addressed to air traffic control personnel helped to identify groups more prone to "burnout."

The survey became a tool to evaluate Human Resources Program steps that included: on-site reviews by Secretarial panels of management experts; Employee Involvement Groups intended to give employees a greater voice in developing policy and procedures; a new Office of Human Resource

	Management, headed by an Associate Administrator reporting directly to the Administrator (see Mar 19, 1985); and a "hotline" linking employees with the Administrator's staff, beginning on Aug 6, 1984. Measures to combat burnout included stress management counseling and a June 1984 policy to allow more air traffic controllers to achieve full performance level, thus sharing difficult work more widely among the workforce.
	In a continuing effort to evaluate improvement actions, FAA conducted a follow-up survey of all employees in 1986, and followed this with Job Satisfaction Surveys administered to a randomly selected 15 percent of the workforce. The survey series revealed the following overall job satisfaction percentages: 53 (1984); 56 (1986); 67 (1988); 65 (1990); 72 (1993); and 69 (1995).
19840823	Aug 23, 1984: FAA issued an advisory circular establishing an acceptable means of obtaining airworthiness approval of airborne LORAN-C equipment for use as an area navigation system under instrument flight rules (IFR) as well as visual flight rules (VFR). Derived from the LORAN (Long Range Navigation) system developed during World War II, LORAN-C used radio signals from ground transmitting stations spaced several hundred miles apart. It had been developed primarily for marine users, but in the early 1980s many general aviation pilots had begun to adopt the system for VFR navigation. (See Jun 2, 1986.)
19840912	Sep 12, 1984: Airline representatives reached agreement on rescheduling flights to avoid congestion during peak hours at six major airports: New York's La Guardia and Kennedy; Newark International; Chicago O'Hare; Atlanta Hartsfield; and Denver Stapleton. The representatives forged the agreement in eight days of intense negotiations with FAA participation and with the understanding that FAA might impose new regulations if no voluntary solution was found. The Civil Aeronautics Board granted immunity from anti-trust laws to those engaged in the talks, and later approved the agreement. Writing to the Air Transport Association on Mar 12, 1985, FAA Administrator Engen cited steps taken to reduce delays and indications that the airlines would not return to excess peak-time operations. Engen therefore stated that the scheduling agreement need not continue beyond Apr 1.
19840915	Sep 15, 1984: FAA centralized responsibility for the operational control and technical direction of the air traffic control system under the Associate Admininstrator for Air Traffic. (On an organizational level, however, the regional air traffic division managers continued to report to the Regional Directors: see Jun 16, 1988.) A directive issued on Feb 8, 1985, reorganized the Associate Administrator's office to include an Air Traffic Operations Service and an Air Traffic Plans and Requirements Service. On Oct 31, 1986, another directive also established an Air Traffic Evaluations and Analysis Office under the Associate Administrator. (See Oct 2, 1989.)

19840926 Sep 26, 1984: FAA announced the award of a construction contract to expand the Seattle Air Route Traffic Control Center, the first in a program to expand all 20 en route centers in the contiguous states. The construction would allow the facilities to accommodate more sophisticated computers and radar displays being developed under the Advanced Automation Program (see Jul 26, 1985). The Seattle groundbreaking ceremony took place on Nov 5, 1984. (See Apr 1987.)

19840928 Sep 28, 1984: A DOT Inspector General report on drug and alcohol abuse among FAA employees concluded that the problem was more widespread than management realized and recommended stronger action on the issue. In a memorandum to FAA managers at year's end, Administrator Engen stated that he had established a policy under which employees who abused drugs or alcohol must enter a treatment program or face penalties that might include dismissal. Employees with safety-related duties would be assigned other tasks while receiving treatment. The Administrator also stated that he had taken steps to establish a substance abuse screening procedure for employees in safety-related positions. In a general notice on Feb 16, 1985, Engen stated that occasional incidents suggested that FAA was not totally immune to drug/alcohol abuse, and informed employees that a new policy was under development. (See Aug 16, 1985.)

19841005 Oct 5, 1984: FAA announced a contract for ground stations for the new Mode S radar beacon system, a secondary radar system employing advanced ground sensors and radar beacon transponders aboard aircraft. Two corporations participated in the joint contract to produce 78 of the stations, with an option for another 59 units. The Mode S system was designed to replace the existing air traffic control radar beacon system, know as ATCRBS (see Jun 23, 1981). The discrete address capability of the new system would enable controllers to interrogate aircraft individually and selectively to determine their position, identity, and altitude, without having to use voice communications. This would eliminate the overlapping and garbled signals that were sometimes a problem in busy terminal areas. Mode S would also make possible the development of a capability for controllers to transmit data to properly equipped aircraft directly without using voice communications. (See Jan 29, 1987, and May 9, 1993.)

19841018 Oct 18, 1984: Vice President George Bush was involved in a near midair collision (NMAC) near Seattle when the crew of Air Force Two was forced to take evasive action due to their failure to sight an aircraft flying under visual flight rules. On Sep 30, 1984, Air Force Two had been involved in a less serious incident when a controller in Ohio allowed it to come too close to another aircraft. (See Jan 11, 1985.)

19841026 Oct 26, 1984: FAA published two rules to increase the survival chances of airline passengers encountering fire and smoke. Both were based on findings of the Special Aviation Fire and Explosion Reduction (SAFER) Advisory Committee (see Sep 10, 1980) as well as on subsequent research. One rule called for the installation, within three years, of seat cushions possessing an outer layer of highly fire-resistant material. Research showed that the cushions would provide as much as 40 additional seconds before "flashover," the deadly ignition of accumulated vapors. The requirement applied to operators of aircraft weighing 12,500 pounds or more and having over 29 seats. The second rule required emergency escape path marking at or near floor level that would provide evacuation guidance even when all sources of illumination more than four feet above the cabin aisle floor were totally obscured by smoke. With the exception of aircraft type-certificated before 1958, all airliners operated by major lines were required to have such marking within two years. (See Jul 21, 1986.)

19841031 Oct 1984: FAA awarded a contract for design of the Oceanic Display and Planning System (ODAPS) with features that would include visual displays of oceanic air traffic. ODAPS would automatically provide controllers with flight data for aircraft flying in oceanic sectors, thus eliminating time-consuming procedures involving use of flight strips and repeated voice communications. A planned second phase of the contract would include delivery of ODAPS equipment to FAA's Technical Center and two air route traffic control centers. (See Dec 14, 1989.)

19841110 Nov 10, 1984: FAA revoked the operating certificate of Provincetown-Boston Airlines (PBA), a large commuter carrier. The revocation was probably the most publicized of numerous operational curtailments enforced by FAA during the year, many as a result of the NATI program (see Mar 4, 1984). Critics charged that FAA inspections had failed to uncover PBA’s violations before information from a former pilot of the airline triggered the investigation that led to the grounding. After assisting PBA to correct deficiencies, FAA on Nov 24, 1984, recertificated the airline for that part of its operations involving smaller aircraft.

On Dec 6, 1984, the crash of a PBA Embraer Bandeirante (EMB-110) shortly after takeoff from Jacksonville killed all 13 persons aboard. On Dec 9, FAA issued an emergency Airworthiness Directive requiring owners to inspect key parts of certain Bandeirante models. The agency also dispatched a team to Brazil to work with authorities and the manufacturer to insure the safety of the aircraft type. On Jan 8, 1985, the National Transportation Safety Board (NTSB) recommended that FAA ground many of the approximately 90 Bandeirantes in the U.S. pending further inspection and/or modification. FAA ordered the inspections, but allowed 18 hours of flying time prior to compliance. In its final report on the accident, NTSB listed the probable cause as a control system malfunction. The crew's reaction to the problem resulted in overstress that caused failure of the horizontal stabilizer attachment structure.

New incidents and allegations in late 1984 and early 1985 resulted in further FAA surveillance of PBA. By May 1985, however, the agency was ready to recertificate the carrier for operation of its largest aircraft.

19841114 Nov 14, 1984: Effective this date, the Civil Aeronautics Board (CAB) adopted a rule regulating air carrier-owned computer reservations systems (CRSs), which set forth requirements designed to prevent unfair, deceptive, and anticompetitive practices among the airlines who controlled those systems. CAB mandated a future review of this regulation, and on Sep 16, 1992, DOT announcd a final rule on CRS, which strengthened and extended the existing regulations through 1997. Among other things, the revised rule prohibited a vendor from requiring its subscribers to make a specified minimum number of bookings; reduced the maximum subscriber contract term from five to three years; and readopted the existing requirements that information be organized in an objective and unbiased manner, and that participation in a CRS be open to all carriers on a nondiscriminatory basis.

19841201 Dec 1, 1984: FAA and the National Aeronautics and Space Administration conducted a Controlled Impact Demonstration (CID) in which a Boeing 720 was remotely piloted to a prepared crash site at Edwards Air Force Base, Calif. The aircraft carried instrumented test dummies, high-speed cameras, and more than 350 sensors to transmit data to ground recorders. The project involved numerous experiments on the crash behavior of the aircraft's structure and of internal features such as seats, seat belts and harnesses, storage compartments, and galleys. Among the other items tested were fire-blocking seat cushion layers, fire-resistant windows, cockpit voice recorders, and flight data recorders. Most importantly, the aircraft's tanks carried anti-misting kerosene (AMK), an experimental fuel designed to prevent or minimize the fireball that may result when spillage from a ruptured tank forms a volatile mist and ignites. Devices known as degraders converted the AMK back to normal kerosene before it entered the engines.

Preparations at the impact site included eight steel wing cutters installed to ensure that fuel would spill from the tanks. Touching down 300 feet short of the cutters with its left wing low, the aircraft slid forward at an angle so that the first cutter slashed into the right inboard engine before ripping open the wing tank. In consequence, the spill began with non-AMK fuel from the engine, which ignited instantly and touched off the AMK fuel gushing from the tank. A spectacular fireball resulted. The use of AMK reduced the heat of the fire, and an estimated 20 percent of the passengers would probably have escaped had the aircraft contained real occupants. The AMK test was disappointing, however, and in Sept 1985 the FAA announced that it had dropped plans to require airline use of the special fuel. Despite this, other experiments conducted as part of the CID produced a wealth of useful information.

19841204 Dec 4, 1984: Four Arab hijackers diverted a Kuwait Air A-310 to Iran, where they murdered two American passengers and committed other brutalities while demanding the release of prisoners held in Kuwait. The hijackers released 153 of their hostages in several groups, and Iranian forces freed the remainder when they stormed the aircraft on Dec 9. The hijacking was part of an increase in terrorist seizures of foreign airliners that began in Jun 1984.

19841211 Dec 11, 1984: FAA grounded about 180 Sikorsky S-76A helicopters pending installation of a replacement part being developed by the engine builder, a division of General Motors. The action followed an Oct 31 accident in the South China Sea.

19841213 Dec 13, 1984: Richard H. Jones became Deputy Administrator of FAA, succeeding Michael J. Fenello (see Aug 1, 1981). A native of Portsmouth, Va., Jones served as a Marine Corps pilot during 1953-57, received his B.S. from Virginia Polytechnic Institute in 1958, and began flying for Eastern Air Lines in 1959. He served a second tour with the Marines, 1960-1966, leaving active duty as a reserve Lieutenant Colonel. Jones then returned to Eastern, becoming a captain in 1967 and continuing in this capacity until joining FAA. He also practiced law with the firm of Lewis, Wilson, Lewis & Jones, having received an L.L.B. from American University in 1964. Jones was Secretary and Treasurer of the Airline Pilots Association, International, 1969-70, and ran unsuccessfully for president of the union in 1970. He was Chairman of the Washington-based Eastern Air Lines Pilots Association, 1970-72, and served on numerous other groups and committees devoted to legal and aviation issues.

On Jun 4, 1986, Jones announced his resignation from FAA, effective Jul 15, 1986, to return to the private sector. (See Apr 1, 1988.)

19841231 Dec 31, 1984: In accordance with the Airline Deregulation Act (see Oct 24, 1978), the Civil Aeronautics Board (CAB) ceased to exist at the end of this day, having operated for 44 years and 7 months. Originally entrusted with airline economic regulation, accident investigation, and safety rulemaking, CAB lost the latter responsibility with the Federal Aviation Act of 1958. The Department of Transportation Act of 1966 later deprived the Board of its accident investigation role, leaving economic regulation as its principal mission. After 1984, the Department of Transportation (DOT) assumed those CAB duties that had not been abolished by deregulation. Functions assigned to elements of the Office of the Secretary of Transportation included: international aviation responsibilities such as bilateral treaty negotiation, carrier selection, and tariff filing and review; the Essential Air Service Program, which protected service to small communities; consumer protection for airline passengers; antitrust review and immunity authority; and certification of the economic fitness of carriers. DOT's Research and Special Projects Administration assumed responsibility for collection and dissemination of air carrier economic data.

1985

19850111

Jan 11, 1985: Ralph Nader's Aviation Consumer Action Project made public a study claiming that FAA had underreported near midair collisions (NMACs) for 1983 and 1984 (see Oct 18, 1984). FAA acknowledged that discrepancies existed and stated that procedural changes would ensure more accurate NMAC statistics in the future. On Apr 19, 1985, FAA released data showing a rise in NMACs for the first quarter of 1985. The agency stated that the increase reflected improved statistical procedures and renewed emphasis on pilot reporting of the incidents. In June, Georgetown University Dean Ronald L. Smith began an audit of the new NMAC reporting system. In findings announced by FAA on Dec 3, Dean Smith judged the system to be working well and found no evidence of earlier deliberate suppression of NMAC reports.

Meanwhile, media attention to the NMAC issue heightened due to two such incidents in the national capital area on Jun 9 and Sep 24, 1985. In Oct 1985, NTSB Chairman James Burnett told Congress that the Board was very concerned about a trend toward increased NMACs. On Apr 14, 1986, FAA stated that reported NMACs for 1985 had totaled 777 (a figure later revised to 758), as compared to 589 for 1984. Commenting that the 1985 statistics were based on improved methods, FAA Administrator Engen pointed to the agency's efforts to reduce NMACs, including the establishment of Airport Radar Service Areas (see Dec 22, 1983) and the "Back to Basics" program (see Oct 10, 1985). Engen also stated that special working groups were studying the problem of potential collisions on the ground, termed "runway incursions." FAA later issued the following statistics: 840 NMAC reports in 1986; 1058 in 1987; 710 in 1988; 550 in 1989; 454 in 1990; 348 in 1991; 311 in 1992; and 293 in 1993.

19850208

Feb 8, 1985: FAA established a policy that the Precision Approach Path Indicator (PAPI) would be the standard visual glideslope indicator for new, Federally-funded installations at fixed-wing airports. PAPI was an improved version of VASI, the Visual Approach Slope Indicator (see Oct 12, 1970). The PAPI system featured four bars of light and was able to give pilots an indication of the extent of their deviation from the desired glide path, rather than merely warning that they were too high or too low. In 1982, the International Civil Aviation Organization had adopted PAPI to replace VASI, which would cease to be the international standard on Jan 1, 1995. In May 1983, FAA had changed its longstanding policy of funding only VASI to one permitting funding of various different systems, with the exception that only PAPI was funded for international airports. The agency's Feb 1985 shift to exclusive funding of PAPI reflected a desire to promote safety through standardization. In response to congressional action, however, FAA modified this policy to permit funding of systems other than PAPI at general aviation airports not certificated for air carrier use.

19850226 Feb 26, 1985: FAA published Advisory Circular 91-62 stating a new policy on child restraint systems (CRSs). The background of this issue included the formation of an FAA Task force to evaluate the use on aircraft of CRSs, also known as child safety seats. On Jun 1, 1979, the task force had recommended that the agency adopt the Federal Motor Vehicle Safety Standard for CRSs, with additional provisions for aircraft use. FAA developed performance standards which it published as a Technical Standard Order on May 28, 1982. Subsequently, the National Highway Traffic Safety Administration (NHTSA) and FAA had worked toward a common standard.

Advisory Circular 91-62 declared that a CRS manufactured after Feb 25, 1985, was suitable for aviation if it bore a NHTSA label certifying it for use in both motor vehicles and aircraft. In addition, a CRS made between Jan 1, 1981, and Feb 25, 1985, was suitable for use in aircraft provided it bore a NHTSA label indicating that it met Federal motor vehicle standards. The new FAA policy made an additional 6 million child seats acceptable for use aloft. FAA encouraged but did not require use of the devices, and airlines could decide whether to permit them (see Sep 15, 1992). Children under the age of two might still be held in an adult's lap during takeoff and landing.

19850318 Mar 18, 1985: FAA began an in-depth inspection of Continental Airlines that lasted through Apr 26. This was the second special inspection of Continental (see Feb 6, 1984) since the Air Line Pilots Association began a strike against it. On Jun 11, 1985, FAA announced that the airline continued to operate in basic accordance with safety regulations. In Mar 1986, however, Continental paid a $402,000 penalty for violations uncovered by FAA during its 1984 and 1985 inspections.

Meanwhile, the flight attendants and mechanics ended their strike against Continental in Apr 1985, and a bankruptcy court resolved the pilots strike during that October by ordering a back-to-work plan. On Jun 30, 1986, the court approved a plan allowing Continental to end its bankruptcy within sixty days. (See Sep 24, 1983 and Dec 3, 1990.)

19850319 Mar 19, 1985: The appointment of Charles E. Weithoner as the first Associate Administrator for Human Resource Management became effective. Weithoner had served in the post on an acting basis since the previous October. On Sep 4, 1985, an FAA directive formally created the position and placed four offices under its control: Human Resource Planning and Evaluation; Labor and Employee Relations; Organizational Effectiveness; and Personnel and Technical Training. At the same time, FAA abolished the former Office of Labor Relations and Office of Personnel and Training, and assigned their functions to offices under the new Associate Administrator. This structural change was part of a program of increased emphasis upon human relations (see Jul 1984.)

19850326 Mar 26, 1985: A directive issued on this date established a new Office of Program and Regulations Management under the Associate Administrator for Aviation Standards. The office was later retitled the Office of Program and Resource Management, and subsequently abolished by a directive issued on Apr 24, 1992.

19850329 Mar 29, 1985: FAA published a rule to improve cabin fire protection for passengers aboard aircraft operated by major airlines under Federal Aviation Regulations Part 121. The rule required that each lavatory be equipped with a smoke detector, or equivalent, and that each lavatory trash receptacle be equipped with an automatic fire extinguisher. It also increased the number of hand fire extinguishers required in the cabins of aircraft with more than 60 seats, and specified that at least two of these use Halon 1211 or an equivalent extinguishing agent. The new rule resulted from investigation of two aircraft cabin fires and an inspection survey conducted in their wake. One of these fires involved an Air Canada flight (see Jun 2, 1983) and the other was a non-fatal blaze at Tampa on Jun 25, 1983. (See May 26, 1987, and Apr 4, 1991.)

19850417 Apr 17, 1985: FAA published a rule establishing a blood alcohol standard (.04 percent by weight) for determining when drinking had impaired the ability of aircrew members to perform their duties. The new regulation strengthened the existing rule prohibiting anyone from acting as an aircrew member within eight hours of alcohol consumption or while under the influence of alcohol or any drug adversely affecting performance (see Dec 5, 1970). A related rule published on Jan 9, 1986, made airmen subject to possible loss or suspension of their licenses if they refused to submit to tests for alcohol given by law enforcement officers under certain conditions. (See Feb 17, 1987, and Mar 8, 1990.)

19850429 Apr 29, 1985: Astronauts aboard the space shuttle Challenger placed the Northern Utah Satellite (NUSAT) in orbit. The 105 lb. aluminum polyhedron satellite was an experiment aimed at developing a new means of calibrating the vertical tilt of FAA beacon radar antennas. Before reentering the atmosphere on Dec 15, 1986, NUSAT transmitted important information on the radar signal environment as perceived from low earth orbit. The project was accomplished by a volunteer coalition of FAA, NASA, Utah's Weber State College, and numerous aerospace companies.

19850505 May 5, 1985: Administrator Engen and other FAA officials arrived in Beijing on a mission to foster closer cooperation between the U.S. and China in aviation matters. On Aug 28, 1985, Transportation Secretary Dole announced that the two countries were working together for a mutual exchange of information, research, and experts for further development of their transportation systems. The Secretary made the announcement in Beijing during a trip to China with her husband, Senator Robert Dole (R-Kan.). (See Mar 15, 1986)

19850509 May 9, 1985: The first of four heliports selected in 1983 for development under FAA's National Prototype Demonstration Instrument Flight Rules Heliport Program was dedicated in Indianapolis. A $2.5 million Airport Improvement Program grant had assisted the establishment of the facility.

19850517 May 17, 1985: United Airlines pilots went on strike over the company's plan for a two-tiered pay structure with lower pay for new pilots. The union and management soon reached an economic agreement that permitted such a two-tier system, but back-to-work issues delayed settlement until Jun 14. During the strike, FAA increased safety surveillance of United operations, and used electronic equipment to help identify those harassing non-striking pilots with illegal radio transmissions on air traffic control frequencies.

19850531	May 31, 1985: FAA announced new criteria on extended range (ER) flights. Previously, FAA had generally prohibited a two-engine aircraft from flying a route that at any point was more than one hour flying time (in still air at normal cruising speed with one engine inoperative) from a usable airport. Under the new criteria, the diversion time was increased to two hours, provided that at least half of each extended-range route segment was less than 90 minutes of one-engine flying time from an airport. The change meant that some two-engine aircraft would be able to fly North Atlantic routes without veering far to the north.
	As experience with extended two-engine operations increased, FAA further increased permitted diversion times. In 1989, the agency approved a three-hour diversion time, long enough to permit two-engine operations between Hawaii and the U.S. mainland.
19850603	Jun 3, 1985: A directive issued on this date established the Airport Capacity Program Office under the Associate Administrator for Airports. (See Feb 21, 1990.)
19850606	Jun 6, 1985: The Professional Airway Systems Specialists (PASS), the bargaining agent for Airway Facilities technicians, agreed with FAA on a joint labor-management employee involvement (E-I) pilot program. A steering committee composed of five FAA and five union representatives agreed upon an eighteen-month test of E-I, a concept involving cooperative efforts to solve operational problems affecting employees. The program was first implemented at facilities in Baltimore and New York, and subsequently expanded to all FAA regions. (See Aug 31, 1991.)
19850607	Jun 7, 1985: Effective this date, FAA reduced the total flight hours required for a pilot to be eligible to obtain an instrument rating from 200 to 125. A contract study had indicated that the change would have no effect on pilots' ability to learn instrument flying skills, but would encourage them to acquire the rating earlier.
19850614	Jun 14, 1985: Two Lebanese Shiite Moslems hijacked a TWA 727 departing Athens and diverted it to Beirut, where additional hijackers joined them. During a two-week confrontation, they demanded the release of Shiite prisoners held by Israel. The hijackers murdered one passenger, a U.S. Navy diver. They released the other 155 hostages (including 39 Americans) in stages, the last being freed on Jun 30. Lebanese authorities held the aircraft in Beirut until Aug 16.
	The TWA hijacking and an upsurge in Middle East terrorism prompted a series of U.S. actions. Events included:
	* On Jun 18, President Reagan warned travelers of inadequate security measures at Athens airport. This advisory was lifted on Jul 22, after an FAA inspection found improvements. * On Jun 23, an Air India jet crashed under mysterious circumstances (see entry for this date below).
	* On Jun 27, Transportation Secretary Dole urged the International Civil Aviation Organization (ICAO) to act immediately to enhance airport security. The ICAO Council met on an accelerated schedule, and on Dec 19 adopted amendments strengthening international security standards and recommended practices.

	* On Jul 1, the President suspended airline travel between U.S. and Lebanon.
	* During July, FAA issued an emergency regulatory amendment requiring airlines to carry Federal Air Marshals on certain flights. Eight days later, the agency issued another emergency rule that required airlines to expand security training for crew members and to provide a ground security coordinator and an in-flight security coordinator for every flight.
	* Between mid-Aug and early Nov, FAA personnel assisted by law enforcement officers from other agencies inspected U.S. air carrier security procedures at 79 foreign airports.
	* FAA also issued a number of emergency amendments to the agency-approved security programs of both airlines and airport operators.
	On Aug 8, the President signed the International Security and Development Cooperation Act of 1985. The Act authorized the use of $5 million from the Airport and Airway Trust Fund for research on and development of airport security devices and explosives detection techniques. It also mandated a system for conducting security assessments at foreign airports, and authorized Federal Air Marshals as a permanent FAA workforce. The agency began hiring additional security inspectors and training them to serve as Air Marshals. FAA also reorganized its Office of Civil Aviation Security to reflect its expanded responsibilities under the Act, creating an International Civil Aviation Security Division and an Intelligence Division. (See Aug 5, 1986.)
19850623	Jun 23, 1985: An Air India 747 crashed into the North Atlantic during a flight from Montreal to London, killing all 329 persons aboard (see Jun 14, 1985). Circumstances made it appear that Sikh separatists might have been responsible for the tragedy and for a near-simultaneous bombing that killed two airport baggage handlers in Tokyo. Indian and Canadian government reports released the following year concluded that that the 747 was destroyed by a bomb in luggage in the forward cargo hold. In Jul 1992, Indian authorities arrested a Sikh extremist who was allegedly involved in the bombing.
19850701	Jul 1, 1985: A toll-free FAA Aviation Safety Hotline began operations. Coordinated by the Office of Aviation Safety, the hotline was intended primarily for those in the aviation industry with specific knowledge of Federal Aviation Regulations violations. Callers' identities would be held in confidence and protected from disclosure under the Freedom of Information Act. During the following month, an FAA Consumer Hotline also opened, initially in one region only but expanding to nationwide operations on Sep 2, 1986. The Consumer Hotline was for use by the public to inquire or lodge complaints about aviation safety issues or FAA user services. The hotline did not handle airline service issues, such as lost luggage or flight cancellations. When such problems were not resolved by the airlines hemselves, consumers were referred to DOT’s Office of Community and Consumer Affairs.

19850718 Jul 18, 1985: FAA published a rule setting forth simplified flight and rest time requirements for domestic airline pilots, effective Oct 1, 1986. The new rule was intended to allow greater flexibility in scheduling while ensuring that pilots had adequate rest. For major airlines, the rule replaced a complex flight duty time regulation that had remained virtually unchanged for over 30 years. The new rule also covered air taxi and commuter air carrier pilots, who previously had only minimal restrictions on the number of hours they could fly. FAA drafted the rule with the aid of an advisory committee composed of representatives of the various groups interested in the outcome. The agency adopted this "Regulatory Negotiation" approach after several years of unsuccessful attempts to update and simplify flight duty time regulations.

19850724 Jul 24, 1985: FAA announced the award of a contract to upgrade the Automated Radar Terminal System (ARTS II), giving it certain additional safety features of the more sophisticated ARTS III. Based on development work begun in Mar 1982, this ARTS IIA enhanced system would include conflict alert and Minimum Safe Altitude Warning capabilities. In addition to upgrading the ARTS II systems in service at 87 locations, the contractor would install ARTS IIA's at 33 airports where the outmoded TPX-42 system was in use. (See Dec 12, 1978.)

19850726 Jul 26, 1985: FAA announced the award of a contract for replacement of the IBM 9020 computers at the nation's 20 air route traffic control centers (ARTCCs) as part of the agency's Advanced Automation Program. IBM won the replacement contract in a competition with Sperry Corp. under a pair of contracts that had been announced on Sept 22, 1983. The new installations were designated the "Host" Computer Systems (HCSs) because of their ability to run the existing 9020 software package with minimum modifications. Using the IBM 3083-BX1 computer as its key element, the Host system would provide greater speed, reliability, and storage capacity. Each installation would consist of two units, one serving as the primary processor and the other providing support and backup. (See Mar 22, 1983, and May 29, 1987.)

In addition to installing the Host systems at the ARTCCs, IBM agreed to supply the systems to teams working on the other major element of the Advanced Automation Program, the Advanced Automation System (AAS). Under a pair of contracts announced on Aug 16, 1984, IBM and Hughes Aircraft Co. were engaged in a competition to produce the best AAS design (see Jul 26, 1988). Among the key elements of AAS were controller work stations, called "sector suites," that would incorporate new display, communications and processing capabilities. AAS would also include new computer hardware and software to bring the air traffic control system to higher levels of automation. Once the full AAS system was operational, FAA planned to begin the integration of en route and terminal radar control services at the ARTCCs, which would be renamed Area Control Facilities (ACFs) and expanded to handle the new functions (see Apr 19, 1993). Among the planned future enhancements to AAS was Automated En Route Air Traffic Control (AERA), which would automatically examine aircraft flight plans to detect and resolve potential conflicts.

19850802	Aug 2, 1985: A Delta Air Lines L-1011 crashed when it encountered wind shear during a landing approach to Dallas-Fort Worth International Airport. The accident killed 134 of the 163 persons aboard and one person on the ground. The wind shear did not reach the sensors of the Low Level Wind Shear Alert System (LLWAS) until after the crash, a fact that demonstrated the system's limitations. The National Transportation Safety Board listed the accident's probable cause as: the flightcrew's decision to approach through a cumulonimbus cloud which they observed to contain lightning; lack of specific guidelines, procedures, and training for avoiding and escaping wind shear; and lack of real-time, definitive wind shear information. The report noted that low-altitude wind shear had been a cause or contributory factor in seven fatal air transport crashes since 1970.
	On Nov 27, 1985, FAA announced the award of a contract for development of a comprehensive wind shear training program for pilots. The agency received the completed program in February 1987 and distributed it to the industry. On Apr 14, 1986, FAA circulated a draft Integrated Wind Shear Program plan. In addition to better pilot training, the plan featured development of: improved ground-based detectors, including: enhanced LLWAS (see Jan 1988); Next-Generation Weather Radar, known as NEXRAD (see Feb 28, 1994); Terminal Doppler Weather Radar, known as TDWR (see Nov 2, 1988); and sensors for airborne detection systems using microwave Doppler, laser, or infrared radiometer technology (see Oct 9, 1986).
19850802	Aug 2, 1985: FAA submitted the first National Plan of Integrated Airport Systems (NPIAS) to Congress. A successor to the National Airport System Plan (see Sep 7, 1973), the NPIAS was to be published in an updated form every two years as mandated by the Airport and Airway Improvement Act (see Sep 3, 1982). The first NPIAS estimated that Federal, state, and local agencies needed to invest $18.3 billion in airport development over the next decade in order to keep pace with the projected growth of air traffic.
19850812	Aug 12, 1985: A Japan Air Lines 747 crashed into a mountain about 70 miles northwest of Tokyo after wandering out of control for more than 30 minutes. All but 4 of the 524 persons aboard were killed, a fatality toll higher than in any previous single-plane accident. Japanese authorities listed the probable cause as rupture of the aft pressure bulkhead, and the subsequent ruptures of part of the fuselage tail, vertical fin, and hydraulic control system. They attributed the bulkhead rupture to fatigue cracks caused by improper repairs. To avert such accidents in the future, FAA ordered that a cover plate be placed over an access door in the tail section of 747s to control damage in the event of an aft pressure bulkhead failure.

19850816 Aug 16, 1985: Transportation Secretary Dole released a report on FAA's Flight Standards programs by the Safety Review Task Force that she had created in Dec 1983 to examine the safety programs of all the Department's modal administrations. The report identified four problem areas: difficulty in carrying out timely actions; lack of uniformity in interpreting rules and policies; sometimes ineffective communications within FAA and with the aviation community and general public; and expanded autonomy at FAA regional offices and some headquarters offices that had inhibited the accomplishment of program objectives. (See Feb 20, 1986.)

19850816 Aug 16, 1985: FAA announced that it would implement a new policy on drug and alcohol abuse involving agency employees in safety-related positions. The agency's pilots, safety inspectors, air traffic controllers, police officers, and firefighters would be given urinalysis tests upon hiring and thereafter during their annual physical examinations. Penalties for using illicit drugs or alcohol abuse either on or off duty ranged from dismissal to reassignment. Employees who completed a treatment program might return to their original positions, but would be subject to random screening. A second offense would result in firing. The testing procedures became effective in February 1987. (See Sep 22, 1984, and Sep 9, 1987.)

19850820 Aug 20, 1985: Trans World Airlines' board of directors accepted a stock purchase offer from "corporate raider" Carl C. Icahn, leading to Icahn's takeover of TWA before the end of 1985.

19850822 Aug 22, 1985: One engine of a British Airtours charter 737 exploded on takeoff at Manchester, U.K., engulfing the aircraft in flame and killing 54 of the 137 persons aboard. Both British authorities and FAA ordered inspections of certain Pratt & Whitney JT8D engines used on some 727s, 737s, and DC-9s. On Sep 6, a Midwest Express DC-9 rolled out of control and crashed after one engine failed on takeoff from Milwaukee. All 31 persons aboard died. The accident's probable cause, according to the National Transportation Safety Board, was the flight crew's improper response to the loss of the engine, an older version of the JT8D than that involved at Manchester. Following the accident, FAA broadened its order on engine inspections to include more models of the JT8D, and in Dec began a special inspection of engine repair facilities (see Dec 12, 1985). Subsequently, FAA issued further directives on JT8D inspections and parts replacement.

19850916 Sep 16, 1985: FAA dedicated the last of 800 contractor-installed solid-state VORTAC air navigation aids. VORTAC had long been an important element of the airspace system (see Aug 30, 1956). The new solid-state VORTACs were more reliable and energy-efficient than the tube-type equipment they replaced. In addition to installing the 800 units, the contractors delivered 150 VORTACs for FAA to install as sites were readied. The agency's technicians had installed more than 60 of these systems by Sep 1985. The new VORTACs were the first FAA systems to have Remote Maintenance Monitoring (RMM), a feature that greatly reduced the need for site visits.

19850918	Sep 18, 1985: DOT issued a rule prohibiting deceptive airline code-sharing. The rule required airlines sharing the same two-letter designator code to notify passengers of the arrangement and identify the airline actually providing the transportation.
19850925	Sep 25, 1985: American Airlines agreed to pay a $1.5 million civil penalty, the largest levied by FAA to that date. Most of the safety violations cited against American had been uncovered in a special inspection that summer.
19851009	Oct 9, 1985: FAA announced that the agency had signed an agreement with the National Aeronautics and Space Administration and the Department of Defense (DOD) to conduct a joint study of the benefits of continued development of tiltrotor aircraft. This type of aircraft is equipped with rotors that tilt to act like a helicopter rotor during takeoff and landing, yet perform like a conventional propeller for cruise flight. The XV-15, a small proof-of-concept aircraft, had been flying successfully since 1977, and the larger V-22 Osprey was under development for DOD. The joint study (published in two phases, in 1987 and 1991) concluded that civil tiltrotors could be both technically and commercially feasible. (See Jun 16, 1988.)
19851010	Oct 10, 1985: FAA and general aviation manufacturers gave a preview of a "Back to Basics" safety program to a group of pilots at the National Air and Space Museum. Beginning on Jan 1, 1986, the program used presentations and clinics to increase pilot awareness of a different safety topic each quarter for three years. The first year's topics included: takeoff and landing; collision avoidance; weather; and fueling and fuel planning. The program proved successful, and on Jan 1, 1990, FAA began a Back to Basic II program scheduled to run through 1994.
19851031	Oct 1985: As part of its continued upgrading of automated radar terminal systems, FAA commissioned the first ARTS IIIA installation to use a new software package designated A3.02 at Ontario International Airport, Calif. An enhanced version of the A3.01 software (see Dec 1979, and Mar 26, 1986), the A3.02 package could be used at facilities employing data from more than one radar sensor. In Nov 1986, the first ARTS IIIA to use the still more advanced A3.03 software was commissioned at Burbank, Calif. This new package included an enhanced conflict alert capability that was less prone to false alarms. Meanwhile, FAA continued to install ARTS IIIA hardware, and had replaced most of the basic ARTS III systems by the end of 1986.
19851101	Nov 1, 1985: FAA published a rule requiring any person flying an aircraft equipped with a radar beacon transponder to operate the transponder (including altitude reporting equipment if installed) while in controlled airspace. This requirement had previously applied to pilots in Terminal Control Areas (TCAs) and flying en route above 12,500 ft. (see Jun 4, 1973). FAA now extended it to those operating in airport control zones, designated Federal airways, and transition zones. The new rule involved no requirements for installation of additional equipment (see Jan 29, 1987).
19851107	Nov 7, 1985: DOT announced final approval for United Airlines acquisition of Pan American's Pacific Division. The transaction meant the end of Pan Am's far-flung Pacific operations, except for service between Hawaii and the U.S. mainland. (See Nov 14, 1990.)

19851113 Nov 13, 1985: FAA published a rule requiring shoulder harnesses for all seats in new airplanes with less than ten passenger seats manufactured after Dec 12, 1986. The rule extended an earlier requirement that had applied only to the front seats of small aircraft (see Jun 16, 1977).

19851123 Nov 23, 1985: An unusually bloody hijacking began when three men seized control of an Egyptair 737 with 98 persons aboard shortly after takeoff from Athens. In a midair gunfight, one hijacker was killed and an Egyptian security guard and two flight attendants were wounded. The hijackers demanded to fly to Libya or Tunisia, but agreed to refuel at Malta. In an attempt to force Maltese authorities to supply the fuel, the hijackers shot five hostages, killing two of them, including an American woman. After 22 hours of negotiation, an Egyptian military force stormed the plane. During the rescue action, 57 persons were killed and about 30 others injured.

19851204 Dec 4, 1985: AN FAA DC-3 (registration number N-34) arrived at Washington National Airport to begin a new career as a flying exhibit. Manufactured in 1945, N-34 had belonged to the Navy before its transfer to FAA in 1963. With many other DC-3s, it performed quality assurance and facility certification checks on the nation's airways before its retirement from this role on Sep 9, 1982. N-34 was exhibited at air shows until retired from active service as a cost saving measure in early 1994.

19851212 Dec 12, 1985: A chartered DC-8 operated by the U.S. carrier Arrow Air crashed on takeoff from Gander, Newfoundland. All 256 persons aboard died, including 248 U.S. soldiers returning from the Mideast. Early theories on the tragedy's cause included the possibility that it was part of a series of crashes involving engine failure (see Aug 22, 1985), and FAA conducted a special inspection of jet engine repair facilities following the accident. On Dec 8, 1988, the Canadian Aviation Safety Board released a divided verdict on the crash's probable cause. The majority of five members cited icing on the wings, perhaps combined with the loss of thrust from one engine (see Jan 13, 1982, and Nov 15, 1987). A minority of four concluded that an in-flight explosion was most likely.

FAA increased surveillance of Arrow Air following the Gander crash, and an in-depth inspection of airlines operating under military charter was announced in January 1986. Subsequent actions included the Feb 8 temporary grounding all 10 of Arrow’s DC-8s pending replacement of unapproved spare parts. Nine years later, in March 1995, Arrow voluntarily ceased operations for nearly three months following an FAA inspection that revealed safety violations.

19851220 Dec 20, 1985: DOT published a new rule on allocation of takeoff and landing reservations ("slots") at the four airports subject to flight quotas under the High Density Rule (see Mar 6, 1984). Beginning on April 1, 1986, any person might buy, sell, trade, or lease air carrier or commuter slots (with the exception of international and essential air service slots, which were subject to certain transfer restrictions). A lottery procedure was provided for allocation of new slots, or slots returned under the rule's use-or-lose provision. On Mar 12, 1986, DOT issued a special rule aimed at increasing competition: 5 percent of slots at high density airports would be assigned by lottery to new entrants and incumbent air carriers with fewer than 8 slots. Although the High Density Rule was subsequently amended in certain other respects, its main provisions remained essentially unchanged despite opposition from some parts of the aviation community. On Jun 16, 1995, DOT released a report on the issue and announced its conclusion that, on balance, the rule was currently beneficial.

19851227 Dec 27, 1985: Near-simultaneous Arab terrorist attacks on airports in Rome and Vienna caused the death of 20 persons, including four of the terrorists, and injured approximately 120. Five of the victims killed were U.S. citizens. The attacks centered on the check-in counters of the Israeli airline El Al. Libyan leader Muammar Qaddafi praised the terrorists, thus contributing to tensions between his nation and the United States. (See Feb 11, 1986.)

1986

19860107	Jan 7, 1986: The first helicopter flight simulator certificated by the Federal Aviation Administration was commissioned at the Bell Helicopter plant in Hurst, Texas, for use in Bell 222 helicopter training and proficiency checks.
19860109	Jan 9, 1986: FAA published a rule requiring passenger-carrying airliners to carry a medical kit in addition to the basic first aid kits already mandated. The agency estimated that roughly 21 in-flight deaths occurred annually, most involving persons already suffering from terminal illnesses. FAA expected that about 10 percent of the in-flight deaths would be prevented by the new rule, which became effective Aug 1, 1986.
19860123	Jan 23, 1986: Northwest Airlines announced that it would buy Republic Airlines. DOT approved the merger on Jul 31, 1986.
19860128	Jan 28, 1986: The space shuttle Challenger exploded shortly after liftoff from Cape Canaveral. The accident killed all seven persons aboard and dealt a severe blow to the U.S. space program. No further shuttle flights took place until Sep 29, 1988.
19860210	Feb 10, 1986: FAA formally established the National Aviation Safety Inspection Program (NASIP), a plan to continue on a more systematic basis the kind of in-depth inspections begun under the National Air Transportation Inspection, or NATI (see Mar 4, 1984). An inspection of Eastern Air Lines already begun in Dec 1985 became part of NASIP (see Mar 7, 1986). The program also included inspections targeting airlines operating under military charter, an emphasis that fulfilled a directive issued by the Secretary of Transportation in the wake of a crash in Newfoundland (see Dec 12, 1985). NASIP inspections during fiscal 1986 included 18 carriers providing military charter flights, as well as 20 turbine engine repair stations. The program was then redefined annually, as were the certificate holders targeted for inspections, and special emphasis inspections were conducted as circumstances warranted.
19860211	Feb 11, 1986: The Department of Transportation released an order suspending commercial aviation relations with Libya. The action made final a tentative order issued in response to a Jan 7 Presidential directive which declared Libya a threat to U.S. security. Tensions between the two nations continued to grow, fed by events that included naval clashes and a bombing in Germany in which a U.S. soldier was one of the two fatalities. On Apr 15, the confrontation culminated in a U.S. air raid against Libya. (See Dec 27, 1985, and Apr 15, 1992.)

19860212 Feb 12, 1986: FAA commissioned the first “family” group of automated flight service stations (AFSSs), at airports in Cleveland, Ohio, Dayton, Ohio, and Bridgeport, Conn. The group of stations used the Model 1 Flight Service Automation System (see Oct 2, 1981). They were linked by dedicated communications lines with a Central Flight Service Data Processing System (FSDPS) at the Cleveland Air Route Traffic Control Center. Computer terminals at the three automated stations gave flight service specialists quick access to weather information, flight plans, and other data continually fed into the FSDPS. The commissioning was part of FAA's long-range plan to consolidate all its flight service stations into 61 automated facilities. On Sep 28, 1987, FAA completed the first phase of the AFSS program as it commissioned the 37th and final AFSS planned to receive the initial version of the Model 1 system. In Feb 1987, meanwhile, Congress had approved development of the Model 1 Full Capacity system in place of the Model 2 system that FAA had originally planned. (See Nov 1982, and Nov 8, 1991)

19860220 Feb 20, 1986: Transportation Secretary Dole announced a comprehensive review of domestic airport security to be coordinated by her Safety Review Task Force (see Aug 16, 1985). The Task Force submitted its initial recommendations in August 1986, and FAA responded with a range of actions to improve security training and planning, and to tighten access to secure areas.

19860224 Feb 24, 1986: Financially troubled Eastern Air Lines tentatively accepted a buy-out offer by Texas Air. The board's decision followed labor negotiations in which Eastern's pilots agreed to make concessions but the union representing machinists and mechanics demanded replacement of chairman Frank Borman. Following the purchase agreement, Borman remained as Eastern's head until his resignation in June. (See Oct 1, 1986.)

19860228 Feb 1986: FAA completed acceptance testing for new Flight Data Input/Output (FDIO) equipment. FDIO, which provided a modernized method of transmitting and updating flight plan information, was delivered to 11 air route traffic control centers and their associated terminals during fiscal 1986. By the end of FY 1987, FAA had accepted delivery of FDIO equipment to all enroute and terminal control facilities; the first system became operational in Dec 1989.

19860301 Mar 1, 1986: Trans World Airlines acquired Ozark Airlines under an agreement that received Department of Transportation approval in September. Ozark had begun flying in 1950 and expanded within the Midwest, then grew beyond that region with the introduction of airline deregulation in the late 1970s. The airline had encountered economic difficulties, beginning in 1984. Ozark's operations merged into those of TWA on Oct 26, 1986.

19860307	Mar 7, 1986: FAA proposed a $9.5 million civil penalty against Eastern Air Lines, by far the largest penalty the agency had proposed to that date, for safety violations revealed during an inspection from Dec 3, 1985, through Feb 20, 1986. Eastern objected to the fine, but in Feb 1987 agreed to pay. Meanwhile, on Aug 22, 1986, FAA announced that Pan American would pay $1.95 million for safety violations revealed by an inspection that began in March. This was the largest penalty actually levied by FAA to that date, but smaller than the $3.9 million originally proposed to Pan Am for these violations.
19860313	Mar 13, 1986: FAA activated the domestic message portion of a computerized system to collect, process, and distribute notices to airmen (NOTAMs) throughout the U.S. airspace system and abroad. This completed the commissioning of the Consolidated NOTAM System (CNS), culminating a two-year implementation effort that began in Feb 1984 when the international messages subsystem of CNS came on line.
19860314	Mar 14, 1986: FAA announced the choice of Embry Riddle Aeronautical University to provide a new management training facility to replace the existing school at Lawton, Okla. (see May 3, 1971). After building the new school at Palm Coast, Fla., Embry Riddle operated the facility for FAA under a 20 year contract, while FAA awarded separate contracts for instructional services. FAA dedicated the new school, named the Center for Management Development (CMD), on Oct 15, 1987, and the first class began four days later.
19860315	Mar 15, 1986: FAA Administrator Engen and the Chinese Civil Aviation Administration Director signed a U.S.-Chinese agreement on cooperation in civil aviation. The agreement covered a wide range of activities including the exchange of scientific and technical information and personnel, cooperation in research and development, and the provision of training and other technical assistance. (See May 5, 1985, and Mar 31, 1995.)
19860326	Mar 26, 1986: FAA announced a contract to upgrade the New York Radar Approach Control (TRACON) Facility, which provided radar service to aircraft approaching and departing the major hubs and designated satellite airports in the New York area. The existing facility used a special ARTS IIIA Automated Radar Terminal System capable of tracking 1,200 radar targets at one time. This would be upgraded to a unique ARTS IIIE able to simultaneously track 1,700 targets. The second stage of the enhancement would allow tracking of 2,800 targets, with a capability of expanding to 3,400 targets if needed. (See Jan 10, 1981, and Sep 20, 1991.)
19860331	Mar 1986: FAA commissioned the first second-generation common radar digitizer, known as CD-2, for operational use (see Apr 6, 1979). The first two CD-2s had been delivered to the FAA Academy on Feb 11, 1983, and the first field delivery took place in May 1984.
19860402	Apr 2, 1986: A bomb hidden under a seat cushion exploded aboard a TWA 727 on approach to Athens, Greece, creating a hole in the fuselage four feet in diameter. The blast killed four passengers and injured nine others, but the aircraft landed safely. The bomb was similar to one that exploded on Aug 11, 1982, aboard a Pan American 747 flying from Japan to Hawaii, killing 1 person and injuring 15.

19860415 Apr 15, 1986: In a move to consolidate aviation medicine expertise and responsibilities, FAA transferred direction of the Civil Aeromedical Institute (CAMI) from the Director of the Aeronautical Center to the Federal Air Surgeon. (See Sep 30, 1966.)

19860429 Apr 29, 1986: Direct airline service between the United States and the Soviet Union resumed after an interruption of over four years (see Dec 29, 1981). The flights resulted from an agreement announced soon after the Nov 1985 summit meeting of President Reagan and Soviet leader Mikail Gorbachev. (See Feb 16, 1990.)

19860516 May 16, 1986: FAA published a rule upgrading fire safety standards for cargo or baggage compartments in future transport category aircraft by establishing new fire test requirements. The regulation also limited the volume of Class D compartments (those not readily accessible to crewmembers or equipped with built-in fire extinguishers, but instead designed to control fire by restricting oxygen). The rule stemmed from a testing project undertaken at the FAA Technical Center in the wake of a Saudi Arabian in-flight fire (see Aug 19, 1980) and from a rulemaking proposal published in Aug 1984. (See Feb 10, 1989.)

19860602 Jun 2, 1986: FAA and the Coast Guard concluded a Memorandum of Agreement outlining the roles of each agency in developing the LORAN-C navigation system for use by civil aviators (see Aug 23, 1984). In an updated edition of the National Airspace System (NAS) Plan issued that same month, FAA included a new project for LORAN-C, an interim, supplemental radio navigation system providing at least single-level coverage for instrument flight rules (IFR) navigation for the contiguous U.S., eventually including the "midcontinent gap" not covered by existing transmitters. FAA would provide procurement funds, while the Coast Guard would operate and maintain the transmitters. Nonprecision LORAN-C approaches would also be supported where signal requirements were met, and FAA therefore planned to acquire and operate equipment to check the quality of LORAN-C signals. In Oct 1986, the agency awarded a contract for the first 112 of these signal monitors. (See May 14, 1991.)

19860618 Jun 18, 1986: A Bell 206B helicopter and a DHC-6 Twin Otter airplane collided while conducting air tours over the Grand Canyon National Park, killing all 25 persons aboard the two aircraft. The National Transportation Safety Board listed the probable cause as the failure of both flightcrews to see and avoid each other for undetermined reasons. As contributory factors, the Board listed: failure of FAA oversight regarding Grand Canyon flights; National Park Service influence over route selection by air tour operators; and modification of helicopter routes to intersect those used by fixed-wing aircraft. On Dec 9, 1986, FAA published a proposal to establish special temporary flight restrictions above the Canyon, to be followed by a permanent rule addressing the safety and noise issues associated with operations over the park. (See Mar 26, 1987.)

19860620 Jun 20, 1986: A directive issued this date established a new Office of Science and Advanced Technology reporting directly to the Administrator. The office was later abolished by a directive issued on Aug 29, 1988.

19860706	Jul 6, 1986: President Reagan proclaimed this to be National Air Traffic Control Day in honor of the 50th anniversary of Federal involvement in controlling air traffic (see Jul 6, 1936). FAA personnel throughout the nation observed the occasion with ceremonies and celebrations.
19860721	Jul 21, 1986: FAA published a rule setting stricter flammability standards for materials used in cabins of existing and future airliners with 20 or more passenger seats. The new standards required use of fire resistant and slower-burning materials for cabin sidewalls, ceilings, partitions, storage bins, galleys, and other interior structures. Establishment of such standards had been one of the recommendations of the Special Aviation Fire and Explosion Reduction (SAFER) Advisory Committee (see Sep 10, 1980). The necessary research had been conducted primarily at the FAA Technical Center, and further toxicity studies had been carried out at the agency's Civil Aeromedical Institute (CAMI). The new rule was effective on Aug 20, 1986, but prescribed a phased compliance schedule stretching over four years.
19860805	Aug 5, 1986: In an example of action under the International Security Development and Cooperation Act (see entry for Jun 14, 1985), the Department of Transportation announced that Manila airport in the Philippines did not maintain effective security standards. Airlines were required to inform passengers buying tickets for Manila of this determination. Following an FAA team's inspection, the Department on Sep 2 announced that the airport now met international security standards.
19860813	Aug 13, 1986: The National Academy of Sciences issued a report on airliner cabin air quality and related safey issues. The report had been mandated by Congress in 1984. Its most controversial recommendation was a ban on smoking on all domestic commercial flights (see Apr 23, 1988). The authors cited four major reasons: to lessen discomfort to passengers and crew; to reduce potential health hazards to cabin crewmembers from environmental tobacco smoke; to eliminate possible fires; and to align cabin air quality with standards for other closed environments. Further recommendations included an FAA review of carbon dioxide standards, which eventually resulted in a 1996 rule lowering the allowable concentration of this gas for occupied areas of transport aircraft from 3.0 to 0.5 percent. The report’s other suggestions included FAA consideration of requiring additional protective breathing equipment for use during in-flight fires aboard airliners (see May 26, 1987).

19860821 Aug 21, 1986: FAA's Air Route Traffic Control Centers handled 112,467 en route operations, the highest single-day traffic to that date. Record operations levels at many facilities in fiscal 1986 helped to create a 19.85 percent increase in delays as compared to the previous year. During the fiscal year, FAA proceeded with implementation of a Traffic Management System integrating certain air traffic control functions to create a more orderly traffic flow. Work also continued on the Expanded East Coast Plan, the first phase of which was scheduled for implementation in 1987 (see Feb 12, 1987). Under development since 1982, the plan was designed to alleviate congestion in the New York area and associated airspace through the use of additional departure routes and other techniques. During fiscal 1986, FAA also deployed mobile "tiger teams" of personnel with expertise in a variety of air traffic control disciplines to improve traffic management in areas experiencing delays.

19860831 Aug 31, 1986: A Mexican DC-9 and a Piper PA-28 collided in clear sky over Cerritos, Calif. The Piper had inadvertently made an unauthorized entry into the Los Angeles Terminal Control Area (TCA), and its radar return was not observed by the controller providing service to the Mexican flight. The accident killed 82 persons--all 64 aboard the DC-9, all 3 aboard the Piper, and 15 on the ground. The National Transportation Safety Board later listed the probable cause as the limitations of the air traffic control system to provide collision protection, through both air traffic control procedures and automated redundancy.

The Cerritos accident was the first midair collision to occur within a TCA. On Sep 15, FAA Administrator Engen appointed a special task force to study actions to improve the TCAs. On Oct 27, the agency announced plans to implement the group's 40 recommendations, including: a minimum 60-day license suspension for pilots violating TCA boundaries (see Oct 10, 1986); expanded requirements for altitude encoding transponders (see Jan 29, 1987); and action to simplify and standardize the design of TCAs (see Jan 12, 1989).

19860905 Sep 5, 1986: At Karachi, Pakistan, four men dressed as security guards stormed a Pan American 747. The flight crew escaped, but the four terrorists demanded a crew to fly them to Cyprus. They killed an American passenger during the ensuing 17 hour negotiations. When the lights aboard the aircraft failed, the terrorists began a massacre, killing 22 persons and injuring 125 before being arrested.

19860930 Sep 1986: AN FAA/Air Force review board endorsed specifications for a new long-range Air Route Surveillance Radar, designated ARSR-4, for use at joint surveillance sites. On Jul 25, 1988, FAA announced that it had awarded Westinghouse a $271.6 million contract for 34 ARSR-4s. The new three-dimensional, solid state equipment would replace the 25- to 30-year-old Joint Surveillance radars, improving detection and reducing the clutter from terrain, weather, and other sources. The Air Force and FAA shared the cost of all but one of the ARSR-4s, which the Navy purchased. FAA began initial testing of the new radar during fiscal 1992. (See Jun 25, 1979, and Apr 12, 1996.)

19861001 Oct 1, 1986: DOT gave final approval for Frank Lorenzo's Texas Air holding company to acquire Eastern Air Lines (see Feb 24, 1986), with Lorenzo becoming Eastern's chairman on Oct 15. The Department had earlier rejected the merger on Aug 26, but reversed itself following an agreement safeguarding Pan American's role as a competitor on the Boston/New York/Washington shuttle routes. On Oct 24, DOT gave final sanction to Texas Air's acquisition of People Express and most of the assets of People's bankrupt subsidiary, Frontier Airlines. A no-frills airline, People Express had grown rapidly after staring operations on Apr 30, 1981, but had begun to experience heavy losses in 1985. (See Feb 1, 1987.)

19861009 Oct 9, 1986: FAA announced an agreement with the National Aeronautics and Space Administration for a joint program to develop basic requirements for an airborne wind shear detection and avoidance system. The program's goal was a predictive alert system that could "look ahead" of the aircraft, as distinguished from already-available systems that reacted when wind shear was encountered. (See Aug 2, 1985, and Sep 22, 1988.)

19861010 Oct 10, 1986: FAA issued an enforcement bulletin implementing a 60-day suspension of the certificate of any unauthorized pilot who entered a Terminal Control Area (TCA). The agency could seek harsher actions, including a $1,000 civil penalty, if there were aggravating circumstances, such as causing a near midair collision while illegally within a TCA. (See Aug 31, 1986, and Mar 5, 1990.)

19861021 Oct 21, 1986: FAA announced the award of two contracts to develop competing prototypes of the Voice Switching and Control System (VSCS). The system would provide controllers at air route traffic control centers with computer-controlled voice switching for air-ground communications and well as intercom and interphone communications within and between FAA facilities. Compared to the existing electromechanical system, the new electronic VSCS would be faster, more reliable, and cheaper to maintain. Harris Corporation received the production contract on Dec 31, 1991. (See Jun 30, 1995.)

19861023 Oct 23, 1986: FAA announced the purchase of 19 turboprop Beech Super King Air Model 300 aircraft for its flight inspection fleet used to check the accuracy of air navigation and landing aids. Expected to be more fuel efficient and easier to maintain, the new aircraft were to replace a number of Saberliner Model 80s and all five of the agency's Jet Commander Model 1121 aircraft. Delivery began in Apr 1988. The purchase was part of a modernization process that was reducing the number and types of aircraft that FAA used for flight inspection and for other purposes. At its peak in FY 1964, the agency's total fleet had consisted of 116 aircraft of 24 different types. In FY 1987, the fleet would be reduced to 50 aircraft of 16 types. (See Jul 8, 1973 and Oct 1, 1991.)

19861030	Oct 30, 1986: President Reagan signed the Public Law 99-591, including Title VI, the Metropolitan Washington Airports Act of 1986 authorizing the transfer of control of Washington National and Dulles International Airports to an independent regional authority under a 50-year lease (see Jun 8, 1984, and Jun 7, 1987). The authority was to be created by agreement between Virginia and the District of Columbia. It would be governed by a board of 11 members appointed by the Governor of Virginia (5), the Mayor of the District of Columbia (3), the Governor of Maryland (2), and the President (1). The law also prohibited airlines from operating non-stop flights between Washington National and any airport more than 1,250 miles distant, a wider non-stop service perimeter than previously set by policy (see Dec 6, 1981).
	Title V of P.L. 99-591, the Aviation Safety Commission Act of 1986, established for 18 months a commission of seven Presidentially appointed members to study how FAA might most effectively fulfill its functions. In April 1988, the commission released its final report, concluding that overall the nation's air transportation system was safe, but that the regulatory structure was inadequate to deal with future growth and technological change. The commission's recommendations included: the creation of an independent federal aviation authority with a separate safety director; increased safety inspections; tighter regulation of commuter aircraft operations; mandatory use of Mode C transponders for general aviation aircraft flying near hub airports; and a set term for the FAA administrator.
19861031	Oct 31, 1986: In a restructuring of the organizational complex under the Associate Administrator for Aviation Standards, the Office of Flight Operations was retitled the Office of Flight Standards. The Rotorcraft Program Office, which had been disbanded on Mar 7, was formally abolished and its functions divided between the Office of Flight Standards and the Office of Airworthiness. Certain other adjustments in the responsibilities of these two offices also took effect.
19861116	Nov 16, 1986: Effective this date, a Department of Transportation order ended air service between the U.S. and South Africa, as required by the Comprehensive Anti-Apartheid Act of 1986. (See Aug 8, 1991.)
19861223	Dec 23, 1986: Dick Rutan and Jeana Yeager became the first aircraft pilots to circle the globe without landing or refueling when their experimental airplane Voyager touched down at Edwards Air Force Base, Calif., after covering 25,000 miles in nine days. The aircraft had a propeller at each end of its fuselage, and was equipped with a main wing nearly 111 feet long as well as a smaller forward wing. Voyager took off on Dec 14 with 1,200 gallons of fuel and landed with only eight gallons of usable fuel remaining.

1987

19870128 Jan 28, 1987: Secretary of Transportation Elizabeth Hanford Dole announced a three-part effort to help reduce airline delays. The initiative included: a proposal to grant immunity to the airlines to permit them to conduct joint discussion aimed at adjusting schedules; an investigation to determine if and how airline scheduling processes contributed to delays; and a series of FAA actions to increase system capacity and efficiency. Those FAA steps included the use of computer traffic models to help airlines adjust schedules, a realignment of the air traffic control sectors in the New York/Boston corridor, a review of air traffic procedures on a facility-by-facility basis, and the transfer of additional controllers to the busiest facilities.

19870129 Jan 29, 1987: FAA issued a rule establishing requirements pertaining to the use, installation, inspection, and testing of transponders in U.S.-registered civil aircraft. The rule continued the requirement that aircraft be equipped with a transponder for operation in Terminal Control Areas (TCAs) and in the airspace of the 48 contiguous states above 12,500 feet above ground level (see Nov 1, 1985). The requirement for automatic pressure altitude reporting (Mode C) equipment, currently mandatory in all of the above airspace except Group II TCAs, was extended to include Group II TCAs, effective Dec 1, 1987 (see Jun 21, 1988). The rule also contained provisions intended to provide for transition from Air Traffic Control Radar Beacon System (ATCRBS) transponders to Mode S transponders (see Oct 5, 1984). All transponders newly installed in U.S.-registered aircraft were required to be Mode S transponders after Jan 1, 1992, a deadline that was subsequently extended to Jul 1, 1992. (See Jul 30, 1992.)

19870201 Feb 1, 1987: The Texas Air holding corporation merged New York Air and People Express into Continental Airlines.

19870202 Feb 2, 1987: FAA's Federal Air Surgeon resigned and was reassigned at his own request to help end a controversy over airmen certification. Critics had charged that the Federal Air Surgeon had granted waivers to commercial pilots whom they considered medically unfit to fly.

19870212	Feb 12, 1987: FAA initiated Phase 1 of the Expanded East Coast Plan (EECP) to help increase the capacity of the National Airspace System (see Aug 21, 1986). The plan had been originally intended to relieve traffic congestion in the New York and Washington, D.C., areas through the more effective use of airspace, but was expanded to cover the airspace from Maine to Florida and west to Chicago. The EECP: created new departure and arrival routes; established separate paths and altitudes for jets and slower propeller aircraft; set up new city-pair routes; and used new traffic management techniques to increase airport departure flows and reduce holding procedures. The agency initiated Phase II of plan on Nov 19. That phase involved a realignment of the northwest departure quadrant from the New York Metropolitan area. The agency also increased the number of westbound high-altitude, routes from one to four to expedite traffic flows to Chicago, Detroit, and the west coast. The final phase of the EECP, implemented on Mar 10, 1988, was designed to improve traffic flow from the New York area to the northeast, and involved changes affecting the airspace in New England, New York, Philadelphia, Baltimore, and Washington, D.C. (See Aug 25, 1988.)
19870217	Feb 17, 1987: FAA added a new commuter category of aircraft and set forth the airworthiness and operating rules, certification procedures, and noise rules for that additional category of propeller-driven, multi-engine airplane, with a seating capacity of no more than 19, and a takeoff weight of no more than 19,000 pounds.
19870217	Feb 17, 1987: DOT announced a program designed to identify and prosecute pilots who failed to declare drug or alcohol-related convictions on medical certificate applications. (See Apr 17, 1985, and Jul 26, 1990.)
19870223	Feb 23, 1987: In the wake of a series of fatal accidents, FAA began a 60-day surveillance of civilian air ambulance programs. Agency inspectors investigated equipment, maintenance, training, and pilots' hours. The program was followed by publication of new safety guidelines for emergency medical service helicopters.
19870228	Feb 28, 1987: General William F. McKee died in San Antonio, Tex. After serving as FAA's third Administrator (see Jul 1, 1965), McKee had been a partner in a consulting firm before retiring.
19870318	Mar 18, 1987: Donald D. Engen announced his resignation as FAA Administrator, effective in July (the exact date became July 2). On Engen's departure, the position of Acting Administrator was filled by Robert Whittington, Director of the New England Region. (See Jul 22, 1987.)
19870318	Mar 18, 1987: The first revenue flight of an airplane equipped with an operational TCAS II version of the Traffic Alert and Collision Avoidance System occurred (see Jun 23, 1981). Two airliners began an in-service evaluation of the system on Jan 31, 1988, marking the start of FAA's TCAS II Limited Installation Program. Three airlines participated in the program, which was designed to resolve any outstanding technical and operational questions about the system's use in regularly scheduled service. (See Jan 10, 1989.)

19870325	Mar 25, 1987: FAA published a rule requiring Cockpit Voice Recorders on new jet and turboprop commuter aircraft manufactured after May 26, 1989 (see Jun 26, 1964). The rule also mandated the installation of more sophisticated digital Flight Data Recorders on about 2,000 older large commercial jets, with compliance also by May 26, 1989. (See Aug 12, 1970, and Jun 30, 1988.)
19870326	Mar 26, 1987: FAA published a special rule addressing aviation safety and noise concerns at the Grand Canyon (see Jun 18, 1986). Provisions included: a temporary Special Flight Rule Area limiting operations below 9,000 feet mean sea level above the Canyon; prohibition of flights below the Canyon rim, with some exceptions; and requirements aimed at reducing the risk of midair collisions and terrain impact. Another rule, published on Jun 15, 1987, modified and extended these temporary provisions. On Aug 18, 1987, enactment of Public Law 100-91 mandated a study of aircraft noise impacts at a number of national parks and required flight restrictions at three parks: Grand Canyon, Yosemite, and Haleakala. The law specified that FAA would prepare and issue a final plan for air traffic management above the Grand Canyon, based on recommendations from the Interior Department. On Jun 2, 1988, FAA published a rule implementing Interior's preliminary recommendations, with some modifications. Among other provisions, this rule: raised the ceiling of the Special Flight Rule Area to 14,500 feet mean sea level; established flight-free zones from the surface to 14,500 feet above large areas of the park; and provided routes for commercial tour operators and transient operators through the canyon area. The rule was to expire after Jun 15, 1992, but was given two extensions totaling five years to allow for completion and review of National Park Service studies of the Canyon noise issue. On Jun 19, 1992, meanwhile, a crash claiming 10 lives continued a series of fatal accidents in the Canyon vicinity. The accidents prompted FAA to establish a new geographical unit to help oversee the area's air tourism. (See Mar 17, 1994.)
19870401	Apr 1, 1987: Western Airlines merged into Delta Air Lines.
19870430	Apr 1987: Completion of a construction project at the Miami Air Route Traffic Control Center early this month marked the conclusion of a nationwide ARTCC expansion program. (See Sep 26, 1984).
19870514	May 14, 1987: President Reagan announced his nomination of Lawrence M. Hecker as FAA's Deputy Administrator. The nominee was a former pilot and vice president of flight operations for Western Airlines. Hecker withdrew his candidacy in September because the Senate failed to act on the nomination.

19870517 May 17, 1987: FAA began using the Aircraft Situation Display (ASD) at its Central Flow Control Facility at Washington Headquarters. ASD provided traffic managers with a near real-time visual display of en route aircraft operating under instrument flight rules nationally, regionally, or to a specific airport terminal area. The information was provided by more than 100 long-range radars across the country. On July 25, 1988, FAA announced the addition of Monitor Alert to ASD. Monitor Alert was a computer system designed to analyze flight plans and project when and where airspace congestion was likely. By May 1994, FAA had installed ASD at 41 en route and terminal facilities. (See Dec 31, 1983, and Nov 15, 1990.)

19870519 May 19, 1987: USAir absorbed Pacific Southwest Airlines. On Oct 30, DOT announced its approval for USAir's proposed acquisition of Piedmont Airlines. Formal merger of the two airlines' parent companies occurred on Aug 5, 1989, and full integration of Piedmont Airlines into USAir was not completed until Feb 1, 1990.

19870520 May 20, 1987: FAA Administrator Donald Engen announced that the agency had formally adopted a new policy that permitted instrument landing systems (ILS) to be installed at some hub and reliever airports. FAA had earlier imposed a freeze on installation of ILS in favor of microwave landing systems (MLS), but Engen said that more ILSs would help address the problem of limited airport capacity in the short run. (See Jan 12, 1984, and Apr 6, 1989.)

19870526 May 26, 1987: A new FAA regulation required airline operators to equip all large passenger aircraft with protective breathing equipment (PBE) for flight attendants to use in fighting in-flight fires, and to provide training in PBE use. The rule applied the same performance standards to this equipment as to the PBEs already required for cockpit crew members. FAA had proposed the rule in Oct 1985 in response to National Transportation Safety Board recommendations and to several in-flight fires. FAA originally gave airlines two years to comply with the regulation, but subsequently granted extensions to Jan 31, 1991, for PBE installation and to Jul 31, 1992 for training. (See Mar 29, 1985.)

19870529 May 29, 1987: FAA commissioned the first of its Host Computer Systems at the Seattle air route traffic control center (ARTCC). On Jun 23, 1988, the agency commissioned the last of the systems at the Salt Lake City ARTCC, completing the Host implementation program at all 20 continental ARTCCs. (See Jul 26, 1985.)

19870605 Jun 5, 1987: FAA published a rule requiring airlines to develop and use approved programs to control the amount and size of carry-on baggage, with compliance by Jan 1, 1988. The agency specified that airlines must ensure that passengers did not bring excessive luggage aboard, and that all luggage was safely stowed prior to closing the last cabin door when preparing for takeoff. FAA’s regulation of carry-on bags had begun with a Sep 1967 requirement that passengers could take to their seats only items that could be securely stowed under a seat. The rules had subsequently evolved as cabin interiors changed.

19870607 Jun 7, 1987: The Metropolitan Washington Airport Authority (MWAA) took over management of National and Dulles airports from FAA. The MWAA had been created by the Metropolitan Washington Airports Act (see Oct 30, 1986). Under the terms of a lease agreement with the Federal government, the new authority would operate the two airports for 50 years and would pay the government a total of $150 million for the lease period. Almost 700 FAA employees left the agency to join the MWAA, and a directive issued on Oct 26, 1987, abolished FAA's Metropolitan Washington Airports organization.

19870612 Jun 12, 1987: FAA commissioned its new National Concepts Development and Demonstration Heliport at the Technical Center. The research heliport was fully equipped with such items as a microwave landing system, an automated weather observing system, precision approach path indication lights, and reconfigurable landing lights.

19870619 Jun 19, 1987: The Federal Labor Relations Authority certified the National Air Traffic Controllers Association (NATCA) as the exclusive representative of all GS-2152 series terminal and center controllers whose primary duty was separation of aircraft. The controllers had voted for representation by a margin of 7,494 to 3,275, using mail ballots sent to them on May 6. The Authority had announced the outcome on Jun 11. (See Jul 2, 1982, and May 1, 1989.)

19870701 Jul 1, 1987: AirCal merged into American Airlines. AirCal had begun flying in Jan 1967 as an intrastate carrier called Air California, then expanded to destinations outside the state in 1978. The airline had adopted the name AirCal in 1981.

19870722 Jul 22, 1987: T. Allan McArtor became the tenth FAA Administrator, succeeding Donald D. Engen (see Apr 10, 1984). McArtor took the oath a second time in a public ceremony on Jul 27. President Reagan had announced the new Administrator's appointment on Jun 5, and the Senate had confirmed it on Jul 17.

Born in 1942 in St. Louis, Mo., McArtor received a B.S.E. from the U.S. Air Force Academy in 1964 and a M.S.E. in engineering mechanics from Arizona State University in 1971. He served as a fighter pilot in Vietnam, logging 200 combat missions and winning the Silver Star and Distinguished Flying Cross. McArtor flew with the Air Force Thunderbirds precision flying team from 1972 to 1974. He joined the Federal Express Corporation in 1979, and was senior vice president for telecommunications at the time of his selection to head FAA. He had also chaired the Department of Transportation Commercial Space Transportation Advisory Committee from June 1986 to June 1987. McArtor served as FAA Administrator for over 18 months, resigning during the first month of the Bush Administration. (See Feb 17, 1989.)

19870727	Jul 27, 1987: During a public ceremony in which he took the oath as FAA Administrator a second time, Allan McArtor described his plan to restore public confidence in the aviation system through a set of initiatives later dubbed Impact 88. In a speech on Sep 15, McArtor outlined these eight initiatives, which were to be revealed in more detail during the succeeding weeks. Focusing on fiscal 1988, the program was to enhance aviation safety in the areas of airline accountability, aircrew performance, airspace capacity, advanced technology, aviation awareness, air transportation security, airport development, and agency effectiveness. Among the elements of Impact 88 were reviews of training for pilots and air traffic controllers, and an inspection of the aircraft manufacturing industry (see Sep 21, 1987).
19870816	Aug 16, 1987: A Northwest Airlines MD-80 crashed on takeoff at Detroit, killing all but one of the 157 persons aboard as well as two persons on the ground. The National Transportation Safety Board (NTSB) cited the probable cause as the crew's failure to use the taxi checklist to ensure that the flaps and slates were extended for takeoff. A contributory factor was an unexplained absence of power to the airplane takeoff warning system. FAA actions in response to the accident and to NTSB recommendations included required changes to MD-80 warning systems and steps aimed at improving flightcrew performance.
19870819	Aug 19, 1987: Effective this date, a Special Federal Aviation Administration Rule (SFAR) altered the Los Angeles, Calif., terminal control area (TCA). The rule raised the upper limits of the TCA from 7,000 to 12,500 feet above mean sea level to enable air traffic control to provide terminal air traffic control service to arriving and departing aircraft in the TCA. The action also eliminated the visual flight rule (VFR) corridor in one area of the TCA to minimize the mix of controlled and uncontrolled operations in the vicinity of Los Angeles (see Aug 31, 1986, and Mar 10, 1988).
19870901	Sep 1, 1987: AN FAA rule issued this date required: that 12-inch high nationality and registration marks be displayed on all aircraft that penetrate and Air Defense Identification Zone (ADIZ) or Defense Early Warning Identification Zone (DEWIZ); that an identification data plate be displayed on the exterior of each U.S.-registered civil aircraft; and that operators of aircraft modified to carry fuel tanks within the passenger or baggage compartment keep a copy of the form authorizing that modification on board. A related rule, issued Oct 5, 1988, required transponder-equipped aircraft to have their transponders turned on during flights into or out of the United States penetrating an ADIZ. The rule also established flight plan and position report requirements for operations penetrating the ADIZ around the contiguous 48 states. Both rules were a response to concerns raised by the U.S. Customs Service in 1985, and FAA stated that they were actions to combat hazards resulting from airborne drug smuggling. (See Apr 22, 1982, and Mar 6, 1990.)
19870902	Sep 2, 1987: DOT announced a rule directing all major air carriers to file regular monthly reports on their delay and baggage-handling records.

19870909	Sep 9, 1987: DOT announced that within the current week it would begin random urinalysis testing to detect drug abuse among departmental employees in jobs directly affecting safety and security. (FAA already had a drug testing program for such employees, but it did not involve random tests: see Aug 16, 1985.) DOT's initiative was the first such program to be implemented department-wide under President Reagan's Executive Order of Sep 15, 1986, calling for a drug-free Federal workplace. (See Nov 21, 1988.)
19870921	Sep 21, 1987: Administrator McArtor announced that FAA would begin a special inspection of the U.S. aircraft manufacturing industry to ensure that the companies were following proper procedures and had updated their techniques to keep up with technology (see Jul 27, 1987). On Jan 13, 1989, the agency completed these Operation Snapshot inspections of 88 manufacturers.
19870927	Sep 27, 1987: California became the first state to ban smoking on all intrastate trips by airline, bus, or train. In addition, the bill required that at least 75 percent of the space in airports and public transit centers be set aside for nonsmokers. The bill became effective Jan 1, 1988. (See Apr 23, 1988.)
19871001	Oct 1, 1987: Elizabeth Hanford Dole resigned as Secretary of Transportation and Deputy Secretary James H. Burnley became Acting Secretary. Before becoming Deputy Secretary, Burnley had been the Department's General Counsel and had previously been an Associate Deputy Attorney General at the Justice Department. President Reagan nominated him for the top post at Transportation shortly after Dole's resignation. On December 3, Burnley became Secretary of Transportation. He served the remainder of the Reagan Administration, resigning effective Jan 20, 1989.
19871020	Oct 20, 1987: Intercom announced that New England Region Director Robert Whittington had been designated Executive Director, a new position at FAA's national headquarters. The departure of Deputy Administrator-designate Lawrence M. Hecker (see May 14, 1987) had created a void that the new position was intended to help fill. The new Executive Director, who reported to the Administrator, provided direction and guidance to the operating elements and to the regions and centers. The position was formally established by a directive issued on Feb 29, 1988. (See Jun 16, 1988.)
19871030	Oct 28-30, 1987: Administrator McArtor met a group of air traffic controllers in Atlanta in the first of a series of Employee Focus Group meetings, an approach to problem solving in which personnel in various specialties met directly with top managers.
19871109	Nov 9, 1987: FAA issued a major revision of its airport certification regulations for airports served by air carriers with aircraft having a seating capacity of more than 30 passengers. The new regulations, designed to improve safety standards, included: strengthening fuel handling and storage requirements; making airport tenants responsible for quality control of aircraft fueling operations; requiring that firefighting and rescue vehicles be equipped with two-way radios; mandating that at least one firefighting employee trained in emergency medical care be on duty during air carrier operations; and increasing restrictions on access of ground vehicle traffic to operational areas.

19871115	Nov 15, 1987: A Continental Airlines DC-9 crashed on takeoff at Denver Stapleton airport, killing 28 of the 82 persons on board. The National Transportation Safety Board cited the probable cause of the crash as the captain's failure to have the airplane deiced a second time after a delay before takeoff. Contributing factors listed by the Board included the absence of regulatory or management controls governing operations by newly qualified flightcrew members and the confusion that existed between the flightcrew and air traffic controllers that led to the delay in departure. (See Dec 12, 1985 and Mar 22, 1992.)
19871207	Dec 7, 1987: A Pacific Southwest BAe 146 jet crashed near Paso Robles, Calif., killing all 43 on board. Gunfire was heard on the cockpit recorder, and the authorities later determined that a vengeful former employee caused the crash. On Dec 21, FAA ordered all airlines operating at U.S. airports to screen all their employees entering secure areas with the same metal detectors and baggage x-ray equipment used for passengers.
19871219	Dec 19, 1987: Effective this date, FAA required a positive baggage/passenger match on all international flights by U.S. airlines. FAA had placed the same requirement on selected international flights since the summer of 1985.
19871230	Dec 30, 1987: President Ronald Reagan signed the Airport and Airway Safety and Capacity Expansion Act, extending the authority for the Airport Improvement Program (AIP) for an additional five years. The legislation authorized $1.7 billion each fiscal year through 1990 and $1.8 billion each year for fiscal years 1991 and 1992 (see Nov 5, 1990, and Oct 31, 1992). Other provisions of the act included: authorization for a State Block Grant Pilot Program (see Nov 24, 1976, and Oct 1, 1989); a requirement that ten percent of the funds available under AIP be expended with the Disadvantaged Business Enterprise Program; a redefinition of primary airports to include all airports emplaning more than 10,000 passengers annually; expenditures for soundproofing public schools and hospitals without a noise compatibility study; and establishment of a discretionary fund set-aside for projects to enhance systemwide capacity, safety, security, and noise compatibility.
	The act increased the maximum civil penalty for each safety violation by an airline or other commercial operator from $1,000 to $10,000. The legislation also authorized a two-year civil penalty demonstration program, which began on this day, permitting FAA to adjudicate civil penalty cases not to exceed $50,000. Subsequent legislation granted the program two extensions, ending on Jul 31, 1990 (see Apr 13, 1990).
19871231	Dec 31, 1987: At the end of this day, FAA completed its phased ban on all large transport and turbojet aircraft at the Phase I noise level, with the exception of non-revenue flights permitted under certain circumstances through the end of 1989. (See Feb 18, 1980, and Nov 5, 1990.)

1988

19880131	Jan 1988: FAA commissioned its first expanded network version of the Low Level Wind Shear Alert System (LLWAS) at Denver Stapleton airport (see Aug 2, 1985). A second of the expanded-network systems was commissioned at New Orleans in Nov 1988. In addition, the agency continued upgrading the standard six-sensor LLWAS units to a version with full microburst detection capability and other improved features. On Oct 11, 1991, a ceremony at Lexington, Ky., marked the completion of this upgraded LLWAS at all 110 airports designated to receive it.
19880205	Feb 5, 1988: Effective this date, FAA issued the first noise certification standards for new helicopter types and banned modifications to current helicopters types that would increase noise levels.
19880208	Feb 8, 1988: FAA announced that it had retired airplane registration number N16020, used by Amelia Earhart when she disappeared on a flight over the Pacific Ocean (see Jul 2, 1937). The number had been recently held by Continental Air Lines, which had agreed to its retirement.
19880309	Mar 9, 1988: Secretary of Transportation James H. Burnley announced the creation of a Secretary's Task Force on Internal Reforms of the FAA, co-chaired by FAA Administrator McArtor and DOT's Assistant Secretary for Administration. The task force was charged with examining ways to eliminate marginal, non-safety expenditures and to improve the procurement process. It was instructed to place a high priority on reviewing FAA's regional structure, which Burnley described as outdated and a cause of inconsistency in interpreting national standards. On Apr 28, DOT and FAA announced that the task force's recommendations would include a variety of improvements in practices and procedures, including "straightlining" of reporting relationships. Under this arrangement, regional division managers in key programs would report to to Associate Administrators at national headquarters rather than to the Regional Directors. (See Sep 15, 1984, and Jun 16, 1988.)
19880310	Mar 10, 1988: Effective this date, FAA established a special flight route through the Los Angeles terminal control area (TCA) to accommodate general aviation aircraft wishing to transit the area. The action allowed small aircraft operating under visual flight rules (VFR) and carrying a Mode C transponder to follow the designated route through the TCA without the prior approval of Los Angeles approach control. The corridor was similar to one that had been closed effective Aug 19, 1987 (see that date).
19880316	Mar 16, 1988: Effective this date, FAA included free-standing heliports in regulations on airport noise compatibility planning that had previously applied only to heliports on public airports used by fixed-wing aircraft. When their plans were approved, the free-standing heliports would be eligible to apply for benefits under the Airport Improvement Program.
19880401	Apr 1, 1988: Barbara McConnell Barrett became FAA's Deputy Administrator, succeeding Richard H. Jones (see Dec 13, 1984). A previous nominee, Lawrence M. Hecker, had withdrawn in September (see May 14, 1987).

	Born in Indiana County, Pa., Barrett earned three degrees from Arizona State University (B.S., 1972; M.B.A, 1975; J.D., 1978). She held positions with Greyhound Corp. and Southwest Forest Industries, Inc., and in 1982 became Executive Assistant to the Chairman of the Civil Aeronautics Board. Barrett served as the Board's Vice Chairman, 1983-84. She then practiced law as a partner at the firm of Evans, Kitchel, and Jenckes in Phoenix, Ariz., until becoming the first woman to occupy the FAA's Deputy position. Barrett served the remainder of the Reagan Administration, and resigned effective Jan 20, 1989. (See Mar 12, 1990.)
19880405	Apr 5, 1988: FAA decommissioned the last radar bright display equipment being used at a domestic air route traffic control center when it shut down the unit at the Los Angeles Center. (See Apr 27, 1960.) On the same day, FAA terminated the last broadband radar service, when it stopped that service at the Paso Robles, Calif., long-range radar facility. FAA had gradually replaced the broadband with the Direct Access Radar Channel (see Feb 2, 1981).
19880415	Apr 15, 1988: Effective this date, FAA required large air carriers to report each failure, malfunction, or defect of their emergency evacuation systems and components.
19880423	Apr 23, 1988: Effective this date, FAA placed a two-year ban on smoking on all domestic scheduled airline flights of two hours or less. The rule, published ten days previously, responded to legislation that had been enacted in Dec 1987. The same legislation also imposed a $2,000 fine for tampering with smoke detectors in airliner lavatories, and FAA's rule required the posting of signs warning passengers of this penalty. (See Aug 13, 1986, and Feb 25, 1990.)
19880428	Apr 28, 1988: An 18-foot gap opened in flight in the fuselage of a Boeing 737 operated by Aloha Airlines. Decompression swept a flight attendant through the opening, and 8 other persons were seriously injured. The plane made an emergency landing on the Hawaian island of Maui. In the immediate aftermath of the accident, FAA ordered inspections of 737-100 and 737-200 jets logging more than 55,000 landings and restricted those planes to 23,000-foot altitude until inspected. On May 23, 1989, the National Transportation Safety Board cited the probable cause of the accident as the Aloha maintenance program's failure to detect disbonding and fatigue damage. Contributary factors listed included Aloha management failings, FAA regulatory deficiencies, and Boeing's failure to ensure correction of certain 737 construction problems. The near disaster aboard the high-service, 19-year-old Aloha plane focused attention on the issue of the airworthiness of aging airliners. (See May 6, 1981, and Jun 1, 1988.)
19880508	May 8, 1988: A fire at an Illinois Bell Telephone Co. switching center drastically limited communications between the towers at Chicago's Midway and O'Hare airports, the Aurora air route traffic control center, and aircraft. The 56 hour outage resulted in major air traffic delays throughout the country (see Jan 4, 1991.)

19880517 May 17, 1988: Voters in Colorado approved a measure that allowed the city of Denver to annex land for a new airport, which would occupy 45 square miles. One year later, on May 16, 1989, the voters approved a referendum authorizing construction of the facility, which would be the country's first new major airport since Dallas-Fort Worth opened in 1974. FAA approved a $60 million grant for construction on Sep 27, 1989, and site preparation began the following day. Construction officially started on Nov 22, 1989. FAA announced it had approved an additional grant of $90 million on Mar 27, 1990, and on Apr 29, 1992, approved the collection of passenger facility charges at Stapleton International Airport to help finance construction of the new facility. The airport was originally scheduled to open in Oct 1993, but encountered a series of delays due to difficulties that included problems with the baggage handling system. (See Feb 28, 1995.)

19880601 Jun 1, 1988: FAA opened a three-day international conference on the problems of aging airliners attended by more than 400 participants. Concerns about the continued airworthiness of the many high-service aircraft in the air carrier fleet had been heightened by a recent accident (see Apr 28, 1988). The gathering led to the establishment of a government-industry task force on the issue, and to FAA actions that included: increased research and development in the aging aircraft field; acquisition of expertise in nondestructive inspection techniques; consideration of new structural inspection programs for older commuter aircraft; the use of FAA teams to monitor maintenance checks on older aircraft; and rulemaking projects aimed at improving the safety of high-service airliners (see Mar 7, 1990). The conference became the first in a series of such meetings.

19880602 Jun 2, 1988: After a six week review of Texas Air Corp. and its subsidiaries, Eastern and Continental Airlines, Secretary of Transportation James Burnley announced that the airlines were currently operating safely. He noted however, that labor-management hostility at Eastern was at an unprecedented level. To prevent this tension from threatening Eastern's future safety, Burnley had asked former Secretary of Labor William E. Brock to mediate the situation. (See Mar 4, 1989.)

19880614 Jun 14, 1988: FAA issued its first certificate to a major all-composite aircraft, the Beech Starship, a business-class turboprop seating between seven and ten.

19880616 Jun 16, 1988: Administrator McArtor announced a reorganization of FAA's senior management structure, building upon recommendations by the Secretary's Task Force on Internal FAA Reform (see Mar 9, 1988). The reorganization's aims were to: improve communications, coordination, and management oversight of FAA's technical modernization and other activities; reduce unnecessary reporting relationships; and allow Washington headquarters to handle increased authority over field operations. Effective Jul 1, 1988, FAA increased the number of Executive Director positions from one to four (see Oct 20, 1987, and Feb 21, 1990). The Executive Directors reported directly to the Administrator, and most of the agency’s functions were consolidated under them. As described in a new directive issued on Feb 6, 1989, the four Executive Directors were responsible for the following organizational elements:

(1) Executive Director for Policy, Plans, and Resource Management (the new title of the former single Executive Director position). Reporting to this position were the:
(a) Associate Administrator for Policy, Planning, and International Aviation (responsible for the Europe, Africa, and Middle East Office and three other Offices: International Aviation; Aviation Policy and Plans; and Environment, later redesignated Environment and Energy);
(b) Associate Administrator for Human Resource Management (responsible for four Offices: Human Resource Development; Labor and Employee Relations; Personnel; and Training and Higher Education);
(c) Associate Administrator for Administration (responsible for the Acquisition and Materiel Service and three Offices: Accounting; Budget; and Management Systems);
(d) Regional Directors, now retitled Regional Administrators to reflect their role as representatives of the Administrator; and the
(e) Director, Aeronautical Center.
(2) Executive Director for Systems Operations, to whom reported the:
(a) Associate Administrator for Air Traffic (responsible for the Office of Air Traffic Evaluations and Analysis and two Services: Air Traffic Plans and Requirements; and Air Traffic Operations);
(b) Associate Administrator for Airway Facilities (responsible for two Services: Program Engineering and Systems Maintenance);
(c) Director of Operations Planning and Policy; and the
(d) Director of Operations Resource Management.
(3) Executive Director for Regulatory Standards and Compliance, to whom reported the:
(a) Associate Administrator for Regulation and Certification (responsible for the Office of Rulemaking and two Services: Aircraft Certification and Flight Standards);
(b) Associate Administrator for Aviation Standards (responsible for the Aviation Standards National Field Office and three other Offices: Aviation Medicine; Civil Aviation Security; and Accident Investigation); and the
(c) Director of Program and Resource Management.
(4) Executive Director for System Development, to whom reported the:
(a) Associate Administrator for Advanced Design and Management Control (responsible for the Operations Research Office and two Services: Advanced System Design; and Management Control)

	(b) Associate Administrator for NAS (National Airspace System) Development (responsible for the System Engineering and Program Management Office and three Services: Automation; Advanced System Acquisition; and NAS Transition);
	(c) Associate Administrator for Airports (responsible for the Airport Capacity Program Office and two other Offices: Airport Planning and Programming; and Airport Standards); and the
	(d) Director, FAA Technical Center.
	In addition to the Executive Directors, the positions reporting to the Administrator were: the former Director, Aviation Safety, now retitled an Associate Administrator (responsible for two Offices: Aviation Safety Analysis and Aviation Safety Oversight); the Chief Counsel; and three Assistant Administrators for: Public Affairs, Civil Rights; and Government and Industry Affairs.
	Also effective on Jul 1, 1988, FAA implemented a straightline reporting system under which regional division program managers in the following functions reported to Associate Administrators at national headquarters instead of to the former Regional Directors: air traffic, airway facilities, aircraft certification, flight standards, civil aviation security, medical, and airports. Under the new arrangement, the Regional and Center Counsels also reported to the Chief Counsel.
19880616	Jun 16, 1988: Administrator McArtor announced a five point program to assist development of tiltrotor aviation, including: (1) negotiations with the Defense Department for FAA access to engineering and test data; (2) accelerated efforts in such areas as tiltrotor airspace review, criteria for flight tests and pilot training, and final aircraft certification standards; (3) establishment of a tiltrotor program organization that reported to the Administrator during McArtor's tenure; (4) expanded research and development; and (5) stepped-up planning and development of vertiports.
19880621	Jun 21, 1988: FAA published a rule setting new requirements for aircraft to carry the Mode C transponder, an altitude-reporting radar beacon (see Jan 29, 1987). Effective Jul 1, 1989, the rule mandated Mode C carriage en route above 10,000 feet, instead of the 12,500 feet previously specified. With certain exclusions, the rule also required aircraft to carry and operate Mode C transponders within 30 miles of a primary airport in terminal control areas (TCAs). (On Dec 5, 1990, however, FAA suspended certain aspects of this provision, thus allowing aircraft without Mode C to have access to about 300 specified outlying airports within 30 miles of a TCA primary airport.) In addition, the rule required Mode C in Airport Radar Service Areas (ARSAs), effective Dec 30, 1990.

19880630	Jun 30, 1988: In response to legislation, FAA issued a rule expanding requirements for Flight Data Recorders (FDRs) and Cockpit Voice Recorders (CVRs), with compliance by Oct 11, 1991. The rule required CVRs on all multi-engine, turbine-powered commuter and air taxi aircraft that were able to seat six or more persons and were required to have a two-pilot crew. It mandated FDRs on certain existing and newly manufactured large commuter aircraft. The rule also required large air carriers to upgrade FDRs in certain aircraft possessing the digitial capability to accomodate more advanced devices. In addition, the rule contained CVR/FDR requirements for certain general aviation aircraft with multiple turbine engines. (See Jul 16, 1996.)
19880703	Jul 3, 1988: U.S.S. Vincennes mistakenly shot down an Iran Air A-300 Airbus over the Persian Gulf, killing all 290 persons aboard. The Navy ship fired two missiles, seven minutes after the flight took off from Bandar Abbas. Before firing, Vincennes had sent electronic identification requests and voice warnings to the plane over civilian and military radio channels.
19880726	Jul 26, 1988: FAA announced it had awarded IBM a $3.55 billion contract to develop, deploy, and service the Advanced Automation System (AAS). The announcement ended almost four years of competition between IBM and Hughes Aircraft Corp. (See Jul 26, 1985, and Oct 1, 1991.)
19880805	Aug 5, 1988: FAA created a new general aviation staff to improve liaison between the agency and private and business flyers. The new staff, which operated within the Office of Flight Standards, was later abolished on Oct 13, 1992, and its functions assigned to the General Aviation and Commercial Division.
19880808	Aug 8, 1988: FAA began System Safety and Efficiency Reviews (SSERs), programs in which interdisciplinary teams from the agency, other public officials, and industry conducted thorough evaluations of all activities that affected aviation safety in and near a facility. The investigations included air traffic control towers and centers, flight service stations, airway facilities, aviation security, and inspector functions. The first SSER began at Chicago O'Hare airport.
19880823	Aug 23, 1988: United Airlines became the first major U.S. carrier to get Operations Specifications produced by a new automated FAA system designed to increase standardization. With the new system, FAA assumed responsibility for initial preparation of the "Ops Specs," which spelled out in detail the rules that an airline must follow to comply with safety requirements. Previously, the carriers had prepared the document and submitted it to FAA for approval.
19880825	Aug 25, 1988: FAA published a rule further upgrading fire safety standards for cabin interiors in transport aircraft by establishing refined fire test procedures and apparatus as well as a new requirement for smoke emmission testing. The agency expected that the new flammability standards would also lessen the problem of toxic gas release during fire. FAA prescribed a phased compliance schedule for new and existing aircraft. The rule was based on a continuing research program recommended by the SAFER committee. (See Jul 21, 1986.)

19880825	Aug 25, 1988: FAA announced changes to the Expanded East Coast Plan because of numerous complaints of increased noise by New Jersey residents. Changes to the EECP included rerouting Newark westbound departures from 11 p.m. to 7 a.m. (See Feb 12, 1987, and Mar 11, 1991.)
19880831	Aug 31, 1988: A Delta Airlines Boeing 727 crashed on takeoff at Dallas-Fort Worth International Airport, killing 13 of the 108 on board. The National Transportation Safety Board listed the probable cause of the accident as inadequate cockpit disciple resulting in an attempt to takeoff without the wing flaps and slats properly configured, and a failure in the warning takeoff system. As a contributory factors, the Board cited: Delta's slow implementation of safety steps necessitated by the airline's rapid growth; a lack of accountability in FAA's inspection process; and insufficiently aggressive action by the agency to correct known deficiencies at Delta, which had been the subject of a special inspection in 1987 following a series of incidents. FAA's response to the Board's recommendations included certain actions concerning inspections, required modifications to the 727 takeoff warning system, and a variety of other measures.
19880831	Aug 1988: FAA began a test and demonstration of the Precision Runway Monitor (PRM) at the Memphis airport, followed in May 1989 by a year-long test at the Raleigh-Durham airport. The radar greatly reduced the update rate of aircraft movements as depicted on an air traffic control screen. The demonstration proved successful, determining that the new radar, in conjunction with automated alarms and high-resolution color displays, helped controllers prevent or resolve aircraft conflicts in the airspace between closely spaced parallel and converging runways. On Apr 15, 1992, FAA announced award of a contract to the Bendix Division of Allied-Signal Aerospace Co. for five Precision Runway Monitoring radars. The following year, on Jul 20, 1993, FAA commissioned the first PRM in the United States at Raleigh/Durham.
19880922	Sep 22, 1988: FAA issued a rule requiring that all turbine-powered airliners seating 30 passengers or more carry equipment to warn pilots when they encounter low-altitude wind shear and provide them with information needed to escape safely (see Oct 9, 1986). The rule also mandated wind shear training for flight crewmembers. FAA allowed until Jan 2, 1991, to complete the training requirements and permitted the airlines to phase in the equipment in accordance with an approved schedule by Jan 4, 1993. On Apr 9, 1990, the agency published rule extending this deadline to Dec 30, 1993, making certain exemptions for older aircraft, and allowing the substitution of more advanced "predictive" warning systems when available.
19881003	Oct 3, 1988: Citing increasing congestion and a rash of air traffic control operation errors, FAA indefinitely reduced the maximum number of arrivals permitted at Chicago O'Hare from 96 an hour to 80.

19881102	Nov 2, 1988: FAA announced it had awarded a contract to Raytheon for 47 Terminal Doppler Weather Radar (TDWR) systems which would be able to warn of hazardous wind shear conditions and microbursts. The contract followed operational evaluation of a TDWR at Denver Stapleton airport, and further operational evaluations of test units continued. (See Aug 2, 1985, and Jul 2, 1994.)
19881102	Nov 2, 1988: AN FAA Jet Commander 21 crashed near Latrobe, Pa., after both engines lost power. The accident claimed the lives of all three personnel aboard.
19881103	Nov 3, 1988: The Aviation Safety Research Act broadened FAA's role in aircraft-related research, which had previously focused on testing and developing existing devices and materials. The act authorized the agency to develop new technologies and conduct data analyses in such fields as the effects of wear and fatigue on aircraft structures, aircraft maintenance, materials resistent to smoke and fire, low flammability fuels, and methods of containing in-flight and post-crash fires. (See Nov 5, 1990 and May 6, 1996.)
19881107	Nov 7, 1988: FAA announced award of a contract for five operational models of a new Thermal Neutron Activation (TNA) explosives detection system. The TNA device measured the gamma rays produced by energy neutrons passed through luggage and cargo and triggered an alarm when components of explosives were detected. FAA had first become involved in TNA research in 1976 in the wake of the La Guardia bombing (see Dec 29, 1975). After testing a "breadboard" TNA device at several airports, the agency awarded competitive design contracts in Sep 1985 and began testing a prototype system at San Francisco airport in Jun 1987. (See Dec 29, 1988.)
19881118	Nov 18, 1988: After receiving information eight days earlier from West German authorities, FAA issued an aviation security bulletin, describing a cassette recorder containing a barometric detonating device that could be set to explode when an airliner reached a certain altitude. Such a device had been discovered by German authorities in an Oct 26 anti-terrorist sweep. On Dec 7, FAA issued another bulletin to airlines advising them of a telephone warning that had been received Dec 5 by the U.S. Embassy in Helsinki. The anonymous caller claimed that a bomb was to be placed aboard a Pan Am plane in Frankfurt. (See Dec 21, 1988.)

19881121	Nov 21, 1988: DOT published an interim rule on testing procedures for a series of new rules requiring employers in the transportation sector to have an anti-drug program for personnel with responsibilities affecting safety or security. The programs generally included five kinds of drug-abuse testing: pre-employment, random, periodic, post-accident, and for reasonable cause. (DOT had already established a similar program for its own employees: see Sep 9, 1987.) Also on Nov 21, FAA published a rule applying the DOT testing guidelines to the aviation industry by requiring an anti-drug program for domestic and supplemental air carriers, air taxi and commuter operators, certain commercial operators, certain contractors, and air traffic control facilities not operated by FAA or the U.S. military. (Subsequent amendments to this rule included an exemption for some types of operations, such as student instruction.) DOT published a final rule on testing procedures on Dec 1, 1989. The program began within the aviation industry on Dec 18, 1989, when large airlines and regionals with 51 or more employees began testing. (See Jul 10, 1990.)
19881215	Dec 15, 1988: FAA issued a type certificate for the Airbus A-320. The aircraft had received its certification in Europe in February 1988. The A-320 was a short-to-medium range, twin turbo-fan transport with a seating capacity of 120-179 passengers. It was the first civilian transport to incorporate "fly-by-wire" controls for elevators, ailerons, spoilers, tailplane trim, slats, flaps, and speed brakes.
19881221	Dec 21, 1988: An explosion destroyed Pan American World Airways Flight 103 near Lockerbie, Scotland, killing all 259 persons aboard and 11 on the ground (see Nov 18, 1988). The Boeing 747 had been bound for New York Kennedy from London Heathrow. Investigators later discovered that the tragedy was the result of a bomb concealed inside a radio-cassette player that had been loaded into a forward luggage compartment in Frankfurt (see Nov 14, 1991). FAA quickly began an inspection of Pan American's security procedures at Heathrow and Frankfurt airports, and later proposed $630,000 in civil penalties against the airline for alleged violations of security regulations.
	On Dec 29, FAA revealed new security measures to go into effect within 48 hours for U.S. carriers at all airports in Europe and the Middle East. These included requirements that the airlines x-ray or physically search all checked baggage, conduct additional random checks of passengers and baggage, and achieve a positive match of passengers and their baggage to keep unaccompanied bags off airplanes. FAA also ordered a sixth thermal neutron analysis (TNA) device (see Nov 7, 1988) and accelerated the TNA delivery schedule. (See Jan 3, 1989.)
19881227	Dec 27, 1988: A presidential proclamation extended U.S. territorial jurisdiction from three to twelve nautical miles from the nation's coasts, and FAA at the same time extended certain controlled airspace and air traffic rules to coincide with the new limits.

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19890103 Jan 3, 1989: As part of a series of security measures following the Lockerbie bombing (see Dec 21, 1988), the Federal Aviation Administration issued a rule requiring airport operators to supplement their procedures for limiting entry into secure areas by installing a computer-controlled access system, or a similar approved system. On Mar 13, FAA issued a rule requiring foreign air carriers that land or takeoff in the U.S. to submit a written security program to the agency. Two days later, the agency adopted a mandatory minimum fine of $1,000 for passengers trying to take guns through airport screening positions. On Jul 6, FAA issued a rule strengthening its system for providing security information to airlines by requiring compliance with prescribed countermeasures and making disclosure of information in security alerts a violation subject to penalty.

On Sep 5, FAA published a rule giving the agency authority to require airlines to install explosives detection systems (EDS) to screen passengers' checked baggage for international flights, with about 40 U.S. and foreign airports targeted for initial implementation. Also on Sep 5, operational testing of the first of six FAA-funded Thermal Neutron Activation (TNA) explosive detection systems began at New York Kennedy airport (see Nov 7, 1988). Subsequently, operational demonstrations of TNA units were conducted at several other airports, but the devices were not adopted for permanent use.

Other security-related events during 1989 included the establishment on Aug 4 of the President's Commission on Aviation Security and Terrorism to review security policy (see May 15, 1990). Effective on Oct 10, FAA established an Aviation Security Advisory Committee including representatives of 16 Federal agencies and aviation organizations. (See Mar 3, 1990.)

19890110 Jan 10, 1989: FAA published a rule requiring the Traffic Alert and Collision Avoidance System (TCAS II) on all airliners with more than 30 passenger seats operating in U.S. airspace (see Mar 18, 1987). The airlines were to phase in TCAS II by Dec 30, 1991. On Apr 9, 1990, however, FAA extended the TCAS II compliance schedule completion date to Dec 30, 1993 (an extension that also applied to wind shear warning equipment: see Sep 22, 1988). The Jan 10, 1989, rule also required turbine-powered commuter aircraft with 10 to 30 passenger seats to install the simpler TCAS I by Feb 9, 1995, a deadline later extended to Dec 31, 1995.

19890112 Jan 12, 1989: FAA revised the pilot and equipment requirements for conducting operations in terminal control areas and established a single class of terminal control area (TCA) instead of the two classes which previously existed. (See Aug 31, 1986.) In addition, pilots needed at least a private certificate to fly in a TCA. Student pilots were permitted to conduct certain operations with specified training and logbook endorsements from a certified flight instructor except at 12 TCA primary airports, where student pilot operations were prohibited. In addition, helicopters operating within a TCA had to install a VOR or TACAN reciever by Jul 1, 1989.

19890115	Jan 15, 1989: The Surface Movement Guidance and Control System (SMGCS), a red-and-green traffic light system for runways and taxiways, began a one-year test at New York Kennedy airport. The red lights, called "stop bars," warned pilots not to enter runways until controllers issued clearance and switched on green lights leading to the runway center line. An improved version received further testing at Kennedy during 1991, and on Dec 10, 1992, Seattle-Tacoma International Airport became a demonstration airport for the first FAA-approved stop bar system. Seattle's system, developed by the Port of Seattle's airport management team, FAA, and airport users, served as the prototype for development of national standards for low visibility operations under FAA's Runway Incursion Plan. (See Feb 7, 1991.) On Jun 1, 1993, Hartsfield-Atlanta International Airport became the second airport in the Untied States to begin using the SMGCS plan.
19890120	Jan 20, 1989: George Bush became President, succeeding Ronald Reagan.
19890124	Jan 24, 1989: FAA Administrator T. Allan McArtor reestablished the Administrator's Executive Committee, or EXCOM (see Feb 5, 1973). The four executive directors and the general counsel made up the membership of the reconstituted committee, with the Executive Director for Policy, Plans, and Resource Management serving as permanent chair. The committee's primary function was to review and evaluate the recommendations of the Administrator's Review Committee on the budget, policy, and other critical issues. The EXCOM was replaced on Nov 24, 1989, by the Executive Board. The Deputy Administrator served as the permanent chair of the board, with the Executive Director for Policy, Plans, and Resource Management serving as alternate chair. (See Mar 10, 1994.)
19890130	Jan 30, 1989: Effective this date, FAA established a Research, Engineering, and Development Advisory Committee.
19890206	Feb 6, 1989: Samuel K. Skinner became Secretary of Transportation, succeeding James H. Burnley with the change of administrations. A lawyer from Illinois, Skinner had been chairman of a regional transportation authority and had managed the Bush Presidential campaign in the state. He served as Secretary until becoming President Bush's chief of staff on Dec 16, 1991.
19890208	Feb 8, 1989: A Boeing 707 crashed into a fog-shrouded mountain on the Azores island of Santa Maria with the loss of all 144 persons aboard. The small U.S. charter company Independent Air had operated the aircraft.
19890210	Feb 10, 1989: FAA issued a new rule upgrading the fire safety standards for baggage and cargo compartments in existing airline aircraft. The new standards required that all cargo compartments larger than 200 cubic feet that were inaccessible to crewmembers in flight be lined with rigid fiberglass or comparable materials on their sidewalls and ceilings to more effectively resist the spread of fire. The airlines had two years from the effective date of the new regulation to comply. (See May 16, 1986, and Nov 14, 1996.)

19890217	Feb 17, 1989: Effective this date, T. Allan McArtor resigned as FAA Administrator. The post of Acting Administrator was filled by Robert Whittington, whose regular position was now Executive Director for Policy, Plans, and Resource Management. (See Jun 30, 1989.)
19890228	Feb 28, 1989: FAA's first operational Automated Weather Observing System (AWOS) began service, and the agency had installed 50 more the end of Sep 1990. AWOS equipment automatically gathered weather data from various locations around an airport and transmitted that information directly to pilots by means of computer-generated voice message (see Jan 26, 1983). In cooperation with the National Weather Service, FAA also pursured a program to acquire Automated Surface Observing System (ASOS) equipment, which offered additional percipitation sensing capabilities. The agency began ASOS installation in Aug 1991, and had commissioned over 60 by April 1996.
19890304	Mar 4, 1989: Upon the expiration of a Federally imposed cooling-off period, the union representing Eastern's machinists went on strike, supported by large numbers of the airline's pilots and flight attendants. Approximately ninety percent of Eastern's planes were grounded. The airline's attempt legally to force pilots back to work failed on Mar 7, when a Federal judge ruled that the pilots could continue their sympathy strike. On Mar 9, Eastern filed for protection under Chapter 11 of the Federal Bankruptcy Code. On Nov 21, President Bush vetoed legislation which would have set up a commission to investigate the dispute between Eastern's unions and its management. The next day, leaders of the pilot union voted to end their strike, and on Nov 23 the flight attendant union also told its members to return to work. The machinists' strike continued. (See Jun 2, 1988, and Apr 18, 1990.)
19890322	Mar 22, 1989: Fire consumed one of the mobile lounges used at Dulles International Airport to transport passengers from the terminal to aircraft, injuring two passengers. The day before the fire, a ramp worker at Dulles had been crushed to death under the wheels of a lounge. As a result of the accidents, airport officials on Mar 23 ordered maintenance inspections on all mobile lounges and retraining courses for all lounge drivers.
19890331	Mar 31, 1989: The Acquisition and Materiel Service was retitled the Logistics Service, its name prior to Oct 29, 1982. (See Sep 30, 1991.)
19890331	Mar 1989: The U.S. licensed commercial space industry made its first launch when Space Service, Inc., sent a scientific payload on a suborbital trip aboard a Starfire rocket. Later in 1989, the first U.S. licensed commercial orbital launch was successfully carried out on Aug 27 by the McDonnell Douglas corporation, using a Delta I launch vehicle.
19890406	Apr 6, 1989: In Lebanon, NH, FAA commissioned the first permanent, Federally funded Microwave Landing System (MLS) at a commercial airport. The Hazeltine Corporation had delivered the system to the agency under a contract for 178 MLS units. On Aug 7, 1989, however, FAA notified Hazeltine that it was terminating the contract because of the company's failure to meet the specified delivery schedule. (See May 20, 1987, and Dec 6, 1989.)

19890501	May 1, 1989: FAA and the National Air Traffic Controllers Association (NATCA) concluded their first labor agreement. (Signing on behalf of the union was R. Steve Bell, who had been elected president in 1988.) Negotiators had reached a tentative agreement in January, and union members ratified the contract on Apr 18. (See Jun 19, 1987, and Aug 1, 1993.)
19890502	May 2, 1989: FAA commissioned the first operational ASR-9 airport surveillance radar (see Sep 30, 1983). The new radar employed advanced Doppler technology to filter out radar reflection, and was capable of detecting a one square meter target at a distance of 60 nautical miles. FAA planned to equip every major airport with an ASR-9, and 121 of them had been commissioned by the end of FY 1996. With the introduction of the ASR-9 radars, the older ASR-7 and -8 units would be used to replace aged ASR-4 and -5 radars.
19890505	May 5, 1989: FAA's National Data Interchange Network 1A (NADIN 1A) became fully operational, supplanting several independent communications networks with a single, efficient means of transmitting weather and flight plan data. The agency had originally contracted for the system in Nov 1980. On Mar 31, 1995, FAA commissioned an upgraded version designated NADIN II.
19890607	Jun 7, 1989: New York real estate developer Donald Trump acquired Eastern Air Lines' shuttle operation between Washington, New York, and Boston, and began service under the name Trump Shuttle the next day. The venture proved unprofitable, however, and on Apr 12, 1992, USAir began operating the renamed USAir Shuttle under a management contract with a group of banks.
19890616	Jun 16, 1989: FAA issued a rule limiting the distance between emergency exits on transport category planes to no more than 60 feet. The rule applied to all new transport planes certificated after Jul 23 and to all newly manufactured airplanes of older type designs produced after Oct 16, 1987. It also prevented modifications, such as deactivation of exits, to increase the distance between exits to more than the 60 foot standard.
19890618	Jun 18, 1989: FAA implemented a five-year Pay Demonstration Project to provide a quarterly retention/recruitment allowance of up to 20 percent of base pay. The project covered approximately 2,100 air traffic, flight standards, and airway facilities personnel working at 11 hard-to-staff facilities in the New York, Chicago, Los Angeles, and Oakland areas. (See May 26, 1994.)
19890630	Jun 30, 1989: FAA broke ground for its new high technology training complex in Oklahoma City, named for General Thomas P. Stafford, an astronaut. The agency dedicated the building's tower cab simulation laboratory on Jan 25, 1991, then marked the full opening of the Stafford Building with a ceremony on Mar 11, 1992.

19890630

Jun 30, 1989: Admiral James B. Busey (USN, Ret.) became FAA's eleventh Administrator, succeeding T. Allan McArtor (see Jul 22, 1987). Busey took the oath a second time in a public ceremony on Jul 11. The new Administrator had been on active duty with the Navy when President Bush announced his selection on Mar 17. He retired from the Navy in May, and the Senate confirmed his nomination on Jun 23. Enactment of Public Law 101-47 exempted him from the legal provision barring active or retired military officers from becoming FAA Administrator.

Born in 1932 in Peoria, Ill., Busey attended the University of Illinois in Urbana, and received a B.S. and master's in management from the Navy Postgraduate School. During a 37-year career with the Navy, Busey rose from enlisted ranks to become a full admiral. An experienced pilot and a winner of the Navy Cross for combat action in Vietnam, he served as commander of the Naval Aviation System Command while a vice admiral. Busey's other positions included Vice Chief of Naval Operations, Auditor General of the Navy, and Deputy Chief of Naval Materiel, Resource Management. Prior to becoming FAA Administrator, Busey served for two years as Commander-in-Chief of U.S. Naval Forces in Europe and Commander-in-Chief of Allied Forces in Southern Europe, a NATO command. He held the post of FAA Administrator for one year and five months. (See Nov 20, 1991.)

19890719

Jul 19, 1989: A United Airlines DC-10 crashed while attempting an emergency landing in Sioux City, Iowa, after debris from a failed engine damaged the aircraft's control system. The accident killed 110 of the 296 people on board. On Aug 3, FAA announced the formation of an agency/industry task force on improving aircraft survivability following major in-flight structural damage (see, Jun 5, 1990). Preliminary investigation of the accident indicated that one of the two titanium disks holding the engine's fan blades separated, either intact or in fragments, from the rest of the engine. On Sep 15, FAA issued the first of several directives requiring fan disk inspections. In its final report on the crash, the National Transportation Safety Board listed the probable cause as the failure of the airline's engine overhaul facility to detect a fatigue crack in the fan disk, a failure the Board attributed to inadequate consideration of human factors limitations.

19890824

Aug 24, 1989: FAA established the Charlotte, N.C. terminal control area (TCA), the first new TCA since 1980 (see May 15, 1980). Additional TCAs were established at: Memphis, Oct 19, 1989; Salt Lake City, Nov 16, 1989; Phoenix, Jan 11, 1990; Orlando and Tampa, Sep 20, 1990; and the Washington Tri-Area (which superceded the Washington TCA and encompassed Andrews AFB, and the Washington National, Dulles International, and Baltimore-Washington airports), Mar 7, 1991. This brought the total of TCAs to 29. (See Dec 17, 1991.)

19890831

Aug 31, 1989: FAA established the new pilot category of recreational pilot, requiring less training than a private pilot certificate. The agency intended the new category for pilots interested in flying basic, experimental, or homebuilt aircraft in close proximity to a home airport in which communication with air traffic control facilities was not required. At the same time, FAA established a required annual flight review for non-instrument-rated private pilots with less than 400 flight hours.

19890917	Sep 17, 1989: Hurricane Hugo slammed into the U.S. Virgin Islands before moving on to Puerto Rico and then South Carolina. Numerous FAA facilities in the storm's path suffered damage and service interruption. Destruction was especially heavy in the Virgin Islands, where two airport towers were badly damaged and a radar destroyed. Southern Region Headquarters took charge of the recovery effort, which included establishment of temporary mobile towers on the islands. The agency's DC-9 carried relief supplies to the Virgin Islands and evacuated four FAA employees and 35 dependents, as well as other Federal personnel and their families. Damage to FAA facilities on the mainland was less severe than in the Caribbean, although many employees suffered personal losses. Agency personnel established a relief fund to assist their coworkers affected by the storm. By the end of September most airports in the devastated areas had resumed operation.
19890928	Sep 28, 1989: Braniff again filed for protection under Chapter 11 of the U.S. Bankruptcy Code, and ceased all passenger operations on Nov 6. The company had previously suspended operations during 1982, but later resumed flights. (See Mar 1, 1984 and Jul 1, 1991).
19891001	Oct 1, 1989: A State Block Grant Pilot Program began on this date, as legislated by Congress (see Dec 30, 1987). Under the program, scheduled to run through Sep 30, 1991, FAA selected Illinois, Missiouri, and North Carolina to administer Federal grants for the development of nonprimary airports within their borders. Congress subsequently extended the program for one additional year under the Aviation Safety and Capacity Expansion Act of 1990. (See Jun 29, 1992.)
19891002	Oct 2, 1989: A directive issued on this date restructured the organization of the Associate Administrator for Air Traffic (see Sep 15, 1984) by abolishing the Office of Air Traffic Evaluations and Analysis and establishing a new Office of Air Traffic System Effectiveness. On Feb 22, 1990, another directive added an Office of Air Traffic Program Management. A further change came on Jul 3, 1990, with the abolition of the Air Traffic Operations Service and establishment of the Air Traffic Rules and Procedures Service and the Office of Air Traffic System Management. (See Nov 30, 1994.)
19891017	Oct 17, 1989: An earthquake, registering 7.1 on the Richter scale, shook northern California, damaging runways, disrupting airline service, and causing approximately $50 million damage to FAA facilities and equipment. Among the affected facilities were the San Francisco tower cab, which lost windows and its ceiling, and the San Jose tower, which lost a window and air conditioning unit; controllers nevertheless remained on duty to ensure the safety of flights aloft. FAA subsequently allocated $8 million in discretionary airport improvement funds for partial reconstruction of a runway at Oakland.
19891020	Oct 20, 1989: FAA issued a rule requiring newly built air transport aircraft to have public address systems with an independent power source to increase safety during emergency evacuation. (See Jul 27, 1973.)

19891027	Oct 27, 1989: FAA published a rule improving type certification standards for transport category rotorcraft by adding requirements for "flaw tolerance," a design concept aimed at ensuring that failure of a part does not cause an accident, and by extending requirements for structural fatigue evaluations.
19891206	Dec 6, 1989: FAA issued a precision approach landing systems policy, outlining how it planned to transition from the Instrument Landing System (ILS) to the Microwave Landing system (MLS). An international agreement obligated the agency to provide MLS service at all U.S. international runways by Jan 1, 1998: Until that date, FAA determined to install new ILS's only at those locations that had an immediate and critical requirement for precision approach service that could not be delayed until MLS deployment. (See Apr 6, 1989, and Jun 21, 1991.)
19891214	Dec 14, 1989: Alaska's Redoubt Volcano began a series of eruptions, emitting ash that hampered aviation. FAA used a satellite-based system, recently developed with the National Oceanic and Atmospheric Administration, to track the ash and warn aviators. On Dec 15, however, a Boeing 747 lost all engine thrust temporarily after encountering an ash cloud, and ash from Redoubt damaged four other airliners during the following three months. (See May 18, 1980, and Jun 15, 1991.)
19891214	Dec 14, 1989: FAA authorized use of the Oceanic Display and Planning System (ODAPS) at the Oakland Air Route Traffic Control Center (see Oct 1984). ODAPS achieved initial operational capability at the New York center during FY92. (See Oct 1984 and Jun 21, 1995.)
19891214	Dec 14, 1989: Alliance Airport, the nation's first industrial airport, officially opened. Located fifteen miles northwest of Dallas-Fort Worth airport, the new facility incorporated air, rail, and highway connections. FAA grants provided major funding for construction of the airport, which stood on land donated by industrialist Ross Perot, Jr.
19891221	Dec 21, 1989: DOT awarded AT&T a contract under the Office Automation Technology and Services (OATS) program to replace many computer brands and software packages throughout the Department with a standardized system for desktop automation. FAA, the lead agency for OATS, observed the coming of the new system with a ceremony at headquarters on Feb 20, 1990.
19891226	Dec 26, 1989: DOT announced the creation of the Airport Capacity Funding Advisory Committee, formed at the behest of Congress to recommend new approaches to funding airport capacity projects. The Secretary of Transportation selected representatives from the airlines and airports to serve on the board, which reported to the Secretary through FAA. On Apr 19, 1990, the committee’s report made recommendations concerning the design of possible Passenger Facility Charges, should these be authorized by legislation (see Nov 5, 1990).

1990

19900108 Jan 8, 1990: The Department of Transportation officially opened TransExpo at the Sheraton Washington Hotel. The three-day exhibition, which attracted between 8,000 and 10,000 people, was the biggest U.S. transportation trade show since Transpo 72 (see May 27, 1972).

19900110 Jan 10, 1990: The McDonnell Douglas MD-11 first flew. A medium/long-range transport designed as a successor to the DC-10, the aircraft could seat up to 323 passengers in its standard passenger version. The MD-11 received Federal Aviation Administration certification on Nov 8 and first entered commercial service on Dec 20, 1990, with Finnair.

19900118 Jan 18, 1990: On its landing roll at Atlanta Hartsfield airport, an Eastern Air Lines Boeing 727 collided with a Beechcraft King Air 100 that had landed just before it. The accident killed the pilot of the King Air, which was operated as a charter by Epps Air Service. FAA decertified the controller who cleared the Eastern flight to land. On Apr 2, 1991, the majority of the National Transportation Safety Board (NTSB) cited the controller's error as the accident's probable cause, while dissenting member Jim Burnett blamed inadequate separation standards. On May 29, 1991, NTSB announced a revised finding expanding the probable cause to include the failure of air traffic control procedures to take into consideration occasional lapses in human performance. Chairman James Kolstad dissented, saying that use of existing procedures could have prevented the accident.

19900125 Jan 25, 1990: Attempting to land at New York Kennedy airport, a Boeing 707 operated by the Colombian airline Avianca ran out of fuel and crashed on Long Island, fatally injuring 73 of the 158 people on board. On Feb 25, demonstrators drove a procession of automobiles through Kennedy as a protest against air traffic controllers' alleged mishandling of the flight. The National Transportation Safety Board cited the probable cause of the accident as the crew's failure to manage their fuel load or alert controllers to their fuel emergency. Among the contributing factors, however, the Board pointed to a lack of clear, standardized terminology on fuel emergencies, as well as inadequate traffic flow management. FAA's actions in reponse to the accident included steps to address these concerns and to stress the need for clear pilot/controller communication and for air carriers to be thoroughly familiar with rules and procedures.

19900130 Jan 30, 1990: The Department of Transportation (DOT) issued an order inviting applications from eligible foreign airlines wishing to serve U.S. cities having no single-plane service to the applicant's home countries. On Mar 27, KLM Royal Dutch Airlines became the first of several carriers that received route awards under this program. During 1990, DOT announced agreements with a number of countries making possible expanded air service.

19900213	Feb 13, 1990: The Direct User Access Terminal Service (DUATS) began operating, allowing private pilots to receive weather briefings and file flight plans from home computers. An FAA contractor provided the service free to civilian pilots and students. DUATS took over most of the functions of the Interim Voice Response System (IVRS), which FAA discontinued on Sep 30, 1990. (See Mar 14, 1984.)
19900216	Feb 16, 1990: Representatives of FAA and the Soviet aviation ministry signed a memorandum promoting cooperation on air navigation between Alaska and the Soviet Far East.
19900221	Feb 21, 1990: Administrator Busey announced organizational changes that included establishment of an Executive Director for Acquisition, a move designed to streamline the agency's procurement process. The action brought the number of Executive Directors to five (see Jun 16, 1988, and Sep 30, 1991). As documented in a directive issued on Jul 6, 1990, the newly created Executive Director controlled two new Offices: Acquisition Policy and Oversight; and Independent Operational Test and Evaluation Oversight. Other changes implemented by this directive included: conversion of two Associate Administrators (for Airports and for Policy, Planning, and International Aviation) to Assistant Administrators reporting directly to the Administrator; retitling of the Executive Director for Policy, Plans, and Resource Management as the Executive Director for Administration and Resource Management; establishment under the Executive Director for System Operations of an Office of System Capacity and Requirements with functions including those of the former Airport Capacity Program Office; abolition of two Offices: Operations Resource Management and Operations Planning and Policy; establishment of a new Associate Administrator for System Engineering and Development to replace the Associate Administrator for Advanced Design and Management Control; and retitling the Associate Administrator for Aviation Safety as an Assistant Administrator.
19900225	Feb 25, 1990: In response to a congressional mandate, prohibition of smoking went into effect on virtually all scheduled U.S. domestic airline flights. Flights to or from Alaska or Hawaii scheduled to last six hours or more were excepted. The prohibition included foreign carriers operating between two points within U.S. territory. The ban did not apply to the flight deck. (See Apr 23, 1988, and May 7, 1996.)
19900302	Mar 2, 1990: FAA issued a final rule requiring air carriers to restrict seats in exit rows to persons capable of activating emergency exits and performing other emergency functions during evacuation. Carriers were given until Oct 5, 1990, to comply (see Oct 27, 1992). Also on Mar 2, the Department of Transportation issued a revised regulation prohibiting airline discrimination against disabled passengers. The rule required accomodation for wheelchairs and limited an airline’s ability to restrict the number of disabled persons on a flight or to require passengers to travel with an attendant. It also including a ban on seating restrictions for the disabled, except to comply with FAA's safety rule.

19900303	Mar 3, 1990: FAA assigned the first permanent Civil Aviation Security Liaison Officer (CASLO) oversees, marking the beginning of a program established as a result of the Pan American Flight 103 bombing. The first CASLO was stationed at the American Embassy in London. (See Jan 3, 1989, and May 15, 1990.)
19900305	Mar 5, 1990: FAA's Administrator Busey announced a new policy on fostering compliance with FAA regulations by private pilots. He described a series of changes emphasizing communication and education rather than sanctions. Also in March, and as part of that program, Busey revoked the enforcement bulletin implementing a 60-day suspension of the certificate of any pilot who violated a Terminal Control Area (see Oct 10, 1986). Instead, inspectors were allowed to recommend lesser penalities and remedial training for the infraction.
19900306	Mar 6, 1990: FAA issued a rule requiring private aircraft flying into or out of the country through an Air Defense Identification Zone (ADIZ) to be equipped with altitude-reporting (Mode C) transponders by Dec 30. (See Sep 1, 1987.)
19900306	Mar 6, 1990: An SR-71 Blackbird reconnaissance aircraft landed at Dulles International after a record-breaking 68 minute flight from the Pacific coast, and was then retired to the National Air and Space Museum collection.
19900307	Mar 7, 1990: FAA published three airworthiness directives requiring extensive structural modifications to older Boeing 727s, 737s, and 747s. The first in a series of directives dealing with older airliners, the rules reflected a new FAA approach adopted in 1988 (see Jun 1 of that year). To combat the hazard of structural deterioration, the agency had historically relied upon mandatory inspections that became more frequent as aircraft aged. Now, however, it required preventive modifications for high-service airliners and the replacement of certain parts after a specified number of flight hours or takeoff-and-landing cycles. FAA also asked for comments on a proposal to require corrosion control programs for certain aging Boeing aircraft. This requirement, which became effective on Dec 31, 1991, was also extended to other aircraft types.
19900308	Mar 8, 1990: A three-man Northwest Airlines flight crew took off from Fargo, N.D., despite an FAA inspector's warning that they might be in violation of a rule against flying an aircraft within eight hours of consuming alcohol. After their landing in Minneapolis, the three crewmembers were given tests that showed their blood alcohol exceeded the permissible level. FAA revoked the trio's airman certificates the next day. As a result of this incident, FAA announced on Mar 14 a six-point action plan designed to tighten drug and alcohol enforcement investigation procedures. On Aug 20, a Federal jury in Minneapolis convicted the three men of a felony for operating a common carrier while under the influence of alcohol, and they received jail sentences in October. (See Apr 17, 1985.)

19900312	Mar 12, 1990: Barry L. Harris became FAA's Deputy Administrator, succeeding Barbara McConnell Barrett (see Apr 1, 1988). President Bush had announced the nomination on Nov 6, 1989. A native of Cincinnati, Ohio, Harris attended Harvard and Denison Universities and served as an officer in the U.S. Army. His career included positions as assistant city manager for Gloucester, Mass., director of community programs for the Boston Metropolitan Area Planning Council, and work as a writer and producer for the news media. Prior to joining FAA, he was president and chief executive of Alliance Corp., in Portland, Maine, and Community Services, Inc., in Gloucester. Harris had been cochairman of the Bush campaign's state finance committee in Maine, and had served on the campaign's national finance committee. He was an experienced pilot, qualified to fly helicopters as well as piston- and jet-powered fixed wing aircraft.
	Harris served as Acting Administrator during the period between the tenures of Administrators Busey and Richards (see Dec 4, 1991, and Jun 27, 1992). He remained as Deputy for the rest of the Bush Administration, resigning effective Jan 20, 1993.
19900327	Mar 27, 1990: In a speech to the Aero Club of Washington, Administrator Busey urged all airlines to establish a safety self-audit program. FAA would not penalize airlines for inadvertent violations uncovered by the audits, provided the problem were promptly corrected and reported to the agency. (See Apr 8, 1992.)
19900402	Apr 2, 1990: A National Transportation Safety Board reorganization effective this date included establishment of a new Office of Aviation Safety.
19900413	Apr 13, 1990: A Federal court declared FAA's rules of practice in assessing civil penalties not exceeding $50,000 to be invalid because the agency had failed to give public notice of the proposed rules or to allow a period of public comment (see Dec 30, 1987). FAA accordingly suspended the program, issued a rulemaking proposal, and followed this with a final rule effective Aug 2, 1990. A law enacted Aug 15, 1990, provided new legislative authority for the program, extending it until Aug 1, 1992. The program became permanent with the Civil Penalty Assessment Act enacted on Aug 26, 1992.
19900418	Apr 18, 1990: A Federal bankruptcy judge removed Eastern Air Lines from the control of Texas Air Chairman Frank Lorenzo and placed it in the hands of special trustee, Martin Shugrue. Eastern had lost more than $1 billion since it filed for Chapter 11 protection on Mar 9, 1989. On Aug 9, 1990, Scandinavian Airline System bought Lorenzo's interests in Continental Airline Holdings (formerly known as Texas Air Corporation), which owned Eastern and Continental airlines. Besides stepping down as chairman of Continental Airlines Holdings, Lorenzo agreed not to work for a Continental competitor for seven years, although this stipulation was later dropped as part of a legal settlement. (See Mar 4, 1989, and Jan 18, 1991.)

19900510	May 10, 1990: FAA announced that a contract for development of a prototype program for air traffic control training had been awarded to Hampton University, a designated Historically Black College or University (HBCU). Hampton thus joined the Air Traffic Control Training Center at Eden Prarie, Minn., as one of two institutions to receive Federal funds as part of the Collegiate Training Initiative (CTI) begun by FAA earlier in the year. Three other educational institutions subsequently joined the CTI, but without receiving Federal funds. Graduates of CTI programs became eligible to apply to FAA for employment as developmental controllers without having to attend the FAA Academy.
19900513	May 13, 1990: The FAA Depot at the Aeronautical Center was renamed the FAA Logistics Center.
19900515	May 15, 1990: The President's Commission on Aviation Security and Terrorism released its report, which focused on the bombing of Pan American Flight 103 (see Dec 21, 1988). The report included criticism of FAA and recommendations for improving security and combating terrorism. Among its recommendations, the report suggested that FAA: elevate is security division to a position reporting directly to the Administrator (see Jun 14, 1990); appoint federal security managers to manage security at domestic airports (see Oct 1, 1991); launch a research and development program to produce techniques and equipment to detect small amounts of plastic explosives (see Nov 16, 1990); and make public notification of threats to civil aviation under certain circumstances.
19900601	Jun 1, 1990: The U.S. Secretary of State and Soviet Foreign Minister signed an agreement providing for expanded air service between their two countries. The accord was one of several pacts concluded in the context of a Washington summit meeting between Presidents Bush and Gorbachev. DOT subsequently authorized several airlines to provide new service to Soviet airports. On Jun 17, 1991, Alaska Airlines became the first U.S. carrier to offer scheduled service from the West Coast to the Soviet Far East. (See Apr 29, 1986, and May 25, 1993.)
19900605	Jun 5, 1990: FAA issued an Airworthiness Directive requiring modifications to the hydraulic system of certain DC-b0 aircraft to guard against possible loss of the flight control system. (See Jul 19, 1989.)
19900613	Jun 13, 1990: FAA dedicated its first child care center to be built "from the ground up" in a ceremony at the Aeronautical Center.
19900614	Jun 14, 1990: Secretary Skinner announced that he intended to create an Office of Intelligence and Security within OST, and that its Director would be Coast Guard Vice Admiral Clyde E. Robbins. At the same time, Administrator Busey announced the new FAA position of Assistant Administrator for Civil Aviation Security (see Jul 20, 1990). The actions were in part a response to recommendations of the President's Commission on Aviation Security and Terrorism (see May 15, 1990).
19900710	Jul 10, 1990: The U.S. Court of Appeals for the 9th Circuit upheld FAA's random drug testing program for the aviation industry. (See Nov 21, 1988, and Jul 25, 1991).

19900720	Jul 20, 1990: AN FAA directive issued this date established the new position of Assistant Administrator for Civil Aviation Security in response to a recommendation by the President's Commission on Aviation Security and Terrorism (see May 15, 1990). Orlo K. Steele, a retired Marine Major General, was appointed to fill that position on Nov 1. On Nov 23, FAA announced a new structure for the security organization. A Scientific Staff was created to advise Steele, and four new offices were established to handle: Policy and Planning; Program and Resource Management; Operations; and Intelligence.
19900726	Jul 26, 1990: FAA adopted a new rule, effective Nov 29, 1990, requiring pilots to consent to the release of information from the National Driver Register when applying for an FAA-required medical certificate. Pilots were also required to provide FAA with written notification of each driving conviction related to alcohol or drugs. The rule authorized FAA to deny, suspend, or revoke a pilot certificate if the individual concerned received two or more alcohol or drug-related convictions within a three-year period. (See Feb 17, 1987, and Feb 3, 1994.)
19900802	Aug 2, 1990: Iraq invaded and seized control of Kuwait. President Bush's response included immediate restrictions on air transportation between the U.S. and Iraq, and these prohibitions were extended to include occupied Kuwait on Aug 9. The United States also sent thousands of troops to Saudi Arabia in Operation Desert Shield. Among the other effects of the crisis during the rest of 1990 was a dramatic escalation of the rise in jet fuel prices. (See Aug 17, 1990.)
19900815	Aug 15, 1990: FAA and the Community College of Beaver County, Pa., signed an agreement under which the college would conduct a five-year prototype training program for air traffic controllers. Qualified graduates would be eligible to become controllers without attending the FAA Academy.
19900817	Aug 17, 1990: A portion of the Civil Reserve Air Fleet (CRAF) was called up for the first time in history as the Defense Department activated CRAF Level 1. Participating airlines provided aircraft and crews to expand U.S. airlift capability for the Operation Desert Shield deployment in the Middle East. (See Aug 2, 1990, and Sep 25, 1990.)
19900901	Sep 1, 1990: In accordance with DOT policy, smoking was prohibited in FAA facilities, although designated smoking areas were permitted where a complete ban was not feasible. The actual implementation date of the ban at specific locations was allowed to vary to allow for negotiation with unions.
19900906	Sep 6, 1990: A new Air Force One made its maiden voyage. The specially designed Boeing 747, and its identical backup plane, replaced two twenty-year-old Boeing 707s.
19900925	Sep 25, 1990: FAA released its first strategic plan, addressing six issue areas as well as aviation in the 21st Century. The plan, dated August 1990, was presented in the framework of the Secretary's National Transportation Policy (NTP), which Secretary Skinner had presented to President Bush on Mar 8, 1990. The NTP presented 169 guidelines and 65 legislative, regulatory, budget, and program initiatives to improve the nation's transportation network.

19900925	Sep 25, 1990: The United Nations voted to ban virtually all air traffic with Iraq, with the exception of certain humanitarian flights. (See Aug 2, 1990, and Jan 16, 1991.)
19900926	Sep 26, 1990: FAA issued a rule permitting airlines to develop alternative training for flight crews under the Advanced Qualification Programs (AQP). Developed by a government/industry task force, AQP was intended to promote flexibility and innovation in crew training techniques. A required element of the AQP option was Cockpit Resource Management (CRM) training, which focused on communications skills, coordination, and decision-making. By Aug 1996, 15 air carriers were participating in the AQP program. During that month, FAA announced that it had developed a new training tool to assist regional airlines in adopting the AQP approach.
19900928	Sep 28, 1990: FAA and the MITRE Corporation signed a five-year agreement under which MITRE would operate a new Center for Advanced Aviation System Development at the firm's facility in McLean, Va. The arrangement was subsequently renewed.
19900930	Sep 30, 1990: During fiscal 1990, which ended on this date, FAA began a Direct Route Program that allowed controllers greater flexibility in honoring pilots' requests to use more direct, fuel-saving routes. Renamed the National Route Program during the following fiscal year, the enhanced program permitted more cost-effective operations between 16 city pairs. By Sep 1994, the expanding program included 104 city pairs. (See Oct 1994.)
19901001	Oct 1, 1990: FAA began a "Manage to Budget" pilot project, to last at least one year, under which the managers of about 2,000 employees received new types of authority in an effort to speed personnel actions and achieve a requirements-driven budget process. The project was subsequently extended for a second year.
19901016	Oct 16, 1990: The Department of State announced that it had raised to $4 million the maximum reward for information helping to catch terrorists, due to $1 million donations from both the Air Transport Association and the Air Line Pilots Association. The rewards program had begun in 1984 with a maximum payment of $500,000, but Congress increased that limit to $2 million after the bombing of Pan American Flight 103 (see Dec 21, 1988).
19901105	Nov 5, 1990: The Omnibus Budget Reconciliation Act of 1990 authorized funding for FAA and other Federal entities for FY91-92. Title IX of that legislation included as subparts three acts pertaining to aviation:

	The Aviation Safety and Capacity Expansion Act included permission for FAA to draw on the Trust Fund for up to 75 percent of its operations and maintenance costs and authorized $5.5 billion for modernization of air traffic Facilities & Equipment over the two years. It also empowered the Department of Transportation to authorize airports to levy Passenger Facility Charges of up to $3. per enplaning passenger (see May 22, 1991). Other features of the law provided: encouragement of capacity development at former and current military airports (see May 30, 1991); continuation of the Essential Air Service program; development of a system of Auxiliary Flight Service Stations (see Nov 8, 1991); and more flexibility for FAA in procurement contracts.
	The Federal Aviation Administration Research, Engineering and Development Authorization Act further defined FAA's research functions (see Nov 3, 1988). It included a mandate for the establishment of a Catastrophic Failure Prevention Program to develop technologies to combat the failure of parts and equipment that could result in aircraft accidents.
	The Airport Noise and Capacity Act required airlines by mid-1999 to phase out Stage 2 noise-level jets (see Feb 18, 1980), although those carriers that met this deadline for 85 percent of their fleet might apply to operate their remaining Stage 2 aircraft until the end of 2003. The law also directed the Secretary of Transportation to prepare a national noise policy by mid-1991, and placed limitations were upon airports' authority to impose noise restrictions (see Sep 19, 1991).
19901114	Nov 14, 1990: Pan American and United Airlines signed an agreement under which United would pay $400 million for Pan Am's routes to London Heathrow and certain other assets. (See Nov 7, 1985, and Jan 8, 1991.)
19901115	Nov 15, 1990: FAA announced that it had completed installation of the Enhanced Traffic Management System (ETMS), which would become operational nationwide on Dec 3. ETMS was a computer system able to predict nationwide air traffic demands, permitting traffic managers to take corrective action. (See May 17, 1987, and Apr 15, 1994.)
19901116	Nov 16, 1990: President Bush signed the Aviation Security Improvement Act of 1990, which: required certain regulatory actions affecting several agencies; mandated new reports, organizational arrangements, and staffing requirements; and empowered FAA to conduct an accelerated research and development program in support of aviation security. (See May 15, 1990, Aug 15, 1991, and Oct 1, 1991.)
19901203	Dec 3, 1990: For the second time within eight years (see Sep 24, 1983), Continental Airlines filed for protection under Chapter 11 of the Federal bankruptcy code. (See Jan 7, 1993.)

1991

19910104 Jan 4, 1991: In the first of a series of telecommunications failures which created air traffic control problems during this year, the AT&T company's maintenance workers accidentally cut a fiber-optic telephone cable in New Jersey, disrupting communications between air traffic control sites and delaying air travel for several hours in the New York area. Other significant delays occurred: on May 4, when a farmer cut a fiber cable, limiting operations at four air route traffic control centers; on Sep 17, when an AT&T equipment failure in New York City cut controller communications and disrupted airline travel in the Northeast; and on Nov 5, when AT&T maintenance errors disrupted New England long distance telephone service, delaying flight operations at Boston Logan airport. (See May 8, 1988.)

19910108 Jan 8, 1991: Pan American World Airways filed for protection under Chapter 11 of the bankruptcy laws. On Aug 12, 1991, a Federal bankruptcy judge approved a deal under which Delta Air Lines would acquire major Pan American assets and also own 45 percent of a downsized PAA. On Sep 1, Delta began operating Pan Am's shuttle serving Washington, New York, and Boston. On Oct 18, DOT gave final approval to the sale of most of Pan Am's remaining transatlantic routes to Delta. (See Dec 4, 1991.)

19910113 Jan 13, 1991: An "interim geographic adjustment" gave an eight percent pay raise to 5,933 FAA employees at facilities in the New York, Los Angeles, and San Francisco areas. The adjustment did not result in raises for those already receiving local special pay rates of more than eight percent, or for those already receiving a 20 percent retention allowance under the Pay Demonstration Project (see Jun 18, 1989).

19910116 Jan 16, 1991: One day after the expiration of a United Nations deadline for Iraqi withdrawal from Kuwait, military aircraft of the U.S.-led coalition began Operation Desert Storm, striking targets in Iraq and occupied Kuwait. At 7:00 pm EST, shortly after the attacks began, FAA declared Level 4 airport/airline security, the highest domestic level ever imposed. On Jan 17, the Department of Defense activated Level 2 of the Civil Reserve Air Fleet (CRAF) program, calling upon U.S. airlines to provide additional transport aircraft. American and allied troops routed Iraqi forces in a ground assault that began on Feb 24, and a U.S.-proclaimed ceasefire took effect at midnight EST on Feb 27. (See Aug 17, 1990, and May 14, 1991.)

19910118 Jan 18, 1991: Eastern Air Lines ceased flight operations as of midnight on this date, after nine months under the control of a trustee appointed by a bankruptcy judge (see Apr 18, 1990). On Jan 24, the International Association of Machinists and Aerospace Workers ended their strike of over 22 months against the airline. On Feb 27, Eastern agreed to plead guilty to Federal charges involving falsification of aircraft maintenance records, and was fined $3.5 million, while prosecutors dropped other related charges. The case stemmed from a grand jury indictment on Jul 25, 1990.

19910123	Jan 23, 1991: The Department of Transportation announced that it would relax restrictions on foreign investment in U.S. airlines. Under the new policy, investment of up to 49 percent of total equity obtained from foreign sources would not generally, by itself, be considered an indicator of foreign control.
19910201	Feb 1, 1991: In a night approach to Los Angeles International Airport, a USAir 737 landed atop a Sky West commuter Fairchild Metroliner III. Both planes then slid into a building as fire began. Fatalities included all 12 persons aboard the commuter flight and 22 of the 89 aboard the USAir flight. On Oct 22, the National Transportation Safety Board listed the accident's probable cause as air traffic control management deficiencies that lead to a controller's issuing inappropriate clearances. FAA actions after the accident included assigning additional controllers to the tower and adjusting runway lights to prevent glare from obstructing the view from the tower. (See Feb 7, 1991.)
19910207	Feb 7, 1991: FAA announced a Runway Incursion Plan to cut incursions through actions that included tests of advances in runway marking, lighting, and signs at four airports: Boston, Seattle-Tacoma, Pittsburgh, and the new Denver airport under construction (see Jan 15, 1989). On Feb 15, the agency also amended its ATC Handbook to prohibit controllers from authorizing aircraft to hold at a taxiway/runway intersection at night or when the intersection was not visible from the tower. The change was among several that FAA had been considering as the result of a ground procedures review, begun in early 1990, that also resulted in the Runway Incursion Plan. (See Feb 1, 1991.)
19910208	Feb 8, 1991: FAA's first annual Capital Investment Plan (CIP) became effective, superseding the National Airspace System Plan, or NASP (see Jan 28, 1982). The new plan incorporated the NASP projects, over 86 percent of which were completed or in field implementation. The CIP was issued to the public on Apr 23.
19910214	Feb 14, 1991: First Lady Barbara Bush took a commercial flight from Washington, D.C., to Indianapolis to reassure the public about the terrorist threat to airline security stemming from the conflict with Iraq. (See Jan 16 and May 14, 1991.)
19910218	Feb 18, 1991: FAA announced plans to build a new terminal radar control (TRACON) facility at Elgin, Ill., to handle air traffic in the Chicago metropolitan area. Construction began during fiscal year 1993, and the facility was dedicated on Nov 10, 1996.
19910226	Feb 26, 1991: The Metropolitan Washington Airport Authority dedicated a new terminal for international arrivals at Dulles International Airport.
19910301	Mar 1, 1991: The United States and 39 other nations signed a pact requiring the addition of a chemical marking agent to plastic explosives during manufacture to assist their identification by use of vapor detectors.

19910303	Mar 3, 1991: All 25 persons aboard a United Airlines flight died when their Boeing 737 crashed on approach to Colorado Springs airport. Reported theories as to the cause included a "rotor" mountain wind pattern or a mechanical flaw. The National Transportation Safety Board conducted an exhaustive investigation, but reported on Dec 8, 1992, that it could not explain the crash. (See Sep 8, 1994.)
19910311	Mar 11, 1991: The United States and the United Kingdom reached an agreement on airline service which included permission for United and American Airlines to succeed Pan American and Trans World Airways in serving London Heathrow. In return, British airlines received supplementary rights involving increased access to U.S. airports.
19910311	Mar 11, 1991: FAA began a series of hearings in New Jersey to obtain public comment on the noise effects of air traffic changes under the Expanded East Coast Plan (EECP), which had been implemented in phases between Feb 1987 and Mar 1988 (see Aug 25, 1988). The meetings reflected strong citizen discontent with the EECP. On Jun 28, FAA announced a contract with PRC, Inc., to assist in developing an Environmental Impact Statement (EIS) on the effects of New Jersey flight patterns revised under the EECP. In Oct 1992, Congress acted to freeze the pay levels of certain FAA employees involved with the project until the final impact statement was completed. In a response to another congressional action, FAA on Oct 28 announced a series of public meetings in New York and Connecticut as part of an Aircraft Noise Mitigation Review for the New York metropolitan area (see Nov 20, 1992). On Nov 12, 1992, FAA released a Draft Environmental Impact Statment (DEIS) on the EECP's effects on New Jersey. The agency scheduled public hearings and gathered public views on the DEIS during a comment period that was subsequently extended until Nov 23, 1993. (See Oct 31, 1995.)
19910331	Mar 31, 1991: Construction of the Development Demonstration Facility to assess segments of the Advanced Automation System was completed in Gaithersburg, Md. FAA accepted the facility on May 31, and the first operational suitability demonstration began on Aug 13.
19910401	Apr 1, 1991: A Northwest Airlines 747 began a series of test flights in Soviet airspace as part of a cooperative program to develop a satellite navigation system in which aircraft would receive signals from both the U.S. Global Positioning System (GPS) and the Soviet Global Orbiting Navigation Satellite System (GLONASS). A US/USSR exchange of receivers took place in Montreal on Apr 27. GPS was a satellite-based radio-navigation system controlled by the U.S. Department of Defense. When completed, it would include 24 satellites orbiting 11,000 miles above the earth. At an International Civil Aviation Organization meeting on Sep 5, 1991, FAA Administrator Busey announced that the United States was offering world civil aviation the use of its GPS for at least 10 years, starting in 1993 when the system was to be fully operational. (See May 23, 1983, and Oct 14, 1992.)

19910404	Apr 4, 1991: FAA completed transfer of more than 600,000 square miles of oceanic airspace from the Miami and Boston en route centers to the New York center. The action completed the last phase of a larger restructuring begun in Sep 1989, with transfer of airspace from the San Juan center to the New York center.
19910404	Apr 4, 1991: FAA issued a rule increasing protection against cabin fires by upgrading requirements for lavatory fire detectors, lavatory trash receptacles, and hand fire extinguishers. (See Mar 29, 1985.)
19910405	Apr 5, 1991: An Embraer 120 commuter plane crashed on approach to Brunswick/Glynco Jetport, Ga. All 23 persons aboard the Atlantic Southeast Airlines flight died in the accident, including former Sen. John G. Tower (R-Tex.). Citing several incidents, FAA during May required inspections of certain Hamilton Standard propellers used on the Embraer 120 and other aircraft In Apr 1992, the National Transportation Safety Board cited the probable cause of the crash as malfunction of the left propeller control unit. As contributary factors, the Board listed deificencies in the design of the control unit and FAA's approval of that design.
19910416	Apr 16, 1991: FAA announced that educators could now obtain information on the agency's aviation education programs by using any modem-equipped personal computer to access the Federal Education Information Exchange System (FEDIX).
19910417	Apr 17, 1991: The Supreme Court ruled that passengers on international flights can not recover damages for purely emotional or mental injuries.
19910501	May 1, 1991: A majority of those aviation safety inspectors casting ballots voted for representation by the Professional Airways Systems Specialists, known as PASS (see Dec 31, 1981). On May 10, PASS was certified as the bargaining agent for this previously non-union group of 1,913 FAA employees.
19910502	May 2, 1991: FAA ordered the Collins version of the Traffic Alert and Collision Avoidance System used on some airliners taken out of service temporarily for correction of a computer problem that led to false traffic warnings.
19910514	May 14, 1991: DOT completed the LORAN-C long range navigation system by closing the mid-continent coverage gap. (See Jun 2, 1986.)
19910514	May 14, 1991: As the Gulf crisis waned, DOT announced that airport security measures would soon be adjusted to a modified Level 2, a transition that was completed by May 27. The Defense Department deactivated the Civil Reserve Air Fleet (CRAF) Level 2 on May 17, then deactivated Level 1 on May 24. During Operation Desert Shield/Storm, 27 U.S. carriers had flown 5,441 CRAF missions, carrying 709,000 people and 126,000 tons of equipment and supplies. (See Jan 16, 1991.)

19910520 May 20, 1991: In an effort to reduce the bird hazard to aircraft, U.S. Department of Agriculture biologists shot sea gulls at New York Kennedy airport between this date and Aug 8. More than 14,000 gulls were killed during the program, which was funded by the airport authority and lasted until Aug 8. Similar programs took place at the airport during the next three years, but the practice was suspended in 1995 due to litigation.

19910522 May 22, 1991: FAA issued a rule under which the agency could authorize airports to impose Passenger Facility Charges (PFCs) to finance airport-related projects, in accordance with the Aviation Safety and Capacity Expansion Act (see Nov 5, 1990). Airlines would be compensated for the service of collecting the fees from passengers departing and making connections. On Jan 31, 1992, FAA announced its first PFC program approval, which authorized Savannah (Ga.) International Airport to begin collecting a $3 fee on Jul 1.

19910523 May 23, 1991: The FAA's Aviation Rulemaking Advisory Committee, which had been established on Feb 5, 1991, held its first meeting.

19910526 May 26, 1991: All 223 persons aboard an Austrian Lauda Air flight died when their Boeing 767 crashed after takeoff from Bangkok, Thailand. On Jun 6, FAA confirmed that the thrust reverser on one engine was found fully deployed among the wreckage (and a Thai government report later stated that uncommanded deployment of a thrust reverser was the accident's probable cause). Beginning on Jul 3, 1991, FAA issued a series of directives requiring deactivation of the thrust reversers on 767s powered by Pratt & Whitney PW4000 series engines, as well as inspections and adjustments for these and certain other Boeing aircraft. In October, Boeing announced that it had received FAA approval for design changes to the aircraft affected by the reverser deactivation order. Subsequent actions stemming from the crash included a Boeing program, undertaken in 1992, to install an additional locking device to keep reversers properly stowed on nearly 2,000 of its aircraft.

19910530 May 30, 1991: DOT announced a $5 million grant to Stewart International Airport, Newburgh, N.Y., the first award under the Military Airports Program mandated by the Aviation Safety and Capacity Expansion Act of 1990 (see Nov 5, 1990). The new program used Airport Improvement Program funds to assist former military airports and joint civil/military airports.

19910602 Jun 2, 1991: As of this date, Pre-Departure Clearance (PDC) was operational at all 29 continental U.S. airports designated to receive the system, which used data link to speed departures and reduce voice radio frequency congestion. (An additional PDC system was planned for Honolulu.) Operational evaluation of the first PDC workstation had begun at Dallas/Fort Worth in Jul 1989.

19910611 Jun 11, 1991: FAA issued a rule requiring air carriers to notify aircrew members when there is a specific and credible security threat to their flight.

19910615	Jun 15, 1991: The Philippines' Mt. Pinatuba erupted, damaging airports within that country and emitting a huge ash cloud that disrupted aircraft operations over a wide area. Ash damaged at least 17 airliners in flight, most at distances over 600 miles from the volcano. The eruption lent urgency to the First International Symposium on Volcanic Ash and Aviation Safety, held on Jul 8-12 in Seattle. FAA, one of the symposium's sponsors, reported on its work to improve volcanic hazard notification procedures. The problem was illustrated again when Alaska's Mt. Spurr erupted on Aug 18, 1992, depositing almost a quarter inch of ash on Anchorage airport. One of the airport's runways reopened the following afternoon, and the other reopened on Aug 20. Later FAA actions to combat this hazard included a December 1996 warning to airliners to avoid the Pavlov Volcano in the Aleutian Islands. (See Dec 14, 1989.)
19910617	Jun 17, 1991: The Supreme Court ruled that the law establishing the Metropolitan Washington Airports Authority was unconstitutional (see Oct 30, 1986). The Court held that the legislation violated the separation of powers by giving a congressional review board veto rights over WMAA's decisions. New legislation enacted on Dec 18, 1991, removed the veto rights.
19910621	Jun 21, 1991: FAA issued a security regulation on foreign air carriers operating into or out of the United States, requiring such carriers to provide a level of protection similar to that of U.S. carriers serving the same airports.
19910621	Jun 21, 1991: FAA awarded a contract to Bendix for two Microwave Landing Systems. The contract included an option for 26 additional units, which the agency subsequently ordered. (See Dec 6, 1989, and Jun 15, 1992.)
19910627	Jun 27, 1991: America West Airlines filed for protection under Chapter 11 of the bankruptcy code. The Phoenix-based carrier had begun operations in Aug 1983, and was listed as a major airline by 1990. The airline emerged from bankruptcy on Aug 25, 1994.
19910701	Jul 1, 1991: Piper Aircraft Corporation filed for protection under Chapter 11 of the bankruptcy code.
19910701	Jul 1991: The first of two Mode S production systems was delivered to the Technical Center in preparation for formal acceptance of this new radar beacon ground interrogator system, 137 of which were to be implemented in the airspace system. (See Oct 5, 1984, and Jul 30, 1992.)
19910701	Jul 1, 1991: A new Braniff International Airlines began scheduled service. Legally a different entity from the earlier Braniff (see Sep 28, 1989), the small new airline flew for only a few weeks before filing for Chapter 11 bankruptcy protection on Aug 7, 1991. It ceased operations on Jul 2, 1992.
19910725	Jul 25, 1991: FAA announced the results of the first full year of drug testing (CY90) of employees in and applicants for safety/security positions in the aviation industry: of 230,621 tests, 966 (or 0.4 percent) were positive for drug use. The rate of positive findings in subsequent years remained below one percent. (See Dec 1, 1989, and Feb 3, 1994.)

19910806	Aug 6, 1991: The FAA Technical Center, in conjunction with Sandia National Laboratories, opened an aging aircraft nondestructive inspection validation center at Albuquerque International Airport, N.M.. The center, which studied improvements in nondestructive inspection systems, was dedicated on Feb 10, 1993.
19910808	Aug 8, 1991: DOT ended all aviation sanctions against South Africa and said that it would consider applications for air carrier routes between the two countries. The action followed a DOT show cause order issued on Jul 11, the day after President Bush declared South Africa had met conditions set by the antiapartheid law under which the sanctions were imposed (see Nov 16, 1986).
19910813	Aug 13, 1991: FAA held ground-breaking ceremonies for its Technical Center's new Advanced Automation System Laboratory and its Aviation Security Laboratory. Construction was completed on both facilities during FY 1993.
19910815	Aug 15, 1991: FAA issued a rule prescribing more stringent standards for hiring, training, and performance of airline and airport security personnel as mandated by the Aviation Security Improvement Act. (See Nov 16, 1990, and Sep 28, 1995).
19910901	Sep 1, 1991: Barry Krasner became president of the National Air Traffic Controllers Association, having defeated Steve Bell in an election during the previous month. In Aug 1994, Krasner won a second three-year term.
19910919	Sep 19, 1991: FAA adopted two rules that had been mandated by the Airport Noise and Capacity Act of 1990 (see Nov 5, 1990). One rule required airlines, by the end of 1999, to eliminate Stage 2 noise-level aircraft (see Feb 18, 1980), and provided interim deadlines and options for transitioning to Stage 3. The companion rule set procedures for any new local restrictions on Stage 2 operations, and required that local restrictions on Stage 3 be achieved by voluntary agreements with the airlines or receive FAA approval. Secretary Skinner announced the new rules on Sep 24, saying that DOT had fulfilled its "promise to Congress and the American people to formulate a balanced national noise policy." The Port Authority of New York and New Jersery and local governments in Los Angeles and Minneapolis-St. Paul considered plans for certain restrictions on Stage 2 aircraft in advance of the national phase-out; however, FAA successfully opposed the adoption of local rules that it deemed incompatible with national policy and legislation. Meanwhile, progress on eliminating noisier aircraft brought the percentage of Stage 3 planes in the U.S. airline fleet to 59.3 by the end of 1992 and 70.7 at the end of 1995.
19910920	Sep 20, 1991: A dedication ceremony for the New York Terminal Radar Approach Control Facility's ARTS IIIE marked completion of Stage II of the upgrade of the TRACON's Automated Radar Terminal System. (See Mar 26, 1986.)

19910930	Sep 30, 1991: Joseph Del Balzo became Executive Director for System Operations, and the position's responsibilities were expanded. As documented in a directive issued on Jan 31, 1992, the reorganization gave Del Balzo's new position responsibility for four Associate Administrators directing major agency functions (Air Traffic; Airway Facilities; Regulation and Certification; and Aviation Standards). Other elements reporting to Del Balzo were the: Office of System Capacity and Requirements; Aeronautical Center; and Regional Administrators. The reorganization also abolished the Executive Directors for Administration and Resource Management and for Regulatory Standards and Compliance, reducing the number of FAA's Executive Directors from five to three (see Feb 21, 1990, and Nov 26, 1991). The Associate Administrators for Administration and for Human Resource Management were redesignated Assistant Administrators reporting directly to the Administrator. The Logistics Service was abolished and its functions divided between the Associate Administrator for Airway Facilities and a new Office of Acquisition Support under the Executive Director for System Development.
19910930	Sep 30, 1991: During fiscal 1991, which ended on this date, FAA and the National Air Traffic Controllers Association began a Quality Through Partnership program aimed at improving operations and productivity.
19911001	Oct 1, 1991: The first Peripheral Adapter Module Replacement Item (PAMRI) became operational at the Seattle ARTCC. PAMRI was the initial element of the Advanced Automation System. (See Jul 26, 1988, and Nov 30, 1992.)
19911001	Oct 1, 1991: FAA inaugurated the Federal Security Manager (FSM) Program as mandated by the Aviation Security Improvement Act (see May 15, 1990, and Nov 16, 1990). The Federal Security Managers had responsibility for approving airport security programs, acting as focal points for FAA security operations at airports, coordinating government and law enforcement activities in domestic security areas, and providing security information to the aviation community at each of the 18 airports where FSMs were stationed.
19911001	Oct 1, 1991: FAA received 6 British Aerospace BAe-800 aircraft from the Air Force. The transfer was part of an agreement under which FAA would take over the last of the Air Force's capability to conduct flight inspection of air navigation aids (see Jan 1962).
19911001	FAA's flight inspection fleet continued to evolve under a multi-year modernization plan. As of Nov 1, 1995, the flight inspection inventory included the 6 Bae-800s, 19 BE-300 Beechcraft, 1 BE-F90 Beechcraft, 3 NA 265-80 Sabreliners, as well as 5 other aircraft with disposal action pending. (Planning called for further disposals and for acquisition of Learjet 60 and Canadair 601 aircraft.) In addition, FAA's inventory included 15 aircraft for training, research and development, and support functions. The total fleet consisted of 47 owned and two leased aircraft.

19911023	Oct 23, 1991: A ceremony in San Diego marked the start of construction of a new Southern California Terminal Radar Approach Control (TRACON) facility. Five existing TRACONs in the area were to be consolidated into the new facility, a process completed in Sep 1995. Meanwhile, FAA planned several similar TRACON consolidations. (See Apr 19, 1993.)
19911028	Oct 28, 1991: The Aging Aircraft Safety Act, enacted on this date, required FAA to undertake rulemaking requiring certain airworthiness reviews and inspections for airliners in service more than 15 years. The agency accordingly published such a proposal on Oct 5, 1993. The act also directed FAA to establish programs to insure that U.S. air carriers properly maintained their older aircraft and to encourage foreign airlines to so the same. Although the legislation did not specifically address commuter aircraft, FAA extended its aging aircraft program to that sector.
19911108	Nov 8, 1991: FAA notified Congress of an Auxiliary Flight Service Station Plan adding 26 permanent and five seasonal auxiliary stations to supplement the 61 automated flight service stations already planned (see Oct 2, 1981). The Aviation Safety and Capacity Expansion Act (see Nov 5, 1990) had mandated the project. (See Feb 12, 1986, and Feb 15, 1995.)
19911113	Nov 13, 1991: Midway Airlines ceased operations at midnight. (See Nov 1, 1979.) Earlier that day, Northwest Airlines had dropped plans to acquire Midway, which had filed for Chapter 11 bankruptcy protection on Mar 26, 1991. On Nov 15, 1993, a smaller new carrier named Midway Airlines began service from Chicago Midway airport.
19911114	Nov 14, 1991: The U.S. Justice Department indicted two Libyans for the bombing of Pan American Flight 103 (see Dec 21, 1988). Libya reportedly detained the suspects but refused to extract them. (See Apr 15, 1992.)
19911120	Nov 20, 1991: The White House announced the selection of FAA Administrator James Busey to become DOT Deputy Secretary, succeeding Elaine Chao, who left DOT on Oct 22 to become Peace Corps Director. On Nov 22, the White House announced the choice of Jerry R. Curry to succeed Busey as FAA Administrator. A retired Army major general, Curry was serving as Administrator of the National Highway Traffic Safety Administration. Subsequently, Curry withdrew as nominee for the FAA post on Mar 20, 1992. (See Dec 4, 1991.)
19911121	Nov 21, 1991: Secretary of Transportation Skinner and his Mexican counterpart signed an agreement expanding aviation opportunities. The accord permited each country to designate a carrier to fly between any U.S. city and any Mexican city, a level of flexibility unique in U.S. international aviation relations.
19911126	Nov 26, 1991: Administrator Busey announced a reorganization at FAA headquarters, including:
	* A new Assistant Administrator for Information Technology position with responsibility for administrative and operational information resources. The Office of Management Systems at headquarters was abolished and its former director became Acting Deputy for the new Assistant Administrator.

	* A new Assistant Administrator for Budget and Accounting position with responsibility for the Office of Budget and the Office of Accounting. These two offices had previously reported to the Associate Administrator for Administration, a position which was abolished.
	* Retitling the Executive Director for Acquisition as the Executive Director for Acquisition and Safety Oversight and expanding this position's responsibilities by the addition of: the Office of Aviation Safety, whose head was retitled an Associate Administrator rather than an Assistant Administrator; and the appraisal functions of the former Deputy Associate Administrator for Appraisal. (See Sep 30, 1991, and Nov 30, 1993.)
19911204	Dec 4, 1991: Pan American World Airways ceased flying after 64 years of operations. On the previous day, Delta Air Lines had told a bankruptcy court that it would not supply further financing for Pan Am (see Jan 8, 1991). At an auction of Pan Am assets on Dec 9, United emerged as the largest purchaser, bidding successfully on most of the defunct airline's Latin American routes. Such remaining Pan Am property as industrial and office equipment was auctioned at Miami airport on Aug 4-7, 1992. (See Sep 26, 1996.)
19911204	Dec 4, 1991: James B. Busey left the post of FAA Administrator and became Deputy Secretary of Transportation (a position which he held until resigning effective Jun 19, 1992). On Busey's departure from FAA, Deputy Administrator Barry L. Harris became Acting Administrator, and Executive Director for System Operations Joseph M. Del Balzo became Acting Deputy Administrator (see Jun 27, 1992). On Dec 6, 1991, President Bush announced the choice of DOT Secretary Samuel L. Skinner to become his chief of staff on Dec 16, replacing John H. Sununu (see Feb 24, 1992). Busey became Acting Secretary upon Skinner's departure from DOT.
19911217	Dec 17, 1991: FAA published a rule to establish six classes of airspace designated by a single letter, in conformance with the recommendations of the International Civil Aviation Organization. The new designations and their equivalents under the existing system were: Class A (Postive Control Area); Class B (Terminal Control Area); Class C (Airport Radar Service Area); Class D (Airport Traffic Area, and Control Zone); Class E (General Controlled Airspace); and Class G (Uncontrolled Airspace). The new system became effective on Sep 16, 1993.
19911218	Dec 18, 1991: President Bush signed the Intermodal Surface Transportation Efficiency Act, designed to help develop intermodal travel through a range of actions, one of which was improving access to the country's airports. On May 11, 1992, DOT invited the 50 states to submit proposals for development of intermodal transportation plans, including aviation as well as surface modes. On Jul 2, 1992, DOT established a new Office of Intermodalism.
19911226	Dec 26, 1991: On the day following President Mikhail S. Gorbachev's resignation, the Soviet legislature voted the Soviet Union out of existence.

1992

19920131	Jan 31, 1992: Trans World Airlines filed for protection under Chapter 11 of the bankruptcy laws, announcing a plan under which chairman Carl Icahn would lose his controlling interest but continue to head the airline for at least one year. Subsequent events included acquisition of substantial interests in TWA by its employees, and the departure of Icahn in early 1993. TWA became solvent on Nov 3, 1993, filed again for protection on Jun 30, 1995, and emerged from its second Chapter 11 reorganization on Aug 23, 1995.
19920203	Feb 3, 1992: FAA announced a computerized testing system, expected to speed selection of air traffic controller trainees and improve their success rate, as well as a strengthened training program. Previously, candidates spent their first 9 weeks of employment training and testing and were terminated if they were not successful. The new program took 4 1/2 days, demonstrated an equivalent ability to predict success, and was conducted before an individual was hired.
19920204	Feb 4, 1992: FAA awarded a 10-year, $508 million contact to Electronic Data Systems (EDS) to provide automated data processing services to support such functions as safety analysis and payroll. On Aug 14- 15, the company successfully transferred computer applications and data from FAA's Aeronautical Center in Oklahoma City to an EDS data center in Plano, Texas. The EDS contract was part of the Computer Resources Nucleus (CORN) project, a program to "outsource" computer services begun in the fall of 1986. CORN had received criticism during June 1990 when General Accounting Office faulted FAA's planning and justification of the project. The General Services Administration suspended procurement authority for CORN in September, but reinstated the program in Dec 1990 after FAA made revisions.
19920207	Feb 7, 1992: The Department of Transportation published a request for public comments on rules that may be outdated, too costly, or impede economic growth. The action was a response to President Bush's Jan 28 State of the Union speech declaring a 90-day rulemaking moratorium and a review of regulations. On May 1, Secretary Card announced that a regulatory review had identified over 300 administrative or legislative changes in DOT regulations that would help the nation's economy.
19920224	Feb 24, 1992: Andrew H. Card, Jr., took the oath as Secretary of Transportation (a public swearing-in ceremony was held on Mar 11). A former member of the Massachusetts legislature, the new Secretary had been deputy Chief of Staff under Bush and served the Reagan White House as deputy assistant to the President and director of the Intergovernmental Affairs Office. Card had been nominated on Jan 22 and confirmed by the Senate on Feb 21. He served for the remainder of the Bush Administration, resigning effective Jan 20, 1993.

19920305	Mar 5, 1992: Effective this date, FAA chartered the Pilot and Aviation Maintenance Technician Shortage Blue Ribbon Panel. On Sep 27, 1993, FAA announced the results of the panel's study, which forsaw a possible shortage of experienced personnel within three to five years. The panel considered the fundamental solution was to focus education and training programs on industry needs, and made 13 recommendations to that address the problem.
19920317	Mar 17, 1992: A ceremony at the Salt Lake City Air Route Traffic Control Center commemorated the completed installation of Meteorologist Weather Processors (MWPs) at 21 en route centers and the central flow control facility in Washington. The system assisted air traffic controllers by combining data from the National Weather Service, FAA radars, and a satellite operated by Harris Corporation, the contractor that provided MWP on a lease basis. On Jul 8, 1996, FAA announced a contract with Harris to develop, install, and support the Weather and Radar Processor (WARP), a more advanced system that would integrate information including data from Next Generation Weather Radar (NEXRAD). The first phase of this project would replace MWP with upgraded leased equipment.
19920317	Mar 17, 1992: FAA issued a rule extending the requirement for the Ground Proximity Warning System to all turbine powered (rather than just turbojet) aircraft with 10 or more passenger seats flown by air taxi and commercial operators, effective Apr 24, 1994. The new rule affected primarily commuter airlines. On May 27, the National Transportation Safety Board announced that it had removed a recommendation for such a rule from its "Most Wanted" list of safety actions. (See Dec 24, 1974.)
19920322	Mar 22, 1992: A USAir Fokker F-28 4000 jet crashed at New York's La Guardia Airport while taking off during a snowstorm, killing 27 of the 51 persons aboard. In a 1993 report, the National Transportation Safety Board cited the probable cause as: failure of the airline industry and FAA to provide flight crews with procedures and requirements compatible with departure delays in conditions conducive to icing; and the flight crew's decision to take off without positive assurance that the airplane's wings were ice-free after 35 minutes exposure to precipitation following deicing. (See Nov 15, 1987, and May 28, 1992.)
19920331	Mar 31, 1992: DOT announced that the United States would explore "open skies" aviation agreements with all European countries willing to allow free access to their markets. In the past, the nation had offered such agreements to only a few of its largest aviation partners. On Aug 5, DOT established a definition of "open skies" including such points as: (1) open entry on all routes; (2) unrestricted capacity and frequency on all routes; (3) flexibility in setting fares; (4) liberal charter arrangements; (5) liberal cargo arrangements; (6) open code-sharing opportunities; (7) nondiscriminatory operation of and access to computer reservations systems; (8) the ability of carriers to freely enter into commercial transactions related to their flight operations; (9) the right of a carrier to perform its own ground handling in the other country; (10) no restrictions on converting earnings into hard currency or returning earnings to homelands; and (11) the right to operate between any U.S. airport and any point in the European country without restriction. (See Sep 4, 1992.)

19920408	Apr 8, 1992: FAA announced a new self-audit program for aviation manufacturers. The firms were encouraged to identify their own violations of safety regulations, and the agency would not take enforcement action for infringements voluntarily reported and corrected. FAA had previously unveiled a similar program for airlines (see Mar 27, 1990).
19920415	Apr 15, 1992: United Nations sanctions, including a cut-off of air transportation links, went into effect against Libya due to its failure to surrender two suspects in the Dec 1988 bombing of a Pan American flight (see Nov 14, 1991). On Apr 16, FAA issued a special regulation implementing a Presidential order prohibiting any aircraft on a flight to or from Libya from taking off from, landing in, or overflying the United States.. Since commercial air links with Libya had already been prohibited for several years (see Feb 11, 1986), the action expanded the ban to business and private aircraft and to overflights of U.S. territory.
19920416	Apr 16, 1992: At Manassas, Va., FAA dedicated its first "recycled" tower. The 60-foot structure had been moved from Englewood, Colo., where it was no longer being used.
19920422	Apr 22, 1992: FAA announced expansion of the Terminal Area VFR Routes program which charted special routes to help pilots using Visual Flight Rules in avoiding controlled airspace. The concept, which had been evaluated in the Los Angeles area in 1988-89, would be applied at eight other locations.
19920427	Apr 27, 1992: FAA announced that its Flight Standards Service was opening a direct computer line to answer questions from the aviation community about regulations and procedures. The action reflected a growing global trend toward use of computer networks for communications. On Aug 15, 1995, FAA opened a “Headquarters News and Public Affairs Home Page” on the World Wide Web to provide news releases and other information to the media and public, and the Northwest Mountain Region opened a home page on the same day.
19920430	Apr 30, 1992: President Bush signed an order directing Federal agencies to modify their procedures in order to facilitate the privatization of airports and other public assets built with Federal assistance.
19920430	Apr 30, 1992: Rioting in the Los Angeles area forced FAA to temporarily close its towers at Santa Monica, Torrance, and Hawthorne, as well as the flight service station at Hawthorne. The disorders also hampered operations at Los Angeles International, where smoke from burning buildings created Instrument Flight Rules conditions.
19920504	May 4, 1992: To facilitate emergency evacuations, FAA published a rule specifying required distances between rows of seats near over-wing exits on airliners: a 20 inch clear path for three-seat exit rows, and a 10 inch clear path for two-seat exit rows. As an alternative, airlines could remove the seat nearest to each overwing exit and provide two paths six inches wide in front of and behind the seats adjacent to the exit.

19920520	May 20, 1992: At the request of the State Department, DOT halted the U.S. landing rights of Yugoslav Airlines. The sanction was a response to Yugoslavia's failure to guarantee that Sarajevo Airport would be reopened for humanitarian relief flights or that Serbian troops would withdraw from the airport and its vicinity. In accordance with a Presidential order issued on June 5, DOT and FAA implemented sanctions that included a ban on flights between the United States and the Federal Republic of Yugoslavia (Serbia and Montenegro). The sanctions were suspended indefinitely following a Jan 2, 1996, determination by the President that such a suspension was needed to achieve a settlement of the conflict in Bosnia-Herzegovina.
19920528	May 28, 1992: FAA opened a two-day International Conference on Airplane Ground Deicing. The conference reflected global concern about icing and produced a series of recommendations for combating the hazard. On Sep 25, FAA announced a requirement for airlines using large aircraft (Part 121) to have an approved ground de-icing/anti-icing program in place by Nov 1, 1992. On Dec 29, 1993, FAA announced strengthened deicing requirements for commuter and air taxi pilots to check aircraft surfaces before taking off in adverse weather. The agency also mandated certain new training requirements for commuter pilots as well as certain training and checking requirements for pilots of larger private planes. (See Mar 22, 1992, and Oct 31, 1994.)
19920615	Jun 15, 1992: FAA awarded contracts to the Wilcox and Raytheon corporations to design and develop advanced versions of the Microwave Landing System. Each vendor was to produce six to twelve first article test systems. Following successful completion of this phase, full scale production was planned with the same contractors in 1996. (See Jun 21, 1991, and Jun 2, 1994.)
19920617	Jun 17, 1992: DOT Secretary Card and Russia's Foreign Minister signed a memorandum of understanding on airspace use, air navigation, and air traffic control. Features included joint cooperation in opening shorter Far Eastern routes and FAA assistance in establishing a joint civil-military air traffic system for Russia. (See Feb 16, 1990, and May 25, 1993).
19920626	Jun 26, 1992: The Supreme Court ruled that airports are not a public forum and hence airport authorities may place reasonable restrictions on speech. Such regulation might include a ban on soliciting donations, and limits on the time, place, and manner of distributing literature. (See Feb 18, 1980.)
19920627	Jun 27, 1992: General Thomas C. Richards (USAF, Ret.) became FAA's twelfth Administrator, succeeding James B. Busey (see Jun 30, 1989), in a private ceremony. On Jul 17, Richards took the oath a second time in a public ceremony. President Bush had announced Richards' nomination on Mar 31, following the withdrawal of a previous nominee (see entry for Nov 20, 1991), and formally nominated him on May 1. The Senate confirmed the nomination in June, and Congress passed legislation exempting Richards from the statute barring military officers from serving as FAA Administrator.

	Born on Feb 13, 1930, in San Diego, Calif., Richards received a B.S. from Virginia Polytechnic Institute in 1956, an M.A. from Shippensburg State College in 1973, and was also a graduate of the U.S. Army War College. Richards' military career began with the Army infantry in 1948 and included combat service in the Korean War. He received a commission as a distinguished graduate of the Air Force Reserve Officer Training Corps program at Virginia Polytechnic Institute in 1956. He earned his pilot's wings in 1957. During his Air Force career, he flew over 600 combat missions as a forward air controller in the Vietnam war. His assignments included: commandant of cadets at the Air Force Academy; vice commander, 8th Air Force, Strategic Air Command; commander of the Air University; and deputy commander in chief, U.S. European Command. Upon retiring from the military in 1989, he became a corporate consultant and served on the President's Commission on Aviation Security and Terrorism (see May 15, 1990). Richards was FAA Administrator for less than seven months, resigning when William J. Clinton succeeded George H. Bush as President on Jan 20, 1993.
19920629	Jun 29, 1992: In a report released to Congress on this date, FAA recommended that all states be allowed to administer block grants for nonprimary airports on the basis of a successful pilot project under which three states had administered such grants. (See Oct 1, 1989, and Oct 31, 1992.)
19920717	Jul 17, 1992: The United States and the European Economic Community signed an agreement placing certain limitations on government subsidies for the development and production of large civil aircraft.
19920720	Jul 20, 1992: One of the Navy Department's five prototypes of the V-22 Osprey tiltrotor crashed in the Potomac River, killing all seven people aboard. (Another of the prototypes had crashed, causing no injuries, during the previous summer.) The Navy Department suspended V-22 flight testing until after an accident report, dated May 18, 1993, identified a fluid leak and fire as the cause of the Potomac River crash. On Aug 20, a XV-15 tiltrotor crashed during a Bell Helicopter demonstration flight at Arlington (Texas) Municipal Airport. The XV-15, a smaller, two-seat version of the V-22, was a forerunner of the Osprey.
19920730	Jul 30, 1992: FAA excluded general aviation aircraft from the rule that all transponders installed after Jul 1, 1992, be Mode S transponders (see Jan 29, 1987).
19920808	Aug 28, 1992: Typhoon Omar struck Guam with winds of up to 150 miles an hour, causing major damage to an estimated 75 to 90 percent of all buildings. The island lost all power. By Aug 30 the airport had reopened, but only for VFR/daylight operations. No FAA families were injured, although the housing area was severely damaged.

19920824	Aug 24:, 1992 Hurricane Andrew swept through south Florida, causing devastation that included damage to airports and resulting flight cancellations. Among the worst hit FAA facilities were the Richmond Long Range Radar site and the tower and International Automated Flight Service Station at Tamiami airport, all of which were severely damaged. Facilities at Key West lost communication lines, and other agency installations experienced significant damage, power loss, and outages. By the following day, however, Miami, Key West, West Palm Beach, and Fort Lauderdale Executive airports reopened. The hurricane moved into Louisiana on August 26. During the height of the storm, most FAA facilities in the affected part of that state shut down or were placed on standby status, and several airports were temporarily closed.
	The hurricane destroyed or badly harmed the homes of about 144 FAA employees in the Miami area, and the agency organized an airlift to provide emergency relief. A committee representing local agency organizations coordinated the distribution of supplies and of funds donated by FAAers throughout the country, while the agency provided such benefits as administrative leave, counseling, and emergency loans. At the same time, FAA rushed the restoration of airspace system facilities and supported the overall Federal relief program.
19920904	Sep 4, 1992: DOT announced that the U.S. and the Netherlands had agreed to open their international aviation markets to each other's airlines, the first such agreement under the Department's open skies initiative (see Mar 31, 1992). Taking advantage of the pact, Northwest Airlines and KLM Royal Dutch Airlines agreed on Sep 9 to create what they called "a unified global airlines system." Although KLM already had a 20 percent stake in Northwest, the new agreement enabled the two carriers to integrate their operations worldwide. On Jan 11, 1993, DOT gave Northwest and KLM immunity from antitrust laws so they could operate as one airline. The trend toward greater collaboration with foreign carriers was further illustrated by cooperative plans announced in 1993 by the following U.S. airlines: Delta (with Swissair); Continental (with Air France); United (with Lufthansa); and USAir (which announced a scaled-back version of a plan for partnership with British Airways first proposed in July 1992).
19920909	Sep 9, 1992: FAA published a rule establishing a "primary aircraft" category for aircraft of simple design intended for pleasure and personal use. Primary aircraft must: be unpowered or powered by a single engine meeting certain specifications; have an unpressurized cabin; carry no more than four persons; and weigh no more than 2,700 pounds. (Ultralight vehicles were not included, however.) The new classification was intended to simplify certification procedures and provide owners with aircraft less costly to buy and maintain. The addition of this category raised the number of such of type certificates to 8: normal, utility, acrobatic, transport, special class, commuter, restricted, and primary.
19920911	Sep 11, 1992: Hurricane Iniki hit parts of the state of Hawaii, killing one person on the island of Oahu and three on Kauai, which suffered most of the damage. The storm severely damaged the control tower cab at Kauai's Lihue airport.

19920915	Sep 15, 1992: FAA published a final rule requiring airlines to allow the use of approved child restraint systems (CRSs) on their aircraft. At the same time, FAA amended its Advisory Circular describing approved CRSs to exclude any that positioned the child on the lap or chest of a seated adult. (See Feb 26, 1985, and Sep 21, 1994.)
19920916	Sep 16, 1992: FAA published a rule allowing manufacturers to use a much less costly alternative method of determining whether light helicopters met noise certification standards. The new procedure employed fewer tests and microphones, but required helicopters to meet a standard that was two decibels more stringent than under the normal procedure.
19920930	Sep 30, 1992: During the fiscal year ending on this date, air fares in markets served by Southwest Airlines were dramatically lower than in other short haul markets, according to a DOT study announced on May 11, 1993. The study found that Southwest (which had begun operations as a Texas intrastate carrier on Jun 18, 1971) now ranked fifth among U.S. airlines in terms of passengers carried. The success of Southwest illustrated the demand for low-cost service in short haul markets. The DOT study also noted an increase in new carriers over the past year, including five jet airlines providing scheduled passenger service.
19920930	Sep 1992: FAA inspectors completed the first evaluations under the Aircraft Certification Systems Evaluation Program (ACSEP). The program used standardized evaluation techniques to ensure the continued integrity of manufacturers' design data and production activities subsequent to their initial approval.
19921008	Oct 8, 1992: FAA ordered inspection of fuse pins securing the engines of most Boeing 747s following the crash of an Israeli 747 in Holland on Oct 4. On Nov 13, the agency ordered all U.S. 747 operators to replace old-style fuse pins after the inspections showed instances of corrosion and cracking.
19921014	Oct 14, 1992: An FAA-chartered task force released its report on a Global Navigation Satellite System using the Global Positioning Systen (GPS). The report concluded that the system offered the greatest opportunity to enhance aviation efficiency and safety since the introduction of radio communications and navigation. To help begin the implementation process, FAA on Dec 10 released a technical standard order prescribing standards for airborne supplemental navigation equipment using GPS. (See Apr 1, 1991, and Dec 17, 1993.)
19921027	Oct 27, 1992: Effective this date, FAA amended its regulation on exit row seats, now redefined as "exit seats" to clarify that the rule affected only seats providing direct acces to an exit or seats in rows through which passengers must pass to use an exit. The changes included: prohibiting taxi or pushback until a crewmember has verified that no exit seat is occupied by a person unable to perform required emergency functions; and prohibiting a passenger from sitting in an exit seat if that passenger cannot read, speak, or understand the primary language of the crew. (See Mar 2, 1990.)

19921031 Oct 31, 1992: President Bush signed the Airport and Airway Safety, Capacity, Noise Improvement and Intermodal Transportation Act of 1992. Among other provisions, the act contained amendments reauthorizing the Airport Improvement Program through Sep 30, 1993 (see May 26, 1994). It also reauthorized the State Block Grant Pilot Program through fiscal 1996 for the current participants (Illinois, North Carolina, and Missouri) and provided funds to add four additional states to the program. On Jan 15, 1993, FAA selected the states of Michigan, New Jersey, Texas, and Wisconsin to participate in the pilot project. (See Oct 1, 1989.)

19921031 Oct 1992: In response to safety issues relating to aging aircraft, FAA established the Center of Excellence in Computational Modeling of Aircraft Structures as a joint effort with Rutgers University and Georgia Institute of Technology. This was the first Air Transportation Center of Excellence created by the agency through a program in which selected institutions received long-term matching grants to conduct research under cooperative agreements. FAA subsequently established a Center of Excellence for airport pavement research in 1995 and another for operations research in 1996. In Dec 1996, FAA announced that it was soliciting proposals to establish a Center of Excellence for airworthiness assurance.

19921120 Nov 20, 1992: FAA outlined the results of a congressionally mandated Aircraft Noise Mitigation Review for the New York metropolitan area within a 55 nautical mile radius of La Guardia airport. The review complemented FAA's work on the environmental impact of the Expanded East Coast plan on New Jersey (see Mar 11, 1991). In conducting the review, FAA held 18 listening sessions in New York and Connecticut. The review team's recommendations, which represented a comprehensive action plan, included: raising certain helicopter flight altitudes; amending flight patterns to allow more flights bound for La Guardia to remain longer over Long Island sound; establishing a second instrument landing system at Stewart Airport, and increasing noise reduction awareness training programs.

19921127 Nov 27, 1992: A directive issued on this date retitled the Aviation Standards National Field Office as the Office of Aviation System Standards, a designation that better reflected its identity as an FAA Washington headquarters organizational element.

19921130 Nov 30, 1992: FAA gave a “cure notice” to IBM concerning its development of the Initial Sector Suite System (ISSS), a part of the Advanced Automation System (AAS). The agency stated that unless the company provided a plan to remedy deficiencies within 10 calendar days, the government would withhold progress payments under the contract. Earlier in November, IBM had stated that, because of software difficulties and other problems, the ISSS would not be ready for FAA acceptance until Sep 1994, thus adding another 14 months to an already delayed timetable. Following the cure notice, IBM submitted to FAA an initial and later a final cure plan. FAA’s own steps to remedy the situation included changes in the project’s management structure and an Apr 1 ban on further changes in user requirements for the ISSS. (See Oct 1, 1991, and Dec 13, 1993.)

19921210	Dec 10, 1992: Northwest Airlines began the first commercial flight to transport U.S. troops to Somalia in support of Operation Restore Hope, an international effort to counter famine and disorder in that nation. U.S. forces remained in Somalia until Mar 1994, and returned briefly during Feb-Mar 1995 to aid the evacuation of United Nations peacekeepers.
19921217	Dec 17, 1992: The United States, Canada, and Mexico concluded the North American Free Trade Agreement (NAFTA). The U.S. Congress approved implementation of NAFTA by passing P.L. 103-182, signed into law on Dec 8, 1993. On May 20, 1994, FAA Administrator Hinson and his counterparts from Mexico and Canada held a trilateral meeting as a first step in a continuing process aimed at increasing cooperation on a variety of aviation issues.
19921218	Dec 18, 1992: Eight fatalities occurred when a Cessna 550 crashed after encountering wake turbulence behind a Boeing 757 during descent into Billings, Mont. The National Transportation Safety Board subsequently cited the probable cause as the pilot's failure to follow established wake turbulence procedures. Nevertheless, the accident increased concerns that 757 wake turbulence might represent a special problem, an issue raised within FAA by Chief Scientist Robert Machol. (See Nov 1, 1975, and Dec 15, 1993.)
19921221	Dec 21, 1992: The Justice Department filed a civil antitrust suit against eight airlines, charging them with fixing prices through their computerized fare system. The suit resulted from a three year probe into ticket pricing between 1988 and 1990. All eight carriers eventually signed consent decrees, denying wrongdoing but agreeing to avoid the fare practices.

1993

19930107	Jan 7, 1993: DOT announced its approval of a $450 million investment in Continental Airlines by Air Canada and Air Partners of Dallas, Tex. On Apr 28, Continental emerged from Chapter 11 bankruptcy (see Dec 3, 1990).
19930120	Jan 20, 1993: William J. Clinton became President, succeeding George Bush. FAA's Administrator Thomas C. Richards left office with the Bush Administration, and Joseph M. Del Balzo became Acting Administrator (see Aug 10, 1993).
19930121	Jan 21, 1993: Federico F. Peña became Secretary of Transportation, succeeding Andrew H. Card with the change of Administrations. A former member of the Colorado legislature and two-term mayor of Denver, Peña had been a strong advocate of the new airport under construction for his city (see May 17, 1988). He served as Secretary until Feb 14, 1997 (see entry for Dec 20, 1996).
19930209	Feb 9, 1993: Lt. Gen. Elwood R. Quesada died at the age of 88. Quesada had been FAA's first Administrator (see Nov 1, 1958).
19930222	Feb 22, 1993: The first prototype of the McDonnell Douglas MD-90 series, a follow-on to the MD-80 series, made its initial flight. FAA type-certificated the MD-90 on Nov 16, 1994, and it entered commercial service on April 1, 1995, with Delta.
19930313	Mar 13, 1993: A blizzard swept over the East Coast, halting or delaying almost all airline travel from Georgia to Maine. At one point during the two-day storm, which claimed over 100 lives, all major airports were closed north of Charlotte, N.C. The airspace system took several days to recover.
19930325	Mar 25, 1993: Secretary of Transportation Federico Peña confirmed that he planned a reorganization separating aviation policy issues from the policy issues of other transportation modes. As documented in a directive issued on Feb 15, 1994, the change abolished the Office of the Assistant Secretary for Policy and International Affairs and established a new Assistant Secretary for Transportation Policy and a new Assistant Secretary for Aviation and International Affairs.

19930407 Apr 7, 1993: President Clinton signed legislation creating a National Commission to Ensure a Strong, Competitive Airline Industry to study the problems facing the aviation industry. Former Virginia governor Gerald L. Baliles chaired the commission, which had 11 non-voting and 15 voting members. The commission met for the first time on May 24, and delivered its final report to the President on Aug 19. Among its recommendations was the creation of an independent federal corporate entity within DOT to manage and fund air traffic control and related functions (see Sep 7, 1993). Other recommendations included: establishment of an advisory committee to further the airlines' financial health; bankruptcy code reforms; tax breaks for airlines; possible use of oil reserves when needed to control sharp increases in fuel prices; efforts to create a multi-national operating environment for airlines free of discrimination and restrictions; allowing foreign ownership of up to 49 percent of voting equity in U.S. airlines, providing this was part of a liberal and fair bilateral agreement; limiting the liability of general aviation aircraft manufacturers to 15 years from the date of manufacture (see Aug 17, 1994); and maintaining the Essential Air Service program.

19930408 Apr 8, 1993: FAA released a study it had sponsored on the Age-60 rule on mandatory airline pilot retirement (see Mar 15, 1960). On the basis of accident data, the study's authors concluded that there was "no support for the hypothesis that the pilots of scheduled air carriers have increased accidents as they near the age of 60." The study did not deal with medical problems. FAA stated that any change to the Age-60 rule would have to be based on evidence that passenger safety would not be compromised. (See Dec 14, 1995.)

19930419 Apr 19, 1993: In testimony on Capitol Hill, Acting Administrator Del Balzo announced that FAA had modified its plan to consolidate its en route centers and Terminal Approach Control facilities (TRACONs) into 23 large facilities (see Mar 22, 1983). Instead, the agency planned to operate the 22 existing centers, 170-175 stand-alone TRACONs, and 5 consolidated TRACONs (see Oct 23, 1991).

19930509 May 9, 1993: At the airport in Orlando, Fl., FAA commissioned the first of 133 ground interrrogator systems for the Mode S radar beacon transponder (see Oct 5, 1984). On Mar 8, 1994, the agency commissioned its first monopulse beacon radar by upgrading the Mode S sensor at the same airport. While the older radar beacon system used a barrage of interrogation and required 16-20 replies to determine accurate position information, the monopulse technique obtained position information from a single transponder reply.

19930525 May 25, 1993: DOT announced a new U.S.-Russian aviation agreement, updating and expanding an accord signed in June 1990 (see entry for Feb 16, 1990). Under the pact, the U.S. obtained new rights to fly over parts of Russia to points in Asia, and Russia received rights to serve 11 new U.S. cities. (See Jun 17, 1992, and Oct 14, 1994.)

19930614 Jun 14, 1993: As mandated by legislation, FAA established the Civil Tiltrotor Development Advisory Committee to study the feasibility of civil tiltrotor transportation. Delivered to Congress on Dec 29, 1995, the Committee's final report recommended an expansion of civil tiltrotor research and the establishment of a public/private partnership to address issues associated with the concept.

19930702 Jul 2, 1993: Mississippi River flooding that began to disrupt air traffic control operations on this date closed 36 general aviation airports and two FAA towers. One heavily damaged Automated Flight Service Station remained closed for several months after the flood. FAA response to the disaster included activation of a temporary tower in the St. Louis area.

19930801 Aug 1, 1993: A new collective bargaining agreement between FAA and the National Air Traffic Controllers Association (NATCA) went into effect. The four-year agreement covered all operational air traffic control specialists in terminals and centers. (See May 1, 1989.)

19930810 Aug 10, 1993: David R. Hinson became FAA's thirteenth Administrator, succeeding Thomas C. Richards (see Jun 27, 1992). Hinson took the oath a second time in a public ceremony on Aug 24. The new Administrator's nomination had been announced on May 13, made formal on Jun 30, and confirmed by the Senate on Aug 6.

A native of Oklahoma, Hinson held a bachelor's degree from the University of Washington. He served as a naval aviator and as a pilot for Northwest Airlines. In 1961, he became a flight instructor for United Airlines. Hinson later became a captain and director of flight training for West Coast Airlines, eventually becoming director of flight standards and engineering for West Coast's successor, Air West. In 1973, he founded Hinson-Mennella, Inc., a partnership whose acquisitions included Flightcraft, Inc., the Beech aircraft distributor in the Pacific Northwest. He was one of four founders of Midway Airlines in 1978, and served as chairman and chief executive officer from 1985 until the airline ceased operations in 1991. When selected to head FAA, Hinson was executive vice president for marketing and business development with Douglas Aircraft, a subsidiary of McDonnell Douglas. (See Nov 9, 1996.)

19930812 Aug 12, 1993: The Clinton Administration announced that air traffic controllers fired for participation in the Professional Air Traffic Controllers Organization strike (see Aug 3, 1981) could apply for reemployment. (Since Dec 1981, the fired controllers could apply for any federal position except for jobs in the FAA and certain related positions in the Defense and Treasury Departments.) At the time of the announcement, FAA had already imposed a hiring freeze because of budget restrictions. The agency estimated that once the freeze ended it would hire fewer than 200 new controllers per year over the next few years. In Jan 1995, a rehired group of 26 former strikers began training, and about 14 others were rehired during that year. (See Feb 22, 1996).

19930902 Sep 2, 1993: FAA announced that it planned to require air carriers to have proof that freight forwarders followed FAA-approved security programs or else to inspect all cargo sent to them by the freight forwarders. The compliance date of Jan 31, 1974, was subsequently extended to Apr 1, 1974.

19930907	Sep 7, 1993: Vice President Albert Gore released the report of the National Performance Review, a study of the operations of the Federal government that Gore had led during the past six months. The report made recommendations intended to streamline government and make it more cost beneficial. Proposals concerning aviation included: terminating Federal grant funding for FAA higher education programs; cutting Essential Air Service subsidies; increasing FAA fees for inspection of foreign repair facilities; and contracting for the operation of low activity (Level 1) air traffic control facilities. The report's most far reaching recommendation concerning FAA was its proposal for creating a government-owned corporation to provide air traffic control services (see Jan 6 and May 3, 1994).
19930908	Sep 8, 1993: An administrative law judge recommended that DOT deny the application of Friendship Airlines, later renamed ATX, to operate as an air carrier. The company had been founded by former Texas Air chairman Frank Lorenzo. Although DOT ordered the judge to reopen hearings, he reconfirmed his recommendation on Dec 22. On Apr 5, 1994, DOT rejected the application, citing past safety and regulatory compliance problems experienced by airlines run by Lorenzo.
19931006	Oct 6, 1993: The Metropolitan Washington Airports Authority (MWAA) held a ground breaking ceremony for the expansion of Dulles airport's main terminal, a project completed on Sep 5, 1996. On Nov 17, 1993, meanwhile, MWAA officially broke ground for a new terminal for Washington National as part of a major improvement of the airport.
19931026	Oct 26, 1993: An FAA Beech Super King Air crashed into mountainous terrain near Front Royal, Va., killing all three persons aboard. The National Transportation Safety Board cited the probable cause as pilot error and deficiences in the agency's management of its flying program. In response to the accident, FAA made extensive changes in training, procedures, and oversight relating to its flight operations.
19931102	Nov 2, 1993: FAA dedicated the new Leased Interfacility National Airspace Communications (LINCS) telecommunications system following an initial installation that took about nine months. LINCS connected 20 air route traffic control centers, replacing a network of more than 10,000 individual circuits. Expansion to other facilities was planned.
19931118	Nov 18, 1993: American Airlines' flight attendants went on strike, forcing the airline to cancel or delay flights. The disputed issues centered on scheduling, pay, and health benefits. On Nov 22, President Clinton interceded in the five-day old strike, persuading the union and the airline to agree to binding arbitration.
19931123	Nov 23, 1993: Linda H. Daschle became the Deputy Administrator of FAA. President Clinton had announced his intention to nominate Daschle on Oct 25, and the Senate had confirmed her appointment on Nov 20.

	Born in Oklahoma, Daschle began her career as a weather observer for FAA while attending Kansas State University. During the early 1980's, she became the first woman to direct the Civil Aeronautics Board's Office of Congressional, Community, and Consumer Affairs. Daschle later served as director of Federal affairs at the Air Transport Association of America. She was also active in civic affairs and in the campaigns of her husband, Sen. Tom Daschle (D.-S.D.). When chosen for the FAA post, she was senior vice president in charge of Federal and environmental affairs for the American Association of Airport Executives. (See Nov 9, 1996.)
19931124	Nov 24, 1993: A group of airlines and their trade associations formally asked DOT or FAA to prohibit Los Angeles officials from implementing a plan to deny airlines access to Los Angeles International Airport because of their refusal to pay higher landing fees. On Nov 30 and Dec 1, FAA Administrator David Hinson and DOT Secretary Federico Peña met with airline representatives and Los Angeles city officials to mediate the dispute. As a result, the airlines agreed to pay the higher fees, retroactive to July 1, while planning to pursue the issue through litigation. The airlines subsequently asked DOT to review the increases in accordance with legislation (see Aug 23, 1994) that provided a means of timely resolution of such disputes. On June 30, 1995, DOT ruled that the increases were largely valid but that the airlines were due a partial refund, a decision that remained under appeal at the end of 1996.
19931130	Nov 30, 1993: FAA Administrator Hinson announced that Joseph Del Balzo had been named Executive Director for Strategic Initiatives, bringing to four the number of Executive Directors (see Nov 26, 1991, and Nov 30, 1994). The position was discontinued after Feb 28, 1994, the date of Del Balzo's retirement.
19931201	Dec 1, 1993: A Jetstream BA-3100 operating as a Northwest Airlink commuter flight crashed while approaching Hibbing, Mont., in instrument weather conditions. The National Transportation Safety Board cited crew errors and loss of altitude awareness as the probable cause of the accident, which killed all 18 persons aboard. The crash increased public and congressional awareness of the issue of commuter airline safety. (See Dec 13, 1994.)
19931203	Dec 3, 1993: FAA's first commissioning of an Airport Surface Detection Equipment model 3 (ASDE3) took place at the Seattle-Tacoma airport. An improved ground surveillance radar system, ASDE-3 had been installed for testing at Pittsburgh in Feb 1990, and FAA had formally accepted the system for operational use in Dec 1991. (See Dec 23, 1983, and Jun 27, 1996.)

19931213 Dec 13, 1993: FAA Administrator David Hinson ordered an extensive review of the Advanced Automation System (AAS), a multi-billion dollar program designed to help modernize the nation's air traffic control system. The contractor, IBM, was far behind schedule and had major cost overruns (see Nov 30, 1992). Hinson's recommended review included conferring with IBM to determine the impact the company's plan to sell its unit in charge of the AAS contract to Loral Corp., a sale subsequently concluded. On Mar 3, 1994, FAA announced initial actions as a result of the review that included a new AAS management team and suspension of the portion of the program designated the Area Control Computer Complex (ACCC). Subsequently, on Jun 3, 1994, FAA announced a major overhaul of the AAS program. The agency terminated ACCC. FAA also cancelled another AAS element, the Terminal Advanced Automation System (TAAS), stating that it would substitute a new procurement for modernization of terminal radar approach control facilities (see Sep 16, 1996). The agency reduced the number of towers planned to receive the Tower Control Computer Complex (TCCC). In addition, the agency planned to review the software for the Initial Sector Suite System (ISSS), a program to provide new workstations for en route controllers. On Sep 30, 1994, FAA announced that it would seek a proposal from Loral that would permit the company to move forward with this work under a new program, the Display System Replacement (DSR), which would replace ISSS. (See Apr 27, 1995.)

19931215 Dec 15, 1993: Five persons died when an Israel Westwind aircraft following a Boeing 757 encountered wake turbulence and crashed at Santa Ana, Calif. The National Transportation Safety Board later found the probable cause to have been the Westwind pilot’s failure to maintain adequate separation behind the 757 and/or to remain above its flight path during approach. The Board considered a related factor to be inadequacy of air traffic control procedures regarding visual approaches and visual flight rules operations behind heavier airplanes. On Dec 21, meanwhile, FAA required air traffic controllers to issue wake turbulence advisories to aircraft following 757s in all cases for which such advisories would be issued for jets heavier than the 757. On Dec 22, FAA sent a letter to licensed pilots alerting them to accidents and incidents involving 757 wake turbulence and urging attention to existing guidance on avoiding wake hazards. (See Dec 18, 1992, and May 20, 1994.)

19931217 Dec 17, 1993: Continental Express began the first FAA-approved use of the Global Positioning System (GPS) for non-precision airport approaches in operations at Aspen and Steamboat Springs, Colo. Four days later, DOT announced the report of a joint DOT/DOD task force on the GPS. The task force recommended that DOT should take a stronger role in managing the DOD-controlled system, and that technical steps be taken to improve the integrity and availability of GPS for all transportation modes. (See Oct 14, 1992, and Feb 17, 1994.)

19931231 Dec 31, 1993: The end of this day completed a calendar year in which major (Part 121) scheduled airlines experienced no passenger or air crew fatalities. The only fatal accident in Part 121 scheduled operations involved a ground crewmember struck by a propeller. The fatal accident rate for this segment of aviation was 0.013 per 100,000 departures, the lowest since 1980 (see Dec 31, 1980).

1994

19940103	Jan 3, 1994: As documented by a directive issued this date, the organization of the Associate Administrator for Airway Facilities included three Services: System Management (formerly System Maintenance), Operational Support, and NAS Transition and Implementation.
19940106	Jan 6, 1994: DOT, FAA, and the Council of Economic Advisors held a press conference to unveil the Clinton Administration's plan to revitalize the aviation industry. The plan entailed action on most recommendations of the National Commission to Ensure a Strong Competitive Airline Industry (see Apr 7, 1993). Included were efforts to move ahead with conversion of FAA's air traffic control function to a government corporation (see Sep 7, 1993, and May 3, 1994). Other elements of the plan aimed at: bankruptcy reform; increased foreign investment in U.S. carriers, contingent on reciprocal opportunities; encouragement of new entrant carriers; heightened scrutiny of airline financial fitness; and promotion of employee ownership of airlines.
19940117	Jan 17, 1994: An earthquake measuring 6.6 on the Richter scale hit the Los Angeles area, briefly closing Los Angeles airport. The Van Nuys airport tower lost its window glass but continued to operate until a temporary tower was activated.
19940131	Jan 1994: Locality pay became effective for Federal workers, who received raises ranging from 6.52 to 3.09 percent. The percentage was determined by location in 27 metropolitan areas, plus a catchall "rest of the U.S." locality. Certain employees who were already paid at special rates did not receive a raise unless the amount of the locality increase exceeded their pay differential.
19940202	Feb 2, 1994: FAA announced that 25 low activity towers (Level 1) would be converted to contract towers, beginning in September 1994. The agency had been contracting the operation of such towers since 1982, and 30 were run on this basis as of the end of 1993. On Nov 28, 1995, FAA announced that it would discontinue funding for 7 low-activity towers, including three contract towers and four FAA-operated facilities.

19940203 Feb 3, 1994: DOT announced a group of new transportation-industry regulations on drugs and alcohol that had been developed in response to the Omnibus Transportation Employee Testing Act of Oct 28, 1991. Among these was an FAA rule, published on Feb 15, 1994, that established an aviation industry alcohol misuse prevention program. The program included pre-employment and random alcohol testing of safety-sensitive employees of airlines and certain other FAA-certificated operations (see May 10, 1995). In announcing the new rules, DOT also stated that its operating agencies would implement similar alcohol misuse prevention programs for their own safety-sensitive employees. At the same time, DOT unveiled a proposal to lower the minimum random drug testing rate for industries that record a positive rate of less than one percent for two calendar years and maintain that record during subsequent years. On Nov 22, DOT issued a final rule allowing such industries to test only 25 percent of safety-sensitive employees rather than 50 percent. Accordingly, FAA reduced the random drug testing rate for the aviation industry, effective on Jan 1, 1995.

19940217 Feb 17, 1994: FAA announced that it was implementating civil use of the Initial Operational Capability (IOC) of the Global Positioning System (GPS). IOC signified that the system's 24 satellites were operating in their assigned orbit and providing signals. FAA also stated that it had granted approval for certification of two types of GPS signal receivers. (See Dec 17, 1993, and Jun 2, 1994.)

19940228 Feb 28, 1994: The National Weather Service commissioned the first Next Generation Weather Radar (NEXRAD) as part of a joint development program in which FAA was a participant (see Jun 8-14, 1983).

19940310 Mar 10, 1994: FAA Administrator Hinson issued a memorandum announcing establishment of a Management Board with broader membership than that of the Executive Board (see Jan 28, 1989), which was disestablished. The new Board's responsibilities included implementation of performance measures for FAA as well as oversight of tactical issues and of the agency's strategic plan.

19940317 Mar 17, 1994: DOT and the Department of the Interior published a joint advanced notice of proposed rulemaking on measures to reduce the impact of aircraft noise over the Grand Canyon and other national parks. In an Earth Day memorandum issued on Apr 22, 1996, President Clinton directed DOT to take both short- and long-term actions to restore natural quiet to national parks. In response, FAA on May 15 published a notice proposing several alternative methods of controlling aircraft noise in Rocky Mountain National Park. On Jul 31, the agency published a rulemaking proposal to modify the flight regime at the Grand Canyon (see Mar 26, 1987), followed by a final rule on Dec 31, 1996. Among other provisions, this final rule: modified the "flight-free" zones over the Canyon and established new ones; set curfews for commercial sightseeing operations; and established a cap on the number of commercial tour aircraft allowed to fly over the park. Also on Dec 31, FAA published a rulemaking proposal for a phased ban on noisier aircraft over the Canyon.

19940317	Mar 17, 1994: FAA announced a multi-year strategy to help the general aviation industry, which was facing adverse economic conditions. The plan included a range of initiatives to lower the cost of flying, boost safety and technology, and guarantee fair and equal access to airways and airports. (See Aug 17, 1994.)
19940330	Mar 30, 1994: President Clinton signed the Federal Workforce Restructuring Act of 1994, legislation offering buyouts of up to $25,000 to personnel willing to leave Federal service. The act also targeted a reduction of 272,900 Federal employees between 1993 and 1999. The buyout was offered in conjunction with an early retirement option, authority for which had become available on Mar 14. FAA initially offered the buyout to its personnel between Mar 31 and May 3, 1994. Certain categories of employees received subsequent buyout offers, some with a deferred retirement option, during 1994 and 1995. More than 3,000 FAA employees eventually received buyouts. The buyouts were a major factor in the reduction of FAA's full-time equivalent workforce, which fell from 52,352 in fiscal 1992 to 47,738 at the end of fiscal 1996.
19940415	Apr 15, 1994: FAA's Air Traffic Control System Command Center (ATCSCC) officially began operations in its new facility at Herndon, Va. The ATCSCC had moved from FAA Headquarters because of size and technological constraints (see Apr 27, 1970).
19940418	Apr 18, 1994: DOT stated that it had urged nations that mandate routine spraying of pesticides on board aircraft while passengers are present to reconsider the requirement. The practice had been discontinued in the United States 15 years earlier due to health concerns. In May 1995, DOT hailed a recommendation against such spraying by the Facilitation Division of the International Civil Aviation Organization.
19940503	May 3, 1994: Vice President Albert Gore and Transportation Secretary Federico Peña announced the Clinton Administration's proposal to create a new Air Traffic Services Corporation to operate, maintain, and modernize the air traffic system. (See Sep 7, 1993, and Jan 6, 1994.)
	Under the proposal, 38,000 FAA employees involved in providing air traffic services would become part of a new not-for-profit government corporation. Support for the corporation would be derived from fees levied upon commercial aviation, subject to approval by the Department of Transportation. The Department would maintain additional oversight through membership on the corporation's board of directors, on which airspace users would also be represented. FAA would continue to exercise safety oversight over civil aviation, including the new corporation.
	On the same day that Gore and Peña unveiled the plan, President Clinton wrote letters urging Congress to make the new corporation a reality. During the following months, however, Congress considered a variety of plans for restructuring FAA. These proposals included calls to make the agency independent of the Department of Transportation. (See Sep 12, 1995.)

19940504 May 4, 1994: In a joint memoradum, the Associate Administrator for Airway Facilities and the President of the Professional Airways Systems Specialists (PASS) advised employees of a proposed realignment of the Airway Facilities organization. The proposal envisioned a leaner organization with consolidation to be achieved gradually over a four-year period. Implementation of the plan involved steps to reduce five organizational levels to three: Regional Office, System Management Office, and System Support Center. In May 1995, the Southern Region was the first to declare that its headquarters realignment had been accomplished in accordance with the plan. During the following month, Central Region stated that both its System Management Offices were in place.

19940520 May 20, 1994: In letter responding to a series of National Transportation Safety Board recommendations, FAA outlined an interim policy on Boeing 757 wake turbulence separations. Beginning Jul 1, controllers would maintain a four-mile separation for both large and small aircraft following 757s. The letter indicated that the agency would revise guidance to pilots concerning wake turbulence and would study further changes in air traffic rules relating to this hazard. On Jun 10, Secretary of Transportation Federico Peña and FAA Administrator Hinson ordered a review of the timeliness of FAA's response to the 757 wake turbulence issue. FAA Deputy Administrator Linda Hall Daschle and DOT General Counsel Stephen Kaplan submitted the resulting report on Jul 26. Although supporting some aspects of FAA's actions, the report stated that the 757 wake turbulence issue should serve as a "wake-up call" to the agency regarding its processes for addressing emerging safety issues. Recommendations included improved integration between FAA's research and operations functions. (See Dec 15, 1993, and Aug 17, 1996)

19940523 May 23, 1994: FAA began operational testing of the Integrated Terminal Weather System (ITWS) at Memphis airport. ITWS was designed to combine data from FAA and National Weather Service sensors and radars. The system would present predictions on potentially hazardous weather to air traffic control personnel via easily-understood graphics and text. On Jan 29, 1997, FAA selected Raytheon to build ITWS and to install and maintain the system at 34 sites covering 45 airports.

19940526 May 26, 1994: Enactment of the Airport Improvement Program Temporary Extension Act of 1994 (P.L. 103-260) renewed FAA's authority to award Airport Improvement Program grants, the legislative mandate for which had lapsed on Sep 30, 1993. The new act authorized FAA to make grants through Jun 30, 1994 (see Aug 23, 1994). The law provided for the gradual phasing out of compensation that certain FAA employees had received under the Pay Demonstration Project after that project's termination on Jun 17, 1994 (see Jun 18, 1989, and Apr 1, 1996). It also placed a temporary freeze on increases to certain airport fees charged to airlines and required DOT to study reforming the air traffic control system.

19940602	Jun 2, 1994: Administrator Hinson announced that FAA would halt further development of the Microwave Landing System (MLS) for use under the more difficult visibility conditions rated Category 2 and 3 (see Jun 15, 1992). He stated that the agency instead would concentrate on the development of the Global Positioning System, known as GPS (see Feb 17, 1994). On Jun 8, FAA issued a request for proposals for an initial Wide Area Augmentation System (WAAS) for GPS. The initial WAAS would be a network of 24 ground stations and related communications systems that would enhance the integrity and availability of GPS signals (see entry for Aug 1, 1995). On Jul 16, Administrator Hinson and President Phil Boyer of the Aircraft Owners and Pilots Association landed at the Frederick, Md., airport using the first FAA-approved public "stand alone" GPS instrument approach. On Oct 17, the Administrator formally offered free use of GPS for 10 years to International Civil Aviation Organization member states, reconfirming a previous verbal offer (see entry for Apr 1, 1991). Other related events during 1994 included FAA's Dec 8 announcement of approval of GPS as a primary means of navigation for oceanic/remote operations, subject to certain conditions.
19940612	Jun 12, 1994 The Boeing 777, the first U.S. jetliner to use a "fly-by-wire" control system, made its first flight. The long-range, twin-engine transport was designed for a basic seating capacity of 375 passengers. On April 19, 1995, the aircraft received joint certification by FAA and Europe's Joint Aviation Authorities. After an unprecedented testing program, FAA on May 30, 1995, approved the 777 to fly on long, over-water flights as far as three hours from a landing site. This was the first time that the agency had granted this Extended Twin-Engine Operations (ETOPS) authority without an extensive period of in-service operation. The 777 entered commercial service, with United Airlines, on Jun 7, 1995.
19940702	Jul 2, 1994: A USAir DC-9 crashed while attempting to land at Charlotte-Douglas International Airport, killing 37 of the 57 persons aboard. The accident illustrated the continuing problem of wind shear. As part of its ongoing efforts to combat this hazard, FAA on Jul 20 commissioned the first Terminal Doppler Weather Radar (TDWR). The agency had commissioned a total of 22 TDWRs by the end of CY1996. (See Nov 2, 1988.)
19940705	July 5, 1994: Public Law 103-272 recodified certain laws pertaining to transportation, including the Federal Aviation Act of 1958, as amended, which was FAA's basic enabling legislation. As a result of the recodification, the Federal Aviation Act was superseded by provisions of Subtitle VII of Title 49, United States Code.
19940712	Jul 12, 1994: United Air Lines' parent corporation announced that its shareholders had voted to transfer 55 percent majority ownership of United to the airline's employees. The deal made United the largest employee-owned U.S. company.
19940712	Jul 12, 1994: FAA dedicated its National Aviation Safety Data Analysis Center (NASDAC). Located at national headquarters, NASDAC provided access to safety-related computer data bases and relevant reference material in printed form. A new and improved NASDAC formally opened on Mar 14, 1996.

19940729	Jul 29, 1994: Citing the rapid development of satellite technology (see Jun 2, 1994), FAA announced cancellation of plans to purchase up to 235 next generation Instrument Landing Systems (ILS) designed for specifically for Category 1 precision approaches. (Category 1 conditions are the least difficult of three categories defining visibility conditions for landing.)
19940815	Aug 15, 1994: FAA issued a regulation which, for the first time, set length of duty and rest requirements for airline flight attendants. Under the rule, attendants could remain on duty for as many as 14 hours within a 24-hour period, but would get a rest period of at least 9 hours after that duty period. Longer duty periods would be permitted, but in such cases FAA required that rest periods and the size of the flight attendant crew would increase. Due to litigation, FAA did not begin enforcing the rule until Feb 1, 1996.
19940817	Aug 17, 1994: President Clinton signed the General Aviation Revitalization Act of 1994. Under the new law, manufacturers could not be held liable for accidents happening more than 18 years after the production of general aviation aircraft, engines, or parts. The legislation was followed by an upturn for this sector of industry.
19940823	Aug 23, 1994: Enactment of the Federal Aviation Administration Authorization Act of 1994 provided fiscal year 1994-96 funding and authorization for FAA's programs. This included the awarding of Airport Improvement Program grants, which had lapsed at the end of June 1994 (see entries for May 26, 1994, and Sep 30, 1996). The act also required that airport fees be reasonable, and directed DOT to issue rules on resolving disputes between airlines and airports over such fees, and to establish policies to prevent diversion of airport revenues to activities unrelated to airports. In addition, the act established a five-year term of office for the FAA Administrator, and directed FAA to institute a joint aviation research and development program with other agencies.
19940830	Aug 30, 1994: Lockheed and Martin Marietta announced plans for a merger that was accomplished during 1995, creating Lockheed Martin. Lockheed had been formed in 1926, while Martin Marietta had been created in 1961 by a merger of the American-Marietta Company with the aircraft manufacturing firm founded by Glenn Martin in 1917.
19940902	Sep 2, 1994: FAA issued the first release of results of its International Aviation Safety Assessment (IASA) program, under which the agency evaluated the capability of nations to provide safety oversight for their air carriers. In rating 30 countries, FAA concluded that 17 were acceptable in their ability to ensure adherence to international safety standards, four were conditionally acceptable, and nine did not meet the standards. The agency continued to issue and to revise such ratings, with the goal of evaluating all nations with airlines serving U.S. airports. By the end of 1996, a total 64 countries had been assessed.

19940908	Sep 8, 1994: A USAir Boeing 737 crashed in Aliquippa, Pa., as it approached Pittsburgh airport. All 132 persons aboard died in the accident, the cause of which proved difficult to determine. Prompted by this crash and an earlier one at Colorado Springs (see Mar 3, 1991), FAA conducted a critical design review of the 737 flight control system. On May 3, 1995, the review team reported that it had found no critical flaws but made a number of recommendations for improving the aircraft's safety margin (see Aug 22, 1996). Following the accident, NTSB urged that upgraded Flight Data Recorders (FDRs) be required on 737s by the end of 1995 and on other large airliners by Jan 1, 1998. FAA, however, called for voluntary upgrading of FDRs on 737s while the agency developed comprehensive rulemaking on the FDR issue (see Jul 16, 1996).
19940912	Sep 12, 1994: A pilot flying a stolen Cessna 150 crashed a few yards from the White House, dying on impact.
19940921	Sep 21, 1994: FAA issued a warning concerning certain types of child restraint systems (CRSs) that were adequate for use in motor vehicles but not in aircraft. The statement was based on a research report by the agency's Civil Aeromedical Institute. FAA announced that it would consider banning these CRS types, and would also: conduct further research; cooperate with the National Highway Traffic Safety Administration to revise CRS standards and labeling; and urge airlines to adopt cost-saving policies that would encourage parents to use CRSs. (See Sep 15, 1992, and Jun 8, 1995.)
19940922	Sep 22, 1994: In response to a series of accidents, FAA issued a special rule tightening safety requirments for air tour operators in the state of Hawaii.
19941014	Oct 14, 1994: Following a joint evaluation of the Russian air transportation system, a U.S.-Russian team recommended immediate steps to shore up safety oversight. FAA worked with Russian authorities to assist implementation of these recommendations, and continued to participate in efforts to improve communications and routes for international flights in the area of Russia. On Jun 30, 1995, Vice President Gore and Russian Prime Minister Chernomyrdin signed a memorandum of understanding on strengthening technical cooperation toward a bilateral airworthiness agreement.
19941031	Oct 31, 1994: An American Eagle commuter flight crashed near Roselawn, Ind., with the loss of all 68 persons aboard. The aircraft, an Avions de Transport Regional ATR-72, had been in a holding pattern due to weather delays at Chicago. In a report issued on Jul 9, 1996, the National Transportation Safety Board cited the probable cause as a loss of control due to icing, the manufacturer's failure to provide information on the icing hazard to the aircraft, and French aviation authorities' failure to ensure its airworthiness under icing conditions. Deficiencies in FAA oversight were listed as contributory causes.

Following the accident, meanwhile, FAA took a variety of steps to reduce hazards to ATR aircraft and, on Dec 9, 1994, prohibited flight by models 72 or 42 into known or forecast icing conditions. On Jan 11, 1995, FAA eased this ban, subject to certain requirements, to apply only to freezing rain and freezing drizzle. The agency also required the installation of improved deicing boots on the aircraft by June 1995. Subsequent FAA actions on the broader issue of combating icing included the issuance on May 2, 1996, of 18 new airworthiness directives affecting pilots of 29 different aircraft types. (See May 28, 1992, and Dec 13, 1994.)

19941031 Oct 1994: At FAA's request, RTCA, Inc., convened a government/industry committee to study the Free Flight concept. (RTCA, Inc., was the official name of the former Radio Technical Commission for Aeronautics: see Jun 19, 1935.) The Free Flight concept sought to employ new procedures and technology to provide much greater flexibility for Instrument Flight Rules operations at high altitudes. Currently, the pilots of such flights were obliged to follow specified routes, unless deviations were approved by air traffic controllers. Under Free Flight, in contrast, these pilots (or their airline managers) would be able to choose the routes that they considered most efficient. Controllers would intervene only to ensure safety or prevent congestion.

In Jan 1995, a report by the RTCA committee defined Free Flight and the first steps for its implementation. This was followed in Oct 1995 by the more detailed report of an RTCA task force that had been formed at FAA request. On Mar 15 1996, FAA announced progress on Free Flight, stating that the agency and the aviation community would work together to phase in the concept over the next ten years. On Jan 15, 1997, the agency issued a fact sheet on a plan for a two-year evaluation of Free Flight in the airspace of Alaska and Hawaii, beginning in 1999. (See Sep 30, 1990.)

19941130 Nov 30, 1994: Administrator Hinson announced a reorganization aimed at structuring FAA along its key lines of business, making better use of resources, consolidating functions, and increasing management accountability. As documented in a directive issued on May 15, 1995, the reorganization eliminated a layer of management by abolishing the three remaining Executive Director positions (see Nov 30, 1993). The positions reporting to the Administrator and Deputy Administrator were now the following:

* Chief Counsel.

* Assistant Administrator for Civil Rights.

* Assistant Administrator for Government and Industry Affairs.

* Assistant Administrator for Public Affairs, to which the public affairs functions in regions and centers now reported directly.

* Assistant Administrator for System Safety, a new position charged with analyzing safety data and making recommendations for improvement. The position of Associate Administrator for Aviation Safety, which had reported to an Executive Director, was abolished.

	* Assistant Administrator for Policy, Planning, and International Aviation, which was modified to include six Offices: Aviation Policy and Plans; Environment and Energy; International Aviation; Asia-Pacific; Europe, Africa, and Middle East; and Latin America-Caribbean.
	* Associate Administrator for Administration, a new position assuming the responsibilities of the abolished Assistant Administrators for Budget and Accounting and for Human Resource Management. Elements reporting to the new Associate Administrator included the Regional Administrators, the Director of the Aeronautical Center, and three Offices: Business Information and Consultation; Human Resource Management; and Financial Services, a new office established to consolidate the budget and accounting functions.
	* Associate Administrator for Airports, formerly an Assistant Administrator, responsible for two Offices: Airport Planning and Programming; and Airport Safety and Standards.
	* Associate Administrator for Civil Aviation Security, formerly an Assistant Administrator, responsible for three Offices: Civil Aviation Security Intelligence; Civil Aviation Security Operations; Civil Aviation Security Policy and Planning.
	* Associate Administrator for Regulation and Certification, which continued to control the Office of Rulemaking, Aircraft Certification Service, and Flight Standards Service, with the added responsibility for the Offices of Accident Investigation and Aviation Medicine. The Associate Administrator for Aviation Standards was abolished.
	* Associate Administrator for Air Traffic Services, a new position responsible for the Air Traffic Service, the Airway Facilities Service, the Office of Independent Operational Test and Evaluation, and the Office of System Capacity and Requirements.
	* Associate Administrator for Research and Acquisitions, a new position responsible for the FAA Technical Center and six Offices: Acquisitions; Air Traffic Systems Development; Aviation Research; Communications, Navigation, and Surveillance Systems; Information Technology; and System Architecture and Program Evaluation. The Associate Administrators for NAS Development and for System Engineering and Development were abolished.
19941209	Dec 9, 1994: For the first time, FAA certified an explosives detection system, the Invision CTX-5000. The system used computed tomography and high-quality x-ray technology to automatically locate suspicious objects in baggage. (See Dec 23, 1996)

19941213

Dec 13, 1994: An American Eagle commuter flight crashed on approach to Raleigh-Durham, N.C., killing 15 of the 20 persons aboard the BAe Jetstream 3201 aircraft. Capping a series of fatal airline accidents during 1994, the tragedy heighted public concern about the safety of both commuter and major air carriers. The next day, DOT Secretary Peña announced a three-point safety initiative, including: acceleration of FAA efforts to increase commuter safety standards to the level for large airlines (see Dec 14, 1995); a government/industry meeting on airline safety (see Jan 9, 1995); and a national airline safety audit, subsequently completed in Dec 1995.

In October 1995, the National Transportation Safety Board cited the probable cause of the accident as errors by the captain, who had resigned from another airline following adverse performance evaluation. The Board's recommendations stemming from the crash included establishment of a system for airlines to share information on pilot qualifications.

1995

19950109 Jan 9, 1995: DOT and FAA opened a two-day "summit" Aviation Safety Conference on ways to improve safety measures and increase public confidence in airline transportation. More than 950 government and industry representatives attended the event, at which Transportation Secretary Federico Peña and FAA Administrator David Hinson urged cooperation to achieve a goal of zero accidents. Participants formed workshops and produced recommendations on six key areas: crew training; air traffic control and weather issues; safety data collection and use; applications of emerging technologies; aircraft maintenance procedures and inspections; and flight operating procedures. In response, FAA on Feb 9 published an Aviation Safety Action Plan that identified 173 safety initiatives. In publishing the plan, the agency noted that many airlines were voluntarily establishing safety offices reporting to their chief executives. The agency stated its intention to require airlines with aircraft seating more than nine passengers have independent safety offices. Among the action plan's many features were emphasis on Advanced Qualification Program (AQP) training (see Sep 26, 1990) and on increased sharing of safety data. At the same time that it released the plan, FAA announced that it had reached agreement with the Air Line Pilots Association and Air Transport Association on a Flight Operations Quality Assurance (FOQA) program. The FOQA would permit the use of information from Flight Data Recorders to analyze safety trends rather than merely to investigate accidents and incidents. FAA would have access to the data, with pilot identities deleted. (See Dec 6, 1995.)

19950215 Feb 15, 1995: Commissioning of the final Automated Flight Service Station (AFSS) capped FAA's flight service modernization plan. On this date, all AFSSs also had the Model 1 Full Capacity system. By fiscal 1995's end, 286 flight service stations had been consolidated into 61 AFSSs, 31 auxiliary stations, and one remaining conventional station. (See Nov 8, 1991.)

19950224 Feb 24, 1995: FAA announced a strengthened campaign against the use of suspected unapproved parts (SUPs) in aviation. The agency had expanded its SUP program in recent years, but its efforts had been criticized by Department of Transportation Inspector General A. Mary Schiavo. On Feb 27, FAA published a notice warning of its policy to enforce full compliance with relevant regulations and giving non-complaint firms until May 30 to apply for approval to manufacture aviation parts. On May 24, the agency announced a plan for an industry-operated accreditation program for aircraft parts brokers and distributors. On Oct 12, FAA issued a task force report that proposed a SUP program plan and the establishment of a national Suspected Unapproved Parts Program Office. This office was established on Nov 13, and its creation was formally documented in a directive issued on Jan 2, 1996.

19950228	Feb 28, 1995: At Denver International Airport's opening day, air traffic controllers at the state-of-the-art facility cleared three aircraft to make the world's first triple simultaneous landing. By this date, FAA had provided Airport Improvement Program grants totaling $267.6 million for the project, and had committed over $200 million more in Letters of Intent. In a February 1996 report on the airport's first 11 months in operation, FAA stated that the facility had achieved a flight delay rate five times less than the airport it replaced, Stapleton International. (See May 17, 1988.)
19950331	Mar 31, 1995: FAA announced its first certification of an aircraft type designed and manufactured in the People's Republic of China, the Model Y-12 Harbin. During the 1980s, FAA had provided certification expertise to Chinese authorities in connection with McDonnell Douglas' manufacture of aircraft in China. The United States and China had concluded a bilateral airworthiness agreement on Oct 14, 1991, and a later expansion of this agreement permitted U.S. acceptance of small aircraft, such as the Y-12 Harbin, and certain aircraft components. (See Mar 15, 1986.)
19950414	Apr 14, 1995: Four FAA officials signed an agreement on the Integrated Product Development System (IPDS), greatly broadening the application of a new management approach. (The signers were the Associate Administrators for: Research and Acquisition; Regulation and Certification; Air Traffic Services; and Airports.) The IPDS called for the use of Integrated Product Teams (IPTs) as part of a tiered system of teams in research, acquisition, and the management of equipment life-cycles. The IPTs were multidisciplinary and cut across organizational lines to bring together customers and suppliers with the goal of improving products and services and expediting their delivery. The IPDS became a prominent feature of FAA's new acquisition system (see Apr 1, 1996).
19950419	Apr 19, 1995: A bomb blast at the Alfred P. Murrah federal office building in Oklahoma City killed more than 160 persons and injured hundreds of others. FAA personnel participated in relief efforts.
19950421	Apr 21, 1995: FAA issued a rule establishing minimum combined experience levels for two airline pilots flying together and also upgrading operational experience requirements. The agency had proposed the rule in Mar 1993 in response to accidents and incidents in which a contributing factor was the pairing of inexperienced pilots.
19950423	Apr 23, 1995: Effective this date, many government-owned aircraft became subject to FAA safety standards and procedures for the first time. The change resulted from legislation, enacted on Oct 25, 1994, that established a more restricted definition of "public aircraft." It affected more than 5,000 planes and helicopters owned by Federal, state, and local governments and used for transporting officials or other passengers. The new statute also continued to require that FAA regulate air operations for which governments received compensation from other governmental entities. Aircraft remaining in the public-use category, and hence exempt from FAA oversight, included those used in fire fighting, search and rescue, aeronautical research, and law enforcement, as well as those operated by the armed forces or intelligence agencies.

19950427 Apr 27, 1995: FAA announced an agreement with Loral Corp. on contract modifications regarding air traffic control modernization under the former Advanced Automation System program (see Dec 13, 1993). Loral would develop and implement the Display System Replacement (DSR), new automated workstations for controllers at en route centers and other key sites. On Dec 5, 1996, FAA announced that Loral had delivered the first DSR to the Seattle Air Route Traffic Control Center, ten months ahead of schedule. The Apr 1995 agreement with Loral also included delivery of the first Tower Control Computer Complex (TCCC), with a future agreement for additional TCCC systems to be negotiated. The TCCC program was subsequently restructured, however, to provide modular upgrades to towers on an "as needed" basis.

19950510 May 10, 1995: Effective this date, DOT suspended rules requiring transportation companies to conduct preemployment alcohol testing for safety-sensitive workers (see Feb 3, 1994). A Supreme Court decision of Apr 5, 1995, had vacated the Federal Highway Administration's rule on this subject and raised questions about the validity of similar rules issued by FAA and the Federal Railroad Administration. At DOT's request, Congress amended the relevant legislation to permit such tests rather than to require them. On May 9, 1996, DOT accordingly published a rulemaking proposal to harmonize the regulations with the legislation by making pre-employment testing voluntary for employers.

19950528 May 28, 1995: Effective this date, DOT gave the Office of Airline Statistics the new name Office of Airline Information and transferred it from the Research and Special Projects Administration to the Bureau of Transportation Statistics, a multi-modal agency which had been established in Dec 1992.

19950608 Jun 8, 1995: FAA issued a number of safety tips on traveling with children by air and announced a coming campaign to promote use of child restraint systems, known as CRSs (see Dec 17, 1996). At the same time, FAA reconfirmed its decision not to require CRS use for children under 2 years of age. Such children were still allowed to fly on parent's laps, customarily without tickets. The agency based its position on new research, released on the same day as part of a report to Congress. This research supported FAA's view that a rule requiring CRS use would kill more children than it saved because the resulting increase in air travel costs would force many parents to choose modes of travel less safe than aviation. The agency also announced a proposal to ban certain inadequate CRS types (see Sep 21, 1994), an action accomplished in a final rule published on Jun 4, 1996.

19950613 Jun 13, 1995: FAA unveiled the National Plan for Civil Aviation Human Factors, a joint FAA-DOD-NASA initiative. The Plan outlined a national agenda to eliminate aviation accidents caused by human error. Its elements included: identifying needs and problems involving human performance; guiding research programs to address the human element; involving the nation's top scientists and aviation professionals; and sharing the resulting information with the aviation community.

19950620	Jun 20, 1995: A series of encounters with turbulence on this date and Jun 25 and Jun 26 injured a total of over 40 airline passengers and crew members. On Jun 27, Secretary of Transportation Peña directed FAA to review recent turbulence incidents and determine whether new seat belt rules are needed. The next day, FAA issued a public advisory instructing airline passengers to use seat belts whenever seated. (See Dec 17, 1996.)
19950621	Jun 21, 1995: FAA and Australia's Qantas Airlines completed the first in a series of operational trials of a satellite-based communication, navigation, and surveillance system. Known as the Future Air Navigation System (FANS), the system was designed to improve communication between controllers and pilots on oceanic and remote flights. Other events related to oceanic aviation in 1995 included FAA's Jul 26 announcement that the first component of the prototype Oceanic Data Link (ODL) system was operational at the Oakland Air Route Traffic Control Center. Single sector air-to-ground communications using ODL became operational at Oakland in October. On Sep 22, meanwhile, FAA announced the award of a contract to Hughes Aircraft Company to develop the Advanced Oceanic Automation System (AOAS) to upgrade and automate the agency's oceanic air traffic control systems. (See Dec 14, 1989.)
19950628	Jun 28, 1995: FAA directed airlines and airports in California to increase security measures and warned passengers to be alert for suspicious baggage and parcels. The precautions responded to a threat from the so-called "Unabomber" received by the San Francisco Chronicle on Jun 27. Postal authorities also implemented certain temporary restrictions on mailing packages from California. The Unabomber's alleged crimes included several related to aviation, among them responsibility for an explosion in an American Airlines cargo hold on Nov 15, 1979, that caused 12 persons to suffer smoke inhalation. On Apr 3, 1996, Federal agents detained Theodore Kaczynski as a suspect in the Unabomber case.
19950630	Jun 30, 1995: At the Seattle Air Route Traffic Control Center, FAA commissioned the first Voice Switching and Control System, known as VSCS (see Oct 21, 1986). The project was completed for all 21 en route centers on Feb 18, 1997, when VSCS became operational at the Jaksonville ARTCC. Meanwhile, on Aug 8, 1995, FAA had announced a contract with Denro, Inc, to build and install the Enhanced Terminal Voice Switch (ETVS). This system would provide to towers and approach control facilities the same benefits that VSCS gaves to en route centers. On Nov 1, 1995, FAA commissioned its 100th Small Tower Voice Switch (STVS), a system also produced by Denro.
19950713	Jul 13, 1995: FAA announced that it and 11 airlines would establish a consortium to develop the framework for a worldwide Aeronautical Telecommunication Network (ATN).

19950801	Aug 1, 1995: FAA announced a decision to go forward as quickly as possible with the Display Channel Complex Rehost (DCCR) project to replace aging IBM 9020E computers at five Air Route Traffic Control Centers: Chicago, Dallas/Fort Worth, Washington, Cleveland, and New York. The centers had experienced 20 display channel complex failures in the past four months. On Aug 9, loss of electrical power at the Oakland center highlighted another type of outage problem. On Aug 11, a DOT/FAA announcement described steps to combat equipment service interruptions, including reviews of the problem by both FAA and outside experts, additional training, and hiring of 116 more maintenance technicians. On Aug 30, FAA announced award of a contract to Loral Corp. for DCCR production and installation. Highly-publicized outages at the Chicago center and other facilities prompted DOT and FAA statements during the next two months describing remedial actions and assuring the public that the air traffic control system was safe. On Oct 25, FAA awarded a five-year contract for new emergency electrical systems to provide backup power to air traffic facilities nationwide. (See Apr 1, 1996.)
19950801	Aug 1, 1995: DOT announced the availability of a Global Positioning System (GPS) signal specification defining performance standards for civil aviation use. On Aug 3, a consortium led by Wilcox Electric received an FAA contract to develop and field the Wide Area Augmentation System (WAAS) to enhance GPS signals. (See Jun 2, 1994 and Mar 29, 1996.)
19950802	Aug 2, 1995: DOT and the Department of Agriculture (USDA) released to Congress a joint study on aviation inspection programs. The study concluded that USDA actions during 1994 had reduced to a minimal level duplication between FAA inspections and USDA's inspections of its aviation activities.
19950807	Aug 7, 1995: DOT announced that the Office of Commercial Space Transportation would move from the Office of the Secretary to FAA, effective Oct 1, 1995. The change was part of a larger DOT reorganization aimed at streamlining the Department in accordance with the National Performance Review (see Sep 7, 1993). The transfer of the office was delayed, however, until sanctioned by legislation (see Nov 15, 1995).
19950809	Aug 9, 1995: DOT stated that the Clinton Administration had directed Cabinet agencies to review their security practices. As a result, FAA had determined a need for, and was requiring, increased security by all airports and air carriers in the United States. The action was based on information from intelligence and law enforcement agencies but did not reflect a specific threat. On October 1, DOT announced a further heightening of aviation security. The Department again stated that the measure was not based on a specific threat, but press reports linked it such factors as the conviction on the same day of Islamic militants accused of a conspiracy to bomb locations in New York. (See Jul 17, 1996.)

19950907	Sep 7, 1995: FAA announced that it was putting into operation a new Safety Performance Analysis System (SPAS), an automated decision support system designed to aid in targeting inspection and certification resources. By the end of fiscal 1996, the SPAS operational test system was in use by selected inspectors at 58 FAA offices.
19950912	Sep 12, 1995: Sen. John McCain (R-Ariz) introduced a bill to reform FAA while keeping it within DOT. The bill gave the agency more flexibility in personnel and acquisition matters (an approach that was also part of a bill to provide DOT's fiscal 1996 appropriation: see Nov 15, 1995). The McCain bill also provided for a system of financing FAA that emphasized fees for services. The Secretary of Transportation and FAA Administrator immediately endorsed the bill, a position that marked the Clinton Administration's shift away from its drive to create a government corporation for air traffic control (see May 3, 1994).
19950913	Sep 13, 1995: The United States and the Netherlands signed the world's first bilaterial aviation safety agreement (BASA), a new type of agreement aimed at promoting safety by creating a regulatory partnership. The BASA included provisions on increased cooperation in such areas as aircraft certification and the approval and/or monitoring of airmen, training, flight operations, and maintenance facilities. By the end of 1996, the United States had concluded five more BASAs with Britain, Germany, France, Malaysia, and Switzerland.
19950916	Sep 16, 1995: Pres. Clinton declared Puerto Rico and the U.S. Virgin Islands disaster areas due to Hurricane Marilyn. Aviation-related effects of the storm included severe damage to the tower at Cyril E. King Airport on St. Thomas. FAA worked with the Air Force to transport a mobile tower to the island, and took other actions to restore air service.
19950926	Sep 26, 1995: FAA issued rule on investigations of persons seeking unescorted access to secure areas of airports, requiring disqualification of applicants who had been convicted of certain crimes in the past 10 years. The new rule, which replaced a less stringent November 1985 regulation, fulfilled a provision of the Aviation Security Improvement Act (see Nov 16, 1990).
19951006	Oct 6, 1995: FAA issued a rule requiring manufacturers of new design transport category rotorcraft to minimize the adverse effects of turbine engine rotor failure.

19951027 Oct 27, 1995: The first Alaskan "Alliance for Safety" meeting took place in Anchorage, with participants from FAA, the National Transportation Safety Board (NTSB), the military, the aviation community, and related industries. A committee formed at this meeting developed a sample safety program for use by the state's numerous and diverse air taxi and commuter operators. In Mar 1996, the program was presented at a convention of the Alaskan air carriers. Meanwhile, on Nov 28, 1995, NTSB issued a report on Alaskan aviation safety that contained a variety of recommendations for FAA, the National Weather Service, and state authorities. In comparing the state's fatal accident rates in recent years with that of the rest of the nation, the report concluded that in Alaska: commuter airline fatal accident rates remained greater despite improvement; air taxi fatal accident rates had fluctuated but were generally greater; and general aviation fatal accident rates were comparable.

19951031 Oct 31, 1995: FAA announced its final decision on the New Jersey Environmental Impact Statement (see Mar 11, 1991). The agency rejected a plan to reroute many flights over the ocean, but accepted a measure known as the Solberg Mitigation Proposal for implementation in early 1996. This measure involved routing changes to reduce noise in the Scotch Plains and Fanwood areas.

19951113 Nov 13, 1995: At midnight on this date, funding for much of the Federal government lapsed with the expiration of a continuing resolution that had been approved by the Congress and President in October. As instructed by the Office of Management and Budget, Federal agencies implemented shutdown plans by 12:30 pm on Nov 14. Employees were placed on furlough, with the exception of those exempted because their positions: directly affected safety or the protection of property; were necessary for the orderly shutdown of operations; or did not require further congressional action for their funding. About 7,800 FAA employees were furloughed, but most of the agency's personnel were exempted. (See Nov 15, 1995.)

19951115 Nov 15, 1995: President Clinton received from Congress and signed the fiscal 1996 DOT appropriations bill, allowing all furloughed DOT employees to return to work on the morning of Nov 16. (The furlough ended government-wide on Nov 20.) The DOT appropriations legislation provided $8.216 billion for FAA, and included important provisions for FAA personnel and procurement reform (see Apr 1, 1996). It also cleared the way for the transfer of the Office of Commercial Space Transportation from the Office of the Secretary of Transportation to FAA (see Aug 7, 1995). The transfer became effective on Nov 16, and the director of this new FAA line-of-business organization became an Associate Administrator reporting to the Administrator.

19951117 Nov 17, 1995: DOT announced a plan to implement congressionally-mandated reductions in Essential Air Service subsidies in a manner designed to maintain the highest possible level of service to communities eligible under the program, which had been established by the Airline Deregulation Act (see Oct 24, 1978).

19951206 Dec 6, 1995: DOT and FAA opened a two-day Aviation Safety Initiative Review meeting to evaluate safety actions since the earlier “summit” conference (see Jan 9, 1995) and set the safety agenda for 1996. Some 300 aviation safety experts attended the event. On the second day of the meeting, airline representatives announced a Jan 22 launch date for the new Flight Operations Quality Assurance (FOQA) program to share data from flight recorders (see Sep 18, 1996). Following the meeting, FAA published an updated Aviation Safety Action Plan in Feb 1996. Another meeting in Dec 1996 was followed by a revised plan issued in 1997.

19951214 Dec 14, 1995: FAA announced the Commuter Safety Initiative, a group of new rules aimed at providing a single level of safety for travelers on airliners ranging from “ten-seaters” to jumbo jets. The Commuter Safety Initiative represented one part of a three-point program unveiled a year earlier (see Dec 13, 1994), and was based on a proposal issued on March 16 in an accelerated rulemaking effort. The new rules required many commuter airlines formerly operating under Federal Aviation Regulations Part 135 to operate under the stricter Part 121 governing major airlines. This change applied to scheduled passenger operations using airliners with 10 to 30 passenger seats or using turbojets. The rules also contained provisions on standards for airplane performance and for flightcrew training and qualifications. In addition, the regulations extended to commuter airline pilots the age-60 rule on mandatory retirement, which had formerly applied only to airline pilots flying larger aircraft (see Mar 15, 1960). Finally, the Commuter Safety Initiative included a notice of proposed rulemaking on new common standards regarding rest requirements and limitations on duty and flight time for airline flightcrew members.

19951220 Dec 20, 1995: An American Airlines 757 crashed into a mountain while attempting an approach to Cali, Colombia, killing 159 of the 163 persons aboard. The Colombian accident report cited the probable cause as errors by the flightcrew, who had entered incorrect data into their Flight Management System (FMS). Alerted by the Ground Proximity Warning System (GPWS), the crew tried to pull up but failed to retract the speedbrakes. In response to the crash and to National Transportation Safety Board recommendations, FAA undertook efforts aimed at improvements in FMSs and their use as well as in charting and pilot training. The agency began evaluations of possible regulatory requirements for: automatic speedbrake retraction for situations requiring maximum thrust and climb; visual “angle-ofattack” indicators to aid pilots in safely obtaining maximum climb; and Enhanced GPWS (see Nov 6, 1996).

19951231 Dec 31, 1995: Authority to collect aviation user taxes expired at midnight. By this date, the tax levels had risen to: domestic airline passenger ticket tax; 10 percent; international departure tax, $6 per passenger; domestic air cargo tax, 6.25 percent of the freight waybill; non-commercial jet fuel, 17.5 cents per gallon; and non-commercial aviation gasoline tax, 15 cents per gallon (14 cents of which continued to be collected and depositied in the Highway Trust Fund). Loss of this revenue quickly reduced the amount of money in the Airport and Airway Trust Fund. Legislation enacted on Aug 20, 1996, temporarily reinstated these taxes, effective Aug 27, but they expired again at the end of CY 1996.

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19960213 Feb 13, 1996: FAA announced that it and Europe's Joint Aviation Authorities (JAA) had developed a common set of certification standards for newly designed small airplanes. The achievement was part of an ongoing effort to reduce or eliminate burdensome duplicative requirements through harmonization of international standards.

19960220 Feb 20, 1996: FAA began a 120-day special emphasis safety review of ValuJet Airlines, an innovative low-cost carrier that had grown rapidly since its certification on Oct 21, 1993. Factors prompting the review included a series of incidents and nonfatal accidents. (See May 11, 1996.)

19960222 Feb 22, 1996: Confirming its intent to address staffing needs at key facilities, FAA announced that it planned to hire 100 more air traffic controllers during 1996, and that the Clinton Administration would request funding for hundreds more during 1997 (see Sep 30, 1996). The agency pledged to give fair consideration to former strikers (see Aug 12, 1993).

19960224 Feb 24, 1996: Cuban fighters shot down two U.S. civil aircraft off the coast of Cuba, killing all four persons aboard the two Cessna 337s, which were operated by a Cuban exile group. A third exile plane returned to the United States. On Feb 26, President Clinton took retaliatory measures that included the indefinite suspension of all charter flights between Cuba and the United States. FAA actions included a letter warning south Florida airmen of the dangers and penalties associated with violating Cuban airspace. In May, the agency also revoked the license of the pilot of the third exile plane, based on evidence that he had entered Cuban airspace on Feb 24 and on a previous occasion.

19960229 Feb 29, 1996: As part of a continuing "open skies" initiative (see Sep 4, 1992), DOT announced a U.S.- German agreement relaxing limitations on air travel between the two countries. By this date, the United States had concluded 10 other open skies agreements with European nations: the Netherlands, Austria, Denmark, Finland, Iceland, Luxembourg, Norway, Sweden, Switzerland, and Belgium. In addition, the United States and Canada had signed a liberal agreement on transborder air travel on Feb 24, 1995. Other international accords increasing opportunities for airline service included a Jun 5, 1995, agreement with Britain that included some expansion of airport access and other privileges for U.S. and U.K. carriers.

19960312 Mar 12, 1996: FAA issued a comprehensive revision of pilot medical standards and medical certification procedures. Among the many changes was a modification of the previous two-year validity period for the third-class airman medical certificates required for student, receational, and private pilots. The validity period would still be two years for pilots of age 40 and older, but would now be three years for younger pilots.

19960329	Mar 29, 1996: The Clinton Administration announced a Presidential directive assuring the availability of Global Positioning System (GPS) signals to civilian users. The new policy included a planned end to the practice of degrading civil GPS signals, within a decade, in a manner that would allow the U.S. military to prepare for this eventuality.
	On Apr 26, FAA cancelled its contract with Wilcox Electric for the Wide Area Augmentation System (WAAS) to enhance GPS signals (see Aug 1, 1995). The agency cited project management problems and projected cost overruns. On May 1, FAA entered into a letter contract with Hughes Information Technology Systems regarding WAAS. This was followed by the Oct 29 announcement of a comprehensive contract with Hughes for WAAS development and implementation.
	Other related milestones during 1996 included a Jul 26 FAA plan for transition to GPS-based navigation and landing guidance during a period of about 10 years that would start when augmented GPS service became available.
19960331	Mar 31, 1996: Effective this date, the following functions were transferred from the Office of Public Affairs to the organization of the Associate Administrator for Administration: the Freedom of Information Act program; the audiovisual function; and the agency history program.
19960401	Apr 1, 1996: Effective this date, reforms gave FAA new flexibility on personnel and procurement policies, a change made possible by legislative relief from various statutory requirements (see Nov 15, 1995). Teams of FAA personnel had helped to establish procedures for implementing the reforms. The new acquisition management system aimed at reducing the time and cost of acquiring systems and services while making the acquisition workforce more accountable. The new personnel system was intended to speed recruitment and to reward outstanding employees while dealing effectively with substandard performance.
	In accordance with reform legislation, all FAA employees became part of a new Federal Aviation Service (FAS) on this date. The FAS was designated an “excepted service” in contrast to the “competitive service” to which most Federal personnel belonged. FAA was no longer subject to certain Office of Personnel Management rules on filling positions and related actions, but its employees continued to enjoy a range of legal protections that applied to other Federal workers. Unionized FAA employees retained their representational status, as provided for by legislation that had been enacted on Mar 29. Later in the year, FAA reauthorization legislation enacted further reform measures (see entry for Sep 30, 1996).

19960401 Apr 1, 1996: DOT and FAA announced a program of special pay incentives for seven hard-to-staff air traffic control facilities in or near Oakland, Chicago, and New York City. The program affected about 2,200 employees, including controllers, flight service data processing specialists, technicians, and certain technical staff and managers. They received a 10 percent raise, with 7 percent effective Apr 14 and the remainder effective by mid-Oct 1996. At the same time, DOT Secretary Peña announced that delivery of new computers to five en route control centers under the Display Channel Complex Rehost (DCCR) project would be speeded by 10 months (see Aug 1, 1995). The first of these DCCR systems became operational at the Chicago center in Jan 1997.

19960412 Apr 12, 1996: FAA commissioned the nation's first ARSR-4 air route surveillance radar (see Sep 1986), and had commissioned a total of 12 by the end of calendar 1996.

19960506 May 6, 1996: FAA renamed its Technical Center the William J. Hughes Technical Center. The new name honored Ambassador Hughes, a former member of Congress (D.-N.J.) and a long-time supporter of the facility.

19960506 May 6, 1996: In a full-scale fire test at FAA's Technical Center, one of the new materials tested demonstrated its ability to double the time that it takes for fire to burn through an aircraft's fuselage. The test was part of joint work with British aviation authorities to increase fuselages' resistance to external conflagrations, and was an example of FAA's continuing research in aircraft fire safety. (See Nov 3, 1988.)

19960507 May 7, 1996: DOT announced that about 80 percent of non-stop scheduled U.S. airline flights between the United States and foreign countries would be free of smoking as of Jun 1, when certain air carriers would implement smoking curbs. During the previous year, DOT had granted anti-trust immunity permitting airlines to discuss smoking bans. Other U.S. steps against smoking on international flights had included a 1994 agreement with Canada and Australia to ban the practice on flights between the three nations. (See Feb 25, 1990.)

19960509 May 9, 1996: FAA announced its Global Analysis and Information Network (GAIN) concept, a proposed system to collect and analyze aviation safety data. The agency asked for comments from the aviation community on the development of GAIN prototypes, including the proposal that GAIN be privately owned and operated by an international consortium. In Sep 1996, FAA announced that Britain's Royal Aeronautical Society had agreed to host a conference on GAIN during the following spring. On Oct 22-24, meanwhile, the first international GAIN workshop took place at Cambridge, Mass.

19960511 May 11, 1996: A ValuJet DC-9 crashed into the Everglades shortly after takeoff from Miami, killing all 110 persons aboard. The crew's loss of control was due to an intense fire caused by activation of one or more oxygen generators carried in the forward cargo compartment. In a report released in Aug 1997, the National Transportation Safety Board found the accident's probable cause to be: the failure of SabreTech, a Valujet contractor, to properly handle and identify the chemical oxygen generators before presenting them to the airline for carriage; Valujet's failure to properly oversee its contract maintenance program; and FAA's failure to require smoke detection and fire suppression systems in cargo compartments of the type (Class D) in which the fire had started.

On the day after the crash, FAA announced an expansion of its ongoing review of Valujet (see Feb 20, 1996). On May 23, DOT's Research and Special Projects Administration issued an immediate temporary ban on the the transportation of chemical oxygen generators as cargo on passenger airlines. (See Jun 17 and Dec 30, 1996.)

19960516 May 16, 1996: FAA unveiled the findings of the Challenge 2000 project, a review of the agency's regulation and certification capabilities in light of the rapid changes taking place in aviation. The agency had announced the project on Jul 13, 1995, and during the following month had selected Booz-Allen & Hamilton, Inc. to conduct the review. The project report included recommendations that FAA's Regulation and Certification organization: shift its resources to focus more on industry groups most in need of oversight; revise its organizational structure; redesign and expedite the rulemaking process; and create new Centers of Excellence as sources of expertise (see Oct 1992).

19960520 May 20, 1996: FAA announced that the agency and Boeing had formed a partnership to build the world's first full-scale airport pavement test facility at the William J. Hughes Technical Center.

19960617 Jun 17, 1996: FAA announced that ValuJet Airlines would cease operations, as of midnight on the same day, pending safety improvements required under a consent decree (see Aug 29, 1996). The agency based its action on an intensified inspection of the carrier undertaken since the recent crash (see May 11, 1996). FAA stated that this heightened scrutiny had revealed serious safety deficiencies in the areas of airworthiness, maintenance, quality assurance of contractors, and engineering capability. The announcement sparked renewed criticism of DOT and FAA because it appeared to contrast with statements, made following the accident, assuring the public that the airline was safe. The next day, Secretary of Transportation Peña and Administrator Hinson described steps to improve safety oversight and address public concerns. Peña stated that he would urge Congress to make safety FAA's single primary mission (see Sep 30, 1996). Hinson outlined improvements to FAA's examination of airlines, such as ValuJet, that relied heavily on contractors for maintenance and training. He stated that Deputy Administrator Daschle would lead a review of pertinent regulatory issues (see Sep 16, 1996). Hinson also announced the retirement of Anthony J. Broderick, Associate Administrator for Regulation and Certification. (See Jul 15 and Nov 14, 1996.)

19960627	Jun 27, 1996: FAA signed a contract with Northrup Grumman Systems for three full-scale development versions of the Airport Movement Area Safety System (AMASS). The system was designed to provide a visual and aural alert for the display of the Airport Surface Detection Equipment model 3. (See Dec 3, 1993.)
19960701	July 1, 1996: The United States adopted, with some modifications, an international system for reporting surface weather observations and terminal forecasts for aviation use.
19960702	Jul 2, 1996: Vice President Gore announced NASA's selection of Lockheed Martin to build the X-33, an unmanned, reusable spacecraft intended as step toward replacing the space shuttle. The experimental craft would be capable of suborbital flight 50 miles high. NASA stated that the project should lead to a fleet of privately owned and operated vehicles to carry both government and industry payloads.
19960715	Jul 15, 1996: FAA Administrator Hinson announced initiatives to address the dangers of transporting hazardous materials by air. The initiatives called for a seven-fold increase in resources devoted to the issue, funding to upgrade the "hazmat" program, and the hiring of 130 additional inspectors and legal personnel. He also stated that FAA had asked the Research and Special Projects Administration to ban the transport of oxidizing materials in specific compartments on passenger and cargo aircraft (see Dec 30, 1996).
19960716	Jul 16, 1996: FAA published a rulemaking proposal to increase the amount of data collected by Flight Data Recorders installed in airliners. The agency specified the data parameters to be required for various new and existing aircraft, with retrofit to be accomplished within four years of the final rule. The largest increase in parameters -- from 29 to 88 -- would apply to aircraft manufactured five years after the proposed rule's effective date. The proposal addressed concerns raised in several National Transportation Safety Board recommendations following unexplained crashes (see Sep 8, 1994).
19960717	Jul 17, 1996: Trans World Airlines Flight 800 exploded in midair and crashed into the Atlantic off Long Island after taking off from New York Kennedy airport for Paris. All 230 persons aboard the Boeing 747 died. Initial speculation as to the cause focused on terrorism. On the day after the tragedy, FAA confirmed that the security measures announced during the previous summer (see Aug 9, 1995) remained in effect, with some adjustments. On Jul 25, President Clinton announced increased security for air travel. FAA stated that steps would include more intensive screening of passengers on international flights, increased screening of carry-on bags for both international and domestic flights, as well as other actions not disclosed to the public. Clinton also announced that Vice President Gore would head a commission to review aviation security. This White House Commission on Aviation Safety and Security was formally established Aug 21, 1996. (See Sep 9, 1996.)

	Despite painstaking recovery of the wreckage, the TWA disaster proved difficult to explain. Throughout 1996, the National Transportation Safety Board refused to rule out any of three possible causes: a bomb, a missile, or mechanical failure. As the investigation progressed, however, the possibility of an accidental fuel tank explosion received increased media attention. On Dec 13, 1996, the Board announced a group of recommendations for improving the safety of the 747 fuel system. FAA, which had been conducting a review of 747 safety issues in the wake of the crash, issued on Dec 23 an airworthiness directive requiring inspection of certain wiring in the fuel systems of older 747s.
19960817	Aug 17, 1996: To combat the hazard of wake turbulence, FAA implemented new separation standards for aircraft. The agency increased the required separation for small aircraft traveling behind a Boeing 757 from four to five nautical miles. At the same time, FAA revised the definition of the three aircraft weight categories used in setting separations to avoid wake turbulence: small (formerly 12,500 lb. or less, changed to 41,000 lb. or less; large (formerly 12,500-300,000 lb, changed to 41,000-255,000 lb.); and heavy (formerly 300,00 lb. or more, changed to 255,00 lb. or more). As a result, some 57 aircraft types moved from the large to small category. (See Nov 1, 1975, and May 20, 1994.)
19960822	Aug 22, 1996: FAA announced nine proposed Airworthiness Directives on changes to the design of Boeing 737 flight control systems. The proposals stemmed from recommendations of a Critical Design Review prompted by two 737 accidents (see Sep 8, 1994). Following new information from Boeing that a valve in the 737 rudder power control unit could jam under extreme conditions, FAA on Nov 11 issued an airworthiness directive requiring repetitive inspections. Continuing attention to the 737 control system issue led in Jan 1997 to an airworthiness directive on precautionary flight procedures. During the same month, Vice President Gore announced that FAA intended to require retrofit of 737 rudder components.
19960829	Aug 29, 1996: FAA returned ValuJet's operating certificate to the airline, stating that the carrier had completed the safety improvements outlined in the consent order that grounded it (see Jun 17, 1996). The action cleared ValuJet to renew operations, subject to a DOT fitness ruling subsequently granted on Sep 26. The airline resumed flying on Sep 30. FAA imposed a limit of 15 aircraft, subject to review, in contrast to the 51 aircraft that the carrier had operated before its grounding.

19960909	Sep 9, 1996: President Clinton called on Congress to appropriate more than $1 billion for a variety of antiterrorism measures. Proposed programs related to aviation included: improved airport bomb-detection equipment, more FAA research; more FAA security personnel; expanded Customs Service air security resources; a computerized passenger "profile" screening system; immediate criminal background checks for airport workers with access to secure areas; deployment of explosive-detection dog teams at airports; and a test of a system for matching luggage and passengers on all domestic flights. These measures were based on recommendations of the White House Commission on Aviation Safety and Security (see Jul 17, 1996), whose initial report was also dated Sep 9, 1996. Many of these initiatives were funded by legislation enacted on Sep 30, 1996 (see that date).
19960916	Sep 16, 1996: FAA announced the award of a contract to build the Standard Terminal Automation Replacement System (STARS) to a team led by Raytheon (see Dec 13, 1993). Under the contract, the team would develop and install new computers, displays and software for terminal radar approach control facilities (TRACONs). This joint procurement involved new equipment for up to 172 FAA and 199 DOD facilities. On Sep 17, FAA announced that the Dallas-Fort Worth TRACON was now operating an updated Automated Radar Terminal System IIIE (ARTS IIIE), the first of several new ARTS IIIEs that would provide improvements pending STARS implementation.
19960916	Sep 16, 1996: A team headed by Deputy Administrator Daschle submitted a report on a 90-day review of FAA safety regulation and certification (see Jun 17, 1996). Recommendations included: creation of a national team to assist local certification offices regarding new entrants into the airline industry; increased safety surveillance and growth management for new carriers; actions to ensure that carriers have the resources to operate a varied fleet and to support "outsourcing" of functions to contractors; additional support for inspectors through upgraded training, guidance material, and information technology; and increased inspector staffing. (See Sep 30, 1996.)
19960918	Sep 18, 1996: FAA announced that it and NASA were testing a new Automated Performance Measuring System (APMS) to convert digital data from Flight Data Recorders directly into easily understood safety information. FAA/industry joint work on Flight Operations Quality Assurance (FOQA) programs had demonstrated the need for such a system to assist FAA, airlines, and flight crews in improving safety and efficiency. (See Dec 6, 1996.)
19960919	Sep 19, 1996: FAA issued a license to Spaceport Systems International, allowing it to open the world's first privately-operated space launch facility, California Spaceport. The facility was located on Vandenberg AFB, Calif.
19960926	Sep 26, 1996: A new Pan American World Airways began service. The operators of the small new carrier had purchased the name and trademark of the original airline. (See Dec 4, 1991.)

19960930	Sep 30, 1996: Chicago's Meigs Field ceased operations as part of a plan by the city's mayor to convert the lakefront facility into a park, a concept opposed by Illinois' governor. On Jan 6, 1997, the two officials announced a compromise under which the city would reopen and operate the airport for five years but then be free to close it.
19960930	Sep 30, 1996: Pres. Clinton signed the DOT appropriations bill for fiscal 1997 (P.L. 104-205), providing $8.3 billion for FAA programs. The legislation gave funds for hiring hundreds of new controllers, maintenance technicians, inspectors, and security personnel. On the same day, the President also signed a continuing appropriations bill (P.L. 104-208) that funded programs to increase safety and combat terrorism through a range of means such as deployment of new security equipment at airports (see Sep 9 and Dec 23, 1996). The continuing resolution also gave funds to step up surveillance of newly certificated airlines and to increase the number of safety inspectors, as recommended by Deputy Administrator Daschle's 90-day review team (see Sep 16, 1996).
	On Oct 9, the President signed the Federal Aviation Reauthorization Act of 1996 (P.L. 104-264) , which contained further appropriations, increased the agency's share of Trust Fund monies from 70 to 72.5 percent, and provided two-year funding for the Airport Improvement Program. The legislation established a National Civil Aviation Review Commission to report to Congress on the state of aviation safety and on providing long-term funding for the agency. The law contained provisions aimed at expanding FAA's financial accountability and increasing its autonomy within DOT. It directed the establishment of a Federal Aviation Management Advisory Council composed of 15 members serving 3- year terms, with one member designated by DOT, one by the Defense Department, and 13 by the President with Senatorial approval. The Council was to advise the FAA Administrator and function as an oversight resource for management policy, spending, and regulatory matters. To address public perceptions about FAA's "dual mission," the law specified safety as the agency's highest priority. FAA remained responsible for encouraging and developing civil aeronautics, but references to a promotional role were eliminated from its mandate.
	The law provided for a variety of enhancements to aviation safety, emphasizing anti-terrorism through such means as new requirements for background checks of certain airport personnel with security functions associated with cargo or baggage. The legislation banned children from controlling aircraft for the purpose of setting records. (This stipulation stemmed from a crash on Apr 11, 1996, that claimed the life of a 7-year-old girl, her flight instructor, and her father.) Another provision directed FAA to hire an ombudsman for noise issues.
	The law's Title VII was designated the Aviation Disaster Family Assistance Act of 1996. It gave the National Transportation Safety Board new responsibilities for aiding the families of the victims of air accidents.

19960930	Sep 1996: The Driver's Enhanced Vision System (DEVS) became operational at Boston Logan airport, the pilot installation site for this FAA-developed equipment. DEVS was designed to assist emergency crews when visibility was limited by such factors as smoke, flames, fog, or precipitation. The system combined satellite, digital, and infrared technologies.
19961001	Oct 1, 1996: FAA established a new Air Traffic Systems Requirements Service within the organization of the Associate Administrator for Air Traffic Services. The move combined requirements organizations from Air Traffic and Airway Facilities into a single unit, bringing together controllers and engineers to conceptualize new technology.
19961010	Oct 10, 1996: FAA implemented the Metroplex Plan at Dallas/Fort Worth airport, making the airport capable of handling simultaneous triple landings and greatly increasing air traffic capacity. The plan entailed 68 construction projects, including two high-frequency radio towers, and an additional runway, and a new terminal radar approach control facility (TRACON), which was the latest element to be commissioned. New twin air traffic control towers had been commissioned at Dallas/Fort Worth on Jun 15, 1994, giving the airport a total of three working towers.
19961106	Nov 6, 1996: FAA announced its approval of operational use of the Enhanced Ground Proximity Warning System (EGPWS) on all Boeing 757 aircraft operated by American Airlines, the first carrier to receive such permission. (See Dec 20, 1995.)
19961109	Nov 9, 1996: David R. Hinson resigned as FAA Administrator, effective this date. With Hinson's departure, Deputy Administrator Daschle became Acting Administrator, a post that she held until resigning from the agency, effective Jan 31, 1997.
19961112	Nov 12, 1996: A midair collision near New Delhi, India, claimed the lives of all 349 persons aboard two airliners, a Saudi Arabia Airlines 747 and a Kazak Airlines Ilyushin Il-76. The accident was history's deadliest collision between two aircraft in flight, and ranked third among the world's worst civil aviation disasters, summarized as follows: (1) Mar 27, 1977, Pan American and KLM, runway collision, 583 fatalities; (2) Aug 12, 1985, Japan Air Lines, control system failure, 520 fatalities; (3) Nov 12, 1996, Saudi and Kazak airlines, midair collision, 349 fatalities; (4) Mar 3, 1974: Turkish Airlines, in-flight decompression, 346 fatalities; (5) Jun 23, 1985, Air India, believed sabotage, 329 fatalities; (6) Aug 19, 1980, Saudi Arabian Airlines, in-flight fire, 301 fatalities; (7) Jul 3, 1988, Iran Air, military shoot-down, 290 fatalities; (8) May 25, 1979, American Airlines, engine separation, 272 fatalities; (9) Dec 21, 1988, Pan American, sabotage, 270 fatalities; (10) Sep 1, 1983, Korean Air Lines, military shoot-down, 269 fatalities. (See dates indicated.)

19961114	Nov 14, 1996: FAA announced its decision to issue a rulemaking proposal to require retrofit of fire detection and suppression equipment on some 2,800 older commercial aircraft that did not currently carry this equipment in inaccessible cargo compartments. This proposal, which grew out of concerns following a ValuJet crash (see May 11, 1996), was subsequently issued on Jun 10, 1997. On Dec 12, 1996, meanwhile, a group of the nation's largest airlines announced that they would voluntarily install fire detection systems in cargo holds that lacked the equipment.
19961118	Nov 18, 1996: FAA announced a policy change concerning pilot certification of individuals with insulin-treated diabetes. The new policy permitted the consideration of waivers to allow such persons to receive limited third-class medical certificates, making it possible for them to qualify for student, recreational, and private pilot certificates.
19961125	Nov 25, 1996: Officials at John F. Kennedy airport unveiled a new aircraft arresting system, made of foam blocks, to bring aircraft to a safe stop if they overrun a runway. The airport was the first to install the system, jointly developed by FAA and the Port Authority of New York and New Jersey.
19961215	Dec 15, 1996: An agreement under which Boeing would acquire McDonnell Douglas was announced by the two companies. On Aug 4, 1997, Boeing announced that the merger was complete and that it was now the world's largest aerospace company. Boeing had been formed as the Pacific Aero Products Company in 1916 and adopted the Boeing name the following year. McDonnell Douglas had been created by a merger of two firms (see Apr 28, 1967).
19961217	Dec 17, 1996: FAA unveiled a $500,000. public education campaign using the slogan "Turbulence Happens." The campaign promoted seatbelt use by airplane passengers (see Jun 20, 1995). It also reinforced FAA's recommendation that children weighing under 40 lb. were safest in a certified child restraint system when flying (see Jun 8, 1995).
19961220	Dec 20, 1996: President Clinton announced the selection of Rodney E. Slater to be Secretary of Transportation during the President's second term. A former chairman of the Arkansas State Highway Commission, Slater had been Administrator of the Federal Highway Administration since 1993. Clinton also revealed the nomination of the current Secretary of Transportation, Federico Peña, to be Secretary of Energy. Peña's resignation from the DOT post became effective on Feb 14, 1997, the same day that Slater became Secretary.
19961223	Dec 23, 1996: FAA announced the award of contracts to Raytheon and to Lockheed Martin to provide planning, design, and services required to integrate and install advanced security equipment at up to 77 U.S. airports. On Dec 26, the agency revealed that it had ordered 54 CTX-5000 SP explosives detection systems (see Dec 9, 1994) for use at the nation's busiest airports. The action responded to a recommendation of the White House Commission on Aviation Safety and Security (see Sep 30, 1996).

19961230

Dec 30, 1996: The Research and Special Projects Administration (RSPA) published a rule permanently banning oxygen generators as cargo on passenger aircraft (see May 11, 1996). On the same day, RSPA published a rulemaking proposal to prohibit carriage of oxidizing materials and compressed oxygen on passenger aircraft, as well as on cargo aircraft if stored in inaccessible cargo compartments lacking fire detection and suppression equipment.

1997

19970102	January 2, 1997: The Federal Aviation Administration (FAA) issued an airworthiness directive requiring operators to adopt procedures enabling the flight crew to reestablish control of a Boeing 737 experiencing an uncommanded yaw or roll – the phenomenon believed to have brought down USAir Flight 427 at Pittsburgh, Pennsylvania, in 1994. Pilots were told to lower the nose of their aircraft, maximize power, and not attempt to maintain assigned altitudes. (See August 22, 1996; January 15, 1997.)
19970106	January 6, 1997: Illinois Governor Jim Edgar and Chicago Mayor Richard Daley announced a compromise under which the city would reopen Meigs Field and operate the airport for five years. After that, Chicago would be free to close the airport.
19970106	January 6, 1997: FAA announced the appointment of William Albee as aircraft noise ombudsman, a new position mandated by the Federal Aviation Reauthorization Act of 1996 (Public Law 104-264). (See September 30, 1996.)
19970107	January 7, 1997: Dredging resumed in the search for clues in the TWA Flight 800 crash. The operation had been suspended in mid-December 1996. (See July 17, 1996; May 4, 1997.)
19970109	January 9, 1997: A Comair Embraer 120 stalled in snowy weather and crashed 18 miles short of Detroit [Michigan] Metropolitan Airport, killing all 29 aboard. (See May 12, 1997; August 27, 1998.)
19970114	January 14, 1997: In a conference sponsored by the White House Commission on Aviation Safety and Security and held in Washington, DC, at George Washington University, airline executives called upon the Clinton Administration to privatize key functions of FAA and to install a nonprofit, airline-organized cooperative that would manage security issues. Participants recommended funding these changes with user fees instead of the, then-current, ticket tax. (See July 17, 1996; February 12, 1997.)
19970115	January 15, 1997: FAA issued a fact sheet announcing plans for a two-year evaluation, beginning in 1999, of new air traffic management concepts and technologies for application in Alaska and Hawaii. The goal of this Ha-laska free flight demonstration project was to show that existing technologies could support the "free flight" concept. (See April 16, 1998.)
19970115	January 15, 1997: As part of the continuing review stemming from the accidents near Colorado Springs (1991) and Pittsburgh (1994), Vice President Al Gore announced FAA would require operators to retrofit existing Boeing 737 rudder control systems with four newly developed components. (See January 2, 1997; March 14, 1997.)
19970115	January 15, 1997: FAA praised the Department of Defense for making its global digital terrain elevation database available for civil aviation use, stating that this action would help prevent a danger known as controlled flight into terrain.

19970116	January 16, 1997: FAA announced that the new Display Channel Complex Rehost (DCCR) computer system began operations, ten months ahead of schedule, at the Chicago Air Route Traffic Control Center. (See April 1, 1996.)
19970121	January 21, 1997: FAA issued an airworthiness directive requiring operators to re-inspect and repair wiring leading to fuel tank booster pumps numbers 1 and 4 in the inboard main fuel tanks of 747 airplanes produced prior to 1980. The inspections had to be completed by May 20, 1997. (See November 26, 1997.)
19970122	January 22, 1997: Department of Transportation Inspector General Kenneth Mead issued a report saying that poor cost estimating processes for FAA air traffic control modernization projects resulted in unreliable cost and financial information, increasing the likelihood of poor investment decisions.
19970129	January 29, 1997: FAA selected Raytheon to build the Integrated Terminal Weather System (ITWS) and to install and maintain it at 34 sites covering 45 airports. ITWS would combine sensor and radar data from FAA and National Weather Service and present predictions on potentially hazardous weather to air traffic control personnel via easily-understood graphics and text.
19970129	January 29, 1997: FAA announced steps to provide the following aviation safety data to the public: beginning February 1, press releases on all new enforcement actions that sought civil penalties of $50,000 or greater; effective, February 28, an Internet page providing safety information, including some data previously available only through Freedom of Information Act requests, to consumers; and by March 31, addition of a public education portion to the Internet page to help travelers better understand the aviation safety record and safety systems.
19970129	January 29, 1997: A federal judge in Colorado selected the auditorium at FAA's Mike Monroney Aeronautical Center to host the families of victims of the Oklahoma City federal building bombing who wanted to watch a close-circuit broadcast of the criminal trials.
19970201	February 1, 1997: Barry L. Valentine followed Linda Hall Daschle as acting FAA Administrator, effective at midnight. Monte Belger continued as acting deputy administrator. (See November 9, 1996; December 19, 1997; August 4, 1999.)

19970205 February 5, 1997: A series of incidents and developments began involving U.S. Air Force (USAF) and U.S. commercial aircraft. Two USAF F-16 fighter jets reportedly were involved that day in a near midair collision with a Nation's Air Express 727 off the New Jersey coast. February 7, an American Eagle pilot reported that four Air Force jet fighters came close to his aircraft off the coast of Maryland; the Air Force temporarily halted all training operations off the East Coast as a precaution; the FAA asked controllers at three air route traffic control centers and the military controllers at the Virginia Capes station to review procedures regarding the military areas off the East Coast. February 10, two more, relatively minor, incidents became known and the USAF widened the suspension to include the Gulf of Mexico. February 11, the training resumed after the USAF informed pilots on the dangers of close encounters with airliners. February 19, the media reported that the USAF had concluded that although the pilot in the Nations Air incident had broken no rules, in the future, its pilots would query controllers before intercepting unknown aircraft detected in flight. February 26, the Navy stated that a military controller's failure to follow proper procedures had caused the Nations Air incident.

19970206 February 6, 1997: Invision Technologies announced installation of the first two CTX 5000 SP explosives detection systems at Chicago O'Hare and New York Kennedy airports. (See December 23, 1996; February 12, 1997; May 6, 1997.)

19970212 February 12, 1997: In compliance with Executive Order 13015, the White House Commission on Aviation Safety and Security (Gore Commission) released its final report to President Clinton. Its recommendations included: reducing the aviation fatal accident rate by a factor of five within ten years, requiring installation of enhanced Ground Proximity Warning Systems on all civil and military passenger aircraft (see November 6, 1996), expanding the aging aircraft program to cover non-structural systems, passing legislation to protect employees who report safety/security violations, ending the exemption of passengers younger than age two from restraint systems, and requiring smoke detectors in the cargo holds of all passenger aircraft. Air traffic control recommendations included: national airspace system (NAS) modernization by 2005, stronger leadership in global positioning system (GPS) implementation, requiring NAS users to fund its development and operation, and identifying the frequency spectrum needed for air traffic control. Security recommendations included: federal funding for a major security improvement, new FAA standards for baggage matching and passenger profile screening, U.S. Post Office examination of all packages over one pound, and a U.S. proposal for the International Civil Aviation Organization (ICAO) to begin verifying international security compliance. The commission also recommended measures designed to improve response to aviation disasters. Responding to the Gore Commission report, FAA and the National Aeronautics and Space Administration (NASA) announced a joint initiative, in partnership with the Department of Defense and industry, to reduce aircraft accident rates five-fold within ten years. (See January 14, 1997; January 15, 1997; February 6, 1997; December 15, 1997.)

19970215	February 15, 1997: President Clinton used his powers under the Railway Labor Act to stop a strike by American Airlines pilots a few minutes after it began. An emergency board was established to try to find an acceptable compromise during a 60 day cooling□off period. March 19, American and the Allied Pilots Association stated they had reached a tentative agreement on a new contract. April 4, the union's board voted in favor of the contract, which included higher pay than previously offered. May 5, union members voted to approve the new five-year contract.
19970217	February 17, 1997: Rodney E. Slater became Secretary of Transportation. Outgoing Department Of Transportation Secretary Federico Peña was designated to be Secretary of Energy, but this appointment was not yet confirmed. (See December 20, 1996.)
19970218	February 18, 1997: The Jacksonville Air Route Traffic Control Center (ARTCC) became the last of 21 centers to implement the Voice Switching and Control System (VSCS). May 21, the FAA formally dedicated this installation. (See June 30, 1995.)
19970219	February 19, 1997: FAA and National Weather service launched an experimental aviation digital data service, via the Internet, to provide weather information to the aviation community.
19970221	February 21, 1997: FAA and Interior Department announced a delay in implementing aspects of a rule, announced on December 31, 1996, on flights over the Grand Canyon. Most of the rule's provisions would be implemented as planned on May 1, 1997; however, a restructuring of the park airspace and air routes would not be implemented until January 1998. (See May 12, 1997.)
19970227	February 27, 1997: Department of Transportation and the Department of Defense announced an agreement to provide a second frequency for its global positioning system (GPS), and guarantee uninterrupted availability of the L2 frequency for civil users in the interim. The development of a second frequency was consistent with a recommendation by the Gore Commission. (See March 29, 1996; March 30, 1998.)
19970228	February 28, 1997: President Clinton signed legislation reinstating certain aviation taxes from March 6 through September 30. Included were the 10 percent airline ticket tax, 6.25 percent domestic air freight tax, an international departure tax of $6 per ticket, and excise charges on non-commercial aviation fuel. The law also gave the Treasury Department authority to transfer aviation tax revenue to the Aviation Trust Fund.

19970228	February 28, 1997: FAA released an independent 90-day assessment, as mandated by the Federal Aviation Reauthorization Act of 1996 (Public Law 104-264), to assess the scope of its financial needs through 2002. The assessment, performed by the Coopers & Lybrand consulting firm, concluded that the FAA had no system to account for its costs, and that FAA managers generally could not manage money properly. This assessment was similar to other studies that concluded that FAA needed to institute a fundamental change in the way it made decisions, and that those who funded the agency, as well as those who used its services, had to afford it greater flexibility in how it did business. In response, FAA stated that the report showed the need for reform to bridge the gap, over the next six years, between its projected responsibilities and its anticipated resources. (See September 30, 1996.)
19970305	March 5, 1997: Department of Transportation Secretary Slater announced that U.S. airlines had recorded a third straight year of strong growth. The announcement followed release of a FAA annual commercial aviation forecast.
19970313	March 13, 1997: FAA announced that it had installed two new systems, the telecommunications processor and the interim situation display, at the New York and Oakland Air Route Traffic Control Centers (ARTCC). These installations would benefit flights over the Pacific and Caribbean.
19970314	March 14, 1997: FAA formally accepted, ahead of schedule, the Display System Replacement (DSR) system. (See April 27, 1995; January 20, 1999.)
19970314	March 14, 1997: FAA published two proposed airworthiness directives requiring retrofit of Boeing 737 rudder components. (See January 15, 1997; January 13, 1999.)
19970319	March 19, 1997: FAA published a rulemaking proposal to update and clarify regulations regarding the licensing of commercial space launches. (See November 15, 1995; May 22, 1997.)
19970320	March 20, 1997: FAA published an interim final rule establishing fees, effective May 19, 1997, for providing air traffic and related services to aircraft that overfly the United States but do not land or takeoff from U.S. territory. (See May 19, 1997.)
19970321	March 21, 1997: FAA announced that, with 33 of 39 commuter air carriers now in compliance, the aviation industry had successfully implemented the commuter rule. Adopted by the government in December 1995, this rule required airlines operating aircraft with 10 to 30 seats to meet the same, or equivalent, safety standards as the major airlines. (See December 14, 1995.)
19970327	March 27, 1997: Although a section of a wing flap fell off of Delta Boeing 767 near Dallas, the plane landed with no passenger or crew injuries. April 2, FAA ordered inspections of flaps for all 767s with at least 25,000 hours or 10,000 flights.

19970327	March 27, 1997: FAA initiated phase 1 of Reduced Vertical Separation Minima (RVSM) procedures in the North Atlantic. Reducing separation from 2,000 to 1,000 had huge implications for capacity and fuel efficiency in oceanic operations. This was the first reduction of separation over the Atlantic in 40 years. (See April 9, 1997.)
19970401	April 1, 1997: A groundbreaking ceremony for the world's first full-scale airport pavement test facility took place at the FAA William J. Hughes Technical Center. FAA and Boeing partnered to create the facility. (See May 20, 1996; April 12, 1999.)
19970403	April 3, 1997: Unofficial reports began circulating that the Clinton Administration would nominate Acting Highway Administrator Jane Garvey for the post of FAA Administrator and George Donohue, currently FAA associate administrator for research and acquisitions, as her deputy. (See June 11, 1997.)
19970405	April 5, 1997: The new Washington National air traffic control tower began operating. Rising 201 feet, the state-of-the-art facility was 114 feet taller than the tower that had been in use since the airport's opening in 1941. Department of Transportation Secretary Slater dedicated the new tower on May 12, 1997.
19970407	April 7, 1997: In response to North Korea's opening of its airspace to routine international flights, the U.S. government lifted its prohibition on paying overflight fees to North Korea. April 24 the FAA cited such factors as North Korea's military rules of engagement as justification, however, for publishing a special federal aviation regulation (SFAR) prohibiting certain U.S. flights in the area.
19970409	April 9, 1997: FAA established requirements, effective this date, affecting the operations of U.S.-registered aircraft in designated Reduced Vertical Separation Minima (RVSM) airspace. This designation referred to airspace between flight level (FL) 290 and FL 410 – in which a minimum of 1,000 feet separation, rather than the 2,000 foot minimum separation generally required above FL 290, was to be maintained between aircraft. These regulations required operators and their aircraft to be properly qualified and equipped – as well as to obtain approvals certifying these conditions – to conduct flight operations while separated by 1,000 feet. RVSM was to be applied only in designated areas, and the first such area was to include certain flight levels in the North Atlantic minimum navigation performance specifications airspace. (See March 27, 1997; February 24, 2000.)
19970415	April 15, 1997: The tail of a German-made BK-117 helicopter reportedly broke off in flight, causing the aircraft to crash into New York's East river, killing one occupant and injuring two. April 25, FAA issued an airworthiness directive requiring operators of certain models of helicopters manufactured by Eurocopter Deutschland GmbH to inspect the tail booms for cracks before the craft would be permitted to fly. April 26, FAA grounded all 132 of the BK-117s in the United States pending checks for cracks in certain key components.

19970422	April 22, 1997: FAA published a proposal to accept applications, beginning December 1, for participation in an airport privatization pilot program established by the Federal Aviation Reauthorization Act of 1996 (Public Law 104-264).
19970423	April 23, 1997: FAA issued an airworthiness directive requiring visual inspections to detect stress and replace any faulty ball bearings in GE90 engines on five Boeing 777s. The directive followed ball bearing failures on two British 777s.
19970424	April 24, 1997: FAA unveiled its inflight aircraft icing plan, based on recommendations from international experts. The plan was the final phase of a three-phase program that FAA had announced in 1994. (See October 31, 1994.)
19970428	April 28, 1997: FAA selected Hughes Information Technology Systems, a unit of Hughes Aircraft Company, as its integration-services contractor to support the National Airspace System Infrastructure Management System (NIMS) program. The contract was estimated to be worth $100 million over seven years. (See June 15, 1998.)
19970502	May 2, 1997: FAA announced the $12.2 million purchase of additional trace detection security equipment for use at the nation's busiest airports. (See February 12, 1997; September 25, 1998.)
19970504	May 4, 1997: FBI Director Louis Freeh announced that the evidence in the TWA Flight 800 crash pointed to mechanical failure and emphasized the need to bring the investigation to a close. (See January 7, 1997; December 8, 1997.)
19970506	May 6, 1997: Airlines began a two-week test of matching bags with passengers at selected airports nationwide. (See February 6, 1997; February 12, 1997; May 17, 1997.)
19970512	May 12, 1997: FAA announced its selection of the FAA/NASA Joint University Program for Air Transportation to receive the first Excellence in Aviation Research award.
19970512	May 12, 1997: FAA proposed an airworthiness directive requiring ice detector systems on Embraer 120 aircraft. (See January 9, 1997.)
19970512	May 12, 1997: FAA proposed converting two flight-free zones over the Grand Canyon into new flight corridors. The agency stated that one of these was to be an "incentive corridor" for quieter aircraft, and the other was intended to address Native American concerns by preventing overflights of their cultural properties and sacred sites. (See February 21, 1997; May 19, 1997.)

19970514	May 14, 1997: FAA awarded a contract worth up to $250 million for computer support services to the Department of Agriculture's National Information Technology Center. The center would establish the Integrated Computing Environment - Mainframe and Networking (ICE-MAN) system, a follow-on to the computer resource nucleus contract. May 20, due to questions raised by industry about this controversial government-togovernment award, the FAA associate administrator for research and acquisitions suspended work on the ICE-MAN contract. FAA's ICE-MAN acquisition team and Office of Management and Budget (OMB) officials reviewed the original contract, and determined that the program met OMB's A-76 guidelines. June 10, FAA lifted the suspension on the contract and formally announced resumption on June 20, 1997. Agriculture delayed resumption of work until the deadline for appeals had passed.
19970514	May 14, 1997: FAA issued an airworthiness directive requiring operators to check an engine fire switch override button on Boeing 777s.
19970514	May 14, 1997: The Air Transport Association stated that its members would begin installing fire suppression systems in cargo holds of passenger planes. The first of these might be installed in the last quarter of 1997, and the program would take five years to complete its work. FAA reportedly proposed to require the action within three years. (See November 14, 1996; June 10, 1997.)
19970517	May 17, 1997: As part of the aircraft hardening program, FAA and British aviation authorities set off four simultaneous explosions in the cargo hold of an old Boeing 747 at Leicester, England. (See May 6, 1997; May 4, 1998.)
19970519	May 19, 1997: Under an interim final rule, FAA began collecting fees for overflight services, as scheduled – having, on the previous Friday, turned down requests from the International Air Transportation Association and the Air Transportation Association of Canada for a 90 day delay. A U.S. Court of Appeals decision in January 1998 determined that FAA's calculation of fees was inconsistent with the statute and prohibited the collection of the fees. (See March 20, 1997; June 5, 2000.)
19970519	May 19, 1997: Department of Transportation and Interior Department established a National Park Overflights Working Group to develop a plan to ensure preservation of natural quiet in the parks. The group would exist for 100 days after the date of its initial meeting, scheduled for May 20-21, 1997. Its membership included representatives of the aviation industry, parks, and conservation groups. (See May 12, 1997.)
19970521	May 21, 1997: To allow commercial airlines to benefit from technological improvements, FAA published a rule permitting commercial aircraft to activate their autopilot at less than 500 feet above ground level during takeoff and climb. Such actions, however, would have to be authorized by the FAA Administrator and would have to be performed as required in the performing carrier's operating specifications.
19970522	May 22, 1997: FAA issued its second privately-operated spaceport license to Spaceport Florida for the Cape Canaveral Spaceport. (See March 19, 1997; December 19, 1997.)

19970528	May 28, 1997: The National Civil Aviation Review Commission, lead by Norman Mineta, held the first of two public hearings regarding the financing of certain FAA services. Seventeen organizations testified. September 25, the commission made its "Preliminary Finance Report" available to the public. October 28, a second, and final, public hearing was held. December 11, Mineta issued the commission's final report, "Avoiding Aviation Gridlock and Reducing the Accident Rate: A Consensus for Change," which noted that airline passengers were doomed to massive airport congestion and more dangerous skies unless FAA received a radical overhaul. The 21-member panel called on lawmakers and the White House to improve FAA management and finances. It urged a partial privatization of the agency and steps to shield aviation regulation from partisan budget battles. The proposed reforms would let the FAA beef up funding for the air traffic control system and airports to accommodate a rise in air traffic. (See September 30, 1996.)
19970528	May 28, 1997: FAA sent a letter to Raytheon indicating its concern about delays in the Standard Terminal Automation Replacement System (STARS) project. FAA proposed to elevate STARS software development to high risk status because of delays in meeting project milestones. (See September 16, 1996; September 11, 1997.)
19970530	May 30, 1997: FAA grounded the MD-900 Explorer helicopter until further notice following the discovery of a broken adjustable collective drive link during a McDonnell-Douglas post-flight inspection on May 8.
19970530	May 30, 1997: FAA selected the firm of Booz-Allen & Hamilton to perform a congressionally-mandated review of the agency's new acquisition system.
19970610	June 10, 1997: FAA issued a notice of proposed rulemaking (NPRM) that would require the installation of fire detection and suppression systems in the sealed cargo holds of all commercial aircraft. The airline industry would have three years from the time the rule became final to meet the new standards. According to the agency, the new rule would affect approximately 3,000 passenger aircraft and another 300 cargo planes. Most long-range passenger aircraft, such as the new Boeing 777 jetliners, already met the new standard. (See May 14, 1997; February 12, 1998.)
19970611	June 11, 1997: President Clinton announced his intention to nominate Jane Garvey as FAA Administrator and George Donohue as her deputy. (See April 3, 1997; July 31, 1997; February 9, 1998.)

19970701	July 1, 1997: The National Transportation Safety Board (NTSB), reporting on a commuter plane collision in which most passengers survived the impact but died in a subsequent fire, recommended that FAA find ways to fund fire and rescue protection at small airports served by small planes. NTSB said the collision of a United Express Beechcraft 1900 with a private twin-engine Beechcraft King Air at Quincy, Illinois, on November 19 took place because the pilots of the King Air failed to monitor properly a common radio frequency on which the United Express pilot repeatedly reported her position and intention to land. Although finding the King Air crew primarily responsible, NTSB presented a list of other safety issues, including a radio transmission by a novice pilot that probably confused the United Express crew, the inability of surviving passengers to open jammed emergency exits, and a lack of fire and rescue capability at Quincy.
19970703	July 3, 1997: The Federal Trade Commission decided not to block the merger between the Boeing Company and McDonnell Douglas Corporation. The newly strengthened Boeing would control two-thirds of the world's airplane market. August 1, the two companies formally merged. (See December 15, 1996.)
19970719	July 19, 1997: A Cessna 172 and Beech Bonanza mid-air collision near Chicago's Meigs field killed all seven onboard the two aircraft. The accident resulted in a safety review of FAA's contract tower program.
19970731	July 31, 1997: The U.S. Senate confirmed Jane Garvey as FAA Administrator. August 4, Garvey was sworn in as the 14th FAA Administrator, the first to be appointed to a five-year term. (See June 11, 1997.)
19970806	August 6, 1997: A South Korean Boeing 747 jetliner crashed in rugged jungle terrain while attempting to make an early-morning landing on the South Pacific island of Guam, killing more than 200 people. At least 35 of those aboard survived the fiery crash. The crash occurred as Korean Air Flight 801 approached Won Pat International Airport in darkness and heavy rain with 254 passengers and crew aboard.
19970807	August 7, 1997: FineAir Flight 101, a DC-8, crashed on takeoff from Miami after improperly secured cargo slid. The excess weight in the rear portion of the aircraft caused a severe aft center of gravity condition, rendering the crew unable to lower the aircraft's nose. The airplane stalled, crashed into a field, and slid across busy 72nd Avenue into a strip-mall parking lot.
19970814	August 14, 1997: The Eighth U.S. Circuit Court of Appeals in St. Louis dismissed a standing protest by Wilcox Electric against FAA for having awarded the then-$500 million Wide Area Augmentation System (WAAS) contract to Hughes. FAA had terminated the Wilcox contract on April 26, 1996, claiming Wilcox, the original prime contractor, had failed to live up to provisions of the contract. FAA subsequently awarded Hughes Aircraft a sole-source award for WAAS development. (See March 29, 1996; September 23, 1997.)

19970818	August 18, 1997: A final rule requiring that digital flight data recorders (black box) collect more information went into effect. The number of specific areas of flight information, called data parameters, increased to 88 for newly manufactured aircraft and increased from 11 to 17 or 18 for older aircraft. (See July 16, 1996; May 3, 1999.)
19970819	August 19, 1997: The National Transportation Safety Board (NTSB) ruled that all parties, including FAA, executive boardrooms, and the "shop room floor," shared some culpability for the crash of ValuJet Flight 592. The aircraft probably would not have crashed into the Florida Everglades on May 11, 1996, if FAA had followed a decade-old recommendation to require fire detection and suppression systems in aircraft cargo holds. NTSB also listed as "probable causes" the failure of the maintenance contractor SabreTech to properly "prepare, package, identify and track" hazardous oxygen generators that were improperly placed in the cargo hold, and ValuJet's failure to oversee SabreTech. In addition, NTSB said FAA's failure to adequately monitor ValuJet's maintenance program and its maintenance contractors, the failure to respond adequately to prior oxygen generator fires, and the airline's failure to train its employees about handling hazardous material also contributed to the causes of the tragedy. (See May 11, 1996.)
19970825	August 25, 1997: FAA awarded Harris Corporation a contract to replace the current system by which flight service stations provide crucial information such as emergency assistance and weather briefings to pilots. Under the Operational and Supportability Implementation System (OASIS) program contract – valued at more than $110 million, including options – Harris would provide flight planning and weather information to general aviation pilots nationwide. FAA planned to modernize up to 61 flight service stations over the next ten years. (See July 1, 2002.)
19970911	September 11, 1997: Representative Connie Morella, chair of the House Science Subcommittee on Technology, met with the administrator to discuss installing the Standard Terminal Automation Replacement System (STARS) in the Washington National terminal radar control (TRACON) facility. FAA committed to making a decision in four to six weeks on whether it would be possible to deploy an interim solution at a selected few major terminal facilities, like National, that would provide STARS hardware operating in tandem with existing software. This would provide controllers an improved operational capability, including color displays, until the STARS software was ready to meet mission requirements. The schedule called for STARS to be ready for initial operation at National in September 2000. (See May 28, 1997; October 30, 1997.)
19970922	September 22, 1997: Bombardier Aerospace announced that FAA had granted final certification of Learjet's pioneering Model 45, the world's first business jet designed and manufactured entirely by computer. The aircraft was Learjet's first all-new jet in 30 years and its third aircraft to be certified since the company was acquired by Bombardier Inc., in 1990.

19970923	September 23, 1997: FAA sponsored a demonstration flight into Tijuana International Airport showing the benefits of the Wide Area Augmentation System. The agency called this the first big step toward establishing a seamless air navigation system across North America. (See August 14, 1997; October 1, 1997.)
19970923	September 23, 1997: FAA announced the selection of a team of universities to serve as the FAA Center of Excellence for Airworthiness Assurance. (See October 1992; January 28, 2004.)
19971001	October 1, 1997: Testifying before the U.S. House of Representatives Subcommittee on Aviation, Committee on Transportation and Infrastructure, Department of Transportation Inspector General Kenneth Mead criticized FAA management of the Wide Area Augmentation System (WAAS) program. He stated, "We found that FAA did not use a consistent method for cost estimating. An April 1994 cost benefit analysis for WAAS reflected an estimated total life-cycle cost through the year 2014 at $1.4 billion. Program documentation in July 1997, reflects an estimate of total life-cycle costs for WAAS, through the year 2016, at over $2.4 billion. Our analysis of this showed that FAA has been slow to fully recognize all life-cycle costs of systems . . . In our opinion, FAA's efforts to include life-cycle cost estimates for all satellite related systems and supporting activities will establish an understanding of the financial requirements and greatly facilitate decision making. Once established, these projected life-cycle costs should be integrated into FAA's plan to ensure effective transition to the new technologies." (See September 23, 1997; October 20-22, 1997.)
19971001	October 1, 1997: FAA implemented a new cost accounting system, with research and acquisitions personnel at Washington, DC, headquarters serving as a pilot for the system. The labor distribution module of the system was a key component of the effort.
19971006	October 6, 1997: The FAA commissioned the first precision runway monitor at Minneapolis/St. Paul International Airport. The system permits simultaneous independent instrument landing system (ILS) approaches to parallel runways spaced less than 4,300 feet apart.
19971014	October 14, 1997: John Denver, a licensed pilot who had a home near Monterey, California, was killed when his fiberglass plane crashed about 100 yards offshore shortly after having taken off at Monterey Airport.
19971022	October 20-22, 1997: FAA and Italy's Ente Nationale Di Assistenza Al Volo conducted flights at Ciampino Airport near Rome to test the capabilities of the Wide Area Augmentation System to function in European airspace. A FAA Boeing 727 used signals from both the U.S. national Satellite Test Bed and Italy's Mediterranean Test Bed to complete the test flights. (See October 1, 1997; October 15, 1998.)
19971022	October 22, 1997: FAA began collecting fees, effective this date, for the production of certification-related services pertaining to aeronautical products manufactured or assembled outside the United States.

19971029	October 29, 1997: The Task Force on Assistance to Families of Aviation Disasters, co-chaired by Secretary of Transportation Rodney Slater and NTSB Chairman James Hall, issued 61 recommendations to ensure that the families of the victims of aviation disasters receive prompt and compassionate assistance.
19971030	October 30, 1997: National Air Traffic Controllers Association (NATCA) President Michael McNally told the U.S. House of Representatives Subcommittee on Aviation, Committee on Transportation and Infrastructure that "NATCA has made it very clear to FAA that there are problems with the Standard Terminal Automation Replacement System (STARS) that must be rectified before it can be a workable product within the terminal environment." At the urging of Representative Frank Wolf (R-VA), the FAA agreed to bring in MITRE and work with the Department of Transportation Inspector General in an attempt to resolve the dispute with NATCA over STARS. Wolf asked the FAA to report by December 15 on progress in resolving cost, delay, and human factors issues. (See September 11, 1997; April 26, 1999.)
19971120	November 20, 1997: FAA awarded a four-year contract to Lockheed Martin with a potential value of up to $1 billion, to modernize the air traffic control system. The initial four-year National Airspace System Implementation Support contract (NISC II) contract was worth approximately $350 million with as many as three two-year extension options. Under the terms of the NISC II contract, Lockheed Martin would supply engineering, planning, automation, environmental analysis, and other services to the FAA.
19971126	November 26, 1997: FAA proposed two airworthiness directives asking airlines to find and fix potential ignition sources in or near the central fuel tanks of Boeing 747 aircraft. (See January 21, 1997; December 12, 1997.)
19971127	November 27, 1997: Department of Transportation Inspector General Kenneth Mead issued a report in which he stated that some FAA inspectors assigned to check airplane maintenance and electrical systems have not been trained. Mead found some employees took no training courses before they joined the agency or after they were hired. And workers who had been trained may not have taken additional courses to learn about changes in the systems they were inspecting.
19971208	December 8, 1997: The National Transportation Safety Board began hearings on TWA Flight 800 in Baltimore, Maryland. (See May 4, 1997.)
19971212	December 12, 1997: FAA issued an airworthiness directive expanding the inspection and replacement of the Teflon wire coating used in the stainless steel wire conduits on Boeing 747 fuel boost pumps and the pumps used in jettisoning fuel. The AD immediately superseded the December 23, 1996, AD requiring inspections and replacements for Boeing 747 airplanes that used aluminum conduits. (See November 26, 1997; December 19, 1997.)

19971215	December 15, 1997: FAA and the Air Transport Association announced a new partnership to eliminate controlled flight into terrain (CFIT). Air Transportation Association member airlines would voluntarily equip 4,300 of their aircraft with advanced terrain awareness warning systems, such as the enhanced ground proximity warning system. Installation of the system was expected to be substantially complete during 2003. (See February 12, 1997; March 29, 2000.)
19971216	December 16, 1997: President Clinton signed into law the Foreign Air Carrier Family Support Act requiring foreign carriers to file a plan by June 15, 1998, addressing the needs of families of victims of an aviation disaster in the United States.
19971219	December 19, 1997: Top FAA and National Transportation Safety Board officials, often at odds over aviation safety issues, agreed to move forward aggressively with plans to make Boeing 747 fuel tanks safer. The agreement between FAA Administrator Jane Garvey and NTSB Chairman Jim Hall followed board hearings on the crash of Trans World Airlines Flight 800 off the coast of Long Island on July 17, 1996, which killed 230 people. Investigators determined that the plane's center fuel tank exploded and split the plane apart, but did not yet know what sparked the explosion. (See December 12, 1997; April 7, 1998.)
19971219	December 19, 1997: Barry Valentine stepped down as FAA deputy administrator (acting) and retired from the agency. (See February 1, 1997.)
19971219	December 19, 1997: FAA issued a launch site operators license to Virginia Commercial Space Flight Authority to operate a space launch facility at Wallops Island, Virginia. (See May 22, 1997; February 10-11, 1998.)
19971228	December 28, 1997: A powerful blast of air turbulence sent a United Airlines jumbo jet with 393 people aboard into a sudden 1,000-foot drop over the Pacific Ocean, killing one passenger and injuring 110 others. The Boeing 747 (United Flight 826) was about 1,100 miles east of Japan after leaving Tokyo for Honolulu when it encountered the turbulence. December 31, 1997: During Calendar Year 1997 public agencies collected $1.2 billion in Passenger Facility Charge (PFC) revenue.

1998

19980108	January 8, 1998: FAA ordered immediate visual inspection of the tail sections of 211 late-model Boeing 737s after investigators determined that a crash in Indonesia might have been the result of missing fasteners in the tail. Within the 24 hours prior to issuing this order, the agency had checked horizontal stabilizers on aircraft being built or prepared for delivery at Boeing's Renton, Washington, factory. No major problems were noted, but the inspectors found a loose fastener on one in-service aircraft. All U.S. carriers with 737s manufactured after September 20, 1995, in their fleets were therefore required to inspect the horizontal stabilizer portion of the tail section within 24 hours, or five flight segments, for missing fasteners.
19980206	February 6, 1998: President Clinton signed legislation into law renaming Washington National Airport the Ronald Reagan Washington National Airport.
19980209	February 9, 1998: George Donohue, FAA associate administrator for research and acquisitions withdrew his nomination to be the FAA deputy administrator and informed Department of Transportation Secretary Rodney Slater that he planned to leave the agency. (See June 11, 1997.)
19980211	February 10-11, 1998: FAA held its first Commercial Space Transportation Forecast Conference. (See December 19, 1997; April 21, 1998.)
19980211	February 11, 1998: President Clinton signed into law the FAA Research, Engineering, and Development Authorization Act of 1998 (Public Law 105-155). The bill mandated FAA establish a program to fund undergraduate and technical colleges, including Historically Black Colleges and Universities and Hispanic Serving Institutions, to perform research on subjects of relevance to FAA. The legislation also required the agency to assess immediately the extent of the risk to its operations that could be identified up until the year 2000 and to develop contingency plans to reduce or avoid the risk introduced by faulty systems that could not be fully corrected before the target year.
19980212	February 12, 1998: Department of Transportation issued a rule mandating that, beginning the upcoming fall, airlines must collect the full names of all passengers traveling on international flights and be prepared to make a passenger manifest available within three hours of a crash. The rule was one of several Department of Transportation actions issued on the first anniversary of the publication of the White House Commission on Aviation Safety and Security report.
19980212	February 12, 1998: FAA issued a final rule requiring fire detection and suppression systems in aircraft cargo compartments. (See June 10, 1997; March 19, 2001.)
19980330	March 30, 1998: Vice President Al Gore announced that two new civilian global positioning system (GPS) signals would be provided by the U.S. free of charge. The announcement fulfilled a pledge made by the Department of Defense and Department of Transportation in March 1997 to reach a decision on a second civil frequency within a year. (See February 27, 1997; June 3, 1998.)

19980407	April 7, 1998: Federal aviation investigators probing the explosion of TWA Flight 800 urged inspections of the wiring in fuel monitoring systems of hundreds of Boeing 747s and possibly other Boeing jets. In a letter to FAA Administrator Jane Garvey, National Transportation Safety Board Chairman Jim Hall noted that his organization had found damaged wiring on the "fuel quantity indication systems" of the crashed aircraft and three other 747s. While not directly linking them with the explosion of Flight 800's fuel tank, the letter described the conditions as "potentially hazardous." Also, sources close to the investigation said the letter was not intended to indicate that the board was any closer to determining the cause of the fuel tank's violent explosion. The problems with the 747 fuel systems had been revealed earlier, and had been discussed at hearings on the crash held the previous year in Baltimore. (See December 19, 1997; May 10, 1998.)
19980414	April 14, 1998: The Clinton Administration unveiled its Safer Skies initiative, an aviation safety agenda consistent with one announced earlier by the aviation industry. Designed to reduce the commercial aviation accident rate by 80 percent over the next decade, the initiative included mandatory equipment and training to prevent pilots from flying mechanically fit aircraft into the ground or water. It also contained programs to encourage cabin safety. Safer Skies concentrated FAA resources on the most prevalent causes of aircraft accidents and used special teams of technical experts to identify the leading causes of aviation disasters and recommend safety advances.
19980415	April 15, 1998: FAA leased the Atlantic City International Airport to the South Jersey Transportation Authority. FAA and the authority signed a 50-year lease and cooperative agreement transferring 2,000 acres of land, including airport runway and taxiway systems.
19980416	April 16, 1998: RTCA's Free Flight Steering Committee recommended that, through a core capability limited deployment process to be undertaken through 2002, FAA should adopt its proposed free flight program to implement six technologies at selected air route air traffic control centers. The technologies included: Traffic Management Advisory (TMA), Passive Final Approach Space Tool (pFAST), User Request Evaluation Tool (URET), Collaborative Decision Making (CDM), Controller-Pilot Datalink Communications (CPDLC), and Surface Movement Advisor (SMA). (See January 15, 1997; September 30, 1999; February 4, 2000; March 30, 2000.)
19980421	April 21, 1998: FAA published a final rule on licensing requirements for the launch of expendable vehicles from federal sites. (See February 10-11, 1998; August 26, 1998.)

19980504 May 4, 1998: FAA announced plans to introduce computer-based training for security screening personnel at the nation's busiest airports. The training was a module in the Screener Proficiency Evaluation and Reporting System (SPEARS) being developed by the agency to select, train, evaluate, and monitor the performance of employees who operated the X-ray screening checkpoints. FAA awarded Safe Passage International an $11 million contract on this date to install the SPEARS computer-based training workstations and train instructors to use it at up to 60 airports. (See May 17, 1997; August 21, 1998.)

19980510 May 10, 1998: FAA ordered all older Boeing 737s temporarily grounded until mechanics inspected high-voltage fuel tank wiring for problems that could cause a fire or explosion. FAA gave airlines seven days to complete the inspections. The action came after United Airlines mechanics found evidence of electrical arcing on wiring removed from another 737. Thomas McSweeny, FAA director of aircraft certification, stated that nearly every one of the first 13 aircraft inspected prior to the order exhibited some level of chafing on the insulation that separated the wiring from the metal conduits carrying the wiring through the fuel tank to fuel pumps. May 14, FAA expanded the order to include somewhat newer 737 planes and added a set of wires exempted from the original inspection. In some cases, when mechanics performed inspections of newer planes already in the shop for major repairs, they found chafed high-voltage wires. (See April 7, 1998; July 23, 1998.)

19980513 May 13, 1998: FAA unveiled a new, data-driven air carrier inspection program called the Air Transport Oversight System (ATOS) to enable FAA inspectors to spot safety trends and catch problems before they could lead to an incident or accident. (See October 1, 1998.)

19980515 May 15, 1998: FAA commissioned the country’s 34th Terminal Doppler Weather Radar (TDWR) at Newark International Airport. It also commissioned an airport surveillance radar (ASR-9) there. The ASR-9 replaced the ASR-7 at Newark, providing a clearer picture of weather and aircraft than the older system.

19980602 June 2, 1998: The Department of Transportation Inspector General issued a report saying that, despite the fact that adverse weather conditions had caused or contributed to nearly 25 percent of aviation accidents in the last decade, FAA still had failed to provide leadership in aviation weather programs.

19980603 June 3, 1998: Department of Transportation Secretary Slater announced the award of a contract to Advanced Management Technologies, Inc., to provide expertise in the adaptation of the global positioning system (GPS) to civil aviation needs. The contract was worth $27 million over three years, with four one-year options that could bring the full potential contract value up to $62 million. Under the contract, the company would provide technical engineering and program management support for current and future satellite and satellite augmentation systems for FAA. (See March 30, 1998; January 29, 1999.)

19980605	June 5, 1998: FAA ordered the retraining of 10,000 air traffic controllers nationwide. Two specific incidents and a general increase in controller errors nationwide prompted this action. An April 3 incident had not been revealed to the public, but shortly before the order was released, an Air Canada Airbus A320 jet, taking off from La Guardia, flew directly over a US Airways DC-9 jet as it broke off a landing. The two passenger jets came as close as 20 feet from colliding and the incident was widely reported. The agency ordered mandatory proficiency training for controllers working in airport towers handling takeoffs and landings.
19980605	June 5, 1998: Effective on this day, a FAA reorganization took place that:
	* Abolished two offices
	− The Office of the Associate Administrator for Administration
	− The Office of Business Information and Consultation.
	* Established four offices
	− Assistant Administrator for Financial Services/CFO
	− Assistant Administrator for Financial Services/Director of Budget
	− Assistant Administrator for Human Resource Management
	− Assistant Administrator for Region/Center Operations.
	* Moved two offices
	− Office of Flight Oversight became Flight Standards Service under the Office of the Administrator for Regulation and Certification
	− Moved the Washington Flight Program Office (Hangar Six) became the Aviation Systems Standards Office within the Airway Facilities organization.
	* Transferred the duties of two offices
	− The duties of the Freedom of Information Act Office were assumed within the Office of the Assistant Administrator for Region/Center Operations
	− The duties of the Headquarters Facilities Management Office were assumed within the Office of Acquisitions under the Associate Administrator for Research and Acquisitions
19980615	June 15, 1998: Department of Transportation Secretary Slater and National Air Traffic Controllers Association President Michael McNally announced a new labor agreement between FAA and NATCA. September 9, NATCA members voted to approve the new contract. August 28, FAA and NATCA formally signed the new five-year pact in which a federal labor union negotiated wages, for the first time, with a government agency. (See January 7, 2003.)

19980615	June 15, 1998: FAA completed construction of NAS infrastructure management System (NIMS) facility located in Reston, Virginia. The facility was used to evaluate human factors, validate various commercial-off-the-shelf products and interfaces that comprise NIMS, and to develop, verify, and refine initial operational procedures. (See April 28, 1997.)
19980616	June 16, 1998: The National Transportation Safety Board reported that the probable cause of the crash of Fine Air Flight 101 onto a Miami street the previous summer was a combination of the actions of an inexperienced crew and the effects of an improperly loaded cargo. Federal investigators said that both the airline and FAA shared responsibility for failing to correct numerous safety problems. NTSB further chose this crash to address broader problems in FAA oversight of all airlines, drawing parallels to the 1996 fatal crash, also attributed to hazardous cargo, of a ValuJet DC-9. Several NTSB members suggested FAA should clean house at its flight standards office in Miami, the headquarters for five major all-cargo companies. NTSB's official report on the cargo crash said the Miami office knew of deficiencies in Fine Air's operations, but did not correct them.
19980617	June 17, 1998: FAA unveiled a step in its congressionally authorized personnel reform efforts – a test of a new compensation plan for about 1,200 agency employees. The new plan replaced the traditional grade and step base pay method with a structure of pay bands whose value was determined by comparison with similar jobs in government and private industry. The program linked compensation with performance. (See April 1, 1996.)
19980630	June 1998: FAA established a formal safety risk management policy through Order 8040.4. The new policy provided for a formal, but flexible, approach for managing safety risks associated with high consequence decisions.
19980723	July 23, 1998: FAA proposed new measures to reduce potential ignition sources in Boeing 747 center wing tanks. The proposed airworthiness would require operators of Boeing 747 aircraft registered in the U.S. to take the following actions:
	* Inspect the center fuel tank to detect damage, disbonding or incorrect installation of wiring and components.
	* Test to ensure the electrical bonding of center fuel tank components to the aircraft's structure is within limits, reworking it if necessary.
	* On certain 747s, measure the insulation resistance of the fuel quantity indication system (FQIS) to ensure that it is within limits. Also on certain aircraft, operators would have to replace FQIS components with new hardware, and replace silver-plated FQIS wires with new nickel-plated wiring.
	* In certain airplanes, install a flame arrestor into the inlet line of the scavenge pumps of the center fuel tank.

	Under the proposed rule, replacement of the FQIS components and wiring would have to be done within 24 months, or 20 years from the date the plane was built, which ever would be later. All other actions would have to be accomplished within 24 months. The rule would require operators to report inspection results to Boeing within ten days. (See May 10, 1998; August 11, 1998.)
19980731	July 1998: FAA's new Sexual Harassment Accountability Board began operations. The Board had responsibility for providing timely response to complaints while making senior officials accountable for their workplace environments. (See July 2000.)
19980811	August 11, 1998: The National Transportation Safety Board urged mandatory inspections of the fuel-pump control shaft on about one-third of all commercial jet aircraft engines – including those in most Boeing 727s and 737s and McDonnell Douglas DC-9s and MD-80s. Several incidents – including one on September 6, 1997, in which a Boeing 737 was destroyed on takeoff from Najran, Saudi Arabia, as well as a Delta Airlines in-flight problem – prompted the letter from NTSB Chairman Jim Hall to FAA Administrator Jane Garvey. In the Saudia incident, the crew noticed a control panel light indicating that the right engine's exhaust was dangerously hot. When the pilot tried to throttle back, the engine remained at a high power level, the board said. (See July 23, 1998; September 21, 1998.)
19980821	August 21, 1998: Law enforcement and transportation officials in the U.S. capital adopted tighter security measures, stepping up patrols at tourist attractions, at federal buildings and in the 95-mile subway system. Military installations across the region also increased security, causing backups at some bases as military police conducted stricterthan-normal identification checks at gates. FAA announced that officers and bomb-sniffing dogs would conduct more sweeps at U.S. airports and increase scrutiny of passengers. Security personnel were instructed to use hand-held devices to screen randomly passengers for traces of explosives. The District of Columbia Metropolitan Police Department, the U.S. Park Police, and the U.S. Capitol Police all increased patrols in key areas of the District and ordered officers to be more aware of their surroundings. The agencies declined to say how many more officers were on patrol. (See May 4, 1998; September 25, 1998.)
19980821	August 21, 1998: FAA issued a NPRM that would ban, in certain air carrier operations, the transportation of devices designed to generate oxygen chemically. This ban would include older devices that have been charged and discharged as well as newly manufactured devices that have yet to be charged. (See December 30, 1996.)

19980821	August 21, 1998: FAA issued Advisory Circular 150/5220-22, Engineered Materials, which contained standards for the planning, design, and installation of engineered materials arresting systems (EMAS) in runway safety areas. FAA and Engineered Arresting Systems Corp. (ESCO), a division of Zodiac Aerospace, developed EMAS, under a cooperative research and development agreement. EMAS, which consists of a layer of crushed concrete positioned at the end of runways, slows and stops aircraft in runway overruns. John F. Kennedy International Airport installed the first EMAS in 1998. (See May 8, 1999.)
19980826	August 26, 1998: FAA published a final rule in the Federal Register implementing financial responsibility and insurance coverage requirements for space launch activities it regulated. This action codified practices required under the Federal Government's commercial space launch licensing procedures. The new regulations required a launch licensee to obtain insurance or otherwise to demonstrate financial responsibility to protect itself, the customer, the U.S. Government, and contractors and subcontractors of against claims for third-party losses and federal property damage resulting from the licensed launch activities. The agency would set insurance requirements according to a risk-based determination of the maximum probable loss that might result from the licensed activities. Launch participants, whether from industry or government, were required to enter into reciprocal waivers of claims in which each party agreed to absorb certain losses it might sustain as a result of the licensed activity. In addition, subject to the funds being appropriated, the U.S. Government agreed to pay successful third-party claims in excess of the required insurance, up to $1.5 billion s adjusted for inflation. The final rule was effective 60 days after publication in the Federal Register to allow those subject to the rule to change existing practices covered by it, although the rule did not substantially change those practices previously carried out through license orders. (See April 21, 1998; September 8, 1998.)
19980827	August 27, 1998: The National Transportation Safety Board attributed the deaths of 29 people killed in a Comair commuter plane crash in a field near Detroit in the winter of 1997 to FAA's failure to heed decades of information about the effect of icing on aircraft performance. NTSB also said that Comair and its pilots contributed to the crash, and that the crew must share some responsibility for operating in poor weather conditions at a speed too low to provide a margin of safety. (See January 9, 1997.)
19980902	September 2, 1998: A Swissair jumbo jet en route from John F. Kennedy International Airport in New York to Geneva with 228 people on board crashed off the southern coast of Nova Scotia late at night while trying to make an emergency landing. Canadian aviation officials said the three-engine McDonnell Douglas MD-11 had been diverted to Halifax International Airport, which lies about ten miles to the north of the Nova Scotian capital, after its flight crew reported smoke in the cockpit or passenger cabin about two hours after take-off. (See November 12, 1998.)
19980908	September 8, 1998: The 100th commercial space launch licensed by the U.S. took off from Vandenberg Air Force Base. (See August 26, 1998; September 24, 1998.)

19980924	September 24, 1998: FAA issued a space launch site operator's license to the Alaska Aerospace Development Corp. The license allowed commercial rocket launches on the southern tip of Kodiak Island. Alaska joined California, Florida, and Virginia as states with FAA-licensed state or commercially operated space launch facilities. It was, however, the first spaceport not co-located with a federally operated launch range. FAA earlier issued commercial space launch site licenses for the operation of spaceports on leased property at Vandenberg Air Force Base, California; Cape Canaveral Air Station, Florida; and at NASA's Wallops Flight Facility, Wallops Island, Virginia. (See September 8, 1998; March 15, 1999.)
19980924	September 24, 1998: FAA awarded a $14.2 million dollar contract to Northrop Grumman Corporation to develop equipment that would provide warnings to air traffic controllers and pilots of hazardous wind shear and microburst events. Called the Weather Systems Processor (WSP), it would forecast the arrival of wind gust fronts and tracks storm motion, providing a complete picture of current and projected hazardous weather conditions which might impact runway and airport usage. Intended be used in conjunction with Airport Surveillance Radar Model-9, WSP would be a low cost detection system suitable for installation at medium and high air traffic density airports. Its functional capability would be similar to that provided by Terminal Doppler Weather Radar, a legacy system which FAA was then deploying at 45 major airports subject to heavy thunderstorm activity. (See April 25, 2001.)
19980925	September 25, 1998: FAA announced the implementation of a final rule requiring employment background investigations and criminal history checks for airport security checkpoint screeners and screener supervisors. This new rule responded to the mandate in the Federal Aviation Reauthorization Act of 1996 and was additionally recommended by the White House Commission on Aviation Safety and Security. The rule also required airport operators and air carriers to audit employment history investigations. (See August 21, 1998; November 20, 1998.)
19980928	September 28, 1998: FAA ordered airlines to inspect, within 60 days, fuel boost pump wiring on Boeing 737-100 through -500 series aircraft with 20,000 to 30,000 flight hours. The directive also required the addition of a layer of Teflon sleeving to protect the fuel pump wires. (See August 21, 1998; October 1, 1998.)
19980930	September 30, 1998: FAA announced a $932,613 contract to Sensis Corporation, to develop an identification system for transponder-equipped aircraft operating on airport taxiways and runways. The airport target identification system would give airport controllers detailed information about aircraft and vehicles operating on the ground, including position, speed, and aircraft identification.

19981001 October 1, 1998: FAA, which had launched its original aging aircraft program after an Aloha jetliner lost a chunk of its roof in 1988, announced a companion program, the aging transport non-structural systems plan, to help ensure that aircraft systems, such as those for wiring and fuel, did not fail as they grew older. The program, which grew out of the investigation of the in-flight explosion of Trans World Airlines Flight 800 that killed 230 people in 1996, included stepped-up inspections of wiring, a long-term research program, and a model-by-model assessment of each aircraft type together with other items. (See October 28, 1991; September 28, 1998; December 3, 1998; August 16, 2001.)

19981001 October 1, 1998: FAA implemented the Air Transport Oversight System, an air carrier oversight process that advocated a systems approach to FAA certification and surveillance oversight. The new process would combine system safety techniques with risk management principles to ensure that air carriers had built safety considerations into their operating systems. (See May 13, 1998; April 8, 2002.)

19981008 October 8, 1998: FAA, with assistance from the Helicopter Safety Advisory Conference (HSAC), implemented the world's first Instrument Flight Rules (IFR) Grid System in the Gulf of Mexico. FAA designed this navigational route structure, completely independent of ground-based navigation aids (NAVAIDs), to facilitate helicopter IFR operations to offshore destinations. The Grid System was defined by over 300 offshore waypoints located 20 minutes apart (latitude and longitude). These waypoints have five-letter identifiers systematically based so that operators and controllers can visualize the relative location. To simplify flight planning inflight data input and navigation, these waypoints were integrated into the computer database within the GPS receivers. Both flight crews and controllers used the grid system, which assisted them by: allowing for more direct routing; reducing the manual workload that controllers performed to provide separation from other helicopters; and reducing delays.

19981009 October 9, 1998: FAA Administrator Jane Garvey and NASA Administrator Daniel Goldin signed an agreement that established a new partnership in pursuit of improved aviation safety, airspace system efficiency, and aircraft environmental concerns. The agreement created an executive board comprised of senior managers from both agencies who would monitor progress and ensure that complementary aviation and commercial space transportation goals were achieved through a coordinated planning effort.

19981014 October 14, 1998: FAA announced that within six months it would develop a new test specification for aircraft insulation that would contribute to increased fire safety. When available for use, this new test standard would be required for use in the manufacture of all applicable aircraft. The Civil Aviation Administration of China in 1996 strongly recommended new tests after a Chinese Eastern MD-11 fire in Beijing in 1995. (See August 11, 1999.)

19981015	October 15, 1998: A FAA Boeing 727 receiving signals from both U.S. and European satellite navigation networks performed successful flight tests at Iceland's Keflavik Airport. The aircraft performed a series of category I precision approaches to the runway using onboard equipment that received signals from the FAA national satellite test bed, a forerunner to WAAS, and the United Kingdom's Northern European Satellite Test Bed. (See October 20-22, 1997; December 9, 1998.)
19981028	October 28, 1998: FAA recommended that pilots not take impotence drugs within six hours of flying because it could affect their ability to distinguish between the blues and greens found in cockpit instrument and runway lights.
19981028	October 28, 1998: FAA officials told a public hearing in Rockville, Maryland, that, while a federal plan to consolidate four of their region's air traffic control facilities would lead to an overall reduction in airplane noise, it also might aggravate the problem for some local communities. Under the plan, FAA would close the separate terminal radar control (TRACON) facilities at Dulles International, Reagan National, and Baltimore-Washington International airports and Andrews Air Force Base and open an overall center in Loudoun County or Fauquier County. (See January 7, 1999.)
19981106	November 6, 1998: President Clinton dedicated the new Northwest Arkansas Regional Airport in Highfill, Arkansas. He told the audience his administration was working to make the national aviation system better able to handle the anticipated 50-percent increase in global air travel in the coming seven years. He added that FAA and other agencies were working together "... to convert our air traffic control system to satellite technology, to change the way we inspect older aircraft, and most important over the long run, to combat terrorism with new equipment, new agents, and new methods."
19981112	November 12, 1998: Reacting to concerns raised by the September 2 crash of Swissair Flight 111, FAA ordered airlines to inspect two lighting dimmer switches that could overheat and emit smoke when installed in the cockpits of McDonnell Douglas MD-11 aircraft. McDonnell Douglas had issued a service bulletin three years before recommending replacement of the switches. One of the problems reported by the crew of Flight 111 before it crashed was smoke in the cockpit. (See September 2, 1998; December 9, 1998.)
19981120	November 20, 1998: FAA proposed to require foreign air carriers flying to and from the United States to implement security measures identical to those required of U.S. air carriers serving the same airports. (See September 25, 1998; November 23, 1998.)
19981123	November 23, 1998: FAA certified the eXaminer 3DX 6000 system manufactured by L-3 Communications as the second explosives detection system to meet the agency's certification requirements. (See November 20, 1998; March 31, 1999.)
19981203	December 3, 1998: In an emergency airworthiness directive, FAA ordered all Boeing 747 operators to carry more fuel in the center wing tank to ensure that the pumps are immersed in fuel when they are operating. (See October 1, 1998; March 3, 1999.)

19981209	December 9, 1998: FAA issued an airworthiness directive ordering inspection and possible replacement of electrical wiring above the forward passenger doors of McDonnell Douglas MD-11 aircraft. The order required a one-time visual inspection within ten days to detect problems such as nicks, fraying or chafing in the wiring above the left and right forward passenger doors. As part of the inquiry into the Swissair 111 crash off Nova Scotia in September, FAA learned that damaged electrical wires were found near the forward passenger doors of an MD-11 during regularly scheduled heavy maintenance. Further examination showed that, when the doors were raised to the open position, sliding panels above the doors moved inward and could have chafed the electrical wiring in those areas. The condition, if not fixed, might have led to an electrical fire in the passenger cabin. (See November 12, 1998; January 28, 1999.)
19981209	December 9, 1998: FAA and Chile's Director General of Civil Aeronautics completed the first test flights in Chile demonstrating the capabilities and benefits of the Wide Area Augmentation System installation at the Arturo Merino Benitez International Airport. (See October 15, 1998; January 5, 1999.)
19981215	December 15, 1998: Department of Transportation Secretary Slater announced that all flights of all U.S. carriers, both domestic and international, were now to be completely smoke-free. (See May 7, 1996.)
19981216	December 16, 1998: FAA issued a notice to airmen advising all civil aircraft operators that hostilities had begun in the airspace over Iraq and might also occur in the airspace over nearby nations and waters in the Arabian Peninsula, including the Persian Gulf and the Red Sea. FAA advised that operators flying in the area should strictly comply with aircraft identification procedures and monitor international emergency frequencies.
19981217	December 17, 1998: FAA's small airplane directorate issued the first U.S. type certificate for a Russian type design, clearing the way for import into the United States. The type certificate was issued at a ceremony at the Ilyushin plant attended by senior Russian officials and by U.S. Ambassador James Collins. An all-metal, two-seat propeller-driven aircraft powered by a single 210 HP Teledyne Continental Motors IO-360ES engine with a Hartzell propeller, the Ilyushin IL-103 was issued Certificate Number A45CE. It was certified in the utility category.
19981221	December 21, 1998: FAA Administrator Jane Garvey announced a new streamlined administrative action process that would reduce paperwork and shorten the time it took to resolve certain violations that did not pose a serious threat to aviation safety. At that time, it was taking an average of 75 days to resolve an administrative violation. Under the new program, FAA hoped to cut that delay to as little as seven days in some cases. Inspectors could use the new process to deal with alleged violations that did not require extensive investigation. (See July 15, 1999.)

1999

19990105 January 5, 1999: FAA announced it would revise the implementation schedule for the Wide Area Augmentation System to allow more time to complete development of a critical software safety package that would monitor, correct, and verify the performance of the system. FAA rescheduled the original July 1999 commissioning date for phase 1 of WAAS to September 2000. (See December 9, 1998; January 29, 1999; April 6-9, 1999.)

19990107 January 7, 1999: FAA announced the selection of Vint Hill Farms Station, a former military intelligence base in Fauquier County, Virginia, as the site for a $93 million consolidated air-traffic control facility. FAA officials said the move would put controllers handling planes approaching, Dulles International, Reagan National, and Baltimore-Washington International airports, and Andrews Air Force Base under one roof to improve air safety and streamline costs. (See October 28, 1998; March 6, 2000.)

19990111 January 11, 1999: FAA issued final airworthiness directives calling for operators to limit the payloads of Boeing 727 aircraft. The orders placed restrictions on 727s converted from passenger to all-cargo operations until the floor structures were reinforced or they were re-qualified to carry higher payloads. FAA expressed concern that converted aircraft had design features, including under-strength cargo floors, did not meet FAA certification safety requirements for cargo carriers. The ADs required operators either to reduce payloads to 3,000 pounds per container or to adhere to interim operational limitations that would permit them to carry individual containers of up to 4,800 pounds. Operators had 90 days from the effective date to make the appropriate revisions to the airplane flight manuals, supplements to them, and airplane weight and balance supplements. If individual operators failed to complete modifications within 28 months, their allowed payloads would be permanently reduced to 3,000 per container.

19990113 January 13, 1999: FAA proposed mandatory tests for potential cracks in valves in some 737 rudder power control units (PCUs). The NPRM entailed an airworthiness directive that would apply to all Boeing 737-100 through -500 series aircraft. This AD was proposed in response to the PCU supplier's discovery of cracks in a component of a valve assembly. In addition, cracks had been found by operators before they installed valves in their aircraft. The proposed rule would order operators to perform tests on their PCUs to detect cracks in a joint in the servo valve that regulates the intake of hydraulic fluid to the PCU. Analysis had shown that a single crack in one leg of the component was not in itself an unsafe condition. A crack in both legs, however, could have caused the component to break apart and jam the valve assembly. If a crack were found during the test process, the AD required the operator to replace the defective valve with a modified valve. (See March 14, 1997; May 3, 1999.)

19990120 January 20, 1999: Department of Transportation Secretary Rodney Slater and FAA Administrator Jane Garvey dedicated a new, first-of-its-kind air traffic control system, the Display System Replacement, at the air route traffic control center in Auburn, Washington. The DSR replaced equipment that had been in service for 20 to 30 years with upgraded displays, and computer hardware and software. (See March 14, 1997; July 14, 2000.)

19990128 January 28, 1999: FAA ordered inspections of wiring and insulation in the cockpit and cabin on the entire U.S. commercial fleet of McDonnell Douglas MD-11s. The Airworthiness Directive was under development even prior to the January 11 recommendation of the National Transportation Safety Board on MD-11 wiring. It also followed discussions with the Canadian Transportation Safety Board and NTSB, which resulted in a December 22, 1998, Canadian Transportation Safety Board safety advisory letter suggesting a closer look at the wiring in the MD-11 fleet. Several MD-11s were examined as part of the Swissair accident investigation. Based on the wiring discrepancies found, the directive required U.S. operators to perform the inspections, and make any necessary repairs, within 60 days and report findings to the FAA. (See December 9, 1998; April 20, 1999.)

19990129 January 29, 1999: FAA announced findings that, with some anticipated improvements, an augmented global positioning system (GPS) could serve safely and reliably as the only navigation system installed in aircraft and the only navigation system provided by the FAA. The findings were taken from an independent assessment of GPS capabilities conducted by the Johns Hopkins Applied Physics Laboratory for the FAA, Aircraft Owners and Pilots Association, and the Air Transport Association. Features of the Wide Area Augmentation System (WAAS) and the Local Area Augmentation System (LAAS), both under development, were expected to provide the improved accuracy, integrity, and availability of the GPS signal referred to in the findings. (See June 3, 1998; January 5, 1999; April 2, 1999; April 6-9, 1999.)

19990203 February 3, 1999: Department of Transportation Secretary Rodney Slater announced that the Clinton Administration would propose legislation to promote competition at large airline hubs dominated by one airline. The draft legislation would state that before they could raise passenger fees, the operators of such facilities would be required to explain how they intended to promote competition. The bill would also include a proposal to charge fees for use of the air traffic systems and would require a "performance based-organization" to be created to provide for air traffic control within FAA. Aspects of these proposals proved controversial and ran into stiff opposition in Congress and in portions of the aviation community. (See April 5, 2000.)

19990209 February 9, 1999: Working in partnership with the aviation industry, FAA announced it had reached an agreement with pilots and airlines regarding procedures affecting the conduct of land and hold short operations (LAHSO). The agreement dealt with runway surface and weather minima, training, visual aids, landing distance, and rejected landings. Highlights included:

	* Air carriers would conduct LAHSO only on dry runways until such time as the manufacturers had provided actual demonstrated landing distance figures on wet runways for the aircraft in question.
	* FAA would issue a flight standards handbook bulletin specifying that before an air carrier could conduct LAHSO, it must provide a pilot training program for the LAHSO procedure.
	* Use of LAHSO would not be authorized on a runway lacking electronic or visual vertical guidance (i.e., an improved LAHSO lighting configuration).
	* For each type of aircraft with LAHSO, the runway landing length would be the greater of the simultaneous operations on intersecting runway category length or FAA approved aircraft flight manual distance plus 1000 feet.
	To ensure that the appropriate level of safety was maintained, only LAHSO configurations which did not require a rejected landing instruction, or for which a rejected landing instruction was published, were to be used by air carrier aircraft. (See July 14, 2000.)
19990303	March 3, 1999: In an airworthiness directive to go into effect March 18, FAA ordered operators of certain Boeing 737-100, -200, -300, -400 and -500 aircraft to inspect and correct any chafing of float switch wiring found in the center fuel tank. The float switch, powered by direct current, automatically closed the fueling valve to prevent the fuel tank from being overfilled. Chafed wiring associated with this device, however, could have provided an ignition source inside the tank. The agency required that each aircraft's float switch be removed or deactivated and inspected for evidence of chafing – such as electrical arcing or worn insulation – either within 30 days of the AD effective date, or before the aircraft could accumulate 30,000 total flight hours. Under the terms of the AD, operators might install protective Teflon sleeving and wiring, allowing reuse of the float switch, or they might install a new float switch with the necessary Teflon sleeved wiring. Alternatively, operators might deactivate the float switch and paint a "caution" sign adjacent to the aircraft-fueling panel to indicate a mandatory reduction of the maximum fuel capacity with associated modified fueling procedures to minimize the possibility of fuel spills. (See December 3, 1998, October 28, 1999.)
19990308	March 8, 1999: FAA released the National Airspace System plan, version 4.0. The update extended the agency's modernization strategy through 2015.
19990311	March 11, 1999: Department of Transportation Secretary Rodney Slater and FAA Administrator Jane Garvey dedicated the newest FAA air traffic control computer system in a ceremony at the New York Air Route Traffic Control Center. They dedicated the Host and Oceanic Computer System Replacement, known as HOCSR, a key component of the NAS infrastructure modernization program and FAA's Year 2000 (Y2K) compliance effort. The new system was more than four times faster and orders of magnitude more reliable than its predecessor – while occupying only an eighth of the floor space of the system it replaced. The New York Center's HOCSR, the first in the nation, went online February 24. (See September 30, 1999).

19990315	March 15, 1999: FAA announced it had issued a launch license to a Boeing-led international consortium to conduct a first-of-its-kind demonstration space launch, targeted for March 2, from a sea-going platform in the mid-Pacific. The 40 percent Boeing-owned partnership would use a Ukrainian-built Zenit booster rocket and a Russian-built upper stage in the demonstration. The launch platform, a converted self-propelled oil drilling platform, would be accompanied to the launch site by an assembly and command ship designed and built by Kvaerner Maritime of Norway, another partner in the undertaking. (See September 24, 1998; April 21, 1999.)
19990331	March 31, 1999: FAA announced plans to purchase more than 150 additional security devices for the nation's airports, continuing to implement a recommendation by the White House Commission on Aviation Safety and Security. The purchase of 21 FAA-certified explosives detection systems and 135 trace explosives detection devices added to the multi-year deployment of innovative security equipment. Purchases to date included 95 FAA-certified explosives detection systems, 20 automated dual-energy X-ray machines, two quadrapole resonance devices, and 462 trace explosives detection devices. The trace explosives detectors were being deployed primarily at airport security checkpoints for screening carry-on bags. The other machines were bulk explosives detectors used to examine checked baggage. (See November 23, 1998; April 15, 1999.)
19990401	April 1, 1999: President Clinton signed Public Law 106-6, Interim Federal Aviation Administration Authorization Act.
19990402	April 2, 1999: FAA announced an agreement to join with Raytheon Systems, and Honeywell Inc. in the development of the Local Area Augmentation System. Raytheon and Honeywell would provide funding for the development, and FAA would provide the LAAS specifications and expertise on development and certification. (See January 29, 1999; August 13, 1999.)
19990409	April 6-9, 1999: Raytheon completed the first of three major system integration milestones for WAAS. Called stability build, the test showed the ability of the Wide Area Augmentation System (WAAS) to provide augmentation to the U.S. global positioning system (GPS) system. During the test, the system operated continuously for 72 hours using WAAS ground and space components. In monitoring the test, Raytheon and FAA examined data from several locations, including Denver, Oklahoma City, and Dayton. The next system integration milestone, the Full Functionality Build, would be followed by the performance build, the final software build designed to show that the system was ready to enter formal system testing. (See January 5, 1999; August 24, 2000.)
19990412	April 12, 1999: FAA commissioned the National Airport Pavement Test Facility. (See April 1, 1997.)

19990415	April 15, 1999: FAA proposed a rule to strengthen security of checked baggage in the domestic aviation system. The proposal would require airlines to apply additional security to the checked baggage of some passengers. The rule directed the use of automated screening procedures, but provided options for airlines that choose to apply additional security to all passengers. The Computer Assisted Passenger Screening program (CAPS) would replace manual programs. CAPS used data from existing airline reservation systems to select baggage randomly or through preprogrammed criteria. The proposed rule would require CAPS for scheduled operations on any aircraft with 61 seats or more. (See March 31, 1999; November 2, 1999.)
19990420	April 20, 1999: FAA ordered operators of 45 McDonnell Douglas MD-11s registered in the U.S. to verify the installation of a wire harness support bracket and clamp in the lower center cargo compartment. A missing bracket and clamp could have caused a wire bundle to contact the insulation blanket and rub against the fuselage frame, producing a possible fire source. The Emergency Airworthiness Directive affected MD-11s equipped with a 72-inch cargo door. MD-11s with a 104-inch cargo door had a different wire bundle configuration. Operators of the affected aircraft were required to perform inspections, verify the installation of the bracket and clamp, and repair any damaged wires within five days. All findings had to be reported to the FAA within ten days after completion of the inspections. (See January 28, 1999; September 29, 1999.)
19990421	April 21, 1999: Following industry review of applicable safety guidelines, FAA issued a notice of proposed rulemaking for reusable launch vehicle and reentry licensing regulation and continued to work with industry to develop a regulatory program to address public safety issues. (See March 15, 1999; June 21, 1999.)
19990426	April 26, 1999: FAA ordered operators to inspect for and correct possible fatigue cracks in the aft pressure bulkheads located near the tails of certain Boeing 737 aircraft. Stemming from reports of fatigue cracks on these components in some Boeing 737-200 models, the airworthiness directive applied to Boeing 737-100 through -500 aircraft. In some cases, to comply with the AD, operators had to perform a low-frequency eddy current inspection from the rear of the pressure bulkhead. In other instances, visual inspections from the front of the bulkhead were deemed sufficient.

19990426 April 26, 1999: FAA, the National Air Traffic Controllers Association (NATCA), and Professional Airways Systems Specialists (PASS) jointly announced a revised implementation plan for the Standard Terminal Automation Replacement System (STARS). The plan focused on developing the full STARS as soon as possible while simultaneously meeting short-term requirements for controller displays at a small number of FAA facilities. Under the revised plan, the first STARS would go into the terminal radar control (TRACON) facilities in Syracuse, New York, and El Paso, Texas. Initially, these sites would receive the early display configuration of STARS. In parallel, development would continue on the full STARS, which would include a new computer system. Once STARS had the capability to handle the needs of higher-level facilities, it would be deployed throughout the country. (See October 30, 1997; August 3, 1999.)

19990503 May 3, 1999: FAA, responding to pressure from federal safety officials, announced that it would require a major upgrade of aircraft flight data recorders and cockpit voice recorders to provide better information after accidents. In particular, the FAA would require new on-board sensors to determine movements of the Boeing 737 rudder, which had been listed as the probable cause of two crashes. Administrator Jane Garvey revealed these plans during a panel discussion at a National Transportation Safety Board symposium on flight recorders in which NTSB Chairman Jim Hall had criticized the FAA for not responding quickly enough to his agency's recommendations. (See August 18, 1997; January 13, 1999; January 8, 2000; September 14, 2000.)

19990506 May 6, 1999: FAA announced that it had reached an agreement with the National Air Traffic Controllers Association to tighten the rules for its liaison and familiarization training program. This program authorized agency employees to sit in the cockpit during commercial flights, listen to air traffic control communications, and observe pilot procedures. The program was intended to promote better understanding of the pressures facing flight crews.

19990508 May 8, 1999: The engineered materials arresting system installed at New York's John F. Kennedy International Airport successfully stopped a Saab 340 commuter aircraft that overran the runway. (See August 21, 1998; May 30, 2003.)

19990522 May 22, 1999: FAA ordered inspections on more than 1,000 Boeing 727 jetliners registered in the United States. A FAA spokesman said that the emergency airworthiness directive was sent after mechanics found severe wear on wires and holes in the tubing on two 727 cargo jets. Signs of electric sparking around the wires also were discovered. "This condition, if not corrected, could result in ignition of fuel vapors in a fuel tank, and a fuel tank explosion," read the FAA's telegram to 727 operators. May 24, FAA ordered operators of Boeing 727 aircraft to inspect, and if necessary replace, electrical wires running through fuel tanks. The agency previously announced it would follow its May 22 order for Boeing 727 fuel tank leak checks with a more comprehensive order for wiring inspections. The airworthiness directive required that operators remove and inspect wire bundles carried in conduits (tubes) through 727 fuel tanks. If chafing were found, the wires had to be replaced. The AD also required that all the wires be wrapped with an additional protective layer of Teflon. This had to be done immediately if the Teflon wrapping was available, otherwise at the next scheduled maintenance check. (See August 16, 2001.)

19990524 May 24, 1999: FAA released to industry a new computer tool designed to reduce the disk failure rate in turbine-powered jet engines. The computer tool complemented the actions announced earlier by FAA Administrator Jane Garvey that required enhanced inspections of engine fan disks to detect cracks that were potential precursors to uncontained disk failures. The disk design and life management tool, called "design assessment of reliability with inspection," allowed engine manufacturers to improve disk structural integrity. Engine manufacturers could run the code, along with their other design systems, on a computer workstation, to comply with the FAA's a planned advisory circular on disk life management.

19990528 May 28, 1999: FAA and Professional Airways Systems Specialists (PASS), representing approximately 7,600 employees, announced they had agreed to resume negotiations with the help of a mediator. (See January 11, 2000.)

19990603 June 3, 1999: A twin-engine McDonnell Douglas MD-80 carrying 139 passengers and six crew members, crashed at Little Rock National Airport as violent thunderstorms and winds swept through the region. Survivors said the plane swerved out of control almost immediately after making contact, slid off the end of the 7,200-foot runway at a high speed, and crashed into a steel tower. (See October 23, 2001.)

19990614 June 14, 1999: The media reported that some FAA lawyers planned to join a union. When Congress released FAA from many civil service rules, it had said that unionized workers could bargain with management over salaries. It also had given FAA the option of lowering salaries of unorganized workers via a core compensation plan. Air traffic controllers, who already were unionized, were the first FAA employees to bargain for salaries.

19990616	June 16, 1999: FAA proposed to revise and strengthen federal rules for maintenance performed at domestic and foreign repair stations. The proposed new regulation would ensure that certified repair stations were held responsible for all maintenance work that was outsourced to contractors.
19990621	June 21, 1999: Effective this date, FAA amended its commercial space transportation licensing regulations. The changes provided applicants and licensees greater specificity and clarity regarding the scope of a license, and codified and amended licensing requirements and criteria. (See April 21, 1999; November 9, 1999.)
19990710	July 10, 1999: FAA and an industry group conducted the first large-scale test of Automatic Dependent Surveillance — Broadcast (ADS-B), a technology designed to enhance safety by giving pilots and air traffic controllers more information about aircraft locations. Done in partnership with the Cargo Airline Association (CAA), the Wilmington, Ohio, tests evaluated how well ADS-B could help pilots be more aware of aircraft in their vicinity. Using an aircraft's global positioning system (GPS) sensor, ADS-B equipment would send very accurate position information, along with speed and identification data, to other similarly equipped planes and ADS-B ground receiving stations. During the test, participating flight crews monitored aircraft in their area using a special cockpit display. Air traffic control facilities received combined radar and ADS-B target information for evaluation. Ground receiving stations in Wilmington and Louisville, Kentucky, provided coverage throughout the 500-square-mile test area. Approximately 25 planes participated. This ADS-B operational evaluation was the first in a series of tests planned for the next three years under the FAA's Safe Flight-21 program. (See October 26-28, 2000.)
19990713	July 13, 1999: Former FAA Administrator Donald Engen died in the crash of a glider fitted with a small motor. A distinguished U.S. Navy and test pilot who retired as a vice admiral, Engen was 75.
19990715	July 15, 1999: FAA announced a new streamlined administrative action process to deal with violations that did not warrant serious legal enforcement action or pose a serious threat to aviation safety. This new way to resolve minor violations officially commenced on August 30. Using the new process, an inspector would discuss the problem with the alleged violator, fill out a data entry form with all pertinent information, return to the office to check the person's history, enter the information in a database, and mail an automated warning notice to the individual. This person would still have an opportunity to provide additional information for the FAA's consideration. Previously, all administrative actions had involved a burdensome process that often entailed multiple letters of investigation and extensive files. (See December 21, 1998.)

19990716	July 16, 1999: John F. Kennedy, Jr., his wife Carolyn Bessette Kennedy, and her sister, Lauren Bessette, were killed when their small aircraft crashed into the Atlantic Ocean. Kennedy, a relatively inexperienced pilot, was flying the Piper Saratoga, a moderately complex plane that he bought the previous April. He took off without incident just after 8:30 p.m. from Essex County Airport in Fairfield, New Jersey. July 6, 2000, the National Transportation Safety Board released its final report on the crash and stated the probable cause of the accident was "The pilot's failure to maintain control of the airplane during a descent over water at night, which was a result of spatial disorientation. Factors in the accident were haze and the dark night."
19990803	August 3, 1999: The early display capability, or EDC, version of the Standard Terminal Automation Replacement System (STARS) entered its operational test and evaluation. The tests were scheduled to run through October 4. If STARS passed this series of tests, it would enter an initial operational capability phase at El Paso, Texas, in December 1999 and at Syracuse in January 2000. (See April 26, 1999; December 20, 1999.)
19990804	August 4, 1999: Due to provisions in legislation passed the previous year by the Congress, Monte Belger returned to his position as FAA associate administrator for air traffic services. The legislation, called the Vacancies Reform Act, was designed to limit the amount of time an executive in any federal agency might act in a position requiring Presidential appointment and confirmation by the Senate. The FAA Administrator had no plans to name another executive as acting deputy pending nomination by the White House of a candidate for the position. Monte Belger, however, still continued to perform significant management functions, because, under agency procedures, in the absence of a confirmed candidate, the associate administrator for air traffic services assumed the deputy administrator's duties. The air traffic services organization continued to be managed by Steve Brown, as deputy associate administrator. (See February 1, 1997; November 8, 1999.)
19990805	August 5, 1999: An agreement by major U.S. airlines to assess the safety of their foreign partners represented a major step in a long-term trend toward exporting U.S. aviation safety standards around the globe. The assessments took place as part of a growing worldwide arrangement among airlines called "code sharing," in which U.S. airlines shared flight numbers with foreign airlines. (See December 5-7, 1999.)
19990811	August 11, 1999: FAA Administrator Jane Garvey ordered operators of 699 aircraft to replace insulation blankets covered with metalized Mylar within four years. FAA also strongly encouraged operators to accomplish the insulation replacement during the earliest practical maintenance check. The announcement followed eight months of extensive testing in support of the development of a new test standard for aircraft insulation. (See October 14, 1998; May 25, 2000.)
19990812	August 12, 1999: FAA agreed to take a series of steps to reduce air traffic control delays. In particular, FAA would strengthen the decision-making authority of its Command Center, allowing the Herndon, Virginia, facility to assert more authority over large portions of a network of air traffic control centers around the country.

19990813	August 13, 1999: FAA, UPS, and ATA conducted flight tests of the FAA prototype Local Area Augmentation System (LAAS) system at the FAA William J. Hughes Technical Center. Researchers studied the benefits of integrating a pseudolite into the existing LAAS prototype. A pseudolite is a ground component, installed at an airport that appears to an aircraft's navigation system to be the equivalent of a global positioning system (GPS) satellite. (See April 2, 1999; May 1, 2003.)
19990929	September 29, 1999: FAA banned installation of in-flight entertainment systems on all McDonnell Douglas MD-11 aircraft registered in the U.S. An agency review concluded that incompatibilities between the electrical power switching technologies of the entertainment systems and the design concept of the MD-11 airplane limited a flight crew's ability to respond to a smoke or fumes emergency. (See April 20, 1999.)
19990930	September 30, 1999: With the installation at the Honolulu Air Route Traffic Control Center, FAA completed installation of Host and Oceanic Computer System Replacement (HOCSR) systems at all 23 of its air traffic and oceanic centers. The availability of HOCSR completed the network that would provide the main computer and processor that produced and processed information on aircraft movements throughout domestic and oceanic airspace. The improved technology was more than four times faster and more reliable than its predecessor, while occupying only an eighth of the floor space of the systems it replaced. (See March 11, 1999.)
19990930	September 30, 1999: FAA announced it had chosen Lockheed Martin Air Traffic Management to continue development and deployment of the User Request Evaluation Tool (URET). Also called a conflict probe, the URET software gives controllers a strategic 20-minute look ahead to detect potential conflicts when considering pilots' requests for altitude and route changes. The system would be deployed and available to controllers in late 2001 and through 2002. (See April 16, 1998; December 2001.)
19991006	October 6, 1999: FAA selected the Societe Internationale Telecommunications Aeronautiques to provide standing data link communications services (the Future Air Navigation System, also known as FANS) to the Oakland, New York, and Alaska Air Route Traffic Control Centers. Previously, the FAA paid for data link communications services on a per message basis.
19991009	October 9, 1999: President Clinton signed the Department of Transportation and Related Agencies Appropriations Act of 2000. At the signing, however, he noted that he was "concerned about the funding level provided in the bill for FAA operations and capital programs. For example, the bill provides $144 million less than my request for FAA operations. This reduction will slow hiring for safety and security positions and postpone implementation of needed efficiency and management improvements. The bill also constrains funding for the modernization of the air traffic control system, including needed modernization and improvement of the Global Positioning System. These reductions may increase air travel delays and ill-position the FAA to meet the growing challenges of the future."

19991026 October 26, 1999: A Learjet, without a pilot in control, flew for almost four hours from Orlando, Florida, to a swampy grassland in South Dakota. The Learjet was shadowed by USAF and Air National Guard jet fighters, whose pilots reported that the aircraft's windows were frosted over, suggesting that it had lost pressurization. USAF pilots also reported that the Learjet meandered from as low as 22,000 feet to as high as 51,000 feet, but never strayed from a northwest heading. Pentagon officials said the military began its pursuit of the aircraft at 10:08 a.m., when two Air Force F-16 fighters from Tyndall Air Force Base in Florida on a routine training mission were asked by FAA to intercept it. The F-16s did not reach the Learjet, but an USAF F-15 fighter from Eglin Air Force Base in Florida got within sight of the aircraft and stayed with it from 11:09 a.m. to 11:44 a.m., when the military fighter was diverted to St. Louis for fuel. Fifteen minutes later, four Air National Guard F-16s and a KC-135 tanker from Tulsa were ordered to try to catch up with the Learjet, but got only within 100 miles. Two other Air National Guard F-16s from Fargo, North Dakota, intercepted the Learjet at 12:54 p.m., reporting that the aircraft's windows were fogged with ice and that no flight control movement could be seen. At 1:14 p.m., the F-16s reported that the Learjet was beginning to spiral toward the ground. Professional golfer Payne Stewart was killed in the crash.

19991028 October 28, 1999: Building on information gathered since the in-flight explosion of TWA Flight 800 three years before, FAA proposed a mandatory design review of fuel tanks on more than 90 percent of U.S. commercial aircraft fleet. One of the largest such orders ever contemplated, the proposal covered a total of about 6,000 aircraft – applying to all commercial aircraft, whether driven by jet power or propellers, that carry 30 or more passengers. The impact of the FAA proposal, if adopted, was expected to be felt worldwide. (See March 3, 1999; February 22, 2000.)

19991031 October 31, 1999: Egypt Air Flight 900 crashed and killed all 217 onboard. The voice and data recorders from the aircraft revealed that, just before the tragedy, one of the pilots, apparently alone in the cockpit, turned off the autopilot and then uttered a short prayer. The cockpit voice recorder tape also contained sounds similar to a door opening and closing more than once, sources said. This evidence led investigators to question whether one of the pilots left the cockpit, which would have given the other pilot the opportunity to take some action that could have led to the crash. (See March 21, 2002.)

19991102 November 2, 1999: FAA announced it had awarded a contract worth up to $75 million to L-3 Communications to purchase up to 60 of its explosives detection systems. L-3 Communications was the second manufacturer to offer a system that met the FAA's rigorous certification standards. Under the contract, FAA could purchase up to 60 eXaminer 3DX 6000 explosives detection systems over three years. (See April 15, 1999; December 21, 1999.)

19991108 November 8, 1999: President Clinton announced his intention to nominate Monte Belger to be FAA deputy administrator. He submitted Belger's name to the Senate for confirmation on November 10. (See August 4, 2000; August 2, 2002.)

19991109	November 9, 1999: FAA announced that it had signed a memorandum of understanding with NASA concerning the future of space transportation research activities, especially the development of reusable launch vehicle technology. (See June 21, 1999; October 19, 2000.)
19991203	December 3, 1999: Runway 8/26 opened at Philadelphia International Airport.
19991207	December 5-7, 1999: Department of Transportation Secretary Rodney Slater hosted the Aviation in the 21st Century–Beyond Open Skies "ministerial" in the same hotel where, fifty-five years before, the 1944 Chicago Convention on International Civil Aviation produced recommendations for practices and procedures that had thereafter guided world aviation. This new ministerial, attended by more than 900 persons from ninety-three nations, explored challenges and opportunities in the aviation system of the 21st century. On the last day of the conference, Slater announced FAA would require airlines to conduct safety assessments of their foreign airline partners. U.S. agencies, would not, however, directly assess the safety of any foreign airline, even if U.S. passengers were flying that carrier on a code-share ticket. (See August 5, 1999.)
19991208	December 8, 1999: FAA issued an AD ordering inspection of backup generators on Boeing 777-200 and -300 airplanes and requiring their operators to replace, within 14 days, any found to have sheared shafts.
19991219	December 19, 1999: FAA informed U.S. carriers that reserve rest requirements for pilots must be fully implemented. The decision to no longer offer exceptions to the policy was welcomed by the Air Line Pilots Association, who said that U.S. carriers have known about the requirement since June 1998 and had no excuse for asking for further extensions. A spokesperson for the union also said that it would be unfair to airlines already implementing the reserve rest requirement, as well as the public, if nonconforming airlines were granted exceptions. The reserve rest rule stipulated that airlines must give pilots who are reserve duty at least nine hours rest before placing the on reserve or "on call" status.
19991220	December 20, 1999: FAA started controlling arriving and departing air traffic in El Paso , Texas, with the new Standard Terminal Automation Replacement System (STARS) air traffic controller workstations. This was the first component to become operational as part of a phased strategy to deploy this state-of-the-art, full-service system nationwide. Controllers and technicians at this West Texas TRACON successfully integrated the new workstations, featuring high-resolution color monitors, with the existing automation system. (See August 3, 1999; January 12, 2000.)
19991221	December 21, 1999: Security at the nation's airports was tightened in response to the arrest, the previous week, of a man allegedly trying to smuggle explosives into the United States. FAA announced it would make more use of devices that check airline passengers for trace amounts of explosives. Also, more bomb-sniffing dogs and uniformed police would begin patrolling airports, both inside and outside. The measures came amid concern about the possibility of acts of terrorism in the United States and abroad during the holidays. (See November 2, 1999; January 5, 2000.)

19991221	December 21, 1999: FAA made the Surface Movement Advisor (SMA) available to the Dallas-Ft. Worth, Chicago O'Hare, Newark, and Teterboro airports ten days ahead of schedule. SMA would provide aircraft arrival information to airline ramp towers and operation centers. The scope of this information included aircraft identification and position in terminal airspace, details that could be used to compute estimated time to touchdown in order to better manage gates and other ground operations. Staff at Northwest Airlines additionally estimated that the enhanced situational awareness they received through SMA allowed them to avoid three to five costly diversions per week at Detroit Metropolitan airport.
19991231	December 31, 1999: The U.S. air traffic control system successfully rolled over to January 1, 2000, with no disruptions to service.

2000

20000104 January 4, 2000: A Government Accountability Office (GAO) report issued this day revealed FAA had failed to conduct security checks on dozens of foreign nationals hired to fix Y2K problems in sensitive computer systems used for air traffic control. GAO said FAA had violated its own security policy by allowing foreign employees, who had not received background checks and were working for the agency's contractors, to be involved in repairing 15 of 153 critical computer systems. The House Science Committee had asked GAO to investigate how much FAA relied on foreign nationals for Y2K preparedness. FAA announced it was taking immediate steps to implement all of the GAO recommendations.

20000105 January 5, 2000: FAA proposed a rule that would require agency certification of companies hired by the airlines to perform security screening at airports. The rule would set standards for companies providing security screening, strengthen training and testing standards for screeners, and impose more stringent experience and training requirements on screening company managers and instructors. (See December 21, 1999; May 19, 2000.)

20000108 January 8, 2000: The National Transportation Safety Board recommended that all turbine-powered aircraft then exempt from flight recorder rules be required to be equipped with crash-protected video recorders. Under NTSB's recommendation, the requirement would first affect planes that carry passengers for hire and would take effect within five years of adoption of a technical standard order covering the devices by FAA. The NTSB recommendation followed adoption of its final report on the October 8, 1997, crash of a Scenic Airlines Cessna 208B in Montrose, Colorado. All nine persons aboard. The pilot and eight employees of the U.S. Department of Interior's Bureau of Reclamation, died in this tragedy. According to the report, while flying the aircraft at nearly its maximum gross weight and aft center of gravity, in nearly full to full instrument flight conditions, the pilot had apparently failed to maintain sufficient airspeed. Without access to a crash-protected video recorder, the board could not determine exactly why the pilot had allowed the aircraft to fly too slowly. The most likely factors contributing to the accident, however, were the pilot's improper in-flight planning, his faulty decision-making, and his failure to use proper stall/spin recovery techniques. (See May 3, 1999; August 18, 2003.)

20000110 January 10, 2000: FAA and Wildlife Services of the U.S. Department of Agriculture announced publication of a manual to help combat wildlife hazards at airports. The manual, the first of its kind in the United States, was the culmination of years of research, airport site visits, and training conducted by the two agencies. The manual contained information designed to assist airport personnel in addressing airport wildlife hazard issues and enhancing aviation safety.

20000111	January 11, 2000: FAA announced that, after more than one year of negotiations and several months of mediation through the Federal Mediation and Conciliation Service, it had signed a tentative five-year labor agreement with the Professional Airways Systems Specialists. Union employees ratified the contract in early May. (See May 28, 1999.)
20000112	January 12, 2000: FAA achieved initial operating capability on its second EDC of the Standard Terminal Automation Replacement System (STARS) at the Syracuse, New York, TRACON. January 28, FAA Administrator Jane Garvey formally dedicated the new system at Syracuse. (See December 20, 1999; May 9, 2002.)
20000114	January 14, 2000: The White House unveiled a new FAA program to give airline pilots and mechanics a no-penalty way to report safety-related incidents and problems. The Aviation Safety Action Program (ASAP), patterned after a successful American Airlines program begun in 1996, encouraged pilots and mechanics to volunteer information that could help prevent accidents. In return, FAA and the airlines promised not to take action against pilots and mechanics in most cases. (See June 15, 2009.)
20000131	January 31, 2000: Alaska Air Flight 261, a Boeing MD-83, crashed into the ocean off Point Magu, California, killing all 88 on board. Before the plane suddenly dived 17,900 feet into the water, the crew had reported a stabilizer jammed in a position that pushed the aircraft downward. (See February 10, 2000.) December 10, 2002, the National Transportation Safety Board determined that the probable cause of this accident was the loss of airplane pitch control resulting from in-flight failure of the horizontal stabilizer trim system jackscrew assembly's acme nut thread. The component failed because of excessive wear resulting from Alaska Airlines' insufficient lubrication of the jackscrew assembly. Contributing to the accident were the carrier's extended lubrication and end play check intervals, and FAA's approval of these intervals.
20000204	February 4, 2000: FAA awarded a multi-million-dollar contract to Computer Sciences Corp. to begin the software development and implementation of the Controller-Pilot Data Link Communications project (CPDLC). Designed to provide more efficient, automated communications between controller and pilot, and CPDLC would reduce operational errors resulting from misunderstood voice communications. FAA planned to deploy the prototype system at the Miami Air Route Traffic Control Center in June 2003 with national deployment beginning six months later at the other 19 air route traffic control centers. (See April 16, 1998; October 7, 2002.)

20000210	February 10, 2000: FAA ordered an immediate inspection of the entire fleet of single-aisle planes built by McDonnell Douglas after inspectors found two Alaska Airlines aircraft with damage in the tail section similar to that found in the wreckage of Alaska Airlines Flight 261. The airworthiness directive required a visual inspection of the jackscrew assembly of the horizontal stabilizer within three days and a more sophisticated examination within 30 days. Sources close to the investigation of the fatal crash reported that there was preliminary evidence of extreme wear on parts of the stabilizer control system in the tail of the MD-83 aircraft that plunged into the Pacific near Los Angeles on January 31. (See January 31, 2000; March 17, 2000.)
20000222	February 22, 2000: After the German airline Lufthansa found cracked copper lines and ordered Boeing 747s in its fleet grounded briefly for inspections, FAA announced plans to order an inspection of the engine fire suppression system on Boeing 747-400s registered in the United States. (See October 28, 1999; April 27, 2001.)
20000223	February 23, 2000: FAA Administrator Jane Garvey accepted a report from the Fractional Ownership Aviation Rulemaking Committee, chartered in October 1999, outlining their views on the best ways to improve oversight of aircraft owned by multiple entities. (See November 17, 2003.)
20000224	February 24, 2000: Effective this date, FAA added Pacific oceanic areas to the airspace where the principles of Reduced Vertical Separation Minima could be applied. Previously, RVSM was only used in North Atlantic minimum navigation performance specifications airspace. The introduction of RVSM procedures in Pacific oceanic airspace made more fuel- and time-efficient flight levels and tracks available to operators. (See April 9, 1997; December 10, 2001.)
20000229	February 2000: The Department of Transportation and the Department of Defense jointly released the 1999 Federal Radionavigation Plan, which included provisions for two additional global positioning system (GPS) signals for civil use and a revised schedule for making the transition to GPS. (See March 26, 2002.)

20000305 March 5, 2000: Southwest Airlines Flight 1455, a Boeing 737-300, overran the departure end of Runway 8 after landing at Burbank-Glendale-Pasadena Airport, Burbank, California. The airplane touched down at approximately 182 knots. About 20 seconds later, at approximately 32 knots, the airplane collided with a metal blast fence and an airport perimeter wall. The airplane came to rest on a city street near a gas station beyond the airport property. Of the 142 persons on board, two sustained serious injuries; 41 passengers and the captain sustained minor injuries; and 94 passengers, three flight attendants, and the first officer sustained no injuries. The airplane sustained extensive damage and some internal damage to the passenger cabin. June 26, 2002, the National Transportation Safety Board determined that the strongest probable cause of the accident was the flight crew's excessive airspeed and flight path angle during the approach and landing. NTSB also noted that the crew had failed to abort the approach when stabilized approach criteria were not met. Contributing to the accident was the air traffic controller's positioning of the airplane, which was too high, too fast, and too close to the runway threshold. As a result, no safe options existed for the flight crew other than a go-around maneuver. Despite all of these factors, however, NTSB concluded that, had the accident flight crew applied maximum manual brakes immediately upon touchdown, the airplane would likely have stopped before impacting the blast fence. (See March 14, 2000.)

20000306 March 6, 2000: FAA broke ground for a new regional air traffic control center on a 33- acre site in Vint Hill, Fauquier County, Virginia, that would replace the radar monitoring facilities at Baltimore-Washington International, Dulles International, Reagan Washington National, and Andrews Air Force Base. The new TRACON would guide aircraft within about a 75-mile radius of Washington, DC. (See January 7, 1999; December 14, 2002.)

20000310 March 10, 2000: President Clinton, along with Department of Transportation Secretary Rodney Slater, announced FAA and the aviation industry were launching a new effort to improve the flow of air traffic during severe weather. The Spring/Summer 2000 severe-weather plan, slated to begin March 12 and to be fully phased in on April 1, would maximize the use of available air space, improve communications between FAA and the airline industry, and expand the use of new technology to help reduce weather-related delays. At that time, the president also charged FAA to develop, in 45 days, a broader plan for reform of the air traffic control system.

20000313 March 13, 2000: FAA received a clean audit from the Department of Transportation Inspector General for fiscal year 1999, marking the first time FAA achieved approval of its financial statements since the audits began in fiscal year 1992. The report presented an unqualified or "clean" opinion on the full set of FAA financial statements.

20000314 March 14, 2000: FAA Administrator Jane Garvey announced new initiatives to enhance runway safety, including a series of workshops that would be held around the country to produce regional and local plans to reduce runway incursions. These workshops would be followed by a national summit. FAA also announced initiation of a program for pilots involved in such incidents to help determine the root causes of the events. (See March 5, 2000; June 14, 2000.)

20000317 March 17, 2000: The National Transportation Safety Board released its conclusions that the horizontal stabilizer jackscrew, which apparently played a key role in the January 31 crash of Alaska Airlines Flight 261, had no grease on the area that experienced the most friction during normal operation. In a brief statement, the NTSB did not comment on the meaning of the finding by its laboratory. Sources close to the investigation said the discovery was potentially significant, although more work had to be done to determine whether the area was dry before the crash that killed 88 people near Los Angeles or whether the grease was removed by the violent plunge into the Pacific. (See February 10, 2000.)

20000329 March 29, 2000: Effective this date, FAA required all airplanes with U.S. registry outfitted with six or more passenger seats also to be equipped with an FAA-approved terrain awareness and warning system (referred to as an enhanced ground proximity warning system). This announcement came in response to several accident investigations and studies that showed a need to increase the warning times and situational awareness of flight crews to decrease the risk of controlled flight into terrain accidents. (See December 15, 1997.)

20000330 March 30, 2000: Controllers at the Minneapolis Air Route Traffic Control Center started testing an advanced computer tool designed to help them direct more aircraft into airports during busy hours. The Traffic Management Advisor (TMA) would look at planes several hundred miles from selected airports as they approached from all directions. As the aircraft got closer, TMA would help controllers develop plans to handle the traffic effectively according to the spacing requirements for each airport. The new system was to be one half of FAA's Center-TRACON automation system. The other component – the passive final approach spacing tool – would be located at the agency's terminal radar control (TRACON) facilities in Atlanta, Dallas/Fort Worth, Los Angeles, Minneapolis, and St. Louis. (See April 16, 1998.)

20000401 April 1, 2000: FAA ordered immediate inspections of 14 Boeing 717-200 airliners to check for potential electrical problems in their integrated standby instrument system altitude displays. The AD required modification before further flight. The mandate followed reports of two instances of intermittent loss of altitude data on the captain and first officer's primary flight display and the altitude display. In both cases, the airspeed and attitude indication remained operational and the flights continued to their destinations without further incident.

20000405	April 5, 2000: President Clinton signed into law the Wendell H. Ford Aviation Investment and Reform Act for the 21st Century, known more commonly as AIR-21. The bill contained new provisions to advance aviation safety and call for the appointment of a chief operating officer. The act also reauthorized the Airport Improvement Program (AIP) through FY 2003. AIR-21 instituted many changes to the AIP, including changed to funding levels, revised criteria for program eligibility, and expanded pilot programs. The authorized AIP funding level significantly increased in FY 2001 to a level of $3.2 billion, growing to $3.4 billion in FY 2003. This legislation also added two new PFC levels - $4 and $4.50, including new requirements. (See February 3, 1999; April 23, 2000; June 10, 2003.)
20000406	April 6, 2000: FAA awarded a contract worth up to $22 million to Airsys ATM, Inc., for the acquisition of up to 105 ILS configurations. The ILS, a primary landing system, provided vertical and lateral guidance to aircraft during the final approach and landing phases of flight.
20000410	April 10, 2000: FAA established a permanent mentor protégé program designed to broaden the agency's contractor base by encouraging prime contractors to mentor socially and economically disadvantaged small businesses. In April 1997, the agency had implemented a pilot program that successfully enhanced the capabilities of small businesses to work on high-tech FAA contracts and subcontracts. The permanent program would further invite FAA prime contractors and subcontractors to assist or partner with small socially and economically disadvantaged businesses, historically black colleges and universities, minority institutions, and women-owned small businesses.
20000410	April 10, 2000: FAA announced that the International Civil Aviation Organization had found that the agency met safety oversight standards for international aviation in a first-ever audit conducted June 1999.
20000423	April 23, 2000: Approximately 6,500 FAA employees transferred into a new market- and performance-based compensation system closely linked to the strategic goals of the agency. The new core compensation plan replaced the general schedule grade levels with twelve pay bands linked to market pay levels. An executive compensation system became effective on the same date for senior executives. (See April 5, 2000; December 7, 2000.)

20000501 May 1, 2000: FAA announced it had begun use of electronic air/ground communication services for aircraft operating over the Atlantic Ocean. The same system had been operating for aircraft flying over Pacific Ocean airspace for more than a year. FAA's New York Air Route Traffic Control Center had begun initial operations, in March, of the multi-sector oceanic data link system – technology that provided a means for air traffic controllers to have two-way electronic communications with aircraft equipped with data link. This system eliminated the need for voice communication between data link-equipped aircraft and air traffic controllers, improving the reliability and timeliness of message delivery. In conjunction with aircraft equipped with the future air navigation system – an international standard for avionics that are compliant with oceanic data link) – the system provided a means to check automatically pending clearances for conflicts while allowing the flight crews to load flight clearances they had received into the aircraft's flight management system.

20000516 May 16, 2000: FAA announced it had recently completed the final installation and acceptance of innovative air surveillance radar technology that would enhance air safety through improved position information and weather detection. The air route surveillance radar (ARSR-4) replaced obsolete radar with long-range, three-dimensional radar providing aircraft position information to FAA, USAF, Navy, and Customs Service. The new technology could detect a one-square-meter object out to 250 nautical miles, a 50 nautical mile increase over previous long-range radar models. The ARSR-4 also provided weather data to both FAA and National Weather Service. The program consisted of 43 operational systems deployed around the periphery of the continental United States as well as in Guam, Hawaii, and Guantanamo Bay, Cuba. The 44th system was used for support at the FAA Academy at the Mike Monroney Aeronautical Center in Oklahoma City. The twelve-year FAA/Department of Defense (DoD) ARSR-4 program began with a contract award in 1988 to Northrop Grumman. FAA commissioned the first system April 1996 in Tamiami, Florida. Total program costs were $800 million, half of which DoD paid.

20000518 May 18, 2000: FAA ordered 120 Boeing 767 aircraft to undergo emergency inspections after airline mechanics found damaged bolts in the engine pylons of one of the planes. Under the directive, airlines had five to ten days to complete the inspections.

20000519 May 19, 2000: FAA announced grant awards to three companies totaling about $8.6 million to develop explosives detectors. The new systems would be used to scan checked baggage at smaller air carrier stations that did not need the high baggage-processing rate of current systems. The grants provided $7.5 million to InVision Technologies Inc., of Newark, California; $757,432 to L-3 Communications of New York City; and $313,309 to PerkinElmer Inc., of Wellesley, Massachusetts; for the delivery of prototypes within 15 months. The grant project was designed to expedite the development of low-cost certified explosives detection systems. (See January 5, 2000; July 19, 2000.)

20000524	May 24, 2000: FAA issued a notice of proposed rulemaking that would require air carrier operators have automated external defibrillators aboard large, passenger-carrying aircraft and to augment required emergency medical kits. It would affect those operations for which at least one flight attendant was required and, if adopted, would require instruction on the use of the equipment. (See April 12, 2001.)
20000525	May 25, 2000: FAA issued final rules ordering operators of 719 Boeing MD-80, MD-88, MD-90, DC-10, and MD-11 aircraft to replace insulation blankets covered with metalized Mylar. The agency had proposed the rules in August 1999 to minimize the risk of fire spreading aboard these types of aircraft. The airworthiness directives required operators to determine whether their planes had metalized Mylar-covered insulation materials, if so to note where they were located, and to replace them with new insulation blankets within five years. Replacement materials had to meet FAA's new flame propagation standard, which was based on an American Society for Testing and Materials flammability standard. (See August 11, 1999; September 8, 2000.)
20000525	May 25, 2000: FAA told air traffic controllers nationwide to review emergency procedures after a US Airways flight with a dying passenger was delayed in making an emergency landing in Baltimore, Maryland. A US Airways spokesman said the airline followed all on-board procedures, including the use of a heart defibrillator, and that three passengers who were nurses volunteered to help. Sources close to an investigation of the incident said that the 50-year-old woman did not respond to the emergency treatment, and that the delayed landing probably was not a factor in her death.
20000530	May 30, 2000: FAA published in the Federal Register a final rule modifying Part 158 to incorporate changes mandated by the Wendell H. Ford Aviation Investment and Reform Act of the 21st Century, including adding $4.00 and $4.50 Passenger Facility Charge (PFC) levels.
20000531	May 31, 2000: FAA announced the start of operational use of a new tool designed to help reduce delays at major airports in the northeastern part of the U.S. Installation of the departure spacing program (DSP). Achieving this start-up was one of the first milestones in the Spring 2000 initiative, announced in March by President Clinton and Department of Transportation Secretary Rodney Slater. A coordination and planning tool, DSP used pertinent air traffic information from airports equipped with the system, along with other information from filed flight plans, to space departing aircraft more evenly. This innovation allowed the best use of existing capacity, expediting the flow of air traffic while minimizing delays. The tool had been in use at LaGuardia, Kennedy, Newark, and Philadelphia airport towers and in TRACONS in the New York area since April 2000. June 2, 2000: Department of Transportation issued a rule prohibiting smoking on all scheduled passenger flights by U.S. airlines and on scheduled passenger flights of foreign carriers into and out of the U.S.

20000605 June 5, 2000: FAA announced aircraft operators would be required to pay fees for air traffic control services provided to aircraft that operated in U.S. airspace, but did not take off or land in the United States. Unlike other aircraft operations, these overflights had not been paying for the FAA air traffic control services they received. The authority to charge fees to aircraft conducting U.S. overflights was contained in the Federal Aviation Reauthorization Act of 1996. The agency issued an interim final rule in 1997, but a U.S. Court of Appeals decision in January 1998 determined that FAA's calculation of fees was inconsistent with the statute. Under the new rule, fees would be based on the distance flown through airspace under U.S. control. Overflights would be charged at the rate of $37.43 per 100 nautical miles in the en route environment, and $20.16 per 100 nautical miles in the oceanic environment. No charges would be assessed on military and civilian aircraft operated by the U.S. government or by a foreign government. In addition, users who incurred $250 or less in fees per month would not be charged for operations. (See May 19, 1997; August 1, 2000.)

20000609 June 9, 2000: FAA issued directives to the airports and air carriers that strengthened procedures for verifying the credentials of law enforcement officers who carried arms on board aircraft or into secure areas of airports.

20000614 June 14, 2000: The National Transportation Safety Board urged the installation of warning systems that would prevent runway incidents at all 382 airports handling regularly scheduled passenger flights. June 26, FAA announced it would buy a new ground surveillance system that would improve runway safety at 25 airports. The new airport surface detection equipment, called ASDE-X, would provide detailed coverage of runways and taxiways at an airport and also alert air traffic controllers in the tower to impending collisions. The new system provided similar data to the current ASDE-3 ground radar installed at 34 of the nation's busiest airports. Those airports would also have the Airport Movement Area Safety System (AMASS) in operation by late 2002. AMASS was a computer enhancement to the ASDE-3 radar that alerted controllers to an impending collision on or near the runway. ASDE-X offered the functions of ASDE-3 and AMASS at less-busy and complex airports and at lower cost. FAA planned to award a contract for production of ASDE-X in September. (See March 14, 2000; July 15, 2000; October 24, 2000.)

20000630 June 30, 2000: FAA proposed a rule to give the agency access to key safety data from every U.S. airline participating in the Flight Operational Quality Assurance (FOQA) program. FAA planned to use this information to identify aviation safety trends and target potential problems. Airlines collected data about everyday safety trends in their operations and would now be required to share the data with FAA. The agency would then use the data to identify industry-wide safety trends, allowing FAA and industry to target resources more effectively to correct potential safety problems. The information and insights provided by these programs could enhance line operational safety, training effectiveness, operational procedures, maintenance and engineering procedures, air traffic control procedures, and airport surface safety. Participation in FOQA was voluntary and programs had to be FAA-approved. The agency would not use FOQA data for enforcement purposes, except in egregious cases. (See June 25, 2001.)

20000714 July 14, 2000: Department of Transportation Secretary Rodney Slater and FAA Administrator Jane Garvey marked the completion of the effort to modernize the nation's air traffic control system by dedicating the 20th and final installation of new DSR hardware and supporting computers. The last system in the $1.05 billion FAA program to replace older computers and displays was dedicated at the Washington Air Route Traffic Control Center in Leesburg, Virginia. (See January 20, 1999.)

20000714 July 14, 2000: FAA announced an agreement among the airlines, airline pilot groups, and others in the aviation industry to continue land and hold short operations (LAHSO). As a result, FAA said it would issue an order implementing changes to LAHSO. The order, which went into effect August 14, permitted expanded use of the procedure. LAHSO, an aviation procedure used since 1968, increased capacity at airports with intersecting runways by allowing aircraft to land and stop on long runways before an intersection with another runway. Stopping short allowed the air traffic controller to have another aircraft take off or land on the intersecting runway. LAHSO had been refined through years of operational experience and cooperation among FAA, airlines, pilots and controllers. (See February 19, 1999.)

20000715 July 15, 2000: FAA completed the first live flight demonstration of the Airport Movement Area Safety System (AMASS) at San Francisco International Airport. Two FAA aircraft – a Boeing 727 and Convair 580 – participated in the demonstration. AMASS gave controllers aural and visual alerts when aircraft on the airport surface were in danger of running into each other or other airport vehicles. AMASS, an enhancement to the basic airport surface detection radar called ASDE-3, was scheduled to be commissioned at 34 sites by the end of 2002. (See June 14, 2000; May 29, 2001.)

20000719 July 19, 2000: Department of Transportation Rodney Slater announced that FAA had awarded contracts to purchase additional certified explosives detection systems and trace explosives devices for the nation's airports, and would begin purchasing X-ray machines with new imaging software to improve screener performance. The Threat Image Projection (TIP) system projected digital images of hundreds of different guns, knives, and bombs onto the X-ray displays to test screeners' abilities to detect threat objects. TIP would project the images at random into real carry-on bags going through the X-ray or inside bag images created by TIP. When a screener hit the button to stop the suspect bag, TIP flashed a "congratulations" for detecting the threat and recorded the screener's performance. It also recorded missed threat images. (See May 19, 2000; July 27, 2000.)

20000727	July 27, 2000: For the first time, general aviation aircraft could obtain cockpit displays of digital weather graphics and text through a FAA-sponsored service called the flight information service data link. This service provided basic text weather information directly to general aviation pilots if the aircraft had the necessary avionics. Using a small display in the cockpit, flight crews could receive basic text messages, including aviation routine weather reports, special aviation reports, terminal area forecasts, significant meteorological information (SIGMET), convective SIGMETs, airman's meteorological information, pilot reports, and severe weather forecast alerts issued by FAA or the National Weather Service.
20000727	July 27, 2000: Armed with a gun, Aaron Amartei Commey tried to take hostages at John F. Kennedy International Airport on a National Airlines Boeing 757 headed for Las Vegas, Nevada. He demanded to be taken to Miami, Antarctica, or Argentina, and to speak to the Argentinean ambassador, Guillermo McGough. Negotiators from the FBI, New York's Port Authority, and the New York Police Department joined forces to persuade Commey to release the pilot and then the co- pilot. Passengers and crew had escaped from the plane when Commey was in the cockpit. Some of the 143 passengers aboard the flight to Las Vegas and Los Angeles exited by using an emergency chute that flight attendants deployed. July 29, a federal magistrate charged Commey, who authorities said had been planning for months to take over a plane, with one count of air piracy and ordered him held for psychiatric evaluation. (See July 19, 2000; July 17, 2001.)
20000731	July 2000: FAA expanded the scope of its Accountability Board. In addition to dealing with allegations of sexual harassment, it would start to rule on allegations of harassment based on race, color, religion, gender, sexual orientation, national origin, age, or disability as well as other misconduct that might create a hostile work environment. (See July 1998.)
20000731	July 2000: FAA completed the Common ARTS (Automated Radar Terminal System) program with the commissioning of the Huntington, West Virginia, site. Common ARTS was now fully operational at all 133 ARTS IIE sites and five ARTS IIIE sites. Besides providing upgraded equipment, the other major benefit of the common ARTS program was that, regardless of location, it allowed all ARTS systems to share a common software baseline that could be adapted to the size and complexity of a facility. These innovations facilitated the standardization of procedures, training, and logistics support.
20000801	August 1, 2000: An interim final rule went into effect requiring aircraft operators to pay fees for air traffic control services provided to aircraft that operated in U.S. airspace, but did not take off or land in the United States. The Federal Aviation Reauthorization Act of 1996 provided FAA the authority to charge fees to aircraft conducting U.S. overflights. (See June 5, 2000; August 20, 2001.)

20000816	August 16, 2000: British Airways grounded its fleet of Concorde supersonic jetliners a month after an Air France Concorde crashed outside Paris, raising safety concerns about all of these planes. Air France suspended its Concorde flights immediately after this crash, the first in the Concorde's 24 years of commercial service, killed 113 people. British Airways, the only other airline that operated the jets, canceled flights for a day after the accident, but then resumed them, saying it had conducted thorough checks and was confident of the safety of its fleet of these aircraft. British Airways grounded its fleet again, however, after receiving formal word that French and British aviation regulators intended to revoke the certificates of airworthiness for all Concordes.
20000821	August 21, 2000: FAA issued an AD reducing the time required for previously ordered inspections of General Electric (GE) CF-6 engines. The high-pressure compressor in an aircraft engine compresses the incoming air and speeds it up before it enters the combustion chamber to mix with fuel. Cracking in this compressor could cause an uncontained engine failure. FAA had previously ordered operators of aircraft with CF-6 engines to begin inspections effective January 28, 2000. After analyzing an uncontained engine failure experienced by a Varig Brasil Airlines Boeing 767 on June 7, 2000, FAA decreased the time airlines had to complete their initial inspections.
20000824	August 24, 2000: After a successful 21-day stability test of the Wide Area Augmentation System signal in space, FAA declared the system immediately available for some aviation and all non-aviation uses. WAAS improved the position signal to augment the Global Positioning System. The test demonstrated that the system could operate without interruption, providing a stable and reliable signal. The system delivered one to two meters horizontal accuracy and two to three meters vertical accuracy throughout the contiguous United States. Raytheon operated the system for FAA on a continuous basis, interrupting it only as necessary to upgrade or test the system. (April 6-9, 1999; April 10, 2001.)
20000825	August 25, 2000: FAA ordered an inspection of Boeing 767 aircraft to detect possible defects of the shear rivets on the elevator bellcrank assemblies attached to a hydraulic power control actuator at the rear of the plane. Failed shear rivets on two or more bellcrank assemblies could have produced abnormal elevator movements and affected control of the aircraft.
20000908	September 8, 2000: FAA issued a notice of proposed rulemaking that would incorporate a new flame propagation standard into regulations applicable to new transport category aircraft. Newly type certified airplanes and newly manufactured airplanes entering service three years after the effective date of the regulation would be required to comply. (See May 25, 2000; September 2, 2003.)
20000914	September 14, 2000: Following a year-long analysis, FAA announced a range of initiatives affecting the Boeing 737 rudder system. Near-term initiatives involved changes in operations and maintenance; however, long-term, FAA planned to initiate rulemaking to mandate the redesign of the entire system. (See May 3, 1999; October 26, 2000.)

20000919	September 19, 2000: Department of Transportation announced the swearing in of the first seven members of the FAA Management Advisory Council. This body, established by the FAA Reauthorization Act of 1996, would provide advice and counsel to the FAA Administrator on policy, spending, funding, and regulatory matters affecting the aviation industry. It would consist of 18 members. The president would appoint ten members, representing aviation interests. Five members, appointed by the Department of Transportation Secretary, would serve as a subcommittee, with emphasis on air traffic services. There also would be one designee each from the Department of Transportation, the Department of Defense, and an air traffic services union. The first members included: J. Randolph Babbitt, former president of Air Line Pilots Association; Robert W. Baker, vice-chairman of AMR Corp.; Edward M. Bolen, president of General Aviation Manufacturers Association; Geoffrey T. Crowley, president and CEO of Air Wisconsin; Robert A. Davis, former Boeing vice president; Deborah Branson, private attorney; and Kendall W. Wilson, private financial analyst. Initially, advisory council members would serve from one- to three-year terms. Subsequent appointments would be for three years. (See September 30, 1996.)
20000920	September 20, 2000: FAA issued a press release apologizing for an incident on July 17 when passengers were inconvenienced because of actions of a small number of controllers in the Chicago terminal radar control (TRACON) facility. FAA proposed penalties ranging from letters of reprimand to 30-day suspensions for 15 air traffic controllers in the facility following an investigation that indicated there was an intentional slowing of traffic into the Chicago area. Additionally, FAA announced that it would change the management team at the TRACON in Elgin, Illinois, to foster a new workplace environment. The investigation, conducted by FAA with the assistance of the Department of Transportation Inspector General revealed no safety related incidents during the period when traffic was slowed.
20000922	September 22, 2000: FAA announced that April 1, 2001, would be the earliest start date for new $4.00 and $4.50 passenger facility charge (PFC) levels. The April 1 date, however, did not preclude airports from immediately submitting PFC applications. The new PFC levels were authorized under the Wendell H. Ford Aviation Investment and Reform Act for the 21st Century. Previously, the highest PFC was $3.00.
20001005	October 5, 2000: Runway 7R/25L opened at Phoenix Sky Harbor International Airport.
20001016	October 16, 2000: A Cessna 335, carrying Missouri Governor Mel Carnahan, his aide, and piloted by his son, crashed ten miles northwest of Hillsboro, Missouri. All three persons on the aircraft died in the crash.

20001024 October 19, 2000: FAA issued a final rule that established a specific licensing and safety requirement for operating a commercial space launch site, whether the site was located on or off a federal launch range. The regulation outlined who must obtain a commercial launch site operator's license, set application requirements, and delineated licensee responsibilities. The rule followed and built upon prior rulemakings that governed operation of reusable launch vehicles (RLVs) and reentry and recovery of RLVs and reentry vehicles, as well as a companion rule covering the financial responsibility requirements, such as insurance, for licensed reentry activities. As a set, the three rules completed the process of establishing FAA's regulatory oversight authorized by congressional legislation passed in 1998 that gave FAA responsibility for licensing and regulating reentry of returning space vehicles and reentry sites. Previously, the Commercial Space Launch Act had provided authority only over the launching of commercial launch vehicles, not their return to Earth. The expanded authority was needed to bring the return under the safety regulatory regime of FAA. (See November 9, 1999; November 28, 2000.)

20001024 October 24, 2000: FAA awarded a contract to Sensis Corporation to develop the Airport Surface Detection Equipment, version X (ASDE-X), a traffic management system that provides seamless coverage of the airport surface, as well as aircraft identification, to air traffic controllers. ASDE-X uses a combination of surface movement radar, transponder multilateration, and sensors to display aircraft position labeled with flight call-signs on air traffic control tower displays. (See June 14, 2000; February 29, 2004.)

20001026 October 26, 2000: FAA issued an airworthiness directive, mandating use of a simplified procedure in the event that the rudder of a Boeing 737 was to jam or become significantly restricted in its movement. (See September 14, 2000; November 13, 2001.)

20001026 October 26-28, 2000: In conjunction with the Cargo Airline Association, FAA tested the ability of Automatic Dependent Surveillance — Broadcast (ADS-B) and global positioning system (GPS) technologies to improve flight safety while increasing the capacity at hub airports in Louisville, Kentucky. ADS-B, a situational awareness tool, shares the controller’s level of information with the pilot so the controller and pilot could work together to manage traffic more efficiently. (See July 10, 1999; January 1, 2001.)

20001128 November 28, 2000: FAA proposed a new process for obtaining a license to operate an expendable space launch vehicle. Through this rulemaking, FAA proposed to update and streamline its license application process for launches from U.S. territory or by U.S. citizens elsewhere. The agency planned to codify the safety requirements for launch operators regarding license requirements, criteria, and responsibilities to protect the public from the hazards of such launches. These safety requirements would apply to all licensed launches of expendable launch vehicles, whether from a federal launch site or a non-federal launch site. (See October 19, 2000; February 9, 2001.)

20001207 December 7, 2000: President Clinton announced three actions to reduce airline delays and improve air travel for America: the release of an executive order directing FAA to create a performance-based organization to focus solely on efficient operation of the air traffic control system; the appointment of a group of business and labor leaders from outside of the aviation industry to serve as a board of directors for this new organization; and a review of impediments to congestion pricing at airports. The president also called on Congress to reform the way air traffic control services were financed. (See April 23, 2000; June 10, 2003.)

20001212 December 12, 2000: FAA announced that a team of experts would conduct a one-year study of the safety processes used in certifying large transport airplanes, as well as FAA's support of continued airplane safety. The commercial airplane certification process study would include all of the safety processes used to design, build, and certify airplanes, as well as those involved in maintaining safety throughout operational service. Beginning in January 2001, the team would assess current safety processes and practices, and identify areas for improvement. Led by FAA, the team consisted of technical experts from the agency, NTSB, NASA, Department of Defense, foreign civil aviation authorities, industry, and academia.

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20010101 January 1, 2001: As part of FAA-industry Capstone partnership, FAA began the first use of ADS-B technology to track and service traffic near Bethel, Alaska – an area that had no radar coverage. The new system used ground-based transceivers to pick up transmissions from aircraft equipped with ADS-B. The information was then transmitted via phone line and satellite to the Anchorage Air Route Traffic Control Center, where it was displayed electronically to controllers. (See October 26-28, 2000; April 1, 2002.)

20010117 January 17, 2001: FAA and the National Air Traffic Controllers Association (NATCA) signed an understanding covering operational errors and operational deviations (OE/D). Under this agreement, failures to maintain 80 percent separation minima would be recorded as technical violations and maintained in the employee's training folder. FAA and NATCA would, however, immediately cancel the revocation or suspension of control tower operator licenses and facility ratings in addressing performance deficiencies. After twelve months, any information which could lead to the identification of an employee – whether causal or contributory to a technical violation – would be discarded. No controller would be decertified or forced to complete remedial training for a technical violation, and all controllers would have to attend refresher training annually. The agreement, which would be reviewed at six-month intervals, also called for quarterly meetings at the national level to address quality assurance. In addition, FAA and NATCA agreed to work together, no later than April 30, to develop and implement a classification system of OE/Ds based upon risk assessment.

20010120 January 20, 2001: George W. Bush became the forty-third President of the United States.

20010125 January 25, 2001: Former Member of Congress Norman Y. Mineta (D-CA) took the oath of office as the nation’s fourteenth Secretary of Transportation. The lone Democrat in George W. Bush’s cabinet, Mineta, age sixty-nine, had been Secretary of Commerce in the outgoing Clinton Administration, and was the first Asian Pacific American to hold this Cabinet-rank post. (See July 7, 2006.)

20010131 January 2001: FAA Administrator Jane Garvey established the terminal business service. The new organization consolidated funding, personnel, planning, and processes in a single organization to provide integrated terminal air traffic control capabilities.

20010209 February 9, 2001: Effective this date, FAA amended the procedures for assessment and adjudication of civil penalties in space transportation. Previous regulations provided little guidance for the FAA in the prosecution of civil penalties. The new rules provided more detail on the procedures FAA must use to assess civil penalties and on the respondents' rights to adjudication. The rules also provided more detailed procedures to be used in the adjudication. (See November 28, 2000; April 3, 2002.)

20010319 March 19, 2001: FAA announced that U.S. airlines had complied with the deadline to retrofit commercial airplanes with both fire detection and suppression systems. Most wide-body passenger airplanes already had fire detection and suppression systems in inaccessible cargo compartments. FAA's February 1998, final rule required that the remainder of the passenger fleet be retrofitted within three years. In addition, approximately 300 all-cargo airplanes were required to have detection systems and means to shut off airflow to the cargo compartment. (See February 12, 1998.)

20010401 April 1, 2001: Thirty-one airports were the first to be permitted to begin collecting Passenger Facility Charges (PFC) at a $4.50 level. Since that date, an additional 259 airports have collected at a $4.50 PFC level.

20010410 April 10, 2001: FAA announced its agreement with recommendations in the Wide Area Augmentation System (WAAS) Independent Review Board (IRB) report issued earlier in the month. Chartered by the FAA, the IRB said its technical review showed that WAAS would actually work better than the FAA had previously estimated and, when fielded, would likely provide significant additional aviation safety. The board, which met from August to December of 2000, recommended that FAA remain fully committed to the evolution of WAAS, and concluded that national WAAS capability could be achieved with the FAA’s renewed leadership, action, and commitment. It further stated that WAAS had enormous benefits for all global positioning system (GPS) users. (See August 24, 2000; July 11, 2003.)

20010412 April 12, 2001: FAA issued a rule, effective May 12, 2004, requiring air carrier operators to carry automated external defibrillators on large, passenger-carrying aircraft and augment currently required emergency medical kits. The new rule affected those air carrier operations for which at least one flight attendant was required and provided the option of treating serious medical events during flight time. (See May 24, 2000.)

20010425 April 25, 2001: FAA dedicated the first version of its Weather Systems Processor (WSP) at a ceremony held at Albuquerque International Sunport, a facility that had been closely tied to development of the system. The WSP was designed to provide information to controllers and pilots about potentially hazardous microburst and wind shear weather events. The system improved the management of air traffic in air space near the airport by forecasting gust front-induced wind shifts, detecting precipitation, and tracking storms. The new processor was deployed at airports that did not qualify for the more sophisticated Terminal Doppler Weather Radar (TDWR) or as interim measures at airports where TDWR was scheduled for deployment later. WSP went on line at four other sites at the same time as the Albuquerque dedication: Austin, Texas; Norfolk, Virginia; the FAA Academy (training); and the Technical Center (testing and support). (See September 24, 1998.)

20010427 April 27, 2001: FAA prohibited U.S. operators of Boeing 737 aircraft from running center wing tank fuel pumps unless the quantity of fuel exceeded a specified minimum level. The Airworthiness Directive was one of many FAA initiatives to enhance fuel tank safety. (See February 22, 2000; May 7, 2001.)

20010503 May 3, 2001: FAA began providing a new service that used wireless devices to inform the public of aviation delays. Travelers with access to with pagers, cell phones, or personal digital assistants (PDA), could subscribe and obtain real-time airport status information via e-mail.

20010507 May 7, 2001: FAA issued a rule that required airplane manufacturers and operators to change how airplane fuel tanks were designed, maintained and operated. The rule included a special federal aviation regulation (SFAR) to minimize the potential for failures that could cause ignition sources in fuel tanks on new and existing airplanes. It also included a regulation that, for the first time, mandated airplane design changes to minimize the flammability of fuel tanks on new airplanes. Manufacturers had 18 months from June 6, the effective date of the rule, to conduct the safety reviews and develop required maintenance and inspection programs. Operators had 36 months from June 6 to incorporate a FAA-approved maintenance and inspection program into their operating procedures. (See April 27, 2001; June 6, 2001.)

20010523 May 23, 2001: FAA ordered operators of DC-9/MD-88 series and MD-90-30 series aircraft to inspect the wiring of small static port heaters for chafing, loose connections, and evidence of arcing, and to make necessary repairs. These heaters keep ice from forming on devices that measure air pressure. Operators had to determine if the surrounding insulation were covered with metalized Mylar (polyethyleneteraphthalate). If so, the Mylar had to be removed and/or replaced with Tedlar-covered insulation, or other appropriate action had to be taken. The airworthiness directive came in response to an incident that occurred on September 17, 1999, in which a Delta Air Lines MD-88 experienced a fire in the forward cargo compartment shortly after takeoff from Northern Kentucky International Airport in Covington, Kentucky.

20010524 May 24, 2001: FAA provided Congress a report on ways to expedite environmental reviews of runway projects, including establishing special teams of experts, reducing paperwork, and improving coordination between federal and local officials. The agency proposed strengthening environmental impact statement (EIS) teams by adding more FAA members, asking airport proprietors to contribute members, and putting more consultants on the teams. FAA also suggested increasing FAA environmental specialist and environmental attorney resources. FAA also planned to develop a reimbursable agreement for airports interested in paying for extra staff for expedited EIS reviews.

20010524 May 24, 2001: FAA announced it had selected a group headed by Lockheed Martin to undertake the Advanced Technologies and Oceanic Procedures (ATOP) project. Once installed, the new ATOP technology would give controllers the ability to reduce separation between aircraft on oceanic routes, and would give pilots greater flexibility to choose their own routes. (See June 30, 2004.)

20010529 May 29, 2001: FAA announced it would begin using an alert warning system at the country's 34 busiest airports to help prevent runway accidents. Already in use at San Francisco and Detroit, the Airport Movement Area Safety System (AMASS) provided air traffic controllers with visual and aural alerts of potential runway accidents caused by runway incursions. AMASS was an enhancement to the ASDE-3 (airport surface detection equipment) radar that processed surveillance data from the ASDE-3 and the terminal automation system. It then determined conflicts based on the position, velocity, and acceleration of airborne arrival aircraft with ground-based aircraft and vehicles. (See July 15, 2000; August 14, 2001.)

20010606 June 6, 2001: FAA required design approval holders of certain turbine-powered transport category airplanes, and of any subsequent modifications to those airplanes, to substantiate that the design of the fuel tank system precluded the existence of ignition sources within the airplane fuel tanks. The new rule also required the development and implementation of maintenance and inspection instructions to assure fuel tank safety. For new type designs, the manufacturer had to identify safety-critical maintenance actions and incorporate a means either to minimize development of flammable vapors in fuel tanks or to prevent catastrophic damage if ignition did occur. These actions were based on accident investigations and adverse service experience, both of which had shown that unforeseen failure modes and lack of specific maintenance procedures on certain airplane fuel tank systems might result in degradation of design safety features intended to preclude ignition of vapors within the fuel tank. (See May 7, 2001; November 23, 2002.)

20010607 June 7, 2001: FAA unveiled a plan that addressed the growing gap between demand and capacity in the air transportation system. The plan integrated and aligned agency activities with those of the aviation industry and users of the system. The Operational Evolution Plan (OEP) focused on maintaining safety, increasing capacity, and managing delays. The plan identified specific tasks to be accomplished in the near-term (2001 and 2002), mid-term (2002 to 2004), and long-term (2005 to 2010). FAA and industry considered the OEP an evolving document that would be modified, particularly to incorporate new technologies as they emerged. (See June 2007.)

20010611 June 11, 2001: FAA awarded a $125 million dollar contract to Lockheed Martin Corp., to develop and field the En Route Communications Gateway (ECG). This new gateway for processing radar data would reduce system outages and thereby both increase safety margins and reduce maintenance requirements. ECG would replace the Peripheral Adapter Module Replacement Item (PAMRI) program. The system would be installed at twenty-one air route traffic control centers, the FAA Academy in Oklahoma City, and the William J. Hughes Technical Center in Atlantic City, New Jersey. The Seattle Air Route Traffic Control Center was the first site scheduled for installation of the new system. FAA expected the system to become operational in the summer of 2003. The last site would be fielded in mid-2005. (See December 7, 2005.)

20010625	June 25, 2001: FAA issued a final rule to protect from disclosure voluntarily provided information that aids the agency in improving safety and security. The rule particularly encouraged data sharing programs, such as Flight Operational Quality Assurance, which used state-of-the-art flight data recorder technology to collect and analyze data on routine flights. FAA had been using data collected in this fashion to identify industry-wide safety trends and to target more effectively resources and correct potential safety problems. The rule took effect on July 25. (See June 30, 2000; October 30, 2001.)
20010630	June 30, 2001: Mayor Richard Daley announced his proposal for reducing delays and congestion at O'Hare International Airport. Highlights of the proposal included the addition of one new runway and the relocation of three of the current seven runways. According to the city's estimates, making these changes would reduce delays related to poor weather by 95 percent and overall delays by 79 percent.
20010711	July 11, 2001: In a report to Congress, FAA's new Management Advisory Council (MAC) concluded that the agency's rulemaking process was inefficient, lacked credibility, and unless fixed, would erode the safety, security, and efficiency of the aviation system. The MAC, however, was only one of a number of groups that had recently faulted FAA's rulemaking process. GAO, the Aeronautical Repair Station Association, and organized labor echoed the MAC's findings. The MAC found that FAA took an average of five years to complete rules, and, at its current pace, would not be able to finish all of the rules currently being developed for 15 years. It also criticized FAA's cost/benefit analyses, inadequate staffing and management accountability within FAA, and inefficiencies in the Aviation Rulemaking Advisory Committee process.
20010717	July 17, 2001: FAA released final rules on airport and aircraft security, as recommended by the White House Commission on Aviation Safety and Security following the 1996 crash of TWA 800. (See July 27, 2000; September 11, 2001.)
20010731	July 31, 2001: FAA awarded a contract to ITT Industries Aerospace/Communications Division, of Ft. Wayne, Indiana, to provide the agency with multi-mode VHF digital airto-ground radios. The contract was for an initial $20.5 million and would be worth as much as $580 million if all options were exercised. ITT Industries partnered with Park Air Systems, Federal Data Corp., and Operational Technologies Services, Inc., to provide the equipment. This first building block of the Next Generation Air/Ground Communications (NEXCOM) system would, in phases, replace air traffic controllers' aging analog radios with digital radios. When completed, the entirely digital system would enhance the FAA's ability to meet expanding air traffic control communication demands. (See February 22, 2002.)
20010814	August 14, 2001: Representative John Mica (R-FL), chairman of the House aviation subcommittee, criticized FAA for delaying deployment of the airport movement area safety system (AMASS). Mica said the program was six years behind schedule. (See May 29, 2001.)

20010816

August 16, 2001: FAA unveiled a new initiative designed to enhance the continued safety of aircraft wiring systems from their design and installation through their retirement. FAA based its Enhanced Airworthiness Program for Airplane Systems (EAPAS) on results from an intensive data-gathering effort on aircraft wiring systems done in cooperation with industry. EAPAS combined a variety of near- and longer-term actions into a plan to increase awareness of wiring system degradation, implement improved procedures for wiring maintenance and design, and spread that information throughout the aviation community. FAA's overall aging transport non-structural systems program, an effort begun in October 1998, was an expansion of the agency's aging aircraft program. (See October 1, 1998; May 22, 1999; October 6, 2005.)

20010820

August 20, 2001: A final FAA rule, effective this date, lowered the overflight fees the agency charged carriers for air traffic and related services incurred by certain aircraft that transit U.S.-controlled airspace but neither take off from, nor land in, the United States. The new rule reduced the fees that had been established by an interim final rule that had gone into effect on August 1, 2000, and allowed FAA to continue to charge fees as required by law. FAA rulemaking efforts to impose statutorily required fees had been repeatedly challenged in court. The most recent challenge had stemmed from an opinion of the U.S. Court of Appeals for the District of Columbia Circuit, issued on July 13, 2001, which stated: "Because FAA has failed to articulate the basis for its conclusions that 'the unit costs of providing [air traffic control] services to overflights within each environment [are] identical to the unit costs of providing [air traffic control] services to all air traffic within each environment,' we vacate the 2000 Rule and remand to the FAA for further proceedings consistent with this opinion." (See August 1, 2000; June 21, 2002.)

20010911

September 11, 2001: Nineteen radical Islamic extremists with the group al Qaeda penetrated security at three major airports, seized four U.S. domestic airliners, and turned them into missiles that destroyed the World Trade Center in New York City, and damaged the Pentagon in Arlington, Virginia, killing thousands. Passengers on one of the planes fought the hijackers causing the plane to crash in a Pennsylvania field, killing all on board. For the first time in history, FAA put a ground stop on all U.S. air traffic. Related details follow:

Eastern Standard Time

7:59 a.m.: American Airlines Flight 11, a Boeing 767 with 92 people on board, takes off from Boston Logan airport for Los Angeles.

8:14 a.m.: United Air Lines Flight 175, a Boeing 767 with 65 people on board, takes off from Boston Logan airport for Los Angeles.

8:20 a.m.: American Airlines Flight 77, a Boeing 757 with 64 people on board, takes off from Washington Dulles airport for Los Angeles.

8:38 a.m.: FAA notifies the North American Aerospace Defense Command's (NORAD) Northeast Air Defense Sector about the suspected hijacking of American Flight 11.

8:42 a.m.: United Air Lines Flight 93, a Boeing 757 with 44 people on board, takes off from Newark airport for San Francisco.
8:46 a.m.: American Flight 11 crashes into the north tower of the World Trade Center.
9:03 a.m. (approx.): United Flight 175 crashes into the south tower of the World Trade Center.
9:04 a.m.: FAA's Boston Air Route Traffic Control Center stops all departures from airports in its jurisdiction (New England and eastern New York State).
9:06 a.m.: FAA bans takeoffs of all flights bound to or through the airspace of New York Center from airports in that air route traffic control center and the three adjacent air route traffic control centers – Boston, Cleveland and Washington. This is referred to as a first tier ground stop and covers the Northeast from North Carolina north and as far west as eastern Michigan.
9:08 a.m.: FAA bans all takeoffs nationwide for flights going to or through New York Center airspace.
9:15 a.m.: FAA (New York Center) notifies NORAD's Northeast Air Defense Sector that United Airlines 175 was the second aircraft that crashed into the World Trade Center.
9:25 a.m.: FAA bans takeoffs of all civilian aircraft regardless of destination – a national ground stop.
9:37 a.m.: American Flight 77 crashes into the Pentagon.
9:45 a.m.: In the first unplanned shutdown of U. S. airspace, FAA orders all aircraft to land at the nearest airport as soon as practical. At this time, there were more than 4,500 aircraft in the air on instrument flight rules (IFR) flight plans.
10:03 a.m.: United Flight 93 crashes in Stony Creek Township, Pennsylvania.
10:39 a.m.: Reaffirming the earlier order, FAA issues a notice to airmen (NOTAM) that halts takeoffs and landings at all airports.
12:15 p.m.: The airspace over the 48 contiguous states is clear of all commercial and private flights.
2:30 p.m.: FAA announces there will be no U.S. air traffic until noon Eastern Standard Time Wednesday at the earliest. (See July 17, 2001; September 12, 2001.)

20010912	September 12, 2001: Department of Transportation Secretary Norman Mineta announced FAA would allow a limited reopening of the nation's commercial airspace system to allow flights diverted the day before to continue to their original destinations. The Secretary announced FAA was temporarily extending the ground stop order imposed the previous day, while it initiated additional security measures. Mineta said FAA would permit flights only in special limited circumstances. Flights diverted as a result of yesterday's ground stop would be allowed to continue to their original destination under vastly tightened security guidelines. Only passengers on the original flights would be allowed to re-board, and only after airports and airlines had implemented strict screening measures. Mineta said a variety of stepped-up security measures would be instituted at the airports once they re-opened. Those measures included:
	* A thorough search and security check of all airplanes and airports before passengers were allowed to enter and board aircraft.
	* Discontinuance of curbside check-in at the airport.
	* Discontinuance of off-airport check-in.
	* Only ticketed passengers would be allowed to proceed past airport screeners to catch their flights.
	* Vehicles near airport terminals would be monitored more closely. (See September 11, 2001; September 14, 2001.)
20010914	September 14, 2001: Department of Transportation Secretary Norman Mineta approved restoration of the next phase of national air service, allowing certain general aviation flights back into the air effective at 4:00 p.m. General aviation was allowed to resume flights operating under Instrument Flight Rules, or IFR. Temporarily, however, general aviation flights would not be allowed to fly within 25 nautical miles of New York City and Washington, DC. Those restrictions would be kept in place until further notice as officials continued to assess the recovery situation in those cities over the near term. September 19, FAA lifted most restrictions of general aviation (Part 91) visual flight rules operations, or VFR, flights. VFR flights were now permitted for U.S. registered aircraft outside of enhanced Class B airspace, or airspace within a 30-mile radius of 30 major U.S. airports. FAA kept restrictions on the following flying activities (except in Hawaii): civil aircraft VFR flight training operations; VFR operations for banner towing; news reporting; traffic watch; airship/blimps; and Part 91 sightseeing. AA also restricted flying of any kind within 3000 feet altitude and three nautical miles of major sporting events or large open-air gatherings of people, such as football and baseball stadiums, race tracks, and concerts. (See September 12, 2001; September 23, 2001.)
20010923	September 23, 2001: As a result of national security concerns, FAA, in conjunction with other federal agencies, issued a notice to airmen (NOTAM) banning Part 137 (agricultural/crop-duster flights) from operating. In addition, no aircraft capable of or equipped for agriculture operations could operate during the ban. (See September 14, 2001; September 27, 2001.)

20010927

September 27, 2001: In a speech at Chicago's O'Hare airport, President Bush announced three measures to enhance aviation safety and security. First, he would continue to expand the air marshal program and seek Congressional approval to make this expansion permanent. Second, he would ensure that, effective October 1, a fund of $500 million would be established to finance aircraft modifications to delay or deny access to the cockpit. Thirdly, he would work with Congress to put the Federal Government in charge of airport security and screening services. The president said that fully implementing the extensive security proposal might take four to six months. Meantime, to ensure that every airport has a strong security presence, he asked the governors of all 50 states to call up the National Guard – at the Federal Government's expense – to augment existing security staff at every commercial airport nationwide. FAA would provide the necessary training for the National Guard personnel. (See September 23, 2001; September 27, 2001.)

20010927

September 27, 2001: FAA announced it was launching a nationwide search for personnel to join the air marshal program. FAA was training agents from other federal agencies, including the Customs Service, the Secret Service, the Immigration and Naturalization Service, and the Bureau of Alcohol, Tobacco and Firearms. Already-experienced law enforcement officials were being schooled on handling warfare in a confined space aboard a jet. (See September 23, 2001; September 28, 2001.)

20010928

September 28, 2001: FAA alerted civilian pilots of their responsibility to avoid restricted airspace and the procedures to follow if intercepted, in light of a Department of Defense announcement that pilots near or in restricted or prohibited airspace faced a forced landing, or as a last resort, use of deadly force by military aircraft. New security decisions required that additional airspace be barred to civilian aircraft. FAA anticipated announcing new restricted and prohibited areas throughout the United States. This additional airspace would be over areas that require protection for national security reasons. New and current restricted and prohibited areas would be revised periodically. (See September 27, 2001; October 4, 2001.)

20010928

September 28, 2001: FAA announced it was seeking industry input on its new En Route Automation Modernization (ERAM) program, which would replace the existing en route air traffic control automation system and selected en route infrastructure. FAA planned to pursue the award of a single ERAM System contract. Services to be provided under the contract included system engineering, system integration, system requirements analysis, system design/development, software design/development, system testing, infrastructure upgrades/enhancements, hardware and software replacements, system deployment, transition planning and support, training, maintenance, logistics support and life cycle support. FAA planned to incorporate any industry comments it deemed appropriate in the development of the final ERAM screening information request (SIR) #1 contract bid package planned for release in mid-October 2001. (See March 29, 2002.)

20011004 October 4, 2001: Reagan National Airport reopened for business, but under very tight security. Passengers had to undergo intense security screening and were limited to one carry-on bag and one personal item (a purse or briefcase). The first phase of the reopening included commercial flights by six airlines to the airports in Atlanta, Boston, Chicago O'Hare, Dallas/Ft. Worth, Minneapolis, Pittsburgh, New York (LaGuardia), and Newark. The six carriers were United, American, Delta, US Airways, Northwest, and Continental. (See September 28, 2001; October 13, 2001.)

20011013 October 13, 2001: Joint teams comprised of officials from FAA and Department of Transportation Inspector General began auditing background checks of Argenbright Security, Inc., employees at 13 U.S. airports. Recent FAA audits of Argenbright found background check violations at these airports. The action followed a petition filed by Assistant U.S. Attorney John Pease on Thursday, October 11, with the U.S. District Court in Philadelphia that ordered Argenbright officials to answer charges that they continued to violate a probation agreement regarding the hiring of screeners without first performing appropriate background checks or providing training. In the following weeks, separate FAA teams began auditing background checks of all U.S. airport security screeners, starting with those employed at the nation's 20 largest airports. The initial 13 airports were: Boston Logan International, Port Columbus International (Columbus, Ohio), Eastern Iowa (Cedar Rapids, Iowa), Dallas/Fort Worth International, Detroit Metro Wayne County, Las Vegas McCarran International, Los Angeles International, Nashville International, New York LaGuardia, Phoenix Sky Harbor International, Seattle-Tacoma International, Trenton-Mercer and Washington Dulles International. Future background checks would be audited to make sure screeners were properly hired according to FAA standards. (See October 4, 2001; October 18, 2001.)

20011018 October 18, 2001: Department of Transportation Secretary Norman Mineta announced that beginning the following Friday, October 26, flights at Reagan National Airport would be expanded to include 18 more cities, bringing to 26 the number of cities served by the airport after the president authorized its reopening. (See October 13, 2001; November 19, 2001.)

20011023

October 23, 2001: The National Transportation Safety Board issued its findings on the crash of an American Airlines MD-82 during landing at Little Rock airport in 1999. The Board determined the probable cause of the accident was the flight crew's failure to discontinue the approach when severe thunderstorms and their associated hazards to flight operations had moved into the airport area, and the flight crew's failure to ensure that the spoilers had extended after touchdown. Contributing to the accident was the flight crew's impaired performance resulting from fatigue and the situational stress associated with the intent to land under the circumstances, continuation of the approach to a landing when the airline company's maximum crosswind component was exceeded, and use of reverse thrust greater than 1.3 engine pressure ratio after landing. The accident occurred on June 1, 1999, as the flight was arriving from Dallas/Fort Worth with 139 passengers and six crewmembers on board. The aircraft overran the runway, passed through a chain link fence, went down an embankment and collided with a structure supporting the runway lighting system. The captain and 10 passengers were killed; over 100 others were injured. As a result of the investigation, the Board made 22 new recommendations to FAA and two to the National Weather Service. (See June 3, 1999.)

20011030

October 30, 2001: FAA issued a rule that protected the data collected under airline FOQA programs from FAA enforcement action, except in criminal or deliberate cases. A FAA rule issued on June 25 protected voluntarily provided information from disclosure to encourage data-sharing programs such as Flight Operational Quality Assurance (FOQA). The rule responded to a mandate from Congress to protect information that aided in improving safety and security. It also responded to recommendations made by the 1997 National Civil Aviation Review Commission, chaired by Norman Mineta. November 30, effective this date, FAA codified enforcement protection for FOQA programs. The agency would not use an operator's FOQA data, or even aggregate FOQA data, in any enforcement action against the operator or its employees when the information was obtained from an FOQA program approved by the Administrator. Criminal or deliberate acts would not be protected by this ruling. The rule required air carriers participating in approved FOQA programs to submit aggregated FOQA data to the FAA for use in monitoring safety trends. (See June 25, 2001.)

20011112

November 12, 2001: American Airlines Flight 587 exploded over Queens, New York shortly taking off from John F. Kennedy International Airport. All 260 people aboard the plane and five people on the ground were killed. Some witnesses reported that a burning engine fell from the sky before the aircraft did, and others described a midair explosion. The wreckage fell in three places. One cylindrical piece, resembling an engine housing, fell onto a Texaco station, where it landed six feet from the fuel pumps. Most of the fuselage cratered into an intersection, sending columns of dense black smoke aloft over leaping flames. The third element, a wing section, plunged into Jamaica Bay. (See November 16, 2001.)

20011113 November 13, 2001: FAA published a proposal to mandate installation of a new, improved rudder control system in all Boeing 737 models within five years. The proposed airworthiness directive would require Boeing 737 operators to install a new rudder system, currently being developed by Boeing, and make any additional changes to the aircraft needed to accommodate the new system, within five years of the AD effective date. The new design would increase the overall safety of the 737 by simplifying the rudder system and eliminating a range of previously known failure possibilities. The redesign also would make it unnecessary to have existing flight crew operating procedures and associated training unique to the 737 rudder system. (See October 26, 2000; October 7, 2002.)

20011114 November 14, 2001: FAA commissioned the last Automated Surface Observing System (ASOS) at New Haven, Connecticut, five months ahead of schedule, marking the completion of a nationwide push to establish 569 baseline systems, which started in November 1993 in Montrose, Colorado. ASOS provided current weather information on critical weather parameters, such as sky condition and visibility, temperature and dew point, pressure, wind speed, and direction. It also identified precipitation and its accumulation, thunderstorm reporting, and freezing rain accumulation.

20011115 November 15, 2001: FAA and the National Oceanic and Atmospheric Administration made a new tool available to convey advanced storm information to pilots. The National Convective Weather Forecast (NCWF) product, designed and developed by the National Center for Atmospheric Research in Boulder, Colorado, and MIT Lincoln Laboratory, in Lexington, Massachusetts, provided pilots with a plotted map depicting the current location of convective hazards and where they would be an hour later. Pilots, federal aviation weather briefers, air traffic control specialists, and airline dispatchers who routinely made operational decisions associated with thunderstorm hazards routinely were turning to the NCWF for essential information.

20011116 November 16, 2001: FAA issued an emergency airworthiness directive mandating an inspection of the vertical stabilizers and rudders on all Airbus A-300 and A-310 aircraft. The inspections had to be completed within 15 days. In addition to the area where the structural failure in American 587 occurred, the inspections also were focused on the surrounding rudder components and attachment fittings. (See November 12, 2001.)

20011119 November 19, 2001: President George W. Bush signed into law the Aviation and Transportation Security Act (Public Law 107-71), which, among other things, called for the establishment of the Transportation Security Administration (TSA) in the Department of Transportation, to be responsible for security at airports. The act also broadened AIP eligibility to include costs for additional security-related activity required by law or the Secretary of Transportation. The period of eligibility for such projects was for FY 2002 and could include only those additional costs incurred from September 11, 2001, to September 30, 2002. February 13, 2002, TSA took over responsibility for aviation security from FAA. (See October 18, 2001; December 6, 2001.)

20011206	December 6, 2001: FAA required each airport operator and aircraft operator with a security program under part 107 or part 108, to conduct fingerprint-based criminal history record checks for individuals who had not already undergone such a check. The rule applied to those who either possess, or have applied for: unescorted access authority to the security identification display area of an airport; authority to authorize others to have unescorted access; and screening functions. (See November 19, 2001; December 20, 2001.)
20011210	December 10, 2001: FAA amended the list of airspace locations where Reduced Vertical Separation Minima (RVSM) could be applied to include the New York flight information region (FIR) portion of West Atlantic Route System airspace. RVSM procedures allowed vertical separation to be reduced between aircraft at certain higher altitudes if the aircraft met stringent altimeter and auto-pilot performance requirements. The rule also required any aircraft equipped with the Traffic Alert and Collision Avoidance System, version II (TCAS II) flying in RVSM airspace to incorporate a version of TCAS II compatible with RVSM operations. (See February 24, 2000; May 10, 2002.)
20011211	December 11, 2001: Runway 4L/22R opened at Detroit Metropolitan Wayne County Airport.
20011220	December 20, 2001: FAA decreased the no fly zone around Reagan National Airport. As a result of the change, Suburban Airport in Anne Arundel County, Freeway Airport in Prince George's County and Maryland Airport in Charles County, Maryland reopened for normal operations. (See December 6, 2001; January 5, 2002.)
20011227	December 27, 2001: Four FAA facilities in the Eastern Region – the New York TRACON, the New York, and Washington Air Route Traffic Control Centers, and the Philadelphia tower – implemented what was called the “Newark Chokepoint Flip/Flop” project. This involved switching flight paths and eliminating a crossover pattern affecting hundreds of aircraft daily to increase capacity.
20011231	December 2001: The Kansas City Air Route Traffic Control Center began daily use of the User Request Evaluation Tool (URET). The tool enabled controllers to see traffic 20 minutes into the future and allowed them to safely assign and grant pilot requests for more direct and more fuel efficient routes. The prototypes at the Memphis and Indianapolis Air Route Traffic Control Centers had been shown to save the airlines $1.5 million per month based on an increase in direct routings of about 20 percent. (See September 30, 1999; January 26, 2002.)

2002

20020105 January 5, 2002: Fifteen-year-old Charles Bishop, a flight student, took off in a Cessna, leaving his instructor behind, and crashed the plane into the Bank of America Plaza in downtown Tampa, Florida. Bishop, the only fatality in the crash, ignored warnings from an intercepting Coast Guard helicopter to land. The crash rekindled the debate surrounding the security of general aviation, spurred another round of meetings among top security officials, and lead FAA to issue a Flight Standards Service notice proposing eleven recommendations for possible security enhancements around airports. The proposed enhancements included having separate ignition and door lock keys for aircraft, limiting student pilots' access to aircraft keys until they reached a specific point in the training curriculum, keeping student pilots under supervision of a flight instructor at all times, establishing positive identification of any student pilot before every flight lesson, and requiring a parent or legal guardian to co-sign enrollment applications for students who were not legal adults. Other recommendations called for aircraft owners to take appropriate steps to secure unattended aircraft. (See December 20, 2001; January 15, 2002.)

20020115 January 15, 2002: Effective this date, FAA mandated new standards to protect cockpits from intruders and the effects of small arms fire or fragmentation devices, such as grenades. The Aviation and Transportation Security Act authorized the FAA to issue the final rule, which required operators of more than 6,000 airplanes to install reinforced doors by April 9, 2003. The agency also issued a special federal aviation regulation (SFAR) requiring operators to install temporary internal locking devices within 45 days on all passenger airplanes and on airplanes equipped with cargo cockpit doors. October 17, FAA issued a series of SFARs that authorized short-term door reinforcement by providing airlines and cargo operators with temporary relief from certain FAA standards. The major U.S. airlines voluntarily installed short-term fixes to the cockpit doors of 4,000 aircraft in 32 days. The SFAR stated that a long-term fix that meets FAA requirements must be installed within 18 months. (See January 5, 2002; January 18, 2002.)

20020118 January 18, 2002: Effective this date, airlines had to inspect all checked baggage for explosives. (See January 15, 2002; February 13, 2002.)

20020126 January 26, 2002: FAA launched the User Request Evaluation Tool (URET), a software decision-support tool designed to aide controllers in providing direct routes to high altitude aircraft more quickly, at the Memphis Air Route Traffic Control Center. January 27, controllers began using URET at the Indianapolis Air Route Traffic Control Center and on January 30 at the Cleveland Air Route Traffic Control Center. With Kansas City center already up and running, four URET sites were then in service. (See December 2001; May 6, 2002.)

20020205	February 5, 2002: FAA proposed new certification requirements for light-sport aircraft, pilots, and repairmen. Previous FAA regulations had not addressed the sport pilot segment of general aviation. The proposal defined light-sport aircraft as simple, low-performance, low-energy aircraft that would be limited to:
	* 1,232 lbs. maximum weight,
	* Two occupants,
	* A single engine (non-turbine),
	* Stall speed of 39 knots,
	* Maximum airspeed of 115 knots, and
	* Fixed landing gear.
	FAA also included two new categories in the sport aircraft proposal – weight-shiftcontrol aircraft and powered parachutes. (See September 1, 2004.)
20020213	February 13, 2002: FAA issued an emergency rule enabling private flying to resume under new strict security procedures at three airports in suburban Maryland outside Washington, DC, which had been largely shut down since September 11, 2001. The reinstated airports were: College Park, Potomac, and Washington Executive/Hyde. (See January 18, 2002; February 17, 2002.)
20020217	February 17, 2002: Effective this date, formal responsibility for aviation security transferred from FAA to TSA. (See February 13, 2002; March 13, 2002.)
20020222	February 22, 2002: FAA announced establishment of government/industry agreements with three companies for the development of technology that would integrate digital voice and data into air/ground communications. Under the agreements, Rockwell Collins Commercial Systems, Honeywell Aerospace Electronic Systems, and Avidyne Corp. would develop VHF digital link mode-3 (VDL-3) avionics. The FAA would partially fund industry development of the airborne components of Next Generation Air/Ground Communications (NEXCOM) program, which would replace the ground radio system currently used for air traffic control communications with state-of-the-art digital technology. (See July 31, 2001; July 15, 2002.)
20020225	February 25, 2002: FAA announced pilots could now receive up-to-date weather information in the cockpit via VHF data link mode 2 (VDL-2) avionics that supported flight information services broadcast. Pilots of properly equipped aircraft could receive text messages, including routine and special weather reports, terminal area forecasts, and pilot reports issued by the FAA or the National Weather Service at no cost. They could also receive graphic products such as weather maps, and other flight information services products available through a subscription service.

20020228 February 28, 2002: The Department of Transportation Inspector General released an audit of FAA's progress in acquiring the Weather and Radar Processor (WARP), which would provide meteorologists and air traffic controllers more accurate and reliable information to lessen the effects of bad weather. The IG found that FAA had experienced significant problems managing the development and deployment of WARP on controller displays – mostly because of human factors and technical problems. He also found the program's current cost baseline was not realistic and the schedule was at risk. Since 1995, estimated program costs had increased from $227.8 million to $276.8 million. (See March 2002.)

20020313 March 13, 2002: Department of Transportation Secretary Norman Mineta announced that flight operations at Washington's Ronald Reagan National Airport would be authorized to return to their pre-September 11, 2001, capacity by April 15, completing full restoration of the nation's commercial aviation system. Since the airport reopened on October 4, 2001, the facility had been returning in phases to full capacity, giving the Federal Government and local authorities a chance to implement enhanced security measures at all airports serving Reagan National. During the first phase of restored flights, service was allowed to eight cities. Phase 2, which had begun October 26, permitted service to an additional 18 cities. Phase 3, carried out in three stages, began January 2 with incremental increases on February 1 and March 1. Service to a total of 43 additional cities was restored during phase 3, during which approximately 620 daily flights were operated at the airport – 77 percent of its pre-September 11 total. With a return to full service, traffic would be able to grow to its previous total of approximately 800 daily flights. (See February 17, 2002; June 21, 2002.)

20020321 March 21, 2002: The National Transportation Safety Board determined that the probable cause of the crash of EgyptAir Flight 990 was the airplane's departure from normal cruise flight and subsequent impact with the Atlantic Ocean as a result of the relief first officer's flight control inputs. EgyptAir Flight 990, a Boeing 767-366ER, crashed into the Atlantic Ocean off the coast of Nantucket, Massachusetts on October 31, 1999. The scheduled flight was being operated from John F. Kennedy International Airport, New York, to Cairo International Airport, Cairo, Egypt. The 14 crewmembers and 203 passengers were killed and the airplane destroyed. Because the crash occurred in international waters, the Egyptian government had responsibility for the investigation under the provisions of Annex 13 to the Convention on International Civil Aviation. However, the Egyptian government delegated the conduct of the investigation to the NTSB under the provisions of Annex 13. (See October 31, 1999.)

20020326

March 26, 2002: Department of Transportation and Department of Defense (DoD) Secretaries Norman Mineta and Donald Rumsfeld announced the release of the 2001 Federal Radionavigation Plan. This plan included revised schedules for phasing down most land-based radionavigation systems to allow more time to transition to the global positioning system. Department of Transportation would continue to operate Loran-C in the short term while the administration continued to evaluate the long-term need for the system. Beginning with this edition, federal radionavigation information previously contained in a single document would be published in two separate documents, the Federal Radionavigation Plan, and a companion document entitled Federal Radionavigation Systems. The plan included the introduction, policies, operating plans, system selection considerations, and research and development sections, and would allow more efficient and responsive updates of policy and planning information. Sections relating to government roles and responsibilities, user requirements, and systems descriptions were moved to the companion document and would be updated as necessary. A joint product of the Department of Transportation and DoD, the radionavigation plan was mandated by the National Defense Authorization Act for fiscal year 1998, which also required that the plan be revised and updated at least every two years. (See February 2000.)

20020329

March 29, 2002: In response to the En Route Automation Modernization (ERAM) screening information request (SIR) issued March 15, Raytheon filed a formal protest of FAA's sole-sourcing plans to judge bids for the ERAM contract. Raytheon and Lockheed Martin had been the only firms planning to bid on ERAM. Subsequently, an alternative dispute resolution process was set up, FAA shelved the sole-source proposal, and the agency worked with both companies to craft a new SIR. Late June 2002, FAA formalized an agreement between Lockheed Martin and Raytheon to resolve the ERAM contract dispute. Lockheed Martin was awarded the contract worth $10 million for the risk-mitigation phase of the ERAM program, with Raytheon named as one of the subcontractors. At the same time, Lockheed Martin was named as a subcontractor to Raytheon on the Standard Terminal Automation Replacement System (STARS) project. If Lockheed Martin successfully executed the risk mitigation phase, it would secure the implementation contract for the full ERAM program. The total projected value for implementation and support was estimated at $1 billion through 2012. (See September 28, 2001; June 30, 2003.)

20020331

March 2002: FAA awarded a $26 million follow-on contract to Harris Corporation to maintain and support the Weather and Radar Processor (WARP). Under the original contract, a $72.5 million design and development award given to Harris in July 1996, FAA tasked the firm to develop, procure, install, and support 24 WARP systems at FAA air route traffic control centers and the Air Traffic Control System Command Center. The follow-on contract covered general support and hardware and software maintenance through September 2004. Future awards and options could increase the overall contract value to more than $125 million by 2004. (See February 28 2002; May 2002.)

20020401

April 1, 2002: Under contract to FAA's Capstone Program Office in Anchorage, Alaska, General Dynamics Decision Systems, successfully demonstrated a direct small aircraftto-satellite navigation communications data link capability. Using a Motorola hand-held satellite telephone in a University of Alaska Cessna 180, General Dynamics conducted its proof-of-concept demonstration, transmitting a live stream of aircraft position data, via the Iridium satellite system, to the Anchorage Air Route Traffic Control Center. The test flight departed Merrill Field, proceeded along the Knik Arm of Cook Inlet, past Pioneer Peak, and continued deep into the Knik Glacier valley. (See January 1, 2001; July 1, 2002.)

20020403

April 3, 2002: FAA announced it had issued space launch licenses to two U.S. launch vehicles, the Lockheed Martin Atlas V and the Boeing Delta IV rockets. Both were scheduled to fly before the end of the year, each carrying commercial satellite payloads. The new vehicles were highly advanced models of the Atlas and Delta vehicles which had served as the workhorses of U.S. government and commercial launches for many years. (See February 9, 2001; April 1, 2004.)

20020408

April 8, 2002: Department of Transportation Inspector General for Auditing, Alexis Stefani, testified before the House Transportation and Infrastructure Aviation Subcommittee on FAA's oversight of passenger aircraft maintenance. Stefani stated that while FAA's Air Transport Oversight System (ATOS) for monitoring air carriers was conceptually sound, it was not reaching its full potential at the original ten major carriers and had not been expanded to the remaining 129 passenger air carriers. FAA had a longstanding requirement for carriers to monitor their own maintenance. The carriers, however, placed limited emphasis on information derived from Continuing Analysis and Surveillance Systems, a subcomponent of ATOS used to monitor the effectiveness of their aircraft maintenance and inspection programs. As a result, weaknesses had gone undetected in air carrier maintenance systems. Stefani recommended FAA:

* Finish developing key elements of ATOS – specifically, processes for analyzing inspection results and ensuring that corrective actions were implemented for weaknesses found in air carrier maintenance and operations systems,

* Improve inspector training and locating qualified inspectors where they were most needed, and

* Establish strong national oversight and accountability to ensure consistent ATOS field implementation. (See October 1, 1998.)

20020427

April 27, 2002: A new terminal radar control facility (TRACON) began providing air traffic approach and departure control for the entire St. Louis metropolitan area. Airport traffic control tower facilities supported by the new TRACON included St. Louis Lambert International Airport (St. Louis); Spirit of St. Louis Airport; (Chesterfield, Missouri); St. Louis Regional Airport (Alton, Illinois); St. Louis Downtown Airport (Cahokia, Illinois); and Scott Mid-America Airport (Belleville, Illinois), a joint-use facility also responsible for directing air traffic for Scott Air Force Base.

20020506 May 6, 2002: FAA announced the successful deployment of the User Request Evaluation Tool (URET) at the Washington Air Route Traffic Control Center in Leesburg, Virginia. URET allowed pilots to select more direct routes to their destinations. The new digital system was one of many building blocks in the FAA Free Flight technology. In addition to Washington, URET was in use at five other air route traffic control centers (Kansas City, Cleveland, Chicago, Indianapolis, and Memphis). (See January 26, 2002; October 30, 2006.)

20020509 May 9, 2002: FAA announced the operational use of the Standard Terminal Automation Replacement System (STARS) in El Paso, Texas. This upgraded version, referred to as full STARS, completely replaced the Automated Radar Terminal Systems (ARTS). Full STARS consisted of state-of-the-art displays and computers providing radar service and a backup service. The full system was being developed in phases so that the concerns of technicians and air traffic controllers could be addressed. In 1999, El Paso and Syracuse, New York, had received an early version of STARS, which had attached STARS to the ARTS processing system. (See January 12, 2000; June 12, 2002.)

20020510 May 10, 2002: FAA issued a proposed rule that would reduce the minimum vertical separation between aircraft from the current 2,000 feet to 1,000 feet for all aircraft flying between 29,000 and 41,000 feet, thus allowing more airplanes in the same volume of airspace. At the time, aircraft at those altitudes had to be separated by 2,000 feet vertically, meaning they could fly only at 29,000, 31,000, 33,000 feet and so forth. Implementing Reduced Vertical Separation Minima procedures was intended to increase the routes and altitudes available and lead to more efficient routings that would save time and fuel. (See December 10, 2001; October 22, 2003.)

20020531 May 2002: The Fort Worth Air Traffic Control Center became the first facility to go operational with the Weather and Radar Processor (WARP) on the controller displays. WARP displayed Terminal Doppler Weather Radar information directly to controllers on the same screen as aircraft position data, thus helping controllers to reroute air traffic to avoid areas of severe weather. FAA planned to install WARP at the other en route centers during June and July and have the system operational at all the center sites by the end of October. (See March 2002; January 23, 2003.)

20020612 June 12, 2002: FAA announced plans to purchase new radar automation display systems for some low- to medium-activity airports that currently lacked radar displays. The display systems were part of the FAA's plan for providing interim tower displays in advance of the full national deployment of the Standard Terminal Automation Replacement System (STARS). Called the ARTS IE (Automated Radar Terminal Systems IE) and STARS LITE (STARS local integrated tower equipment), the displays were based on existing air traffic control technology, enabling the FAA to minimize the need for additional testing, evaluation and training. (See May 9, 2002; September 17, 2002.)

20020614	June 14, 2002: GAO concluded FAA's controller hiring plans were inadequate, and that the widely publicized problem of controller retirements was going to be even worse than the agency had predicted. Investigating controller attrition at the direction of Congress, the GAO reported that about 5,000 controllers might retire in the next five years, double the number who retired in the previous five years. Although the exact number and timing of the controllers' departures had not been determined, attrition scenarios developed by both FAA and GAO indicated that the total attrition would grow substantially in both the short and long term. As a result, FAA would likely need to hire thousands of air traffic controllers in the next decade to meet increasing traffic demands and to address the anticipated attrition of experienced controllers.
20020621	June 21, 2002: FAA issued a notice of agency reconsideration of final rule regarding the charging of fees for providing air traffic services required by aircraft that fly in U.S.- controlled airspace but neither take off from, nor land in, the United States. Since August 1, 2000, the agency had been charging fees for these overflight services. Authorized by the Federal Aviation Reauthorization Act of 1996, the fees were amended by the Aviation and Transportation Security Act, enacted on November 19, 2001. The newer legislation further required that the fees be “reasonably,” rather than directly, related to costs. The 2001 Act provided that the determination of costs by the FAA Administrator was not subject to judicial review. On May 6, 2002, FAA published a notice of inquiry in the Federal Register seeking public comment on whether, and to what (if any) extent, these statutory changes required the agency to modify its final rule on fees. (See August 20, 2001.)
20020621	June 21, 2002: Effective this date, FAA required improved flightdeck security and operational and procedures changes to prevent unauthorized access to the flightdeck on passenger-carrying aircraft and some cargo aircraft operated by foreign carriers under the provisions of part 129. This final rule applied the same flightdeck security enhancements to foreign air carriers as applied to U.S. air carriers. (See March 13, 2002; October 28, 2002.)
20020626	June 26, 2002: FAA announced plans to upgrade the tower data link services (TDLS) to enhance the reliability of service between tower controllers and pilots. The upgrade would include changes to system hardware, software, and supporting technical documentation. Philadelphia and Boston Logan International airports would receive the upgrades first. Over the following 12 months, FAA planned to upgrade 58 high-density airport towers in the U.S. then using TDLS. In all, the system was used by 17 major airlines and two general aviation service providers who relayed flight information to 1,400 aircraft and two cargo carriers.
20020701	July 1, 2002: FAA announced that flight service station specialists in Anderson, South Carolina, had begun using the Operational and Supportability Implementation System (OASIS), part of the agency's program to modernize 61 automated flight service stations in all 50 states and Puerto Rico. The stations provided in-flight planning and up-to-date weather information to general aviation pilots. OASIS consisted of commercial-off-the- shelf hardware and software to combine weather, flight plan, and aeronautical database information within a single system. (See August 25, 1997.)

20020701 July 1, 2002: FAA announced it had completed the technical and economic evaluations of alternative ADS-B technologies and decided that ADS-B would use a combination of the 1090 MHz extended squitter ADS-B link for air carrier and private/commercial operators of high performance aircraft, and the Universal Access Transceiver ADS-B link for the typical general aviation user. ADS-B airborne systems would transmit an aircraft's identity, position, velocity, and intent to other aircraft and to air traffic control systems on the ground, allowing for common situational awareness to all appropriately equipped users of the national airspace system. (See April 1, 2002; August 30, 2007.)

20020715 July 15, 2002: FAA announced that Harris Corporation had been awarded a contract to modernize, operate, and manage the telecommunications infrastructure that air traffic controllers use to communicate with each other and with pilots. The contract called for the replacement of FAA-owned multiplexing and switching networks, as well as telecommunications services leased from multiple providers. The performance-based contract consisted of a five-year base with options that could extend the period of performance up to 15 years. The FAA anticipated the contract value to grow beyond the initial evaluated cost of approximately $1.7 billion to an estimated $3.5 billion.

20020715 July 15, 2002: While lauding FAA's initiative to develop new communications technologies that would support future air traffic management needs, a GAO report recommended the agency assess the possible impact of emerging technologies on the effort. Anticipated growth in air traffic would require more channels for voice communication than FAA's current systems could handle, according to the report. The agency had undertaken its Next Generation Air/Ground Communications (NEXCOM) initiative to develop an integrated voice and data communications system that would keep pace with future needs. According to the GAO report, FAA eventually would require aviation users to buy new radios and other equipment to support the system. The agency estimated its long-term funding commitment to NEXCOM could reach $4 billion through fiscal year 2023. Members of the House Subcommittee on Aviation had asked GAO to determine to what extent the FAA's current communications infrastructure could meet future needs, what FAA had done to ensure that the technology selected for NEXCOM would be adequate, and what issues the agency had to resolve before it made its final decision. (See February 22, 2002; February 5, 2003.)

20020717 July 17, 2002: The White House announced its intention to nominate National Transportation Safety Board Chair Marion Blakey to become FAA Administrator after Jane Garvey's five-year term ended. Blakey, 54, had been at NTSB for less than a year, having been selected for the post in June 2001 and sworn in September. Before becoming NTSB chairman, Blakey, a native of Gadsden, Alabama, spent eight years - during the Clinton Administration - running her own public affairs consulting business, Blakey & Associates. Before that she held numerous government posts in Republican administrations, including jobs with the Departments of Commerce and Education, the National Endowment for the Humanities and the White House. She was Administrator of Department of Transportation's National Highway Traffic Safety Administration under the senior President Bush from 1992-1993. She was a 1970 graduate of Mary Washington College, and did graduate work in Middle East affairs while attending the School of Advanced International Studies at Johns Hopkins University. (See August 2, 2002.)

20020718 July 18, 2002: FAA awarded the Boeing Company a $23 million contract to examine the feasibility of incorporating satellite-based communications and air traffic management systems into the national airspace system. This was the first significant FAA contract for Boeing's new air traffic management division.

20020802 August 2, 2002: Jane Garvey's five year term as FAA Administrator ended. The Senate confirmation hearing for FAA Administrator-designate Marion Blakey, originally scheduled for this date, was postponed. Secretary Mineta named Monte Belger acting administrator. In an earlier memo to the FAA management team, the Secretary announced that Belger had agreed to stay on beyond his planned retirement date to aid in the transition. If Blakey had been confirmed, Belger would have been acting deputy administrator through August 30. (See August 4, 1999; November 8, 1999; July 17, 2002; September 13, 2002.)

20020805 August 5, 2002: FAA announced that it was providing pilots with Internet access to runway visual range (RVR) information, an electronic means to display how far a pilot with normal vision would be able to see down the runway during an approach. Pilots and flight operations centers used RVR in deciding whether to land at an airport when visibility was poor. Previously, RVR information had been available only to selected air carriers as part of the FAA's CDM initiative, where it was used for traffic management planning.

20020807 August 7, 2002: Effective this date, FAA amended the noise certification standards for subsonic jet airplanes and subsonic transport category large airplanes. These changes were based on the joint effort of FAA, the European Joint Aviation Authorities (JAA), and the FAA Aviation Rulemaking Advisory Committee, to harmonize the U.S. noise certification regulations and the JAA requirements for subsonic jet airplanes and subsonic transport category large airplanes. The changes would provide nearly uniform noise certification standards for airplanes granted certificates in the United States and in the JAA countries. The harmonization of the noise certification standards would also simplify airworthiness approvals for import and export purposes.

20020827	August 27, 2002: FAA issued a final rule confirming interim final rules published on September 29, 1992, and December 30, 1993, requiring deicing operations in ground icing conditions. The interim final rules required Part 121 certificate holders to develop and comply with a FAA approved ground deicing/anti-icing program, part 125 certificate holders to provide pilot testing on conducting operations in ground icing conditions, part 135 certificate holders to provide pilot training on conducting operations in ground icing conditions, and part 125 and 135 certificate holders to check airplanes for contamination (i.e., frost, ice, or snow) prior to takeoff when ground icing conditions exist.
20020909	September 9, 2002: FAA announced plans to develop, and implement within the next year, a plan to establish an air navigation concept called Required Navigation Performance (RNP). Under RNP, the national airspace system would evolve from a ground-based design to one where aircraft could take full advantage of advanced technologies for precision guidance in the en route (high-altitude) and terminal (about a 40-mile radius of the airport) areas. Potential benefits would include allowing more precision approach and departure paths at airports and keeping aircraft clear of obstacles and terrain. Using RNP, flight paths could be developed that met operators' preferred routes and environmental requirements. Parallel paths also could be developed to increase airspace capacity, both in en route and terminal operations. (See October 8, 2002.)
20020913	September 13, 2002: Marion C. Blakey was sworn in as the 15th Administrator of FAA. (See August 2, 2002.)
20020913	September 13, 2002: Monte Belger, long-serving acting FAA deputy administrator retired. Belger worked for FAA for more than 30 years. He joined the agency in 1972 as a security inspector in Tampa, Florida. From 1980 to 1988, he held three senior management positions in the Great Lakes region. In 1992, he was named executive director for acquisitions and safety oversight. Since 1995, Belger had been associate administrator for air traffic services, responsible for the daily operations of the national airspace system. In 1998, he was named acting deputy administrator. (See August 2, 2002; November 2, 2002.)
20020915	September 15, 2002: FAA commissioned a new state-of-the-art air traffic control tower at the Orlando International Airport. The new tower, at 345 feet, became the tallest in North America.

20020917 September 17, 2002: The Department of Transportation Inspector General expressed concerns about progress on deploying the Standard Terminal Automation Replacement System (STARS). The IG had pointed out that FAA had officially changed the cost, schedule, and requirements for STARS twice. In October 1999, FAA estimated the cost for its new approach at $1.4 billion, with a schedule to begin deploying STARS in 2002 at 188 facilities, with installation to be complete at all facilities by 2008. The second change occurred in March 2002, when FAA lowered its estimate from $1.4 billion to $1.33 billion, reduced the number of facilities receiving STARS from 188 to 74, and changed the date to complete installation at all facilities from 2008 to 2005. FAA responded to the IG concerns by stating it planned to follow its policy for testing STARS and addressing critical software problems. Because FAA had changed the date for deploying STARS at the first facility from 1998 to 2002, the agency was implementing interim systems to allow it to continue to meet demands for air traffic services. (See June 12, 2002; September 20, 2002.)

20020920 September 20, 2002: Raytheon defended the Standard Terminal Automation Replacement System (STARS) in a statement responding to a recent GAO report that cited critical software problems with the system. FAA planned to introduce STARS at the Philadelphia TRACON on November 18. STARS would control live traffic there, with the current system serving as a backup. FAA expected to commission formally the new system in February 2003. (See September 17, 2002; February 4, 2003.)

20021003 October 3, 2002: FAA issued a notice of proposed rulemaking that would require FAA-approved corrosion prevention and control programs to be included in the maintenance and inspection of all airplanes operated under part 121 of Title 14, Code of Federal Regulations, all multiengine airplanes registered in the U.S. but operated in common carriage by foreign air carriers or foreign persons under 14 CFR part 129, and all multiengine airplanes used in scheduled operations under 14 CFR part 135.

20021004 October 4, 2002: FAA proposed a two-step program for getting more crash-resistant seats into airplane cabins. Once finalized, these steps would place current-standard "16g" seats in the U.S. fleet within 14 years. FAA proposed giving manufacturers of Part 121 and 135 aircraft four years to get the new seats onto production lines. In-service planes would require the upgrades within 14 years, or when seats were replaced as part of interior upgrades, starting four years after the rule's publication. FAA would tackle the production lines first because new-build planes would have longer useful lives than in-service jets. A FAA study concluded that 16g seats – already in service on many planes – would prevent 114 passenger deaths and 133 serious injuries through 2020. The then-current 9g minimum standard, established in the 1950s, used a static test to measure how much force could be applied to a seat before it broke. The new 16g standard was based on a dynamic test using real-life crash impact data.

20021007 October 7, 2002: Controller-Pilot Datalink Communications (CPDLC) became operational at the Miami Air Route Traffic Control Center. The prototype system, which had been tested for one year at Miami, offered four services:

	* Transfer of communications (an obligatory data transfer process occurring with a flight's hand-off from one sector to another).
	* Initial contact (an obligatory exchange of information occurring at the time of a crew's first check-in with an air traffic control facility).
	* Exchange of altimeter setting information.
	* Exchange of "menu text" to determine what types of messages proved most beneficial to pilots and controllers. (See February 4, 2000.)
20021007	October 7, 2002: FAA published a final rule requiring Boeing 737 operators to install a newly designed rudder control system and make other changes to the aircraft to accommodate the new system. The new design increased the overall safety of the aircraft by simplifying the rudder system and eliminating a range of failure possibilities. Operators had six year to install the new system. (See November 13, 2001.)
20021008	October 8, 2002: In a speech at the U.S. Chamber of Commerce Aviation Summit, FAA Administrator Marion Blakey announced that, within a month, FAA would approve Required Navigation Performance (RNP) procedures for San Francisco International Airport. Through the use of onboard technology, pilots would be able to navigate aircraft to any point in the world using only geographical coordinates. (See September 9, 2002; December 31, 2002.)
20021028	October 28, 2002: Effective this date, FAA revised the pilot certificate requirements to require a person to carry approved photo identification when exercising the privileges of a pilot certificate. Additionally, the rule required a pilot certificate holder to present photo identification when requested by authorities including a duly-authorized representative of the FAA, NTSB, TSA, or a law enforcement agency. (See June 21, 2002; February 10, 2003.)
20021122	November 22, 2002: The White House announced plans to nominate Robert Sturgell, senior counsel to FAA Administrator Marion Blakey, to fill the vacant FAA deputy administrator post. (See September 13, 2002.)
20021123	November 23, 2002: FAA issued an emergency airworthiness directive for Boeing 737- 600s and -700s, 700Cs, 900s, 747s, and 757s after two fuel tank pumps on separate 747s showed "extreme localized overheating of parts." The AD gave carriers four days to comply. The parts in question were located in the priming and vapor pump section of the fuel pump. FAA said the likely cause of the overheating was friction between the pump parts but found no specific cause. (See June 6, 2001; July 30, 2004.)

20021127	November 27, 2002: FAA issued a final rule for air tour operators that called for development of site specific plans to protect the environment of U.S. national parks. The rule, crafted with input from the National Park Service (NPS), accommodated the varied interests of visitors to the parks, Native American tribes, and local air tour operators. The National Parks Air Tour Management Act of 2000 had directed the FAA, in cooperation with NPS, to establish an Air Tour Management Plan (ATMP) for any unit of the National Park System, or abutting tribal lands, where commercial air tour operations were conducted or planned. To continue air tour operations over any national park or abutting tribal lands, all existing air tour operators were required to submit an application to the FAA for operating authority by January 23, 2003. Existing operators who complied with all applicable federal requirements would be granted interim operating authority to continue air tour operations while developing their individual ATMPs. New entrant operators had to apply for and be granted operating authority before commencing air tours over any national park or abutting tribal lands. (See March 15, 2007.)
20021130	November 2002: A high-profile government report called for FAA to offer incentives to airlines to introduce the onboard technology necessary to support a modernized air traffic management (ATM) system, and recommended changes to the modernization process itself. The final report of the Commission on the Future of the U.S. Aerospace Industry said airline reluctance to equip their fleets with new technology could hinder ATM modernization. It said mandatory rules and operational benefits were insufficient to motivate the aggressive operator investments needed for system-wide improvements. Onboard technology should be regarded as part of national aviation infrastructure, and therefore federally funded, the report said.
20021208	December 8, 2002: FAA issued an interim final rule requiring inspections and records reviews for most aircraft that had been in scheduled commercial service for 14 years or more. The rule, effective one year from this date, mandated that operators could not keep an airplane in service more than four years from the effective date unless the maintenance program for the aircraft included damage-tolerance-based inspections and procedures for certain parts. The rule affected operators of multi-engine airplanes in scheduled operations under Parts 121, 135, and 129 of the federal aviation regulations, as well as type certificate holders (for example, aircraft manufacturers). The rule did not apply to airplanes operated within the state of Alaska.
20021208	December 8, 2002: FAA commissioned a new air traffic control tower at Miami International Airport. The tower could withstand 150-mile-per-hour winds generated by hurricanes. At 333 feet, the Miami tower was the second-tallest in the U.S. after Orlando International's 345-foot tower.
20021214	December 14, 2002: The new Potomac Consolidated TRACON began operations. The new state-of-the- art facility in Fauquier County, Virginia, consolidated five existing TRACONs and allowed the FAA to redesign the airspace in this area for more efficient, direct flight routings. (See March 6, 2000.)

20021231

December 31, 2002: FAA signed an industry-championed change, eight years in the making, adding Required Navigation Performance (RNP) instrument approach procedures to the rolls of the terminal instrument procedures document and other publications. In about one year from the nondescript event, operators would be permitted to begin flying scaled-downed versions of the futuristic RNP instrument approaches used by Alaska Airlines in remote locations. The RNP rating system defined an aircraft's ability to know its own position in terms of nautical miles. The lower the aircraft's RNP number, the more airspace access – particularly in new or reduced minimums approaches – would be available to it. The role of FAA in the new regime would be to set the required accuracy levels and criteria for routes or procedures, after which users could decide if the rewards of participating were worth the effort of their participation. (See October 8, 2002; July 25, 2003.)

2003

20030107 January 7, 2003: FAA announced a tentative agreement in principle to extend the existing contract with the National Air Traffic Controllers Association, signed in 1998, for two years to September 2005. (See June 15, 1998; December 9, 2003.)

20030108 January 8, 2003: Air Midwest Flight 5481, a Beechcraft 1900D operating as US Airways Express Flight 5481, crashed into an airport hangar and burst into flames 37 seconds after taking off from Charlotte/Douglas International Airport in Charlotte, North Carolina. All 19 passengers and two pilots aboard were killed in the accident, one person on the ground received minor injuries. February 26, 2004, the National Transportation Safety Board determined that the probable cause of the accident was the airplane's loss of pitch control during takeoff. The findings also suggested that this loss of pitch control probably resulted from a combination of an incorrect rigging of the elevator control system together with a weight distribution that caused the airplane's center of gravity to shift dangerously far aft. (See January 27, 2003.)

20030123 January 23, 2003: FAA announced it had completed deployment of the Weather and Radar Processor (WARP) at all 20 air route traffic control centers. WARP allowed air traffic controllers to view highly accurate and timely weather information on the same display that showed aircraft position data. (See May 2002.)

20030127 January 27, 2003: FAA issued an emergency AD requiring operators to perform prescribed elevator system checks on Raytheon Beechcraft Models 1900, 1900C and D aircraft by January 31. The actions were aimed at preventing an accident similar to the January 8 crash of Air Midwest Flight 5481. In addition, FAA ordered commuter airlines to begin weighing some passengers out of concerns of possible overloading of passengers and baggage. The program covered planes registered in the U.S. and carrying 10 to 19 passengers. The 30-day sample of passenger and baggage weights was designed to determine whether FAA's assumptions at the time about passenger and baggage weights were valid. In general, the agency had assumed that an average adult would weigh 180 pounds in summer and 185 pounds in winter, and travel with 20 pounds of carry-on luggage. Each child aged two to twelve was assumed to weigh 80 pounds. (See January 8, 2003.)

20030204 February 4, 2003: Representative Ellen Tauscher (D-CA), member of the House Transportation aviation subcommittee, expressed concerns that cost overruns on the Standard Terminal Automation Replacement System (STARS) would compromise other agency programs. Tauscher, responding to a GAO report released on February 3, criticized FAA's management of the program in these terms: "After seven years and $1.2 billion, only one major airport has new technology." She considered STARS to be poorly managed. The GAO report was similar in content to a recent Department of Transportation Inspector General report. Tauscher warned the FAA: "This continued lackadaisical management is simply unacceptable." Tauscher said the agency had spent $1.2 billion on STARS since 1996, and estimated it would take at least $153 million over five years to deploy the system. GAO pointed out that inaccuracies in the baseline data received by FAA did not reflect the current status of the contract and recommended changes in STARS management. (See September 20, 2002; June 9, 2003.)

20030205 February 5, 2003: FAA awarded contracts to ITT Industries, Inc., and Harris Corporation valued at $16 and $21 million, respectively, over a 20-month period for the initial phase of Next Generation Air/Ground Communications (NEXCOM). By integrating data link with digital voice, NEXCOM would make more efficient use of the available frequency spectrum, and accommodate additional air traffic control sectors and new runways to support continued industry growth. The existing air/ground communications system had been used for air traffic control for more than 50 years. (See July 15, 2002; March 18, 2004.)

20030210 February 10, 2003: FAA expanded the restricted airspace over Washington, DC. It now covered a 30-mile radius from each of the region's three major airports – Reagan National, Baltimore-Washington International, and Dulles International. (See October 28, 2002; July 26, 2007.)

20030501 May 1, 2003: FAA awarded a Local Area Augmentation System (LAAS) contract to Honeywell International, Inc. A satellite navigation landing system, LAAS would enable pilots to guide planes safely into busy airports in bad weather. It also would significantly increase the accuracy, availability, continuity and integrity of the information received from the global positioning system (GPS) constellation of satellites to enhance the safety and efficiency of air travel. The contract was to unfold in three phases. The first phase, valued at $16.7 million, provided for the software and hardware design of the category I LAAS. Phases 2 and 3 contract options, which totaled an additional $340 million, landing provided a level of service in poor weather conditions down to a ceiling of 200 feet and visibility of one-half mile. (See August 13, 1999.)

20030501 May 1, 2003: Effective this date, FAA revised the applicability of certain collision avoidance system requirements for airplanes. The rules previously in place were based on passenger seating configuration and, therefore, excluded all-cargo airplanes. Intended to reduce the risk of a mid-air collision involving a cargo airplane, this final rule would use airplane weight and performance characteristics as the basis for collision avoidance system requirements. Specifically, it would apply to cargo airplanes weighing more than 33,000 pounds maximum certificated takeoff weight.

20030530	May 30, 2003: The engineered materials arresting system installed at New York's John F. Kennedy International Airport successfully stopped a Gemini Cargo McDonnell Douglas MD-11F aircraft that overran the runway. (See May 8, 1999; January 22, 2005.)
20030609	June 9, 2003: FAA commissioned the first Standard Terminal Automation Replacement System (STARS) at a large, busy airport – Philadelphia International Airport. Under a joint FAA and DoD program, STARS would eventually replace computers and displays at more than 300 air traffic control facilities nationwide. In addition to Philadelphia, other FAA deployments scheduled for 2003-2004 included: Portland, Oregon; Boston, Massachusetts; Miami, Florida; Milwaukee, Wisconsin; Port Columbus, Ohio; San Antonio, Texas; and Seattle/Tacoma, Washington. (See February 4, 2003.)
20030610	June 10, 2003: Department of Transportation Secretary Norman Mineta announced the selection of Russell G. Chew as the FAA's first Air Traffic Organization Chief Operating Officer (COO). (See April 5, 2000; December 7, 2000; November 18, 2003; February 23, 2007.)
20030630	June 30, 2003: The Department of Transportation Inspector General outlined cost and timetable overruns in most of FAA's major acquisition programs. The IG raised red flags about large programs such as En Route Automation Modernization (ERAM), a program it considered to be a high-risk effort and one of the largest, most expensive, software-intensive, and complex acquisitions FAA has undertaken. (See March 29, 2002; September 30, 2007.)
20030630	June 2003: FAA issued the Human Factors Design Standard, a compilation of human factors practices and principles integral to the procurement, design, development, and testing of FAA systems, facilities, and equipment. The guide, which superceded the 1996 Human Factors Design Guide, provided a single easy-to-use source of human factors design criteria, oriented to the needs of the FAA mission and systems.
20030710	July 10, 2003: FAA commissioned Wide Area Augmentation System, technology designed to improve the accuracy, availability, and integrity of global positioning system (GPS) to provide a navigation and landing system that could deliver precision guidance to aircraft at thousands of airports and airstrips lacking precision landing capability. (See April 10, 2001; March 24, 2006.)
20030721	July 21, 2003: Effective this date, FAA amended the airworthiness standards applicable to the lower deck service compartments of transport category airplanes. The change required that two-way voice communication systems between lower deck service compartments and the flightdeck remain available following loss of the normal electrical power generating system. It also clarified the requirements for seats installed in the lower deck service compartment. While adoption of the amendment would not affect then current industry design practices, it would eliminate regulatory differences between the airworthiness standards of the U.S. and requirements of the Joint Aviation Authorities.

20030725 July 25, 2003: FAA released a plan to develop air traffic procedures that would employ Required Navigation Performance (RNP) and area navigation (RNAV), coupled with onboard technology, to help pilots to navigate to any point in the world. The RNP Roadmap identified steps and milestones that would transition the U.S. airspace system from reliance on airways running over ground-based navigation aids to a point-to-point navigation concept that would take maximum advantage of advanced automation capabilities aboard aircraft. The plan, which would be updated regularly, was to be divided into three implementation timeframes:

* Near-Term (2003-2006). FAA and industry would implement a first set of RNP and RNAV procedures in all phases of flight. The agency also would continue to develop criteria and guidance for more advanced RNP/RNAV operations.

* Mid-Term (2007-2012). RNAV would become the primary means of navigation in U.S. airspace. Additional RNP procedures would be made available as more aircraft were equipped with advanced technologies. FAA would begin to remove some ground- based navigation aids, routes and procedures from service starting in 2010.

* Far-Term (2013-2020). Based on previous demonstration of RNP/RNAV benefits, the U.S. aircraft fleet would continue to advance its capabilities. By 2020, operators would use RNP and RNAV procedures operationally in all areas. A minimal operational network of ground-based navigation aids would remain in place. (See December 31, 2002; December 20, 2005.)

20030730 July 30, 2003: FAA dropped an ATR42-300 regional transport airplane 50 feet to the concrete below as part of its efforts to collect the empirical data needed to set crashworthiness standards for commuter aircraft. Data collected from this and previous tests at the William J. Hughes Technical Center would help researchers to assess the impact response characteristics of the airframe structure, seats, overhead stowage bins, fuel tanks, and the potential for occupant injury.

20030731 July 31, 2003: FAA began issuing new, security-enhanced airman certificates to the nation's 650,000 active pilots. FAA Administrator Marion Blakey unveiled the new certificate before hundreds of aviation enthusiasts at the annual Experimental Aircraft Association AirVenture. The new credit card-sized certificates were made from high-quality composite media card stock and incorporated new security features, such as a hologram of the FAA seal. They replaced the existing paper airman certificates which were easily damaged.

20030818 August 18, 2003: Effective this date, FAA amended flight data recorder regulations by expanding the recording specifications of certain data parameters for specified airplanes, and by adding aircraft models to the lists of aircraft excepted from the 1997 regulations. In addition, this rule corrected specifications in an operating rule appendix that were inadvertently omitted in previous actions. These changes were necessary to allow the continued operation of certain aircraft that could not meet the existing recorder criteria without incurring a cost-prohibitive retrofit. (See January 8, 2000; February 24, 2005.)

20030902 September 2, 2003: Effective this date, FAA adopted upgraded flammability standards for thermal and acoustic insulation materials used in transport category airplanes. The standards included new flammability tests and criteria that addressed flame propagation and entry of an external fire into the airplane. The standards previously in place did not realistically address situations in which thermal or acoustic insulation materials might have contributed to the propagation of a fire. (See September 8, 2000; April 1, 2005.)

20030904 September 4, 2003: Runway 16R/34L opened at Denver International Airport and runway 8/26 opened at Miami International Airport.

20030930 September 30, 2003: During FY 2003, which ended on this date, FAA issued its first annual strategic plan, Flight Plan 2004-2008. The new plan laid out four goals and described FAA's strategies for achieving those goals. The Flight Plan was aligned with the Department of Transportation strategic plan and linked to FAA's budget requests. Every staff office and line of business was required to develop a plan that linked directly to the flight plan. (See November 8, 2004.)

20031015 October 15, 2003: The White House commission established to investigate the September 11, 2001, terrorist attacks issued a subpoena to obtain needed documents from FAA. In May, the commission had requested all documents relating to FAA's tracking of the hijacked airliners and communications with the North American Aerospace Defense Command. FAA had provided 40 boxes containing 150,000 pages of information in September, but during subsequent interviews, the commission had learned that some materials had not been included. FAA officials responded that their failure to turn over all documents had been caused in part by internal procedures used to search for material. (See July 22, 2004.)

20031021 October 21, 2003: FAA announced the nationwide deployment of the first all-digital airport radar system. The Airport Surveillance Radar (ASR-11) replaced older-generation analog radars nearing the end of their service life. The replacement technology provided improved digital aircraft and weather input needed by FAA's new air traffic control automation systems, such as the Standard Terminal Automation Replacement System (STARS). The first ASR-11 went operational in March at the Willow Grove, Pennsylvania, Naval Air Station, and was providing radar data to STARS at the Philadelphia International Airport. The new radars grew out of a joint FAA/DoD program. FAA planned to procure a total of 112 ASR-11s, with scheduled deployment completed in 2009. FAA had procured 25 systems since the contract was awarded in December 1996.

20031022	October 22, 2003: FAA issued a new rule reducing the minimum vertical separation between aircraft from the current 2,000 feet to 1,000 feet for all aircraft flying between 29,000 feet and 41,000 feet. RVSM implementation would significantly increase the routes and altitudes available and thus allow more efficient routings that would save time and fuel. FAA planned to implement Reduced Vertical Separation Minima (RVSM) procedures on January 20, 2005, to give airlines and other aircraft operator's time to install the more accurate altimeters and autopilot systems needed to ensure the highest level of safety. The long-awaited rule – FAA initiated the process with a notice of proposed rulemaking in May 2002 – detailed equipment requirements, including dual altimeters and a more advanced autopilot system. Aircraft equipped with traffic alert and collision avoidance system version II (TCAS II) had to be updated with new software, compatible with RVSM operations. (See May 10, 2002; November 26, 2003.)
20031031	October 31, 2003: Runway 8L/26R opened at George Bush Intercontinental/Houston Airport.
20031105	November 5, 2003: FAA announced U.S. certification of an innovative diesel aircraft engine that used automotive parts and ran on jet fuel. Administrator Marion Blakey made the announcement before the Aircraft Owners and Pilots Association annual conference in Philadelphia, Pennsylvania. The 4-cylinder, 135 hp TAE 125-01 was developed by German-based Thielert Aircraft Engines (TAE), an auto racing engine and global automotive parts manufacturer. This newly certified aircraft engine could be installed in general aviation aircraft such as two- seat Cessna and Piper models.
20031110	November 10, 2003: FAA proposed first-time regulations for extended aircraft operations (ETOPS), which would allow consumers to take advantage of new, more direct routes and more frequent trips on existing routes. If adopted, ETOPS rules would cover scheduled air carriers (Part 121) and charter operators (Part 135) and carry the full legal authority of a federal aviation regulation. Currently, carriers and operators complied voluntarily with FAA advisory circulars that governed ETOPS. (See February 15, 2007.)
20031117	November 17, 2003: Effective this date, FAA updated and revised the regulations governing operations of aircraft in fractional ownership programs. The final rule defined fractional ownership programs and their various participants, allocated responsibility and authority for safety of flight operations for purposes of compliance with the regulations, and ensured that fractional ownership program aircraft operations would maintain a high level of safety. These regulations provided a level of safety for fractional ownership programs equivalent to regulations that apply to on-demand operators. (See February 23, 2000.)

20031118 November 18, 2003: Department of Transportation Secretary Norman Mineta announced initial details of FAA's new Air Traffic Organization (ATO) business structure. ATO would consolidate the FAA's air traffic services, research and acquisitions, and free flight program activities into a smaller, more efficient organization with a strict focus on providing the best service for the best value to the aviation industry and the traveling public. The establishment of the ATO was first recommended by the 1997 National Civil Aviation Review Commission, chaired by Mineta. In April 2000, Congress enacted the Wendell H. Ford Aviation Investment and Reform Act for the 21st Century that mandated establishing the position of a Chief Operating Office (COO) to oversee the air traffic control system. Executive Order 13180 (as amended June 4, 2002) officially created the ATO with the COO as its head. (See June 10, 2003; February 8, 2004.)

20031120 November 20, 2003: FAA announced that 86 percent of workers belonging to the National Association of Air Traffic Specialists (NAATS) had approved a new, five-year collective bargaining agreement between the union and the FAA.

20031126 November 26, 2003: Effective this date, an FAA rule allowed RVSM flights in the airspace over the contiguous 48 States of the United States, the District of Columbia, Alaska, that portion of the Gulf of Mexico where FAA provided air traffic services, the San Juan Flight Information Region (FIR), and the airspace between Florida and the San Juan FIR. The RVSM program would permit 1,000-foot vertical separation at certain altitudes between aircraft that meet stringent altimeter and autopilot performance requirements. The rule required any aircraft equipped with TCAS II and flown in Reduced Vertical Separation Minima (RVSM) airspace to incorporate a version of TCAS II software that was compatible with RVSM operations. (See October 22, 2003; January 20, 2005.)

20031209 December 9, 2003: FAA and the National Air Traffic Controllers Association (NATCA) signed a two-year contract extension that expanded pay-for-performance to include air traffic controllers and provided potential savings of several million dollars. The contract extension increased the number of agency employees whose pay was tied partly to performance from 37 percent to 75 percent. The pay for performance compensation system for over 15,000 air traffic controllers was based on safety and capacity targets set forth in FAA's strategic Flight Plan. The targets included reducing operational errors and runway incursions and increasing on-time performance and arrival efficiency rates. FAA and the union also agreed that, when a provision binding FAA to maintain a fixed number of controllers each year expired at the end of September, the agency could adjust staffing levels based on actual workload. This contract action was initiated following direction from Congress and the Department of Transportation Inspector General to exert greater cost control over air traffic control operations. The current contract was ratified in 1998. FAA expected to begin negotiations on a new agreement with NATCA in early 2005. (See January 7, 2003; July 13, 2005.)

20031212 December 12, 2003: President George W. Bush signed the Vision 100 – Century of Aviation Reauthorization Act (Public Law 108-176). The Act abolished the air traffic services subcommittee of the federal aviation management advisory council and created, separate from the council, an Air Traffic Services Committee (ATSC). The ATSC was given substantial governmental authority, including the power to approve the FAA's strategic plan for the air traffic control system, to approve certain large procurements, to appoint and determine the pay of the FAA chief operating officer, to dictate major FAA reorganizations, and to control FAA cost accounting and financial management structure. The legislation also endorsed the concept of the Next Generation Air Transportation System (NextGen) and directed Department of Transportation to create a Joint Planning and Development Office to facilitate the process. The legislation also provided funding for the Airport Improvement Program (AIP) from FY 2004 through FY 2007. The act also changed the basic requirements and guidelines under which FAA implemented AIP, including numerous provisions to assist smaller airports and to streamline the environmental review of airport projects. (See January 27, 2004.)

20031225 December 25, 2003: Runway 17L/35R opened at Orlando International Airport.

2004

20040121 January 21, 2004: Department of Transportation Secretary Norman Mineta announced a new order intended to reduce flight congestion and passenger inconvenience at Chicago's O'Hare International Airport. Under terms of the order signed by FAA administrator Marion Blakey, both American and United agreed to reduce their operations during the peak hours between 1 p.m. and 8 p.m. by five percent. The reduction of 62 scheduled flights, which took effect in early March and lasted for six months, returned scheduled O'Hare operations to October 2003 levels, the last month prior to significant delays. (See April 21, 2004.)

20040127 January 27, 2004: In a luncheon speech to the Aero Club of Washington, Secretary Mineta announced plans for a new, next generation air transportation system with expanded capacity to relieve congestion, prevent gridlock, and secure America's place as global leader in aviation's second century. An inter-agency plan, NextGen would offer a cleaner, quieter system based on 21st-century technology, seamless security, and added capacity to relieve congestion. (See December 12, 2003; December 15, 2004.)

20040128 January 28, 2004: FAA Administrator Marion Blakey dedicated a new FAA Center of Excellence, the Partnership for Air Transportation Noise and Emissions Reduction. (See September 23, 1997; August 18, 2010.)

20040130 January 30, 2004: FAA Administrator Marion Blakey submitted a final proposal for the National Air Traffic Controllers Association (NATCA) multi-unit contract, along with the union's objections, to Congress seeking help in resolving the issue. The NATCA contract represented about 1,900 employees – mostly administrative personnel in budget, regional accounting and logistics, regional airports, plus some engineers and nurses. Over the previous several months, there had been attempts on both sides to seek outside help to break the impasse, but when those failed, the next step for FAA – according to procedures established in the agency's personnel reform legislation dating from the mid-1990s – was to submit its recommendations to Congress for action within 60 days. If the legislators failed to respond within that time, FAA could implement its own proposal. (See July 10, 2005.)

20040208 February 8, 2004: FAA's new ATO officially began operations. The fundamental realignment gave the ATO responsibility for providing air traffic services, research and acquisition, as well as for the free flight organizations. The change came after a decades-long attempt by previous administrations, Congress, and FAA to improve the delivery of air traffic services by adopting business-like practices. (See November 18, 2004.)

20040210 February 10, 2004: FAA published a final rule in the Federal Register modifying 14 Code of Federal Regulations (CFR) Part 158 to change the amount and the basis for compensation to air carriers collecting, handling, and remitting Passenger Facility Charges.

20040229	February 29, 2004: Effective this date, FAA revised its regulations for landing under instrument flight rules to allow aircraft to operate below certain specified altitudes during instrument approach procedures, even when the airport environment was not visible using natural vision, if the pilot used certain FAA-certified enhanced flight vision systems.
20040229	February 29, 2004: Department of Transportation Secretary Norman Mineta visited Mitchell International Airport in Milwaukee, Wisconsin, to introduce a new air traffic control technology and reiterate the Administration's commitment to improvements aimed at reducing airspace congestion nationwide. The airport was the first to receive ASDE-X, a new radar that provided complete, up-to-the-minute map of all airport operations that controllers used to spot potential collisions and ensure aviation safety on the ground. (See October 24, 2000; August 8, 2007.)
20040302	March 2, 2004: A new FAA-developed tool to predict in-flight icing became operational. Using the web-based forecast icing tool, aviation meteorologists and airline dispatchers could warn pilots about icing hazards up to twelve hours in advance.
20040318	March 18, 2004: FAA canceled the Next Generation Air/Ground Communications (NEXCOM) rapid prototype development contracts with ITT Industries and Harris Corp. FAA previously canceled a full-scale NEXCOM development contract that had not yet been awarded. FAA said it canceled the contracts because there was disagreement on global standards. FAA and EUROCONTROL agreed in 2003 to study what the next-generation air traffic control voice communication system should be. (See February 5, 2003.)
20040324	March 24, 2004: Department of Transportation Secretary Norman Mineta announced a series of steps aimed at reducing potential gridlock and delays during the up-coming peak travel periods of spring and summer. The steps included the creation of new air traffic express lanes, within many of the nation's most heavily congested routes. The measures were developed earlier in the month at a three-day conference called "Growth without Gridlock." Hosted by FAA, the conference brought together more than 60 participants from major and regional airlines, business aviation, pilot organizations, and industry associations to develop a common strategy to reduce system delays.
20040325	March 25, 2004: Department of Transportation Secretary Norman Mineta announced the establishment of an office to provide independent safety oversight of the Air Traffic Organization. The office's primary responsibility was to ensure the safety of changes to air traffic standards and procedures. The creation of the new Air Traffic Safety Oversight Service, based within FAA regulation and certification organization, followed a recommendation of the 1997 National Civil Aviation Review Commission chaired by Secretary Mineta. On November 1, 2001, the International Civil Aviation Organization (ICAO) required that its member states, including the U.S., set up independent oversight of air traffic operations. Canada, Great Britain, and Germany were among the ICAO states transitioning to similar systems.

20040401 April 1, 2004: FAA issued the world's first license for a sub-orbital manned rocket flight. The license was issued to Scaled Composites of Mojave, California, headed by aviation record-holder Burt Rutan, for a sequence of sub-orbital flights spanning a one-year period. The FAA sub-orbital space flight license was required for U.S. contenders in the X-Prize competition, a high-stakes international race ultimately to launch a manned, reusable private vehicle into space and return it safely to Earth. The X-Prize foundation would award $10 million to the first company or organization to launch a vehicle capable of carrying three people to a height of 100 kilometers (62.5 miles), return them safely to Earth, and repeat the flight with the same vehicle within two weeks. April 23, FAA announced it had issued a second license for a manned sub-orbital rocket flight to XCOR Aerospace Inc. of Mojave, California, which sought to develop a passenger carrying space vehicle for adventure travelers in the future. June 21, SpaceShipOne reached a record altitude of 328,491 feet (approximately 62 miles), making pilot Mike Melville the first civilian to fly a spaceship out of the atmosphere. September 29, 2004, Melville successfully reached suborbital space for a second time. October 4, Brian Binnie successfully flew the second orbital flight in the prescribed timeframe. The X-Prize foundation awarded its $10 million prize to Scaled Composites for being the first company to launch a vehicle capable of carrying three people to a height of 100 kilometers (62.5 miles), return them safely to Earth, and repeat the flight with the same vehicle within two weeks. (See April 3, 2002; July 2, 2004.)

20040406 April 6, 2004: FAA, in partnership with the U.S. Trade and Development Agency and U.S. aviation manufacturers and suppliers, launched the U.S.-China Aviation Cooperation Program to expand relations and cooperation with Chinese counterparts. (See June 22, 2007.)

20040421 April 21, 2004: Department of Transportation Secretary Norman Mineta announced plans by United and American Airlines to reduce their daily schedules by another 2.5 percent starting in early June, making this the second time the airlines had trimmed their schedules to help reduce congestion at O'Hare. Both airlines rescheduled the majority of targeted flights to slower times of the day, but each also canceled some operations. (See January 21, 2004; August 4, 2004.)

20040430 April 30, 2004: President George W. Bush signed legislation into law renaming the two downtown office buildings that housed FAA after the inventors of powered, sustained, controlled flight, Orville and Wilbur Wright. The measure, approved by Congress earlier in the year, renamed the agency's Federal Building 10-A at 800 Independence Ave., SW, the Orville Wright Federal Building, and Federal Building 10-B at 600 Independence Ave., SW, as the Wilbur Wright Federal Building. July 8, FAA headquarters buildings were officially renamed the Orville and Wilbur Wright buildings.

20040524 May 24, 2004: FAA dedicated a new, state-of-the-art airport traffic control tower at SeaTac International Airport. At 233 feet high, the new tower was more than twice the height of the old tower, built in 1949.

20040531	May 2004: FAA released a screening information request (SIR) for the Automated Flight Service Station public-private competition under OMB's A-76 recommendations to improve government efficiency and cost savings through commercialization of certain government operations. Per the announcement, potential service providers would be required to submit technical proposals in August 2004 and cost proposals in September 2004. The agency planned to award the contract by March 17, 2005. (See February 1, 2005.)
20040624	June 24, 2004: Secretary of Transportation Norman Mineta released Capacity Needs in the National Airspace System: An Analysis of Airport and Metropolitan Area Demand and Operational Capacity in the Future, predicting which airports and communities would need to expand their capacity by the year 2020. The capacity study was the first of its kind to look at current air travel patterns, economic and population trends, current air service, and current capacity. The associated report revealed that 23 of the nation's fastest growing airports needed to add capacity to accommodate air traffic growth over the next two decades.
20040630	June 30, 2004: FAA announced a $13.5 million contract award to Computer Sciences Corporation (CSC) to upgrade the automated system used to ensure the most efficient flow of the nation's air traffic. Under the traffic flow management modernization contract, CSC would design an advanced computer platform that used air traffic data from across the country to predict when the numbers of flights might exceed available routes and capacity. FAA would use this information both to run special programs designed to reduce delays due to severe weather and congestion and to help airlines to provide more accurate flight departure and arrival information to their passengers.
20040630	June 30, 2004: The Oakland Air Route Traffic Control Center began started using Advanced Technologies and Oceanic Procedures (ATOP). The new system allowed controllers to reduce separation between aircraft on oceanic routes, and gave pilots greater flexibility to choose their own routes. Oakland was the first of three en route centers handling oceanic operations to use ATOP. (See May 24, 2001; June 23, 2005.)
20040702	July 2, 2004: FAA announced it had issued a license to create, at the Mojave Airport in California, the first inland commercial space launch site, and the fifth licensed commercial spaceport, in the U.S. With this announcement, East Kern Airport District could operate the Mojave site in support of suborbital reusable launch vehicle missions. (See April 1, 2004; December 23, 2004.)
20040722	July 22, 2004: In its final report, the commission established to investigate the September 11, 2001, terrorist attacks criticized FAA's response and preparedness. The commission, however, acknowledged that agency employees adapted quickly to the crisis. (See October 15, 2003.)

20040730 July 30, 2004: FAA extended the date – from December 6, 2004 to December 16, 2008 – for operators to comply with special maintenance program requirements for transport airplane fuel tank systems. The action was intended to allow operators enough time to incorporate revisions into their maintenance programs, after having learned of required fuel tank systems maintenance programs from those who hold design approval. (See November 23, 2002; November 14, 2005.)

20040804 August 4, 2004: FAA Administrator Marion Blakey told the carriers serving O'Hare Airport that, if a voluntary approach to reducing their schedules at O'Hare did not work, FAA would use its statutory authority to impose a solution. The agency advised that relaxing schedules would help ease the congestion and reduce delays that started at O'Hare and then rippled throughout the system. (See April 21, 2004; August 18, 2004.)

20040805 August 5, 2004: Runway 6L/24R opened at Cleveland Hopkins International Airport.

20040818 August 18, 2004: Department of Transportation Secretary Norman Mineta announced that domestic airlines serving O'Hare had agreed to a voluntary limit of 88 scheduled arrivals per hour between 7 a.m. and 8 p.m. The new limit on scheduled arrivals during peak hours, effective November 1, brought schedules more in line with O'Hare's capacity and was expected to cut the amount of time lost due to delays by 20 percent. The agreement, the result of talks directed by Secretary Mineta and chaired by FAA Administrator Marion Blakey, was expected to cut delay times by imposing a limit on new flights that airlines planned to add in November. United and American Airlines, which were then operating 86 percent of flights at O'Hare, offered the largest reductions. United agreed to reduce 20 arrivals while American canceled 17 incoming flights scheduled between noon and 8:00 p.m. Other airlines with fewer operations also agreed to reduce or change schedules to cut delays. (See August 4, 2004.)

20040901 September 1, 2004: Effective this date, FAA began certifying sport pilots and their aircraft. The rule encompassed manufacture, certification, operation, and maintenance of light-sport aircraft that weighed less than 1,320 pounds (1,430 pounds for aircraft intended for operation on water) and were heavier and faster than ultralight vehicles. The rule included airplanes, gliders, balloons, powered parachutes, weight-shift-control aircraft, and gyroplanes. (See February 5, 2002.)

20040923 September 22-23, 2004: FAA Administrator Marion Blakey hosted the first FAA international safety forum for government and industry leaders to improve communication and provide solutions to improving aviation safety worldwide. The program became the first in a series of annual meetings.

20040924 September 24, 2004: FAA and EUROCONTROL signed a memorandum of cooperation to increase joint air traffic management and research efforts to improve safety, capacity, and standards of air traffic operations between North America and Europe.

20041013 October 13, 2004: The President signed into law the Emergency Supplemental Appropriations for Hurricane Disaster Assistance Act, 2005 (Public Law 108-324) as part of the FY 2005 Military Construction Appropriations Act. The law authorized emergency capital funding to compensate airport sponsors for capital costs for replacement or repair of public-use facilities directly related to damage caused by Hurricanes Charley, Frances, Ivan, and Jeanne.

20041026 October 26, 2004: FAA started using a new landing procedure, known as the simultaneous offset instrument approach, to help cut delays at San Francisco International Airport. Taking advantage of an advanced radar system that was nearly five times faster than conventional airport radar, this procedure allowed up to a 25 percent increase in the number of arrivals during overcast conditions. Because air traffic controllers could get a much more precise fix on approaching aircraft, the change enabled two arriving planes to fly above and then through the clouds at different angles without compromising the safe separation standards required during overcast conditions. Once the aircraft moved under the cloud deck, the planes were to fly a visual, parallel approach to the airport's two runways.

20041108 November 8, 2004: The Association for Strategic Planning, a California-based professional association dedicated to advancing strategic thought, development, and practice awarded the FAA Flight Plan 2004 2008 its 2004 Richard Goodman Strategic Planning Award for continuing excellence in stimulating innovation in the planning process. (See September 30, 2003.)

20041215 December 15, 2004: Department of Transportation Secretary Norman Mineta unveiled the Integrated Plan for the Next Generation Air Transportation System. This a long-term strategic business plan that laid out goals, objectives, and requirements in eight specific areas: airport infrastructure development; security; the air traffic system; information technology; safety management; environmental stewardship; weather forecasting; and global collaboration. The development of innovative public-private partnerships was a key component to the entire effort. Under the direction of Secretary Mineta and an executive-level policy committee, and with 2025 in mind, six government agencies and representatives from the private sector worked to direct and coordinate research, identify and resolve critical policy issues, and invest in necessary infrastructure and technology. A Joint Planning and Development Office would coordinate the transformation effort. In 2003, Congress established a charter to create NextGen by the year 2025 and established a multi-agency committee to carry out the plan to include the Department of Transportation, FAA, NASA, Departments of Transportation and its Federal Aviation Administration, the National Defense, Commerce, and Homeland Security, and the White House Office of Science and Technology Policy. (See January 27, 2004; July 18, 2006.)

20041216 December 16, 2004: FAA Administrator Marion Blakey announced a revised presidential policy on the global positioning system (GPS). The new policy strengthened interagency management of GPS, with a National Executive Committee co-chaired by the Deputy Secretaries of Defense and Transportation. In terms of civil aviation, the policy made it clear that the U.S. remained firmly committed to provide a robust GPS signal free of direct user chargers. The policy directed the Departments of Defense and Transportation to ensure that GPS civil services exceed or at least be equivalent to services provided by the European Galileo system.

20041221 December 21, 2004: FAA released its "10-Year Strategy for the Air Traffic Controller Workforce," a staffing plan that called for hiring 12,500 controllers over ten years to cover projected total retirement and non-retirement controller losses. The level of hiring reflected the required lead time for training and maintained the appropriate ratio between developmental and fully certified controllers. The plan also outlined the expedited training actions FAA would initiate to ensure there were enough recruits in the pipeline to replace the more than 11,000 controllers expected to leave the agency between 2005 and 2014. (See August 24, 2006.)

20041223 December 23, 2004: President George W. Bush signed the Commercial Space Launch Amendments Act of 2004 (Public Law 108-492). The legislation gave FAA authority to regulate manned suborbital flight. (See July 2, 2004; February 11, 2005.)

20041229 December 29, 2004: Effective this date, the FAA and Research and Special Programs Administration (RSPA) banned cargo shipments of non-rechargeable lithium batteries aboard passenger flights, saying these batteries posed a fire hazard when transported in the cargo hold of passenger aircraft. Airline passengers were allowed to carry on board and use, or pack in checked bags, personal computers and other consumer products that contain lithium batteries. The ban applied to all U.S.-carrier flights and those of foreign carriers into and out of the United States. (See October 8, 2010.)

2005

20050120 January 20, 2005: At 4:01 a.m. eastern standard time, air traffic controllers inaugurated Reduced Vertical Separation Minima (RVSM), a new procedure designed to allow aircraft to fly more direct routes at the most fuel-efficient altitudes, saving time and money for airlines and travelers alike. Controllers began directing planes to fly 1,000 feet above and below each other at altitudes of 29,000 feet to 41,000 feet. Although invisible to passengers, the procedural change doubled airspace routes at the affected altitudes and greatly increased the routing options available to pilots and air traffic controllers. Before commercial airlines and other aviation users could take advantage of RVSM, FAA would first determine if their aircraft were properly equipped. Canadian, Mexican, Caribbean, and South American civil aviation authorities also began RVSM on this date. (See November 26, 2003.)

20050122 January 22, 2005: The engineered materials arresting system installed at New York's John F. Kennedy International Airport successfully stopped a Boeing 747-200 cargo aircraft that overran the runway. (See May 30, 2003; July 17, 2006.)

20050201 February 1, 2005: FAA announced selection of a team headed by Lockheed Martin to take over services provided currently by the agency's automated flight service stations. The total evaluated cost of the five-year contract, with five additional option years, was $1.9 billion and represented estimated savings of $2.2 billion over the next ten years. After careful review, FAA had formally announced in December 2003 that its flight service stations met the criteria for competitive sourcing and that it would conduct a competition under OMB's Circular A-76 guidelines for an improved way to provide flight service operations. FAA then evaluated five competing service providers, including the incumbent government organization, to determine the best value to the government for the delivery of effective services to support safe and efficient flight. Lockheed Martin assumed operation of the flight service stations in October 2005. Incremental consolidation of the 58 current flight service stations would begin in April 2006 and was expected to result in 20 sites by the end of March 2007. October 4, the responsibility for flight services transitioned seamlessly from FAA to Lockheed Martin. (See May 2004; September 2010.)

20050201 February 1, 2005: Citing FAA's high priority on cost accounting and the routine use of such information in FAA decision making, GAO announced it had removed the agency from its high risk list for financial management.

20050202	February 2, 2005: A Bombardier Challenger CL-600-1A11, during takeoff, ran off the departure end of runway 6 at Teterboro Airport, in New Jersey. The aircraft continued through an airport perimeter fence, crossed a six-lane highway, struck a vehicle, entered a parking lot, and finally impacted a building. The two pilots were seriously injured, as were two occupants in the vehicle. The cabin aide, eight passengers, and one person in the building received minor injuries. October 31, 2006, the National Transportation Safety Board determined that the probable cause of the accident was the flight crew's failure to ensure the airplane was loaded within weight and balance limits compounded by their attempt to take off with the center of gravity beyond the aircraft's forward takeoff limit. This improper weight distribution prevented the airplane from achieving the required rotation speed.
20050211	February 11, 2005: FAA released draft safety guidelines for space tourism, in anticipation of developing final regulations no later than June 2006. The draft guidelines would require a reusable launch vehicle operator to inform space tourists, in writing, about the safety record of the vehicle they would fly on and compare that record with those of other manned space vehicles. After being given time to ask questions about the risks of flight, passengers would be required to provide written consent prior to flight. Each passenger also would receive safety training on how to respond to any credible emergency situations – which were likely to include cabin depressurization, fire, smoke, and emergency egress. (See December 23, 2004; June 1, 2005.)
20050224	February 24, 2005: FAA proposed a series of significant upgrades to aircraft "black boxes" that would increase the quality, quantity, and survivability of recorded data. The notice of proposed rulemaking would require installation of more rugged flight data recorders and cockpit voice recorders designed to give accident investigators more information. The new rules – which would apply to air carriers, other operators, and aircraft manufacturers – would increase the duration of recordings, increase the data recording rate of certain digital parameters, and improve the reliability of the power supply. All data-link messages sent to an aircraft would have to be recorded, and operators would be required to retrofit all aircraft equipped with ten or more seats. (See August 18, 2003.)
20050323	March 23, 2005: FAA published a final rule in the Federal Register regarding the Non-Hub Pilot Program and related changes to Part 158 mandated by Vision 100 – Century of Aviation Reauthorization Act.
20050328	March 28, 2005: FAA formally delayed – until April 6, 2006 – the deadline by which Part 145 repair stations must establish an approved training program. FAA called the one□year delay necessary because the agency had not yet released guidance material to help repair stations develop appropriate training programs.

20050401 April 1, 2005: FAA proposed a rule that would require operators of more than 800 Boeing aircraft registered in the U.S. to replace or modify certain insulation blankets over the next six years. Aircraft insulation blankets protect the passengers and crew from engine noise and frigid temperatures at high altitudes. The discovery that some insulation blankets coated with a film called AN-26 no longer met the standards for preventing the spread of fire had prompted the proposed airworthiness directive. (See September 2, 2003.)

20050426 April 25-26, 2005: FAA began a two-day forum with aviation industry representatives to discuss changing the way FAA was funded. The agency wanted to initiate debate on a variety of funding alternatives. At the time, FAA was drawing much more of its annual budget from the aviation trust fund than from the government's general fund. The aviation trust fund, however, was due for congressional reauthorization in 2007. Attendance at the forum was by invitation only, and media were not admitted. Department of Transportation Secretary Norman Mineta, FAA Administrator Marion Blakey, Department of Transportation Inspector General Kenneth Mead, and other FAA officials addressed the forum. Representatives of other countries' aviation systems talked about their own funding models. One funding proposal under consideration was allowing FAA raise public debt to replace and modernize aviation infrastructure.

20050531 May 2005: The Supreme Court declined to hear a case brought by a group of pilots against FAA. In Dallas E. Butler et al., Petitioners v. FAA, 12 Southwest pilots challenged a FAA rule dating to 1960 that grounded Part 121 airline pilots at age 60, arguing that FAA should consider the health and skills of each pilot.

20050601 June 1, 2005: FAA proposed adding procedures for obtaining a voluntary safety approval to its commercial space transportation regulations. If the agency raised no objection to its launch vehicle, reentry vehicle, safety system, process, service, or personnel, the safety approval holder could then offer its equipment or personnel to prospective launch and reentry licensees for use within a defined and proven envelope. (See February 11, 2005; December 29, 2005.)

20050623 June 23, 2005: FAA announced that the Advanced Technologies and Oceanic Procedures (ATOP) system was operational at the New York Air Route Traffic Control Center. The ATOP system provided safe separation of aircraft in areas, such as over the ocean, that were outside radar coverage or direct radio communication. It detected conflicts between aircraft and provided satellite data link communication and position information to air traffic controllers. ATOP also reduced the workload on controllers through the use of electronic flight strips instead of the labor-intensive paper strip method used for decades to track trans- oceanic aircraft. October 31, ATOP became operational at the Oakland, California, air route traffic control center. (See June 30, 2004; April 3, 2007.)

20050630	June 2005: FAA directed inspectors to increase oversight of Part 135 operations to ensure that those using a "d/b/a" or "doing-business-as" name were doing so properly and complying with regulations. A five-page notice issued to all Part 135 principal operations inspectors clarified the use of a d/b/a and focused attention on who had operational control of an aircraft. FAA issued the notice to address concerns that arose during the investigation of the Challenger runway overrun accident at Teterboro, New Jersey airport in February 2005.
20050710	July 10, 2005: Following an unsuccessful three-year bargaining process, with two years of negotiations, FAA implemented its final contract proposal with National Air Traffic Controllers Association (NATCA) multi-unit employees. The contract covered about 1,900 employees from ten smaller union groups that included engineers, inspectors, accountants, nurses, administrative employees, and computer specialists. Unable to reach a voluntary agreement in 2004, the parties had called on the Federal Mediation and Conciliation Service (FMCS). When the FMCS could not remove the impasse, NATCA had sought relief from the Federal Service Impasse Panel. On January 9, 2004, the impasse panel had elected not to assert jurisdiction. FAA had forwarded the contract stalemate to Congress on January 30, 2004. Under the law, Congress had the power either to resolve the stalemate or, by default, allow the agency to implement its final proposal. (See January 30, 2004; July 18, 2007.)
20050713	July 13, 2005: FAA and the National Air Traffic Controllers Association began contract negotiations. (See December 9, 2003; November 28, 2005.)
20050729	July 29, 2005: Effective this date, FAA terminated a program that had assigned controllers, full-time, at the agency headquarters to provide controller liaison and feedback on modernization programs.
20050801	August 1, 2005: FAA requested the air traffic control towers at all airports to assess their current need to use the taxi into position and hold procedure. This procedure was designed to allow aircraft to taxi onto a runway and hold while awaiting clearance from the tower. Facilities needing to employ the procedure were asked to confirm and verify that operational requirement.
20050804	August 4, 2005: Effective this date, FAA adopted a new noise standard to ensure that the latest available noise reduction technology was incorporated into new aircraft designs for subsonic jet airplanes and subsonic transport category large airplanes. The new standard, stage 4, was to apply obligatorily to any entity submitting an application for a new airplane type design on and after January 1, 2006, and could be applied voluntarily prior to that date. This noise standard was intended to provide uniform noise standards for stage 4 airplanes being certified in the United States as well as for airplanes that met Annex 16, Chapter 4 of the noise standard published by the International Civil Aviation Organization.

20050811	August 11, 2005: Effective this date, a special federal aviation regulation (SFAR) allowed passengers to use certain portable oxygen concentrator devices on aircraft, provided certain conditions were met. The rule required passengers to carry the devices on board and mandated a battery-packaging standard necessary for the safe carriage of extra batteries in carry-on baggage.
20050825	August 25, 2005: FAA announced that it would not mandate the use of child safety seats on airplanes. The agency explained that its analyses showed that, if forced to purchase an extra airline ticket, families might choose to drive to their destination, a statistically more dangerous way to travel. (See September 26, 2005.)
20050829	August 29, 2005: Hurricane Katrina, which had formed over the Bahamas on August 23, crossed southern Florida as a category 1 hurricane. It then strengthened in the Gulf of Mexico, made its second and third landfalls as a category 3 storm in southeast Louisiana and at the Louisiana/Mississippi state line. The storm surge caused severe damage along the Gulf Coast, closing all airports in the region. September 1, both runways at New Orleans International Airport were restored to 24-hour availability for hurricane relief flights, as FAA worked to repair air traffic control facilities at this and other airports hit by Katrina. FAA said New Orleans could handle nine landings per hour, but only in visual flight rule conditions. September 2- 7, FAA personnel supported the largest airlift operation on United States soil, Operation Air Care. September 8, FAA restored scheduled, commercial passenger service to the Gulfport-Biloxi, Mississippi, airport, with two roundtrip flights originating from Memphis, Tennessee. September 13, FAA restored scheduled, commercial passenger service to Louis Armstrong New Orleans airport, with two roundtrip flights originating from Memphis.
20050909	September 9, 2005: FAA reissued a final rule, with a June 6, 2006 compliance date, creating a second-in-command (SIC) type rating. A requirement put forward by the International Civil Aviation Organization mandated the SIC rating for pilots engaged in international operations. When first released on August 4, 2005, this rule had carried an effective date of September 6, 2005.

20050918	September 18, 2005: Tropical Storm Rita formed over the Turks and Caicos Islands in the Caribbean and moved toward the Florida Keys. September 20, the tropical storm was recategorized as a hurricane, and FAA closed the air traffic control tower at the airport in Key West, Florida. September 22, FAA reopened the air traffic control tower in Key West. September 24, Hurricane Rita made landfall between Sabine Pass, Texas, and Johnsons Bayou, Louisiana, as a category 3 hurricane. The storm surge caused extensive damage along the Louisiana and extreme southeastern Texas coasts and completely destroyed some coastal communities. The Lake Charles Regional Airport in Louisiana and Beaumont-Port Arthur Airport in Texas closed because of damage. FAA instituted a temporary flight restriction along the Texas and Louisiana coast area to support relief and recovery operations. September 26, FAA opened its air traffic control tower at Beaumont- Port Arthur Airport in Texas for visual flight operations only. FAA resumed visual flight operations at the Lake Charles Regional Airport tower in Louisiana, and reopened the Terminal Radar Approach Control facility at the airport.
20050926	September 26, 2005: FAA officially opened its Early Dispute Resolution Center at FAA headquarters. Earlier in the year, the Administrator had announced plans to open such an office in response to low marks in the area of conflict management and resolution that the agency had received on the most recent employee attitude survey.
20050926	September 26, 2005: Secretary of Transportation Norman Mineta signed a Memorandum of Understanding between the Department of Transportation, FAA, and the National Academy of Sciences to establish the Airport Cooperative Research Program (ACRP). FAA funded ACRP at $10 million per year from Airport Improvement Program funds to conduct research on problems shared by airports.
20050926	September 26, 2005: Effective this date, FAA amended its operating regulations to allow the use of FAA-approved child restraint systems (CRSs) on board aircraft. Current FAA regulations did not allow the use of CRSs other than those that meet specific standards for the automobile environment. (See August 25, 2005; September 2006.)
20050928	September 28, 2005: FAA issued the first airworthiness certificate for a civil unmanned aerial vehicle (UAV), the General Atomics Altair. The Altair's FAA airworthiness certificate was in the "Experimental" category and limited flights to research and development, crew training, or market survey. The agency specified a number of safety conditions for the Altair's operation – including weather, altitude, and geographic restrictions, as well as a requirement for a pilot and observer. FAA also collaborated with manufacturers to collect vital technical and operational data that would improve UAV regulatory processes. In addition, FAA asked RTCA, a group that frequently had advised the agency on technical issues, to help develop UAV standards. (See June 1, 2010.)

20051003	October 3, 2005: FAA codified the requirements of the Advanced Qualification Program (AQP), provisions that had previously been contained in a Special Federal Aviation Regulation that expired on October 2, 2005. AQP would continue as an alternative regulatory program for airlines seeking more flexibility in training than the traditional training program allowed.
20051006	October 6, 2005: FAA proposed regulatory changes affecting wiring systems and fuel tank systems in transport category airplanes. First, to organize and clarify design requirements for wire systems, it proposed to create a single section of the regulations specifically for wiring and new certification rules and then move existing regulatory references to wiring into that section. It also proposed to require holders of type certificates for certain transport category aircraft to analyze their fleets and make the necessary changes to existing instructions for continued airworthiness that would improve maintenance procedures for their wire systems. (See August 16, 2001; December 10, 2007.)
20051007	October 7, 2005: President George W. Bush signed Public Law 109-87, which authorized the Secretary of Transportation to provide grants-in-aid for emergency repairs to airports damaged by Hurricanes Katrina and Rita. The law specified that such emergency aid be funded from FY 2005 and 2006 unobligated funds already appropriated to the Airport Improvement Program. The law also waived all federal matching fund requirements.
20051016	October 16, 2005: FAA migrated payroll responsibilities to the Department of Interior's Federal Personnel and Payroll System, the last of the Department of Transportation modal administrations to transition to the new service provider.
20051027	October 27, 2005: FAA implemented new air routes along the East Coast that cut flight delays and saved fuel. Called the Florida Airspace Optimization Plan, the new routes made significant changes to airspace controlled by air traffic control centers in Washington, Jacksonville and Miami, and various approach controls in Florida. The plan created more efficient routings from points north to Florida.
20051027	October 27, 2005: Runway 17/35 opened at Minneapolis-St. Paul International Airport. November 14, 2005: FAA proposed rules that, over seven years, would require retrofit of more than 3,200 existing, as well as manufacture of certain new large passenger jets, to reduce flammability levels of fuel tank vapors. The notice of proposed rulemaking would require aircraft operators to reduce the flammability levels of fuel tank vapors both on the ground and in the air to remove the likelihood of a potential explosion. Boeing 737, Boeing 747, and Airbus A320 models would be retrofitted first. (See July 30, 2004.)
20051114	November 14, 2005: Effective this date, FAA established the Organization Designation Authorization (ODA) program. The ODA program expanded the scope of approved tasks available to organizational designees; increased the number of organizations eligible for organizational designee authorizations; established a more comprehensive, systems-based approach to managing designated organizations; and set phase-out dates for then-current organizational designee programs.

20051128 November 28, 2005: FAA Administrator Marion Blakey called for federal mediation to help the agency reach a voluntary contract agreement with the air traffic controllers union. FAA's request, hand- delivered to the National Air Traffic Controllers Association, sought help from the Federal Mediation and Conciliation Service to reach a voluntary agreement after four and a half months of negotiations. FAA's contract proposal maintained the base-pay of in-service controllers while still taking steps to bring in new hires at a lower pay scale – one that narrowed the pay gap between controllers and the rest of FAA's safety focused employees. While the existing contract had technically expired on September 30, a clause had allowed it to remain in place so long as talks had continued. (See July 13, 2005; April 3, 2006.)

20051205 December 5, 2005: Russ Chew, chief operating officer of the FAA's Air Traffic Organization (ATO), announced the restructuring of ATO administrative and support functions in the field. The number of service areas was reduced from nine to three and flight service areas from three to two. By eliminating duplication of administrative and support services, the agency expected to reduce the ATO's operating costs by an estimated $360-$460 million over the next ten years. (See June 26, 2006.)

20051207 December 7, 2005: FAA announced it had completed deployment of a new mission-critical communications gateway that processed radar and flight data in all 20 en route air traffic control centers. Called the En Route Communications Gateway (ECG), the system consolidated all gateway functions into a single system. It provided the foundation to support new communications sources and new radar/surveillance sources, such as ADS-B. The design of the new system also allowed for easy integration with FAA's En Route Automation Modernization (ERAM) program, a key element in the agency's overall air traffic modernization effort. The ECG replaced the Peripheral Adapter Module Replacement Item (PAMRI), using modern communications protocols and modular, scalable hardware components. PAMRI was a single point of failure in the en route air traffic control infrastructure. The first ECG went operational in Seattle in 2003. The final site to go operational was Miami in October 2005. (See June 11, 2001.)

20051208 December 8, 2005: The engineered materials arresting system installed at Chicago's Midway Airport successfully stopped Southwest Airlines Flight 1248 that overran the runway. (See May 30, 2003; October 13, 2006.)

20051219 December 19, 2005: A Grumman Turbo Mallard amphibious airplane, on a regularly scheduled passenger flight to Bimini, Bahamas, experienced an in-flight separation of its right wing from the fuselage and crashed into the shipping channel adjacent to the Port of Miami shortly after takeoff. Two flight crewmembers and 18 passengers on board were killed; the airplane was destroyed by impact forces. May 30, 2007, the National Transportation Safety Board determined the probably cause of the crash was the failure and separation of the right wing, which resulted from the failure of Chalk's Ocean Airways' maintenance program to identify and properly repair fatigue cracks in the wing, and the failure of FAA to detect and correct deficiencies in the company's maintenance program.

20051220 December 20, 2005: FAA announced the inception of a new navigation procedure at Ronald Reagan Washington National Airport. The Required Navigation Performance (RNP) initiative took advantage of a plane's onboard navigation capability to fly a more precise flight path into the airport. The Reagan National RNP approach to Runway 19 allowed planes to land with considerably lower cloud ceilings and visibility than previously required. The procedure was used by any operator who could meet specific FAA requirements for aircraft navigation performance and pilot training. Alaska Airlines, the first air carrier authorized by FAA to use the RNP procedures at Reagan National, had pioneered the use of RNP procedures at Juneau and other airports in Alaska. Besides introducing the new procedure at Reagan National, FAA authorized RNP procedures at Juneau, Alaska; San Francisco and Palm Springs, California; Portland, Oregon; and Hailey (Sun Valley), Idaho. (See July 25, 2003; July 2006.)

20051222 December 22, 2005: Runway 18R/36L opened at Cincinnati/Northern Kentucky International Airport.

20051229 December 29, 2005: In response to the requirements of the Commercial Space Launch Amendments Act of 2004, FAA proposed rulemaking to affect human space flight of crew and space flight participants. If adopted, the proposed rule would establish requirements for crew qualifications, training, and notification. It also would establish training and informed consent requirements for space flight participants. The regulation would also modify how financial details affecting space flight participants and crew would be accounted for and, though an additional regulation, how experimental permits would be issued. (See June 1, 2005; August 25, 2006.)

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20060103 January 3, 2006: The Federal Service Impasse Panel ruled that contract negotiations between FAA and its systems technicians would begin on February 6 and continue through July 21. The contract between FAA and the Professional Airways Systems Specialists expired in July 2005, but no new negotiations had begun because the agency and the union could not agree on a timetable. (See March 30, 2006.)

20060111 January 11, 2006: FAA withdrew a rule that would ease Part 121 oxygen requirements after the National Transportation Safety Board warned the rule was based on faulty data and could jeopardize safety. In November 2005, FAA had raised the altitude, to flight level 350, at which a pilot must put on an oxygen mask when the other pilot left the control station. With the rescinding of this less rigorous requirement, pilots left alone at the controls were still required to use their masks at altitudes above flight level 250.

20060130 January 30, 2006: FAA announced that an international financial and accounting services firm validated the agency's calculation that the average 2005 air traffic controller compensation package exceeded $166,000. Other independently validated figures revealed that, between 1998 and 2005, controller compensation had increased by 75 percent and the wage gap between controllers and all other FAA employees had doubled. Cost data used to reach these wage determinations were also independently shown to be consistent with the agency's accounting system and its audited financial statements. FAA had begun contract negotiations with the union on July 13, 2005. The existing contract had expired on September 30, 2005, but an evergreen clause had allowed the original contract to remain in place so long as talks were ongoing. (See November 28, 2005; April 3, 2006.)

20060301 March 1, 2006: Effective this date, U.S. parties interested in transmitting certain types of financial interests (or prospective interests) to the international aircraft registry had to file a completed FAA entry point filing form (International Registry, AC Form 8050-135) with FAA. Upon receipt of the completed form, FAA would issue a unique authorization code. With the establishment of the new international aircraft registry, it was no longer sufficient for U.S. aircraft buyers or sellers to conduct searches and file documents only with FAA; they now also had to conduct searches and register interests in aircraft and high-value engines at the new international registry.

20060310 March 10, 2006: The Aeronautical Repair Station Association (ARSA) challenged FAA in federal court over the legality of the agency's changes to its drug- and alcohol-testing regulations. ARSA filed a petition for review with the U.S. Court of Appeals for the D. circuit, claiming the updated testing regulations represented an "unnecessary burden that provides no aviation safety-related benefits." The court filing argued that FAA violated several federal statutes, including the Administrative Procedure Act and the Regulatory Flexibility Act. Two repair stations and a non-certified maintenance provider joined the filing.

20060324 March 24, 2006: FAA announced that, within a year, use of the Wide Area Augmentation System (WAAS) would be extended to 200 feet above an airport's surface. WAAS, a satellite-based navigation system, was designed to improve the accuracy, availability and integrity of signals from global positioning system (GPS) satellites. WAAS was expected, eventually, to enable the agency to remove a portion of its existing ground-based navigation infrastructure, and thus reduce operational costs, while still improving capacity and safety. Originally commissioned in July 2003, WAAS was initially approved to provide vertical guidance down to 350 feet. Localizer performance with vertical guidance procedures down to 250 feet was later developed to take advantage of the increased performance provided by WAAS. (See July 11, 2003; October 19, 2007.)

20060330 March 30, 2006: PASS accepted FAA's contract proposal. However, the union's bargaining team made it clear to FAA that, although it did not think the agency's offer was fair or reasonable, it would leave the decision to its voting members. August 3, FAA system specialists voted to reject the agency's contract offer and called for the agency to return to the bargaining table. The Professional Airways Systems Specialists (PASS) union said its members rejected the contract by a margin of 98 percent. The rejection was anticipated because PASS had recommended that its members vote against the contract offer. Because PASS nominally accepted the FAA proposal as a tentative agreement, FAA had to await the conclusion of the voting process before taking any other action. (See January 3, 2006.)

20060331 March 2006: A U.S. Equal Employment Opportunity Commission judge ruled that controllers fired by President Reagan after the 1981 strike could proceed with a class action suit against FAA. Specifically, they could argue that age discrimination had prevented their rehiring. In the suit, the Professional Air Traffic Controllers Organization (PATCO) said FAA had not hired any PATCO controllers since 1999. Other discriminatory practices listed by PATCO included the use of separate applicant pools, and hiring quotas for PATCO members.

20060403 April 3, 2006: FAA and the National Air Traffic Controllers Association (NATCA) exchanged their final contract proposals. April 6, FAA declared that, as it had reached an impasse with the controllers union after nine months of contract talks, only congressional action could prevent the agency from imposing its latest contract offer without union agreement. April 25, FAA officially ended contract negotiations with NATCA. June 5, FAA announced it would begin imposing its preferred contract terms on the controller work force. Under existing statutory rulings, the agency could impose its contract terms if Congress failed to overturn the agency's proposal within a 60-day window. FAA had sent its contract proposal to Congress in April and the deadline for congressional action was June 4. FAA Administrator Marion Blakey said that, although the previous contract was officially terminated as of the previous day before, the work and pay rules of that contract would remain in effect while the new rules were phased in. She also commented in a letter to employees that this transition process could take several months. (See November 28, 2005; August 2007.)

20060413	April 13, 2006: Runway 11/29 opened at Lambert-St. Louis International Airport.
20060516	May 16, 2006: Atlanta Hartsfield International Airport commissioned its fifth runway and dedicated its new 396 foot air traffic control tower.
20060520	May 20, 2006: Runway 10/28 opened at Hartsfield-Jackson Atlanta International Airport.
20060607	June 7, 2006: FAA posted an announcement in the Federal Register that all Federal Aviation Regulations, Part 121, 135 and 91(K) operators would be issued a new operations specification (Ops Spec) or management specification (MSpec) requiring completion of a new en route landing distance assessment for all their turbojet aircraft. This calculation was to take into consideration runway conditions and allow a full-stop landing, on a given runway, with at least a 15-percent safety margin beyond the actual landing distance – according to the conditions existing at the time of arrival, and with deceleration means and other conditions appropriate to the and airplane being used. The calculation was to be staged as close to the time of arrival as practicable. Previous regulations had only mandated that calculations such as these be made prior to the departure of the aircraft.
20060626	June 26, 2006: FAA instituted a new Air Traffic Organization service center unit. Three service centers replaced the nine service area offices within en route, terminal, and technical operations. Each of the service centers was made up of five functional groups: administrative services, business services, safety assurance, system support, and planning and requirements. A sixth group, engineering services, was a shared resource and remained in place in the existing locations. (See December 5, 2005.)
20060630	June 2006: FAA delayed until January 1, 2007, proposed changes in aircraft registration policies that would have severely limited the ability of aircraft owners to request "priority service" in connection with declarations of international flights. Citing an increasingly heavy workload and the observation that many operators routinely requested priority service even if it was really not needed, officials at FAA's aircraft registration organization sought to limit priority handling for international flights to one request per aircraft in any three-month period.
20060707	July 7, 2006: Effective this date, Department of Transportation Secretary Norman Mineta resigned his post. (See January 25, 2001; October 24, 2006.)
20060713	July 13, 2006: FAA announced plans to phase in a new program designed to reduce the number of flight delays and bring an estimated $900 million in cost savings to the airlines and the flying public. The airspace flow program was designed to allow air traffic controllers to delay only those flights that were expected to encounter extremely bad weather. As a result, the program was expected to minimize the crippling effects of the sudden thunderstorms that frequently affected the nation’s airspace system during the summer travel season. On a single severe weather day in this high peak season, thousands of flights often have been delayed, diverted or canceled, affecting hundreds of thousands of passengers and resulting in millions of dollars in operating losses for carriers.

20060717	July 17, 2006: The engineered materials arresting system installed at Greenville Downtown Airport, Greenville, SC, successfully stopped a Mystere Falcon 900 aircraft that overran the runway. (See January 22, 2005; July 18, 2008).
20060718	July 18, 2006: FAA Administrator Marion Blakey and European Commission Vice President Jacques Barrot signed a memorandum of understanding (MOU) that secured enhanced cooperation toward building a more efficient and seamless air traffic system between Europe and the United States. The MOU focused on building administrative bridges between the United States' NextGen and the Commission's Single European Sky Air Traffic Management Research (SESAR) airspace modernization programs. In addition to annual meetings and regular, informal communications between FAA and the Commission, the MOU formalized pre-existing exchanges for facilitating enhanced understanding of these international programs. The memorandum acknowledged the importance of participation by both European and U.S. industry in each other's air traffic modernization efforts. (See July 18, 2006; May 16, 2007; June 18, 2010.)
20060727	July 27, 2006: Eclipse Aviation won FAA provisional certification for the Eclipse 500 very light jet. (See April 2007.)
20060731	July 2006: FAA's performance-based operations aviation rulemaking committee, a government and industry group, released the second version of the "Roadmap for Performance-Based Navigation." The first road map, released in 2003, covered concepts and principles, but included very few details. The revised version spelled out how FAA planned to proceed in the near-term (2006-10), mid-term (2011-15), and far-term (2016- 25), and outlined dates for mandates on the types of equipment that would be needed by the airlines, business aircraft, and general aviation operators. The near-term period focused on the investment aircraft operators had already made in avionics and FAA spending on satellite-based navigation. It included the wide-scale rollout of RNAV procedures, including the instrument departures and arrivals commissioned at airports such as Atlanta Hartsfield-Jackson International and Dallas-Fort Worth International. (See December 20, 2005; August 6, 2007; March 2007.)

20060824 August 24, 2006: FAA released an updated air traffic controller workforce plan designed to address the anticipated retirement and replacement of air traffic controllers over the coming decade. The revised document outlined the agency's plans to hire more than 11,800 new air traffic controllers over the next ten years. The plan was the first update to A Plan for the Future: The Federal Aviation Administration's "10-year Strategy for the Air Traffic Control Workforce," which FAA released in December 2004. The revised plan was based on updated traffic forecasts, experience with productivity increases, actual retirements, and improved mathematical models. As part of the revised plan, FAA planned to hire 930 controllers by the end of fiscal year 2006. The plan also addressed the broader need to hire more than 11,800 controllers over the next ten years based on the latest attrition and traffic growth modeling. It outlined how FAA would bring on new controllers using a schedule designed to provide adequate training lead-time and to address changing air traffic demands over the coming decade. In addition to the hiring schedule, the plan addressed steps the agency was taking to improve the training process for new controllers. (See December 21, 2004; March 7, 2007.)

20060825 August 25, 2006: FAA and U.S. Air Force Space Command issued new, common federal launch safety standards designed to create consistent, integrated space launch rules for the nation. The rule strengthened public safety by harmonizing launch procedures that identified potential problems early and by implementing a formal system of safety checks and balances. The new FAA regulations governed commercial launch operations at federal and non-federal launch sites. (See December 29, 2005; December 15, 2006.)

20060827 August 27, 2006: Comair Flight 5191 crashed at the Lexington Blue Grass Airport; 48 of the 49 people on board died in the crash. In pre-dawn darkness, the crew had turned the aircraft onto a 3,500-ft. inoperative VFR-day Runway 26 instead of the 7,000-ft. departure Runway 22, a 40-degree heading difference. The aircraft had run out of concrete during the takeoff roll and crashed into a perimeter fence.

20060925 September 25, 2006: A report issued by the Department of Transportation Inspector General outlined a host of problems with FAA's "RESULTS" contracting program, but acknowledged that FAA had moved quickly to shut the program down. The audit was launched at the request of Senators Chuck Grassley (R-Iowa) and Tom Coburn (R-Oklahoma) after a whistleblower highlighted examples of waste and abuse. One of three such contracting programs used by FAA, RESULTS provided a list of 142 pre-qualified vendors to which the agency could award support contracts. Since its inception, the program had awarded more than 114 contracts with a potential value of $543 million. The whistleblower uncovered abuse in one contract. The Office of the Inspector General widened its investigation to cover the entire program. The investigation found that because of inadequate program controls, labor costs were much higher than in other FAA contracting efforts. In addition, RESULTS contracts were awarded without sufficient competition or price analysis, and inadequate oversight of contract performance contributed to further cost overruns.

20060930	September 2006: FAA approved the first child safety harness that could be used on commercial aircraft. The harness, manufactured by AmSafe Aviation, incorporated belt and shoulder harnesses secured by straps around the seat back and attachments to existing lap belts. The harness was an alternative to hard-shelled child seats that were the only other child restraint parents could carry onto aircraft. (See September 26, 2005.)
20060930	September 2006: FAA issued full type certification to the Cessna's entry-level Citation Mustang, making it the first very light jet to achieve that goal.
20061024	October 24, 2006: Mary Peters was sworn in as the 15th Secretary of Transportation. (See July 7, 2006.)
20061030	October 30, 2006: FAA completed the deployment of the User Request Evaluation Tool (URET) at all 20 air route traffic control centers. URET was a conflict-detection tool that automatically detected and advised air traffic controllers of predicted conflicts between aircraft or between aircraft and other operational elements within the NAS. This strategic planning tool allowed controllers to create alternative conflict-free flight routings and to manage better the changing air traffic or weather conditions. (See May 6, 2002.)
20061123	November 23, 2006: Runway 14/32 opened at General Edward Lawrence Logan International Airport.
20061214	December 14, 2006: FAA announced that it had issued a type certificate for the double-decker Airbus A380 jet during a ceremony in Toulouse, France. Airbus applied to FAA for certification of the aircraft on August 12, 1998. The A380's size and complexity required FAA to extend its normal five year certification period for a large airliner to seven years to ensure the required standards of safety.
20061215	December 15, 2006: FAA issued final regulations for crew and spaceflight participants The new regulations require a reusable launch vehicle (RLV) operator to inform space tourists, in writing, about the safety record of the vehicle they would fly in, and compare that record with those of other manned space vehicles. After being given time to ask questions about the risks of flight, passengers will have to provide written consent prior to the flight. Each passenger must receive safety training on how to respond to emergency situations – which include cabin depressurization, fire, smoke, and emergency egress. (See August 25, 2006; April 6, 2007.)

2007

20070130 January 30, 2007: In a luncheon speech at the National Press Club, FAA Administrator Marion Blakey proposed a rule change that would allow pilots to fly until they were 65 years of age. Under the proposal, if one pilot on a flight were older than 60, the other pilot in the cockpit would have to be younger than 60. This would be a change from the mandatory retirement age of 60, which had been in effect since 1960. Before this change could become official, FAA would have to issue a notice of proposed rulemaking and ask for public comment. The agency cautioned it could take years to pass new regulations. December 11, the House of Representatives approved a bill to let pilots fly until they reached the age of 65 provided they took medical tests twice a year. It also mandated that airlines must perform additional proficiency checks on pilots over 60. December 12, the Senate passed a similar bill allowing pilots to fly until age 65. The new law would take effect immediately if signed by President George W. Bush. (See December 13, 2007.)

20070214 February 14, 2007: FAA unveiled a proposal to finance its operations and air traffic control modernization through a complex system of user fees and fuel taxes, plus new authority to issue bonds. The proposal was included in a draft FAA reauthorization bill containing financial provisions would last for ten years and other provisions with a three-year life. In October 2008, after the first year of the reauthorization, the FAA would drop the current taxes and fees that provided revenue to the aviation trust fund – mainly a 7.5 percent excise tax on airline tickets. In place of these revenue sources, the agency it would initiate user fees that would raise 53 percent of its total budget; retain and increase fuel taxes that, with reduced international passenger taxes, would provide an additional 28 percent; and rely on the general fund – derived from government-wide taxes and other revenues – for the remaining 19 percent of the budget. Under the proposal, as the airline's share of revenues decreased, aviation's total business share, derived from fees paid by corporate operators, would grow. Additionally, general aviation would pay a higher fuel tax – raised from 20 cents to about 70 cents per gallon.

20070215 February 15, 2007: Effective this date, FAA established regulations governing the design, operation, and maintenance of certain airplanes that flew long-range, regularly scheduled commercial routes over remote areas. The rule changed the current limitations and opened routes for twin-engine passenger and cargo planes. It also set uniformly high standards for all commercial passenger planes flying routes more than three hours from an airport. The final rule codified FAA policy, industry best practices and recommendations, as well as international standards designed to ensure safety on long-range flights. To ease the transition for current operators, this rule delayed the compliance dates pertaining to certain requirements applicable to Extended Range Operation with Two-engine Airplanes, or ETOPS. (See November 10, 2003.)

20070223	February 23, 2007: Russ Chew, FAA Air Traffic Organization Chief Operating Officer resigned from the agency. Administrator Marion Blakey assigned COO responsibilities to deputy administrator Robert Sturgell as collateral duties. (See June 10, 2003; October 1, 2007.)
20070307	March 7, 2007: FAA released an updated plan to hire air traffic controllers over the next ten years. The plan provided a range of authorized controller staffing numbers for each of the FAA's 314 staffed facilities across the country, giving the agency greater flexibility to match the number of controllers with traffic volume and workload. The agency had planned to hire and train more than 15,000 controllers over the next decade, and the updated plan called for hiring nearly 1,400 new controllers by year's end. (See August 24, 2006.)
20070315	March 15, 2007: Effective this date, FAA implemented a final rule setting safety and oversight rules for a broad variety of sightseeing and commercial air tour flights. The rule standardized requirements for air tour operators and consolidated air tour safety standards. It required operators, including some who were not previously covered, to meet the safety requirements in the expanded national air tour safety standards of the federal aviation regulations. These provision included requirements for enhanced passenger briefings before takeoff, life preservers and helicopter floats for certain over water operations, and the submission of helicopter performance plans. The rules also applied to the growing air tour industry offering tours of national parks. (See November 27, 2002.)
20070323	March 23, 2007: FAA dedicated its newest air traffic control facility in Guam. With oversight responsibility for nearly 200,000 square miles of airspace in the South Pacific, the new Guam Center would consolidate a number of air traffic functions in a single location. It would house en route and terminal radar air traffic control, a new air traffic control tower for the local international airport, and a technical operations division.
20070331	March 2007: FAA selected Naverus Inc., as the first FAA-approved Required Navigation Performance (RNP) consultant to help airlines qualify to fly RNP procedures in the U.S. Intending to accelerate the transition from ground-based to satellite-based navigation, the agency had decided to allow third parties to become involved. Broadening the use of RNP would allow minimums to be lower than otherwise possible during instrument approaches and would eventually allow reduced separation of aircraft. Naverus would advise airlines on how to qualify to fly RNP procedures, as outlined in FAA Advisory Circular 90-101. (See July 2006.)
20070402	April 2, 2007: Runway 7R/25L opened at Los Angeles International Airport.

20070403 April 3, 2007: FAA announced completion of Advanced Technologies and Oceanic Procedures (ATOP) deployment with the installation at the Anchorage Air Route Traffic Control Center. ATOP was already deployed at FAA centers in Ronkonkoma, New York, and Oakland, California, providing air traffic service over the Atlantic and Pacific regions respectively. This technology enabled controllers to separate aircraft in areas outside radar coverage or direct radio communication, such as over oceans. It also detected conflicts between aircraft and provided satellite data link communication and position information to air traffic controllers. (See June 23, 2005.)

20070406 April 6, 2007: FAA released new guidelines allowing developers to obtain one-year experimental launch permits for reusable spacecraft. These provisions would give businesses the opportunity to fly and test their vehicles before applying for a FAA launch license. A permit would cover multiple vehicles of a particular design and could be used for an unlimited number of launches. Applicants would have to provide FAA a program description, a flight test plan, operational safety documentation (including a hazard analysis), and a plan for responding to any mishap. None of the flights covered by an experimental permit could be flown for profit, and the permits could be renewed following a favorable FAA review. The agency would determine what kind of design changes could be made to a vehicle before its permit would be invalidated. (See December 15, 2006.)

20070411 April 11, 2007: FAA dedicated the new $90 million, 324-foot tall air traffic control tower at Phoenix's Sky Harbor International Airport. The new tower featured state-of-the-art equipment and design. At 850 square feet, it was twice as tall as the old Phoenix Tower, built in 1977, and could accommodate 11 controllers in a cab three times the size of the previous one. The new TRACON section of the structure, with work stations for 22 controllers, replaced a 50-year old leased building that had accommodated only 13 controllers.

20070426 April 26, 2007: FAA proposed new standards to ensure timely activation of airframe ice protection systems on Part 25 aircraft. The proposal would require manufacturers to provide a means to alert the flight crew when an ice protection system should be activated. The proposal stipulated three options for hazard detection and activation of the ice protection system: supplying a primary ice detection system that would activate automatically to alert the flightcrew of realized danger; supplying visual cues that, together with an advisory ice detection system, would alert the flight crew of the first signs of ice accretion; or supplying technology that would identify external conditions conducive to icing and advise the flightcrew to be prepared to activate the protective system.

20070430 April 2007: FAA awarded a production certificate to Eclipse Aviation for the Eclipse 500, one of the first very light jets to be certified. (See July 27, 2006.)

20070430 April 2007: The precision runway monitoring system became operational at Atlanta Hartsfield International Airport. The system allowed controllers to land planes almost simultaneously on parallel runways, saving time and simplifying operations.

20070509	May 9, 2007: FAA and NASA formalized an educational partnership aimed at developing the next generation aviation and aerospace workforce.
20070515	May 15, 2007: FAA released the Future Airport Capacity Task (FACT) 2 report. The study identified six airports and four metropolitan areas in the national airspace system that, despite the effect of currently planned improvements, were likely to be capacity-constrained by 2015 and 2025. It recommended airport planning and development to increase the capacity of the system to meet these anticipated future aviation demands.
20070516	May 16, 2007: FAA Administrator Marion Blakey and her counterparts from Canada and Mexico signed a formal agreement establishing a cooperative NextGen strategy group. The agreement encouraged all three countries to share information regarding strategic roadmaps, technologies, and environmental metrics, as well as to coordinate harmonization efforts between North America and the International Civil Aviation Organization. (See July 18, 2006; June 13, 2007.)
20070523	May 23, 2007: FAA announced its annual Spring/Summer Plan, called the airspace flow program. The program gave airlines the option of either accepting delays for scheduled flights that would have to fly through storms or flying longer routes to maneuver around adverse conditions. The agency successfully launched the program in 2006 at seven locations in the Northeast. On bad weather days at major airports in the region, delays fell by nine percent compared to the year before. The 2007 plan targeted 18 locations around the country where heavy traffic and weather created the most system delays.
20070523	May 23, 2007: FAA announced deployment of adaptive compression, a new software program that would help to ensure that airports affected by bad weather would receive as many flights as could safely fly to them. When storms caused flights to be delayed or canceled, the software program would fill automatically vacant arrival slots with the next available flight. Deployed in March, the software tool effectively reduced delays to save time and money for airlines and passengers.
20070523	May 23, 2007: FAA published a final rule in the Federal Register modifying Part 158. The change added debt service and air carrier bankruptcy requirements and other miscellaneous changes mandated by the Vision 100 – Century of Aviation Reauthorization Act.
20070524	May 24, 2007: FAA and the National Association of Government Employees Local signed a contract covering over 200 air traffic assistants who provided support for air traffic operations in terminal and en route facilities.
20070613	June 13, 2007: FAA announced release of the "NextGen Concept of Operation," a document which laid out the blueprint for the development and execution of the NextGen system. (See May 16, 2007; June 2007; September 26, 2007.)

20070622	June 22, 2007: Department of Transportation Secretary Mary Peters, FAA Administrator Marion Blakey, and Minister Praful Patel from the Ministry of Civil Aviation in India signed a memorandum of agreement that established the U.S.-India Aviation Cooperation Program, a U.S. government and industry initiative to promote aviation relations and cooperation with Indian counterparts. (See April 6, 2004.)
20070630	June 2007: FAA published the first version of its expanded Operational Evolution Partnership (OEP), which laid out the agency's path to NextGen through 2025. The OEP, launched in 2001 to improve capacity, was extended in duration as well as broadened in scope to include FAA's NextGen-related activities. (See June 7, 2001; June 13, 2007.)
20070718	July 18, 2007: FAA and the National Air Traffic Controllers Association (NATCA) signed the NATCA multi-unit agreement covering approximately 1,200 engineers and architects responsible for the planning, design, and installation of facilities, systems and equipment. Negotiations took place over the course of nine months before the agreement was overwhelmingly ratified by the union membership. This development was expected to help ensure the continuing safety of the national airspace system. (See July10, 2005.)
20070726	July 26, 2007: FAA announced it was modifying the restricted airspace over the National Capital Region to make it safer, more secure, and easier for pilots to navigate. The new, circular 30-nautical-mile-radius restricted area eliminated the “mouse ears” shape of the previous air defense identification zone and allowed pilots to use a single navigational aid instead of four. The change, which went into effect on August 30, 2007, freed 33 airports and helipads from difficult restrictions affecting approximately 1,800 square miles of airspace. (See February 10, 2003.)
20070806	August 6, 2007: Effective this date, FAA amended its regulations to reflect technological advances supporting Area Navigation, or RNAV. The new provisions updated the use of suitable RNAV systems for navigation and made them more consistent with those of the International Civil Aviation Organization. The regulations also removed all reference to the middle marker, a previously required component of instrument landing systems, and clarified airspace terminology. (See July 2006.)
20070808	August 8, 2007: FAA announced an airport surface detection equipment program known as ASDE-X had begun an operational suitability demonstration at Chicago's O'Hare airport. ASDE-X used ground surveillance data collected from a variety of sources, including traditional radar, the Automatic Dependent Surveillance — Broadcast system, and aircraft transponders. Controllers in the tower saw the information presented as a color display of aircraft and vehicle positions overlaid on a map of the airport's runways, taxiways, and approach corridors. The system continuously updated a map of all airport-surface operations that controllers could use to spot potential collisions. The FAA planned to commission the system in about a month. ASDE-X was first tested by the FAA in June 2003 at General Mitchell International Airport in Milwaukee, Wisconsin. The system was declared ready for national deployment several months later. (See February 29, 2004; December 5, 2007.)

20070815 August 15, 2007: FAA Administrator Marion Blakey assembled a meeting of over 40 aviation leaders to brainstorm short-term remedies for reducing runway incursions. The one-day meeting involved senior FAA officials and industry executives. Blakey asked the meeting participants to consider solutions in four areas: cockpit procedures, airport signage and markings, air traffic procedures, and technology. The aviation community agreed to a five point short-term plan:

* Within 60 days, teams of FAA, airport operators, and airlines would begin safety reviews at the airports where wrong runway departures and runway incursions were the greatest concern.

* Within 60 days, disseminate information and training across the entire aviation industry.

* Within 60 days, accelerate the deployment of improved airport signage and markings at the top 75 airports, well ahead of the June 2008 mandated deadline.

* Within 60 days, review cockpit procedures and air traffic control clearance procedures.

* Implement a voluntary self-reporting system for all air traffic organization safety personnel, such as air traffic controllers and technicians.

* By focusing new procedures and technology on mid- to long-term goals, maximize situational awareness, minimize pilot distractions, and eliminate runway incursions. (See June 24, 2008.)

20070830 August 30, 2007: FAA selected ITT Corporation as the prime contractor for the Automatic Dependent Surveillance — Broadcast (ADS-B) system. Under the terms of the approximately $1.8 billion contract, ITT would build the ADS-B ground stations and would own and operate the equipment. FAA would pay subscription charges to ITT for the transmission of ADS-B broadcasts to suitably equipped aircraft and air traffic control facilities. Along with air traffic displays, ADS-B would provide pilots graphical weather information, terrain maps, and flight information that would include temporary flight restrictions and notices to airmen. The system would alert controllers and pilots alike to the precise location of aircraft, enabling them to negotiate more direct flight routes that would enhance airspace efficiency, reduce delays, and – most importantly – improve safety. (See July 1, 2002; October 2, 2007.)

20070831 August 2007: The Federal Labor Relations Authority (FRLA) issued its rulings on three unfair labor practice complaints filed by the National Air Traffic Controllers Association (NATCA) in April, July, and September 2006. The charges related to the negotiation and implementation of the contract. FRLA concluded that there was no merit to NATCA's claims, FAA had bargained in good faith, and the agency's implementation of the contract was lawful. (See April 3, 2006; December 2007.)

20070904	September 4, 2007: FAA approved collection of almost $1.3 billion of Passenger Facility Charge (PFC) revenue at Chicago O'Hare International Airport to finance various projects, including new runways and a runway extension associated with the O'Hare Modernization Program at Chicago, Illinois.
20070905	September 5, 2007: FAA issued a final decision for redesigning the New York, New Jersey, and Philadelphia metropolitan area airspace as part of efforts to reduce delays, fuel consumption, aircraft emissions, and noise. FAA held more than 120 public meetings in five states to complete the environmental planning process. The airspace redesign involved a 31,000-square-mile area over New York, New Jersey, Pennsylvania, Delaware, and Connecticut with a population of 29 million residents. Twenty-one airports were included in the study.
20070913	September 13, 2007: Marion Blakey left FAA after serving her five-year term. Robert Sturgell became acting administrator. (See September 13, 2002; September 24, 2007; October 23, 2007; February 7,2008.)
20070918	September 18, 2007: FAA dedicated the new air traffic control tower at Washington Dulles International Airport. The new facility, which had become operational about two months before, supplanted a tower that had been in service since the airport opened in 1962.
20070920	September 20, 2007: FAA told airlines it planned to impose a new "level 2" international designation on New York's Kennedy and Newark airports – a classification that would require carriers to supply their summer schedules by October 11. This earlier deadline would apply to flights coming to the area between March 9 and November 1, although FAA would accept schedules that coincided with the International Air Transport Association scheduling season of March 30 through October 25. Level 2 airports were defined by IATA as facilities "where there is considerable potential for congestion at some periods . . . which is amenable to resolution by voluntary cooperation between airlines." New York's LaGuardia and Chicago O'Hare were the only U.S. airports designated as level 3.
20070924	September 24, 2007: Ruth Leverenz, FAA assistant administrator for centers and regions, became acting deputy administrator. (See September 13, 2007.)
20070926	September 26, 2007: House aviation subcommittee Chairman Jerry Costello (D-IL) accused FAA of not acting aggressively enough to prevent airline over scheduling, and suggested the focus by the agency and airlines on the Next Generation Air Transportation System (NextGen) air traffic control system was a red herring. The chairman said he was pleased, however, FAA asked airlines to supply their summer schedules in advance for New York Newark and Kennedy airports. (See June 13, 2007; March 10, 2008.)

20070930 September 30, 2007: FAA announced it had accepted early delivery of a crucial en route air traffic control system from manufacturer Lockheed Martin. The En Route Automation Modernization (ERAM) system had passed all FAA requirement tests. The next phase of operational testing would be primarily conducted by FAA at the William J. Hughes Technical Center. FAA stressed the government acceptance milestone was achieved within budget and ahead of time. ERAM would replace the current host system at the 20 air route traffic control centers. (See June 30, 2003.)

20071001 October 1, 2007: Henry P. Krakowski became the FAA ATO COO, replacing Russ Chew who left the agency in February. Krakowski came to the FAA from a 29-year career at United Airlines. (See February 23, 2007.)

20071002 October 2, 2007: FAA proposed an initial set of aircraft avionics requirements designed to enable the transition to the next generation satellite-based air transportation system. The proposal would require all aircraft flying in the nation's busiest airspace to have satellite-based avionics by 2020 so air traffic controllers could use the satellite-based Automatic Dependent Surveillance — Broadcast (ADS-B) system to track them. Aircraft not flying in controlled airspace would not be required to have ADS-B avionics. The proposed rule was open to public comment for 90 days, and was scheduled to become final by late 2009. The proposed compliance date of 2020 would give the industry more than ten years to equip aircraft with ADS-B avionics. (See August 30, 2007; March 10, 2008; May 27, 2010.)

20071019 October 19, 2007: FAA announced the expansion of Wide Area Augmentation System (WAAS) coverage into Canada and Mexico, increasing capacity at thousands of general aviation airports across the North American continent. WAAS had already improved the accuracy and integrity of Global Positioning System satellite signals, and provided highly precise approaches that could be used regardless of the weather. Nine new international wide-area reference stations were brought online under the expansion. The Canadian locations included Goose Bay, Gander, Winnipeg, and Iqaluit. The Mexican locations included Mexico City, Puerto Vallarta, Merida, Tapachula, and San Jose del Cabo. Cooperation on the expansion project was carried out with Canadian and Mexican aviation authorities under the auspices of the North American Aviation Trilateral Agreement. (See March 24, 2006.)

20071023 October 23, 2007: The White House announced its intention to nominate Robert Sturgell for a five-year term as FAA Administrator. (See September 13, 2007.)

20071025 October 25, 2007: FAA announced that 23 schools were now participating in the agency's air traffic Collegiate Training Initiative (CTI) program, part of a broader effort by the agency to recruit, train, and hire controllers. CTI schools were accredited to offer a non-engineering aviation degree in aviation programs. To the original 14 CTI institutions, FAA added nine schools: Arizona State University; Community College of Baltimore County (Maryland); Florida Community College-Jacksonville; Green River Community College (Washington); Lewis University (Illinois); Kent State University (Ohio); the Metropolitan State College of Denver (Colorado); Middle Georgia College, and the University of Oklahoma. These nine schools joined fourteen others that renewed their commitment to the program, which was first established in 1990 at Minneapolis Community and Technical College.

20071108 November 8, 2007: FAA issued a final rule amending regulations for the certification and operation of transport category airplanes to mitigate conditions that put airlines at risk for wire failures, smoke and fire. The new rule enhances the safety requirements for design, installation and maintenance of electrical wiring in new and existing airplane designs, including the following:

* new maintenance, inspection, and design criteria for airplane wiring to address conditions that put transport airplanes at risk of wire failures, smoke and fire;

* requirements for those aerospace manufacturers holding type certificates, which indicate airworthiness, to analyze the zones of their airplanes for the presence of wire and for the likely accumulation of contaminant materials before 2010;

* requirements for those aerospace manufacturers holding type certificates to develop maintenance and inspection tasks to identify, correct, and prevent wiring conditions that introduce risks to continued safe flight, and that these tasks are included in new Instructions for Continued Airworthiness for wiring and compatible with Instructions for Continued Airworthiness for fuel tank systems while avoiding duplication or redundancy, by 2010; and

* requirements for operators of transport-category airplanes to incorporate maintenance and inspection tasks for wiring into their regular maintenance programs before 2012.

20071115 November 15, 2007: President George W. Bush announced an agreement between the FAA and DoD that temporarily released military airspace for Thanksgiving holiday travel. Under the airspace agreement, the Department of the Navy released airspace, above 24,000 feet, off the east coast from Maine to Florida. FAA was allowed to use that airspace from 4 p.m. eastern standard time on Wednesday, November 21, to 6 a.m. eastern standard time on Monday, November 26. The Navy continued to control airspace off the east coast below 23,000 feet for training operations.

20071130 November 30, 2007: FAA completed tests of a new systems designed to improved the detection of microburst winds in dry climates at the Las Vegas airport. During the tests, the light detection and ranging, or LIDAR, detected more than half of all possible types of windshear. LIDAR uses pulses of infrared light in a narrow scanning beam, which bounces off dust particles in the air. The frequency of the pulse changes according to the speed of the particles. Microbursts are commonly associated with thunderstorms, and more than 40 airports in the U.S. have TDWR systems that detect most microbursts during rain. However, these systems do not pick up microbursts that occur when rain does not reach the ground, particularly in high, dry climates or between mountains. Four major airports have these conditions - Las Vegas, Denver, Phoenix, and Salt Lake City.

20071130 November 2007: FAA and Japanese aviation officials signed a data exchange agreement to coordinate air traffic operations between the two countries. The agreement was the result of meetings by the Informal Pacific Air Traffic Control Coordination Group (of which Japan and the United States are members) that recommended improvements to air traffic flow management through data sharing. Japan was the first country to participate in the program. (See April 27, 2009.)

20071205 December 5, 2007: In a report issued on this date, GAO faulted FAA's approach to reducing runway incursions and increasing ramp safety. GAO said FAA efforts had been uncoordinated, largely because its 2002 runway safety action plan had not been updated – although agency policy called for an update every two to three years. GAO also expressed concern about the deployment of the airport surveillance detection system known as ASDE-X, saying it was skeptical FAA could meet its revised target of deploying ASDE-X to 35 major airports by 2011. GAO echoed National Transportation Safety Board concerns about controller fatigue, particularly the number of controllers working six-day weeks. (See August 8, 2007.)

20071206 December 6, 2007: FAA announced plans to form an aviation rulemaking committee to develop requirements for aircraft landing distance performance assessments prior to landing. FAA said the takeoff/landing performance assessment aviation rulemaking committee would establish: airplane certification and operational requirements (including training) for takeoff and landing operations on contaminated runways; landing distance assessment requirements, including minimum landing distance safety margins, to be performed at the time of arrival; and, standards for runway surface condition reporting and minimum surface conditions for continued operations.

20071210 December 10, 2007: Effective this date, FAA amended regulations for certification and operation of transport category airplanes. These changes improved the design, installation, and maintenance of airplane electrical wiring systems and aligned the amended requirements as closely as possible with those affecting fuel tank system safety. The rule organized and clarified design requirements for wire systems by moving existing regulatory references to wiring into a single section of the regulations specifically for wiring and by adding new certification rules. Under the rule, manufacturers had to complete FAA-approved instructions for new wiring-related maintenance and inspection tasks within 24 months for existing airplanes. U.S. scheduled air carriers and foreign airlines operating U.S.-registered aircraft had to develop maintenance and inspection programs for wiring based on the manufacturers' instructions within 39 months, and had to update those programs, as needed, for subsequent aircraft modifications. (See October 6, 2005.)

20071213 December 13, 2007: President Bush signed into law the Fair Treatment for Experienced Pilots Act (Public Law 110-135). The law amended federal transportation law to allow a pilot who has attained 60 years of age to serve as a passenger airline pilot until the age of 65, provided that a pilot who has attained age 60 may serve as pilot-in-command on international flights only if there is another pilot in the flight crew who has not yet attained 60 years of age. It also prohibited subjecting pilots to different medical examinations and standards on account of age unless to ensure an adequate level of safety in flight, except that no person who has attained 60 years of age may serve as a pilot unless such person has a first-class medical certificate. In addition, the act required air carriers to: (1) continue to provide FAA-approved training to pilots, with specific emphasis on initial and recurring training and qualification of pilots who have attained 60 years of age; and (2) evaluate, every six months, the performance of pilots who have attained 60 years of age through a line check of such pilot. (See January 30, 2007.)

20071219	December 19, 2007: Department of Transportation Secretary Mary Peters announced new measures to reduce airline delays over the holiday season as well as new actions designed to reduce congestion in the New York area starting next summer. The agreement among the major airlines serving John F. Kennedy International Airport, caps the number of flights at either 82 or 83 per hour, depending on the time of day. The hourly caps took effect on March 15, 2008, and would remain in place for two years. Airlines were now allowed to shift their flights to times of the day when the airport has unused capacity, allowing 50 more flights per day than the previous summer. The Secretary also directed the FAA to enter into negotiations to set hourly caps at Newark International Airport. Effective this date, Peters also announced new take-off patterns at Newark and Philadelphia International Airport that allowed aircraft to fan out after take off, which provided more options for aircraft waiting to depart. Peters also authorized the appointment of an aviation “czar” to serve as director of the newly-created FAA New York Integration Office. The new office will coordinate regional airspace issues and all projects and initiatives addressing problems of congestion and delays in New York. In addition, the Secretary formed a new federal advisory task force to help airlines and airports better coordinate when unexpected weather strands passengers on tarmacs and in airports. She also authorized the FAA to exercise liberal use of overtime to make sure facilities are staffed to handle the surge in traffic, and placed a moratorium on nonessential maintenance through the holidays so controllers can focus on traffic.
20071231	December 2007: According to a memo sent by FAA to its managers, the agency submitted its "second settlement proposal" to the National Air Traffic Controllers Association (NATCA) in the last week of December. Former NATCA President John Carr reportedly sent the memo to Aviation Daily. The memo describes the offer as including several pay adjustments as well as additional projects that will further benefit the work force. A FAA spokeswoman confirmed that a new proposal was sent to NATCA. FAA said the agency had been in discussions with the union about a settlement since last spring, and the latest offer is part of this process. NATCA said FAA gave it a deadline of March 31, 2008, to accept the proposal. (See August 2007.)
20071231	December 31, 2007: In Calendar Year 2007, public agencies collected $2.8 billion in Passenger Facility Charge revenue.

2008

20080114 January 14, 2008: Department of Transportation Secretary Mary Peters proposed a new national policy that would make it easier for overcrowded airports to add capacity and reduce delays by encouraging airlines to spread their flights more evenly throughout the day. Under the proposal, the Department of Transportation encouraged congested airports in New York and across the country to move away from the decades-old practice of charging aircraft landing fees based on the weight of the plane and begin charging fees based on the time of the day. As a result, airports would be able to spread traffic more evenly throughout the day – allowing them to serve more passengers and reduce delays. The proposed policy changes would be open to public comment for 45 days before being finalized. Changes to FAA's Policy on Airport Rates and Charges would also allow airport operators to include the cost of projects designed to expand capacity in the new landing fees. Currently, airports could only include those costs after the projects had been completed. (See December 19, 2007; March 10, 2008.)

20080124 January 24, 2008: FAA announced that, as a result of the runway safety summit held in August 2007, FAA and industry had made significant accomplishments in achieving the goals of their runway safety plan. As of this date, 71 of the targeted 75 medium and large airports had completed upgrades to airport painted markings. The remaining four were expected to have their markings upgraded well in advance of the June 2008 deadline. Sixty-two small airports had also upgraded their markings, 121 airports planned to complete the work by the end of the year, 25 airports planned to enhance markings in 2009, and 22 airports had expressed interest, but had not yet provided a target completion date. FAA proposed extending the enhanced taxiway centerline requirement at all certificated airports. FAA published a draft change to Advisory Circular (AC) 150/5340-1J, Standards for Airport Markings, in late December 2007. Comments were due by February 26, 2008. In addition, FAA completed a runway safety review of 20 airports based on runway incursion data and wrong runway departure data. FAA also issued a draft change to AC 150/5210-20, Ground Vehicle Operations on Airports, in late December 2007. Public comments were due by February 26, 2008. (See August 15, 2007; January 15, 2009.)

20080128 January 28, 2008: FAA finalized a special federal aviation regulation (SFAR) that created new pilot training, experience, and operating requirements to increase the safety of the widely used Mitsubishi MU-2B airplane. The final rule mandated a comprehensive standardized pilot training program for the aircraft. The regulation required use of a standardized cockpit checklist and the latest revision of the airplane flight manual. MU-2B operators also must have a working autopilot onboard except in certain limited circumstances. Owners and operators had one year to comply with the SFAR.

20080206 February 6, 2008: FAA announced plans to deploy new air traffic tower simulators to 19 locations around the country to help train new air traffic controllers in an interactive operational environment that provided realistic scenarios. The new simulators would be deployed over the next 18 months at the following towers: John F. Kennedy (NY); Los Angeles; Oakland (CA); Washington Reagan National; Dallas Fort-Worth; Atlanta; Denver; Philadelphia; Cincinnati; Cleveland; San Antonio; Memphis (TN); Honolulu; Orlando (FL); Charlotte (NC); Minneapolis; Boston; and Newport News (VA). FAA planned to install an additional six simulators at the FAA Academy in Oklahoma City.

20080207 February 7, 2008: The Senate Committee on Commerce, Science and Transportation held a confirmation hearing for acting FAA Administrator Robert Sturgell to become the FAA administrator. After the hearing, New Jersey's two democratic senators, Frank Lautenberg and Bob Menendez, placed a hold on the nomination, preventing it from going to the Senate floor for a vote. Both said they had concerns about safety and traffic issues with FAA. Both senators were also unhappy with FAA changes to the New York area airspace, saying the changes added to noise pollution. Sturgell had been acting FAA Administrator since Marion Blakey's term expired. Bush nominated Sturgell to be her replacement October 23. (See September 13, 2007; January 16, 2009.)

20080214 February 14, 2008: Department of Transportation Secretary Mary Peters announced an Open Skies agreement between the United States and Australia that eliminated restrictions on air services for the carriers of both countries. Under the agreement, U.S. and Australian airlines could select routes and destinations based on consumer demand, without limitations on the number of flights that could fly between the two countries. The agreement also removed restrictions on capacity and pricing, and provided opportunities for cooperative marketing arrangements, including code-sharing, between participating carriers. With this agreement, Australia became the 90th U.S. Open-Skies partner. The United States signed its first open skies agreement with The Netherlands on October 14, 1992. (See February 29, 1996; March 13, 2008.)

20080215 February 15, 2008: In an effort to streamline the job application process for air traffic controllers, FAA announced establishment of consolidated screening and testing centers to provide one stop shopping for prospective new employees. The first center was set up at the regional FAA office in New York in January 2009. (See March 7, 2007; September 9, 2008.)

20080226 February 26, 2008: FAA announced plans to install runway status lights at Los Angeles International Airport. Using a series of red lights embedded in the pavement, the system would warn pilots if it were unsafe to cross over or enter a runway. Under an agreement between FAA and Los Angeles World Airports (LAWA), pilots would begin testing runway status lights in early 2009. LAWA would fund the system at an estimated cost of $6 million. FAA would install, test, evaluate and maintain the system. (See October 16, 2008.)

20080228 February 28, 2008: President Bush signed into law legislation extending FAA authorization and the existing aviation excise taxes through June 30, 2008. The legislation, H.R.5270, also renewed FAA's airports contract spending authority, which had expired at the end of 2007, freeing up Airport Improvement Program dollars. The president signed the legislation one day before the agency's authorization was due to expire. (See February 14, 2007.)

20080306 March 6, 2008: FAA initiated an action to collect a $10.2 million civil penalty from Southwest Airlines for operating 46 airplanes without performing mandatory inspections for fuselage fatigue cracking. Subsequently, the airline found that six of the 46 airplanes had fatigue cracks. From June 18, 2006 to March 14, 2007, FAA alleged that Southwest Airlines operated 46 Boeing 737 airplanes on 59,791 flights while failing to comply with a September 8, 2004, airworthiness directive that required repetitive inspections of certain fuselage areas to detect fatigue cracking. FAA alleged that after Southwest Airlines discovered it had failed to accomplish the required repetitive inspections, between March 15, 2007 and March 23, 2007, it continued to operate those same 46 airplanes on an additional 1,451 flights. The amount of the civil penalty reflected the serious nature of those deliberate violations. Southwest Airlines had 30 days from receipt of FAA’s civil penalty letter to respond to the agency. (See March 18, 2008.)

20080307 March 7, 2008: The National Aeronautic Association (NAA) announced that the Automatic Dependent Surveillance-Broadcast (ADS-B) Team of public and private sector groups had been selected as the recipient of the 2007 Robert J. Collier Trophy. The team included the FAA, Aircraft Owners and Pilots Association, Air Line Pilots Association, Cargo Airline Association, Embry-Riddle Aeronautical University, ITT Corporation, Lockheed Martin Corporation, NASA, MITRE Corporation, UPS, ACSS, among others. NAA formally presented the Collier Trophy on June 12. The Collier Trophy is awarded annually for the greatest achievement in aeronautics or astronautics in America. (See October 2, 2007; November 24, 2008.)

20080310 March 10, 2008: FAA mandated significant upgrades to aircraft cockpit voice and flight data recorders – improvements that would enable investigators to retrieve more data from accidents and incidents requiring investigation. Under the final rule, which affected manufacturers and operators of airplanes and helicopters with 10 or more seats, all voice recorders had to capture the last two hours of cockpit audio instead of the current 15 to 30 minutes. The new rule also required an independent backup power source for the voice recorders to allow continued recording for nine to eleven minutes if all aircraft power sources were lost or interrupted. Voice recorders were required to use solid state technology instead of magnetic tape, a medium shown to be vulnerable to damage and loss of reliability. Airplanes (but not helicopters) operating under Parts 121, 125, or 135 of FAA regulations had to retrofit some equipment by April 7, 2012. The rule also mandated these enhancements on all newly built aircraft and helicopters after April 7, 2010. (See September 26, 2007; October 2, 2007; April 5, 2010.)

20080310 March 10, 2008: Airlines serving Newark Liberty Airport agreed to temporarily cap and spread flights for two years at a level that would allow 30 more flights per day than during the previous summer. The cap, which would apply to both domestic and international flights, would allow an average of 83 flights per hour during peak periods and would go into effect in early May. (See January 14, 2008; April 16, 2008.)

20080310 March 10, 2008: Department of Transportation Secretary Mary Peters announced that the Department would move key elements of NextGen – the new satellite-based aviation system designed to enhance efficiency and minimize delays across the nation – from design to delivery in 2008. She said Florida would serve as the test-bed for the new system beginning the summer of 2008, with the introduction of NextGen at Daytona Beach. A new descent technique would also help to save fuel, and reduce noise and emissions in Miami. In addition, Automatic Dependent Surveillance — Broadcast (ADSB) technology would help increase the capacity of airspace along Florida's Gulf Coast by allowing planes to fly more closely together without compromising safety. (See September 26, 2007; May 8, 2008.)

20080313 March 13, 2008: Department of Transportation Secretary Mary Peters announced the United States and Croatia had concluded an Open Skies agreement that would establish free trade in aviation services between the two countries. Under the new agreement, airlines from both countries would be allowed to select routes and destinations based on consumer demand, without limitations on the number of U.S. or Croatian carriers that could fly between the two countries or the number of flights they could operate. The agreement contained no restrictions on capacity and pricing, and provided opportunities for cooperative marketing arrangements, including code-sharing, between U.S. and Croatian carriers. The agreement offered U.S. cargo carriers special benefits by allowing them to carry air cargo between Croatia and third countries without requiring a stop in the United States. Croatia became the 91st U.S. Open Skies partner. The United States drafted similar agreements with Kenya on May 30, 2008; Laos on October 3, 2008; Armenia on October 7, 2008; and Japan on December 11, 2009. (See February 14, 2008; April 23, 2010.)

20080318 March 18, 2008: FAA directed federal aviation inspectors to reconfirm that commercial carriers operating within the United States had complied with all airworthiness directives (ADs). By March 28, 2008, inspectors had to complete review of ten ADs per fleet. In total, they completed a review of ten percent of the directives applicable to a fleet. (See March 6, 2008; April 2, 2008.)

20080331 March 31, 2008: FAA and the National Air Traffic Controllers Association (NATCA) signed an agreement to create an Air Traffic Safety Action Program (ATSAP) designed to foster a voluntary, cooperative, non-punitive environment for the open reporting of safety of flight concerns by FAA employees. Under the ATSAP, all parties would have access to safety information that might not otherwise be obtainable. This information would be analyzed and used to develop skill enhancement or system corrective action to help solve safety issues. The agreement would be in place for 18 months and would begin at several targeted facilities. If both parties determined the program successful after a comprehensive review and evaluation, they would make it a continuing program. (See September 22, 2010.)

20080402 April 2, 2008: FAA acting Administrator Robert Sturgell announced that a safety audit had found U.S. air carriers in compliance with 99 percent of the nearly 2,400 airworthiness directives (ADs) sampled by safety inspectors between March 13 and March 28, 2008. Sturgell also announced plans to (1) enable inspectors to raise their concerns quickly and at a higher level; (2) toughen ethical standards for inspectors to prevent conflicts of interest; (3) enhance airline safety by improving the clarity and coordination of directives issued by FAA to air carriers; (4) require reporting of voluntary disclosures to be made by senior airline officials; and (5) speed up the expansion of our comprehensive aviation safety database. The announced actions included:

* Developing a Safety Issues Reporting System (SIRS) to be implemented by April 30, 2008, which would provide employees an additional mechanism to raise safety concerns if they felt they were not receiving the necessary response from supervisory and management personnel.

* Initiating, by June 30, a rulemaking project to address ethics policies that would enhance inspector post-employment restrictions.

* Working with manufacturers and air carriers to develop a system to improve the clarity of ADs to ensure effective implementation by the industry.

* Requiring senior airline officials submit reports detailing compliance deviations under the Voluntary Disclosure Reporting Program.

* Accelerating the expansion of the Aviation Safety and Analysis Sharing Program. (See March 18, 2008; September 22, 2010.)

20080408 April 8, 2008: Department of Transportation Secretary Mary Peters announced the selection of Marie Kennington-Gardiner as director of the New York Integration Office, created as part of a coordinated effort to address chronic aviation delays in the New York region. As the newly appointed aviation “czar,” Kennington-Gardiner would coordinate regional airspace issues and all projects and initiatives addressing problems of congestion and delays in New York. (See December 19, 2007.)

20080408 April 8, 2008: FAA announced it had transitioned to a new telecommunications network that would increase network reliability and save hundreds of millions of dollars over the next decade. The FAA Telecommunications Infrastructure (FTI) network replaced the legacy telecommunications network known as the Leased Interfacility National Airspace System Communications (LINCS). (See November 2, 1993; December 8, 2009.)

20080416 April 16, 2008: The Department of Transportation finalized changes to its so-called bumping rule, which doubled the limit on compensation airlines had to pay passengers involuntarily bumped from their flight. Under the new rule, fliers who were involuntarily bumped would receive up to $400 if rescheduled to reach their destination within two hours of their original arrival time or four hours for international flights, and up to $800 if they were not rerouted within that timeframe. The new rule covered flights operated with aircraft seating 30 people or more; the previous rule covered flights with 60 seats or more. In addition, Secretary Peters announced new air traffic measures designed to help cut summer delays. The first involved new and greater flexibility for aircraft to use alternative routes in the sky to avoid severe weather. FAA would also open a second westbound route for aircraft, akin to adding another interstate highway lane in the sky. Peters said improving the passenger experience was central to the Department's efforts and that she wanted to hear directly from travelers about how they were affected by problems in the air travel industry. She launched a series of Aviation Consumer Forums to hear from consumers and help educate air travelers about their rights and responsibilities. The first Department-hosted forum was scheduled for April 17 in Miami, to be followed by public meetings in Chicago and San Francisco.

20080416 April 16, 2008: Under a supplemental rulemaking, the Department of Transportation proposed two market-based options to ease congestions at New York's LaGuardia Airport that would require a limited number of flights operated by the airlines in a given day, known as slots, to be made available through an auction process. Under the first option, all air carriers would be given up to 20 slots a day for the 10 year life of the rule. Meanwhile, over the next five years, 8 percent of the additional slots currently used by an airline would be made available to any carrier via an auction. An additional 2 percent of the slots would be retired to help cut the record delays at the airport. Proceeds from the auction would be invested in new congestion reduction and capacity improvement initiatives in the New York region. The second option also gave airlines permanent access to up to 20 slots a day for a 10 year period. Beyond those flights, 20 percent of the slots currently used by the airlines would be made available over the next five years to all airlines through an auction. Under this option, the carriers would retain the net proceeds of the auction. (See March 10, 2008; May 18, 2008.)

20080418

April 18, 2008: Department of Transportation Secretary Mary Peters announced measures to improve FAA safety inspection program and minimize travel disruptions caused when airlines abruptly ground aircraft. She created an external review team and tasked them with developing recommendations within 120 days on how FAA could do a better job safeguarding the skies. Team members included J. Randolph Babbitt, William McCabe, Malcolm Sparrow, Ambassador Edward Stimpson, and Carl Vogt. Peters also said FAA would begin implementing a new program to track the inspections and alert key personnel whenever a safety inspection was overdue. FAA would begin requiring senior level officials within the agency's field offices to be accountable for accepting voluntary safety disclosures from airlines and for revising ethics rules to require a cooling-off period before FAA inspectors could work for an airline they oversaw or interacted with while employed at the agency. In addition, FAA would establish a new National Safety Inspection Review team to conduct focused and comprehensive safety reviews. (See April 2, 2008; September 5, 2008.)

20080505

May 5, 2008: FAA issued an advisory circular (AC 120-96) highlighting the best practices for use by helicopter emergency medical service (HEMS) operators in establishing their control centers and training their specialists. (See November 14, 2008.)

20080507

May 7, 2008: The Department of Transportation issued a new rule giving people with disabilities additional protections against discrimination when they traveled by air. The rule strengthened the Air Carrier Access Act (ACAA) of 1990 and extended it to foreign airlines operating a flight that began or ended in the United States. It applied to U.S. air carrier operations worldwide. The new rule also made it easier for passengers to use medical oxygen during flights by requiring airlines to allow the use in the passenger cabin of portable oxygen concentrators that met applicable safety, security, and hazardous materials requirements for safe use aboard aircraft. The Department sought public comment through a supplemental notice of proposed rulemaking (SNPRM) about whether airlines should be required to provide medical oxygen to passengers upon request. The SNPRM also addressed subjects such as accessibility of airline web sites, automated ticketing kiosks, and in flight entertainment systems. The rule provided greater accommodations for passengers with hearing impairments by requiring airlines to include easy-to-read captions for the hearing-impaired in its safety and informational videos. In addition, airlines had to provide the same information to hearing- and vision-impaired passengers that it provided to other passengers in airport terminals or on the aircraft – such as information on boarding, flight delays, schedule changes, weather conditions at the flight's destination, connecting gate assignments, checking and claiming of baggage, and emergencies. The rule did not specify how carriers should make this information available to passengers who are deaf or hard of hearing. The new rule would be effective in one year to give carriers enough time to implement its provisions.

20080508	May 8, 2008: FAA announced it had created a new position within the Air Traffic Organization. The new senior vice president for NextGen and Operations Planning, Victoria Cox, managed the organizations she previously managed as the vice president for Operations Planning, as well as the Joint Planning and Development Office. (See October 1, 2007; October 3, 2008.)
20080518	May 18, 2008: FAA proposed to temporarily limit scheduled flight operations at Newark Liberty International Airport to ease persistent congestion and delays during peak operating hours and to accommodate the projected increase in flight delays during the summer. After evaluating the written comments submitted to the public docket, FAA issued a final order, which took effect on June 20, 2008. (See April 16, 2008; August 5, 2008.)
20080529	May 29, 2008: Three Iraqi nationals became Baghdad's first tower-certified air traffic controllers after completing months of rigorous instruction based on international aviation safety standards and overseen by a FAA-led team. At a ceremony on May 29, the Director General of Iraq's Civil Aviation Authority Sabeeh Al Shebany and Department of Transportation Secretary Mary Peters presented the controllers with their certifications at Baghdad International Airport's air traffic control facilities.
20080603	June 3, 2008: FAA dedicated a new 228-foot-tall airport traffic control tower at the Huntsville International Airport. The facility had become operational at 6 a.m., Sunday, May 4. The $18.5 million tower complex was located one mile south of the previous facility in a gated, fenced complex between the parallel runways. The project consisted of the control tower and a 10,500-square foot base building and included a generator building and parking. The new 800 square foot TRACON more than doubled the size of the old TRACON.
20080616	June 16, 2008: Acting Administrator Robert Sturgell announced the elimination of flight caps at Chicago's O'Hare International Airport. He said O'Hare had been designated as an International Air Transport Association (IATA) Level 2 airport, a designation that required air carriers to continue providing their schedules six months in advance. In 2004, FAA capped arrivals at O'Hare at 88 during most hours of the day to reduce congestion at the world's second-busiest airport. (See August 18, 2004; October 30, 2008.)
20080617	June 17, 2008: FAA transitioned the traffic flow management system from the Department of Transportation's John. A. Volpe National Transportation Systems Center in Cambridge, MA, to its William J. Hughes Technical Center in Atlantic City, NJ. FAA dedicated the system, which predicts, detects, and handles airspace congestion problems, on August 7, 2008.
20080626	June 26, 2008: The air traffic control tower at St. Louis Downtown Airport, located in Cahokia, IL, began operations.
20080630	June 30, 2008: Acting Administrator Robert Sturgell and Antonio Tajani, European Commissioner for Transport, European Commission, signed a safety agreement to further enhance safety cooperation. The agreement:

	* Provided for reciprocal acceptance of safety findings in aircraft design and manufacturing, continued airworthiness, and repair station oversight;
	* Broadened the scope of potential future United States acceptance of European aeronautical products from all member states of the European Union, beyond the current 14 that have individual agreements with the United States;
	* Promoted safety and harmonization by providing for regulatory cooperation, particularly in rulemaking, and safety data exchange; and
	* Established a bilateral oversight board to manage implementation of the agreement, consult on urgent matters, and provide a forum for discussion of approaches to safety issues.
	The agreement would take effect upon an exchange of diplomatic notes, after each party to the agreement had completed ratification procedures and final arrangements regarding fees and charges.
20080718	July 18, 2008: The engineered materials arresting system installed at Chicago's O'Hare International Airport, Chicago, IL, successfully stopped a Mexicana Airlines Airbus A320 aircraft that overran the runway. (See July 17, 2006; January 19, 2010.)
20080721	July 21, 2008: FAA issued a final rule that specified within two years all new transport category aircraft must include technology designed to significantly reduce the risk of center fuel tank fires. In addition, passenger aircraft built after 1991 must be retrofitted with technology designed to keep center fuel tanks from catching fire. The rule did not direct the adoption of specific inerting technology, but established a performance-based set of requirements that set acceptable flammability exposure values in tanks most prone to explosion or required the installation of an ignition mitigation means in an affected fuel tank. The cost of installing the new technology would range from $92,000 to $311,000 per aircraft, depending on its size. The U.S. aircraft to be retrofitted included approximately 2,730 aircraft belonging to the A320 family of 900 airplanes, 50 A330s, 965 Boeing 737s, 60 Boeing 747s, 475 Boeing 757s, 150 Boeing 767s and 130 Boeing 777s. (See December 10, 2007.)
20080805	August 5, 2008: Department of Transportation Secretary Mary Peters announced plans to hold an auction for the right to operate a single roundtrip flight at Newark Liberty Airport under a five-year lease. Eos Airlines, which had two slots, had filed for bankruptcy leaving FAA with control of the slots. The winner of the auction would be able to operate at Newark daily, arriving at 5:00 to 5:30 pm every day but Monday and Saturday, when the arrival would be from 12:00 to 12:30 pm, and departing daily from 7:30 to 8:00 pm. The funds generated from the auction would be used to reduce delays and enhance capacity at New York-area airports. The terms and conditions of the lease and details of the auction process were made available on FAA's procurement web site for public comment until August 18. After taking into consideration all comments on both the lease and the auction process, a final notice and invitation to bid would be published August 25 and the auction would take place on September 3. (See May 18, 2008; October 9, 2008.)

20080825 August 25, 2008: The U.S. aviation system received a score of 91 out of 100 in a safety audit conducted by the International Civil Aviation Organization (ICAO), a United Nations agency that oversaw international civil aviation. The U.S. score, which was well above the global average of 56, reflected U.S. compliance with over 9,500 international safety standards. FAA led U.S. preparations for the audit, which also included the National Transportation Safety Board, the U.S. Coast Guard and the Pipeline and Hazardous Materials Safety Administration. The team of ICAO auditors conducted a comprehensive audit of all aspects of civil aviation in the United States, including aircraft operations and airworthiness, accident investigation, navigation services, airports, personnel licensing, and legislation and regulations. ICAO established the Universal Safety Oversight Audit Program in 1995 at the urging of the United States. (See July 30, 2010.)

20080905 September 5, 2008: FAA inspectors found an overall compliance rate of 98 percent in more than 5,600 audits of airworthiness directives at U.S. air carriers, acting Administrator Robert Sturgell announced. Alleged noncompliance in the audits fell into five categories: instances where the air carrier could not show compliance with the AD; cases where additional records were needed to prove compliance; cases where the air carrier did the work, but had to apply for an alternate means of compliance approval; situations where the AD work was not done, but the airplane was not flying; and other minor discrepancies not involving ADs. All noncompliance issues were corrected before the airplanes flew again, and FAA was investigating to determine if enforcement actions were warranted. Sturgell also provided a progress report on the safety initiatives announced in April 2008:

* Safety Issues Reporting System — Complete

* Voluntary Disclosure Reporting Program Approvals — Complete

* Ethics Policy Enhancement — In progress; proposed rule expected next summer

* Aviation Safety and Analysis Sharing Program expansion — In progress

* Independent Review Team — Complete; with Secretary Peters for review

* Airworthiness Directive Review — In progress (See April 18, 2008; September 10, 2008.)

20080909 September 9, 2008: FAA awarded a $437 million contract to Raytheon to support air traffic controller training. The 10-year award replaced separate contracts to support initial training at the FAA Academy in Oklahoma City and to support ongoing training in air traffic facilities nationwide. The consolidation into a single contract gave Raytheon the ability to support the entire lifecycle of controller training. This, in turn, would allow FAA to provide more integrated training activities throughout a controller's career. (See February 15, 2008.)

20080910 September 10, 2008: Department of Transportation Secretary Mary Peters directed FAA to implement 13 new safety recommendations made by the team tasked with reviewing the U.S. aviation safety system. Peters said the team's report confirmed the basic approach to aviation safety in the United States had generated unprecedented results, but that there were ways to make the system even safer. In response to a key recommendation by the review team, Peters committed FAA to have guidance in place by the end of the year to ensure that airworthiness directives and their deadlines were fully understood by all appropriate FAA officials and airlines. The review team also recommended new safeguards against FAA personnel developing "overly cozy" relationships with the airlines they regulated through regular audits of field offices where the managerial team had been in place for more than three years. Consistent with recommendations to improve FAA's safety culture, the Secretary also charged the agency with developing, and having underway within six months, a new training program for safety managers and inspectors. (See September 5, 2008; November 20, 2009.)

20081003 October 3, 2008: ATO announced a realignment of its senior leadership into four business units, each led by a senior vice president. The new ATO executive council now included Chief Operating Officer Hank Krakowski and four Senior Vice Presidents for Operations, Strategy and Performance, Finance and NextGen and Operations Planning. Previously the EC included the nine different service unit vice presidents. (See May 8, 2008.)

20081009 October 9, 2008: The Bush Administration committed $89 million over the next eight years to expand capacity at John F. Kennedy International Airport, Department of Transportation Secretary Mary Peters announced. She unveiled new rules designed to lower fares, increase consumer choices, and improve service for air travelers using John F. Kennedy, Newark, and LaGuardia airports. The Secretary said the Department would sign what is known as a "Letter of Intent" committing the federal government to invest the money between 2009 and 2016 to fund a series of taxiway improvements at the airports. The taxiway improvements included constructing two new taxiways, extending or improving six others, and creating new high-speed exit taxiways. The construction work was expected to begin in 2009 and completed by 2014. (See August 5, 2008; October 10, 2008.)

20081010 October 10, 2008: FAA published final rules to address congestion at New York area airports by auctioning a limited number of landing and take-off slots at each of the region's three airports. Under the final rules, airlines operating at Kennedy, Newark, and LaGuardia would receive a 10-year ownership of the vast majority of FAA slots they currently operated. However, the new rules called for a gradual auctioning over the next five years of up to 10 percent of the landing and take off slots these airlines currently operated free of charge. The rules lowered the hourly operating cap at LaGuardia airport from 75 slots per hour to 71 slots per hour by "retiring" an additional five percent of the slots currently being used. Existing airlines at LaGuardia would keep 988 of the slots they currently operated. The remaining 113 slots would be made available over the next five years by auction to airlines interested in starting new service or expanding current operations at the airport. Under the rules for Kennedy and Newark, existing airlines would keep 1,035 of the slots they operated at Kennedy and 1,154 of the 1,245 slots they operated at Newark. The remaining 89 slots at Kennedy and 91 slots at Newark would be made available over a five-year period for airlines wishing to expand their current operations or start new services at either of the airports. (See October 9, 2008; December 8, 2008.)

20081016 October 16, 2008: FAA awarded a three-year contract to Sensis Corp. of Syracuse, NY, to install runway status lights at 22 major U.S. airports. Runway status lights improved runway safety at busy airports by warning pilots when it was unsafe to cross or enter a runway. The initial award, valued at $131 million, included two one-year options to install the lights at additional airports, for a total contract value of $215 million. The runway status lights used the ASDE-X surveillance data to operate. As part of the initial contract, runway status lights would be deployed at Hartsfield-Jackson Atlanta International Airport; Baltimore Washington International Thurgood Marshall Airport; Boston Logan International Airport; Charlotte Douglas International Airport; Chicago O'Hare International Airport; Dallas-Fort Worth International Airport; Denver International Airport; Detroit Metropolitan Wayne County Airport; Washington Dulles International Airport; Fort Lauderdale Hollywood International Airport; Houston Intercontinental Airport; New York John F. Kennedy International and LaGuardia Airports; Las Vegas McCarran International Airport; Los Angeles International Airport; Minneapolis-St. Paul International Airport; Newark Liberty International Airport; Orlando International Airport; Philadelphia International Airport; Phoenix Sky Harbor International Airport; San Diego International Airport; and Seattle Tacoma International Airport. (See February 26, 2008; July 29, 2010.)

20081030 October 30, 2008: The U.S. Department of Justice approved the merger between Delta Air Lines and Northwest Airlines. The airlines had announced the merger on April 14, 2008. (See December 31, 2009.)

20081030 October 30, 2008: FAA extended the expiration date of Special Federal Aviation Regulation (SFAR) No. 105 through October 31, 2010. The action maintained the reservation system established for unscheduled arrivals at Chicago O'Hare International Airport following the expiration of limitations imposed on scheduled operations at the airport. (See June 16, 2008.)

20081103	November 3, 2008: Acting Administrator Robert Sturgell announced FAA had signed a $9 million agreement with two companies to accelerate the testing and installation of NextGen technology. Teams led by Honeywell and Aviation Communications & Surveillance Systems (ACSS) would help FAA test and develop technology that would be used on an airport's airfield to detect and alert pilots of potential safety issues. Two Honeywell test planes and pilots from JetBlue Airways and Alaska Airlines would provide operational input from concept development through flight evaluation and demonstration. Honeywell would conduct work at Seattle Tacoma International and Snohomish County Paine Field airports. Under the agreement, Honeywell would receive approximately $3 million. ACSS, which planned to work with US Airways to develop standards, flight demonstrations, and prototypes, would receive approximately $6 million. Twenty Airbus A330 aircraft would be equipped with cockpit displays, transponders, antennas, wiring kits, and Class 2 electronic flight bags. Demonstrations would be conducted at Philadelphia International Airport. (See March 10, 2008; December 8, 2008.)
20081111	November 11, 2008: The new Indianapolis International Airport opened. Construction funds came from $120 million in federal grants, airport revenue bonds, and passenger head taxes. More than 1,100 residences were bought for the $220 million project, which started in 1987. Parallel runways opened in the 1990s, and after 9/11, the terminal design changed to accommodate improved security. A new air traffic control tower and TRACON opened in 2006.
20081114	November 14, 2008: FAA issued a notice in the Federal Register advising operators of important mandatory changes to helicopter emergency medical service (HEMS) flights. The agency encouraged the use of night vision goggles and terrain awareness warning systems. Consistent with NTSB recommendations, all HEMS operators had to comply with Part 135 weather minimums, including repositioning flights with medical crew onboard. FAA also provided greater access to weather reporting facilities, and requiring the flight crew to determine a minimum safe altitude and obstacle clearance prior to each flight. Operators had to comply no later than February 22, 2009. (See May 7, 2008; January 12, 2009.)
20081118	November 18, 2008: President George W. Bush issued Executive Order 13479, Transformation of the National Air Transportation System. Among other requirements, the executive order reiterated the national importance of establishing the Next Generation Air Transportation System (NextGen) and mandated the Secretary of Transportation to establish a support staff to support NextGen activities. (See November 3, 2008; January 26, 2009.)
20081120	November 20, 2008: New runways at Washington Dulles, Chicago O'Hare, and Seattle-Tacoma International Airports opened. The new runways would allow for an additional 330,000 take-offs and landings each year. The runways, built with $643 million in federal airport improvement program funds, also would help reduce delays at the three airports.
20081120	November 20, 2008: FAA commissioned the North Airport Traffic Control Tower at Chicago's O'Hare International Airport.

20081124	November 24, 2008: FAA commissioned an automatic dependent surveillance-broadcast (ADS-B) system testbed at Daytona Beach Airport under a joint program with Embry-Riddle Aeronautical University, Lockheed Martin, and other partners. The system provided real-time graphical weather displays from the National Weather Service, along with critical flight information. (See March 7, 2008; November 23, 2009.)
20081204	December 4, 2008: FAA broke ground for its new air traffic control system command center near Warrenton, VA, which the agency hoped to open in 2011. The 63,000-squarefoot building that would house FAA's new command center would share a site with the Potomac TRACON, a consolidated approach and departure control facility serving Washington, Baltimore, and Richmond-area airports. FAA awarded a $22 million contract to Corinthian Construction Company of Arlington, VA, to build the new center. (See April 15, 1994.)
20081208	December 8, 2008: The United States Court of Appeals for the District of Columbia Circuit stayed the FAA final rules issued on October 10 concerning slot auctions at three New York area airports. January 22, 2009, the Air Transport Association requested Secretary of Transportation Ray LaHood withdraw the final rule in light of the court's stay. While the regulations were already incorporated into the Code of Federal Regulations, they no longer had force and effect because of the court's ruling. (See October 10, 2008; December 22, 2008.)
20081208	December 8, 2008: FAA signed a wide-ranging agreement with fractional jet operator NetJets to run some test programs in various parts of the U.S. by equipping some of the 550 to 600 aircraft it manages with NextGen avionics. (See November 3, 2008; September 21, 2009.)
20081215	December 15, 2009: FAA issued a launch site license to the New Mexico Spaceport America. The 16,000-acre site was the first launch facility built for passenger spaceflights. Construction work on the site, situated 40 miles north of Las Cruces, was scheduled to open in 2010. (See July 2, 2004; July 1, 2010.)
20081216	December 16, 2008: FAA published a final rule making permanent the air defense identification zone around Washington, DC. The rule established a 15-nautical-mile radius Flight Restricted Zone and an outer Special Flight Rules Area 30 nautical mile radius around Washington National Airport. (See July 26, 2007.)
20081217	December 17, 2008: FAA approved the charter of a new Aviation Rulemaking Committee (ARC) created for the purpose of consulting with FAA regarding the cost of providing air traffic control and related services to overflights, and providing advice and recommendations to the administrator regarding the future level of FAA's overflight fees. (See June 21, 2002; September 28, 2010.)
20081220	December 20, 2008: Continental Airlines Flight 1404, on a scheduled flight from Denver to Houston, crashed while attempting to takeoff from runway 34L. During its takeoff roll, the aircraft veered to the left, exited the runway, went down a ravine, and caught fire. Thirty-eight occupants were injured, 5 critically.

20081221 December 21, 2008: Scaled Composites and Virgin Galactic successfully flew the WhiteKnightTwo on its first flight from Mojave, CA. The aircraft made a 59-minute flight, taking off from Mojave and reaching a maximum altitude of 16,000 feet. The twin-boomed aircraft, powered by four Pratt & Whitney Canada PW308A turbofans, had been undergoing a series of high-speed taxi and brake tests in the run-up to the first flight. (See April 6, 2007.)

20081222 December 22, 2008: Department of Transportation Secretary Mary Peters announced that FAA would work with carriers to reduce voluntarily scheduled operations at New York's LaGuardia Airport from 75 to an average of 71 per hour as part of continued efforts to address chronic congestion at the delay-prone airport. The airport ranked just 28th for on-time departure performance over the first 10 months of 2008. Data showed that lowering the hourly cap on operations from 75 to 71 could reduce delays by up to 41 percent, saving up to $178 million in delay related costs per year. (See December 8, 2008; March 11, 2009.)

2009

20090107	January 7, 2009: FAA certified Embraer's largest executive jet, the Lineage 1000. The aircraft won type certification in December 2008 from Brazil's National Civil Aviation Agency as well as the European Aviation Safety Agency.
20090112	January 12, 2009: FAA issued instructions (Notice 8900.63) to agency inspectors with oversight of HEMS operators to find out how many operators had adopted FAA-recommended best practices. With reports in from all 74 operators surveyed, the percentages that had adopted various programs were:
	* Decision-making skills and risk assessment programs – 94 percent
	* Response to FAA guidance on Loss of Control (LOC) and Controlled Flight Into Terrain (CFIT) avoidance – 89 percent
	* Integration of operation control center – 89 percent
	* Installation of Flight Data Recorders and devices that can re-create a flight. – 11 percent
	* TAWS equipage – 41 percent
	* Use of radar altimeters – 89 percent (See November 14, 2008; October 12, 2010.)
20090115	January 15, 2009: United Airlines Flight 1549 struck a flock of birds after departing New York LaGuardia Airport en route to Charlotte, NC. Captain Chesley "Sully" Sullenberger successfully ditched the aircraft into the Hudson River. All onboard survived.
20090115	January 15, 2009: FAA awarded Thales ATM a contract to install and test a low-cost ($500,000 or less) ground surveillance system that the agency planned for small- and medium-size airports. Kansas-based Thales ATM was among several companies that submitted proposals in response to FAA's August 2007 Call to Action to reduce risk of runway incursions. The low-cost system was radar-based and would provide surface movement information to controllers, who in turn would advise flight crews of potential collisions. (See January 24, 2008; July 1, 2009.)
20090116	January 16, 2009: Acting Administrator Robert Sturgell resigned with the change in presidential administrations. Lynne Osmus, acting deputy administrator, became the acting administrator. (See February 7, 2008; March 27, 2009.)
20090120	January 20, 2009: Barrack Obama became the 44th President of the United States. January 23, 2009: Ray H. LaHood became the 16th U.S. Secretary of Transportation.

20090126 January 26, 2009: Following up on an executive order signed on November 18, 2008, the Department of Transportation named Karlin Toner, Ph.D., as the chief multiagency liaison for the NextGen air traffic control modernization effort. Toner would serve as the senior staff adviser to the transportation secretary regarding NextGen and would be the senior liaison between the Department and the different agencies involved in the Joint Planning and Development Office. Toner was detailed to the secretary's office from FAA, where she recently had been selected to head the human factors research and engineering group. Toner had 15 years of experience at NASA. She served as NASA's director of airspace systems programs from August 2006 to December 2008 and had held several other NASA positions in aerospace and aeronautical planning and research. (See November 18, 2008; see February 26, 2010.)

20090130 January 30, 2009: Delta signed a memorandum of understanding with the Air Line Pilots Association and FAA to reinstate its Aviation Safety Action Program (ASAP) for Delta pilots. Under the program, pilots could report safety concerns without repercussions. Delta said it had formal ASAP programs in place for its dispatchers and technical operations employees, and other safety reporting programs for flight attendants and ground employees. The airline also planned to continue ASAP programs currently covering pre-merger Northwest pilots, dispatchers, and load planners. (See January 14, 2000; September 22, 2010.)

20090202 February 2, 2009: FAA called for the establishment of a new industry-based task force charged with developing an industry consensus for the midterm goals of the NextGen system. FAA asked the task force, the NextGen Mid-Term Implementation Task Force (TF5), carried out through RTCA, to complete its recommendations by August 2009. FAA charged the task force with:

* identifying a specific set of operation capabilities that would be fully deployed and could deliver benefits by 2018;

* determining steps necessary to reach the capabilities, including procedures, training, technical risk mitigation and policy changes;

* recommending interim milestones;

* suggesting ways to accelerate operational benefits, including preferred means to accommodate "mixed-equipage" operations; and

* providing strategies to ensure that the intended benefits are delivered and to encourage operators to equip their aircraft. (See September 9, 2009.)

20090203 February 3, 2009: Aviation Partners Boeing (APB) delivered Continental Airlines' first winglet-equipped Boeing 757-300. Continental became the first U.S. major airline to order blended winglets when it ordered the modification for both retrofit on 757-200 and for production line fit on 737 Next Generations in April 2004. FAA awarded APB a supplemental type certificate for the winglet upgrade on the 757-200 in May 2005, and APB officially launched the retrofit for the 757-300 in June 2008 when it won orders from Continental and German tour operator Condor.

20090210 February 10, 2009: FAA suspended Miami-based AAR Landing Gear Services' repair station certificate because the company had not followed manufacturer maintenance manual procedures for conducting liquid penetrant exams, shot peening, and cadmium plating before returning to service a variety of airliner landing gear parts. The agency said AAR employed defective processes and followed defective inspection protocols. FAA had inspected the Miami facility in early July 2008, and on July 16 had issued a written notice of alleged discrepancies, to which AAR said it responded with corrective actions on July 29. On November 7, AAR and FAA representatives met to discuss the company's responses and its corrective actions. On January 30, FAA sent the company a follow-up letter identifying items that required further attention. AAR said it was in the process of responding to that request when it received the suspension notice. AAR had until February 20 to appeal the Emergency Order of Suspension. (See February 17, 2009.)

20090212 February 12, 2009: Colgan Air (Continental Connection) Flight 3407, on a scheduled passenger flight from Newark, NJ, crashed while on approach to the Buffalo/Niagara International Airport. The twin-engine turboprop had been cleared for the ILS approach to runway 23 in icy weather conditions when it disappeared from radar approximately 5 miles northeast of the airport. Soon after, it was reported that the aircraft had crashed into a residence and exploded in flames near the Buffalo suburb of Clarence Center. All 49 passengers onboard the aircraft and one person on the ground were killed. (See June 9, 2009.)

20090217 February 17, 2009: AAR Landing Gear Services and FAA entered into a consent order that terminated the agency's February 10 emergency suspension of the company's repair station certificate. As a result of the consent order, AAR Landing Gear's certificate now was in a state of "voluntary surrender." To get it back, the company had to adhere to a list of agreed upon stipulations, including revisions to its manuals and procedures, stepped up non-destructive testing of components, greater FAA oversight, and enhanced training for its staff. (See February 10, 2009.)

20090223 February 23, 2009: Seattle-Tacoma International Airport became the first U.S. facility to install and test avian radar. The risk of bird strikes to aircraft was highlighted on January. 15 when Canada geese caused a dual-engine failure on US Airways Flight 1549. The FAA-funded research project at the airport is a collaborative effort with the University of Illinois. Sea-Tac's experimental avian radar, installed on top of the airport office building, was used to monitor bird movements in the vicinity of the airport. The project was aimed at determining how airport operators could use the technology as an early warning detection system against aircraft-bird collisions. (See January 15, 2009.)

20090302 March 2, 2009: FAA reached a settlement agreement with Southwest Airlines to resolve outstanding enforcement actions. Under the agreement, Southwest Airlines would pay a $7.5 million civil penalty that would double to $15 million if the airline did not accomplish specific safety improvements outlined in the agreement. The agreement stemmed from a $10.2 million civil penalty FAA proposed on March 6 against Southwest Airlines for operating 46 airplanes on 59,791 flights without performing mandatory inspections for fuselage fatigue cracking. (See March 6, 2008.)

20090305 March 5, 2009: FAA announced it had no plans to ground Eclipse Aviation's EA500 despite the company's recent announcement it had entered Chapter 7 liquidation. With all Eclipse operations (including certification, production, service centers, training centers, and dealers) closed, FAA issued a special airworthiness information bulletin (SAIB) that requested owners and operators of the Eclipse Model EA500 aircraft to report all unsafe conditions that may exist on the aircraft to its Airplane Certification Office in Fort Worth, Texas. Owners and operators could still fly their aircraft as long as it was in an airworthy condition in accordance with 14 CFR Part 91.

20090309 March 9, 2009: FAA announced it had convened a new Aviation Rulemaking Committee to develop recommendations for comprehensive Safety Management System (SMS) rulemaking. The ARC initially comprised 12 people from across the aviation industry, but membership was expected to grow as working groups formed to delve into the application of SMS to the various industry sectors. FAA planned to release an advanced notice of proposed rulemaking later in the year that would provide a starting point for the SMS rule. The ARC had a three-year charter. (See October 7, 2010.)

20090311 March 11, 2009: The President signed Public Law 111–8, Omnibus Appropriations Act, 2009. That legislation provided several departments within the executive branch, including the Department of Transportation, with the funds to operate until the end of the fiscal year. The law contained a provision that prohibited the Secretary of Transportation from promulgating regulations or taking any action regarding the scheduling of airline operations that involved auctioning rights, permission to conduct airline operations at such an airport, or withdrawing a right or permission to conduct operations at such an airport (except when the withdrawal was for operational reasons or pursuant to the terms or conditions of such operating right or permission). The prohibition was limited to the fiscal year. (See December 22, 2008; May 14, 2009.)

20090327	March 27, 2009: The White House announced its intention to nominate J. Randolph Babbitt for FAA administrator. The President nominated Babbitt on May 11 and the Senate confirmed him on May 21, 2009. He was sworn in as FAA's sixteenth administrator on June 1, 2009. Babbitt came to FAA from Oliver Wyman, an international management consulting firm where he served as partner. A veteran pilot, Babbitt had been a member of the agency's Management Advisory Council since 2001. He was the founding partner of Eclat Consulting in 2001, and served as President and CEO until Oliver Wyman acquired Eclat in 2007. Babbitt began his aviation career as a pilot, flying 25 years for Eastern Airlines. A skilled negotiator, he served as President and CEO for the Air Line Pilots Association (ALPA). Lynne Osmus, who had served as acting administrator, became the acting deputy administrator. (See January 16, 2009; December 4, 2009.)
20090427	April 27, 2009: FAA announced a bilateral aviation safety agreement between the United States and Japan that allowed for the reciprocal certification of aircraft and aviation products. (See November 2007.)
20090514	May 14, 2009: FAA proposed to rescind the October 10, 2008, final rules regarding slots at three New York airports citing the impact of the Omnibus Appropriations Act on the rule and the state of the economy in general. The comment period closed June 15, 2009. FAA received five sets of comments, all of which supported rescission of the rule. October 9, 2009, FAA rescinded the final rules. (See March 11, 2009; June 17, 2009.)
20090518	May 18, 2009: Mediation aimed at ending an ongoing contract dispute between FAA and the National Air Traffic Controllers Association (NATCA) began. Both parties signed a process agreement to move the negotiations forward. The agreement provided for extensive mediation sessions and for binding resolution of any unresolved issues, guaranteeing a new collective bargaining agreement between the parties. Jane Garvey, former FAA administrator, led the mediation as part of a three-member panel that also included Richard Bloch and George Cohen. (See December 2007; August 13, 2009.)
20090609	June 9, 2009: Department of Transportation Secretary Ray LaHood and FAA Administrator Randy Babbitt announced they had ordered FAA inspectors to immediately focus attention on training programs to ensure that regional airlines were complying with federal regulations. Secretary LaHood and Administrator Babbitt also announced plans to gather representatives from the major air carriers, their regional partners, aviation industry groups, and labor in Washington, DC, on June 15 to participate in a "call to action" to improve airline safety and pilot training. (See February 12, 2009; June 15, 2009.)

20090611 June 11, 2009: FAA announced the runway status light system was operational at Los Angeles International Airport. The system used a series of red lights embedded in the pavement to warn pilots if it was unsafe to enter or cross a runway, or to take off. Los Angeles World Airports paid for the $7 million system and FAA installed the system and would maintain it. The runway status light system was connected to the airport's ground radar system. The lights turn red if the ground radar detected a potential conflict between two aircraft or an aircraft and a vehicle. Los Angeles was the third U.S. airport to get runway status lights following several years of successful tests at Dallas-Fort Worth and San Diego. It was the first airport to have the lights installed on multiple runways. (See October 16, 2008.)

20090615 June 15, 2009: Senior officials from U.S. airlines, pilot unions, and FAA agreed on several major actions to improve safety programs and pilot training. Secretary of Transportation Ray LaHood and FAA Administrator Randy Babbitt hosted the "Call to Action" to identify immediate steps to strengthen and improve pilot hiring, training, and testing practices at airlines that provided regional service as well as at the country's major air carriers. The participants agreed on best practices for pilot record checks that would result in a more expansive search for all records available from a pilot's career. The airlines and unions would also review existing pilot training programs over the next several months to see how they could be strengthened. Airline and union officials recommended developing pilot mentoring programs that would expose less experienced pilots to the safety culture and professional standards practiced by more senior pilots. The programs could pair experienced pilots from the major airlines with pilots from their regional airline partners. To address concerns about pilot fatigue, Babbitt said FAA would start the rulemaking process to rewrite the rules for pilot flight and duty time to incorporate recent scientific research about the factors that lead to fatigue. Babbitt also asked airlines to operate safety reporting systems, such as Flight Operations Quality Assurance (FOQA) and the Aviation Safety Action Program (ASAP), to provide better data about safety issues. In addition, FAA and industry representatives agreed to hold as many as 10 similar meetings throughout the country to assure that every carrier and pilot union had the opportunity to commit to these actions and to identify and share best practices. (See December 14, 1995; November 23, 2009.)

20090617 June 17, 2009: FAA published a proposal to extend an earlier order limiting operations at New York's LaGuardia Airport to 71 scheduled operations and three unscheduled operations per hour from October 2009 to October 2010. This would allow the agency to consider options with regard to managing congestion at the airport on a longer-term basis. Options under consideration would provide a means for carriers to either commence or expand operations at the airport, thereby introducing more competition and service options to benefit the traveling public. (See May 14, 2009.)

20090618 June 18, 2009: Controllers at the Salt Lake City Air Route Traffic Control Center (ARTCC) were the first to control operational traffic with the new the En Route Automation Modernization System (ERAM). The goal of the operational test was to place ERAM in limited use during a period of low air traffic activity and record how the technology worked in an operational environment. ERAM, which will replace the HOST system, processed flight surveillance data, provided communications, and generated display information to air traffic controllers. It also supplied crucial flight plan information to terminal radar and control tower facilities. When fully operational at the ARTCC, the new technology will provide additional capabilities, such as the ability to process data from 64 radars instead of the current 24. (See September 30, 2007.)

20090701 July 1, 2009: FAA awarded Northrop Grumman Corp. a contract for the first U.S. installation of low-cost ground surveillance (LCGS) systems designed to help manage airport surface traffic. The contract was for an initial LCGS system at the Reno, NV, airport and included options for additional airports. (See January 15, 2009; December 1- 3, 2009.)

20090803 August 3, 2009: FAA announced new certification standards for transport category airplanes. Under the certification standards, new transport aircraft designs had to use one of three methods to detect icing and to activate the airframe ice protection system:

* An ice detection system that automatically activated or alerted pilots to turn on the ice protection system;

* A definition of visual signs of ice buildup on a specified surface (e.g., wings) combined with an advisory system that alerted the pilots to activate the ice protection system; or

* Identification of temperature and moisture conditions conducive to airframe icing that would tip off pilots to activate the ice protection system.

The standards further required that after initial activation, the ice protection system must operate continuously, automatically turn on and off, or alert the pilots when the system should be cycled. (See April 26, 2007.)

20090808 August 8, 2009: Nine people died when a sightseeing helicopter collided with a small plane near New York City. The single-engine Piper had taken off from Teterboro Airport in NJ, and the helicopter, operated by Liberty Helicopter, had taken off from West 30th Street in Manhattan. Wreckage from both aircraft landed in the Hudson River. (See August 14, 2009.)

20090811 August 11, 2009: Department of Transportation Secretary Ray LaHood announced he had asked the Department's General Counsel to look into whether Continental Airlines or its regional partner, Express Jet Airlines, had violated any laws in connection with the lengthy tarmac delay on their Houston-Minneapolis flight on August 8 during which passengers were stuck in a small plane for seven hours. August 21, 2009, Secretary LaHood announced the Department had concluded the preliminary phase of its investigation and had determined that the Express Jet crew was not at fault. While the crew of the ExpressJet flight did all it could to assist the passengers, more senior personnel within Continental or ExpressJet should have become involved in an effort to obtain permission to take the passengers off the plane. The representative of Mesaba – the only carrier able to assist Continental at the airport – had said at the time of the incident that the airport was closed to passengers, apparently because there was no one from the Transportation Security Administration (TSA) available to screen passengers. In fact, TSA procedures allowed passengers to get off the plane, enter the terminal and re-board without being screened again as long as they remained in a sterile area. LaHood said the Department was considering the appropriate actions to take as it completed the investigation, which it expected to conclude within a few weeks. The Department would use the findings from this investigation to formulate a final rule that would provide better protection for airline passengers. (See November 24, 2009; April 29, 2010.)

20090813 August 13, 2009: FAA announced that mediation with NATCA had resulted in a draft labor agreement. NATCA members had 45 days to ratify the many agreed-upon issues in the proposed agreement. The five issues decided by arbitrators, including compensation, were not subject to ratification by members. The agreement provided employees with greater flexibility in their work schedules, childcare support, a new grievance review process, and a variety of other gains. At the same time, it gave FAA flexibility to more effectively redeploy labor to congested airports using controller incentive pay. The agreement also restored a more equitable pay standard, to benefit new hires as well as veterans nearing retirement. The associated costs would be phased in over the three years of the contract. (See May 18, 2009.)

20090814 August 14, 2009: FAA convened a New York Airspace Working Group to review current operating procedures over the Hudson and East Rivers and recommend safety improvements within two weeks. August 28, the working group made a number of recommendations to FAA. One of the most significant recommendations suggested dividing the airspace into altitude corridors that separated aircraft flying over the river from those operating to and from local heliports or seaplane bases. This new exclusionary zone would be comprised of three components:

* It would establish a uniform "floor" for the Class B airspace over the Hudson River at 1,300 feet, which would also serve as the "ceiling" for the exclusionary zone.

* Between 1,300-2,000 feet, it would require aircraft to operate in the Class B airspace under visual flight rules under positive air traffic control, and to communicate on the appropriate air traffic frequency.

	* Between 1,000-1,300 feet, it would require aircraft using VFR to use a common radio frequency for the Hudson River. Aircraft operating below 1,000 feet would use the same radio frequency.
	In addition, new pilot operating practices would require pilots to use specific radio frequencies for the Hudson River and the East River, would set speeds at 140 knots or less, and would require pilots to turn on anti-collision devices, position or navigation equipment and landing lights. Existing common practices that took pilots along the west shore of the river when they were southbound and along the east shore when they were northbound would become mandatory. In addition, pilots would be required to have charts available and to be familiar with the airspace rules. September 2, 2009, FAA announced it would modify the airspace over the Hudson River by revising procedures to create safe, dedicated operating corridors for all the aircraft that fly at lower altitudes around Manhattan. It also would propose standardized procedures for fixed-wing aircraft leaving Teterboro to enter the Class B airspace over the Hudson River or the exclusionary zone. (See August 8, 2009; November 16, 2009.)
20090817	August 17, 2009: FAA issued a notice of proposed rulemaking to update FAR Part 23 standards to accommodate new light and very light jets. The proposal would eliminate the exemptions, special conditions, and equivalent levels of safety findings the agency used to certify this class of aircraft under Part 23. The proposal would codify the current practice of certificating multiengine turbojets weighing up to and including 19,000 pounds.
20090909	September 9, 2009: The RTCA NextGen Mid-Term Implementation Task Force submitted its final report to FAA. The Task Force developed a short list of actionable operational capability recommendations in five problem areas (Surface, Runway Access, Metroplex, Cruise, Access to NAS) and two cross-cutting areas (Data Communication Applications and Integrated ATM). The Task Force also made four overarching recommendations that were considered essential to the implementation of any of the prior recommendations. (February 2, 2009; January 31, 2010).
20090912	September 12, 2009: A new wide-area multilateration surveillance system began operating at Colorado's Yampa Valley-Hayden, Craig-Moffat, Steamboat Springs, and Garfield County Regional-Rifle airports. The system allowed air traffic controllers to track aircraft not covered by radar in remote, mountainous regions. FAA and the Colorado Department of Transportation shared the cost of the system. (See May 4, 2010.)

20090917 September 17, 2009: As part of a strategy to reduce emerging aviation risks using national safety data, FAA's Office of Aviation Safety established a new Accident Investigation and Prevention Service that integrated the work of the Offices of Accident Investigation and Safety Analytical Services. The new organization consolidated resources so FAA could better understand current and emerging risks across the aviation community through the use of data from accident and incident investigations, historical accidents and incidents, and voluntarily submitted information from industry programs, such as Aviation Safety Action and Flight Operational Quality Assurance programs. FAA also announced the creation of a new Office of Audit and Evaluation. The office, which reported to the FAA Chief Counsel, consolidated into one organization:

* Administrator's Hotline — gave FAA employees a way to get high-level management attention for concerns unresolved by established procedures.

* Aviation Safety Hotline — provided an outlet for anyone to express concerns about unsafe aviation situations without fear of reprisal.

* Public Inquiry Hotline — responded to and referred inquiries from the public about aviation matters.

* Whistleblower Protection Hotline — coordinated with the Department of Labor on safety disclosures made by private-sector aviation workers, including government contractors.

* Safety Issues Reporting System — established in April 2008, allowed Office of Aviation Safety employees to report safety issues they believed had not been addressed by other FAA processes. (See June 21, 2010.)

20090921 September 21, 2009: FAA announced approval of Honeywell's Smartpath Precision Landing System, which provided precise navigation service based on the global positioning system (GPS). The first U.S.-approved system would be located in Memphis, TN, and would become operational in early 2010. The ground-base system (GBAS) augmented GPS to provide precision approach guidance to all qualifying runways at an airport. It monitored the GPS signals to detect errors and augment accuracy by transmitting correction messages to aircraft via local radio broadcast. GBAS would initially supplement the legacy Instrument Landing Systems used at airports. FAA's NextGen Implementation Plan had identified GBAS as an enabler for descent and approach operations to increase capacity at crowded airports. The Honeywell system was approved for precision approach operations down to 200 feet above the surface. (See December 8, 2008.)

20091016 October 16, 2009: FAA published new regulations for manufacturers of aircraft and aviation products that updated and standardized FAA requirements to better align them with the global manufacturing environment. The regulations, which would become effective on April 14, 2010, included:

* Standardization of quality control system requirements for all aviation manufacturers.

* Updated export requirements to facilitate global acceptance and documentation of parts.

	* Standardization of part marking and identification requirements so they aligned with other countries' rules, and consolidation of the requirements into one regulation.
	* Updated and standardized language in the regulations for production approvals, exporting, and identification marking.
20091019	October 19, 2009: FAA officials helped break ground on the Aviation Research Technology Park located adjacent to the William J. Hughes Technical Center in Atlantic City, NJ. The Park will be a high-technology aviation facility that provides the opportunity for FAA partners to perform research, development, testing, integration and verification of new technologies for the Next Generation Air Transportation System. The seven-building, multi-million dollar project is expected to create more than 2,000 jobs.
20091027	October 27, 2009: FAA announced revocation of the licenses of two Northwest Airlines pilots who overflew their destination airport on October 21, 2009, while operating Flight 188 from San Diego to Minneapolis. Air traffic controllers and airline officials repeatedly tried to reach them through radio and data contact, without success. The emergency revocations cite violations of a number of Federal Aviation Regulations. Those included failing to comply with air traffic control instructions and clearances and operating carelessly and recklessly.
20091116	November 16, 2009: FAA finalized a rule, effective November 19, 2009, that separated low-altitude, local aircraft flights over the Hudson River from flights transiting through the river airspace. The rule required pilots to follow safety procedures that were previously recommended, but were not mandatory. In a new Special Flight Rules Area over the Hudson and East Rivers, pilots must:
	* Maintain a speed of 140 knots or less.
	* Turn on anti-collision and aircraft position/navigation lights, if equipped.
	* Self-announce their position on specific radio frequencies.
	* Carry current charts for the airspace and be familiar with them.
	* In an exclusion zone below 1,300 feet over the Hudson River, announce their aircraft type, position, direction, and altitude at charted mandatory reporting points and stay along the New Jersey shoreline when southbound and along the Manhattan shoreline when northbound.
	* When transiting the Hudson River, fly at an altitude between 1,000 feet and 1,300 feet and operate local flights in the lower airspace below 1,000 feet.
	The rule also incorporated provisions of an October 2006 Notice to Airmen (NOTAM) that restricted fixed-wing aircraft in the exclusion zone over the East River to seaplanes landing or taking off on the river or those specifically approved by FAA air traffic control. (See August 14, 2009.)

20091120 November 20, 2009: FAA published a notice of proposed rulemaking proposed limits on airlines and other operators from hiring FAA safety inspectors and their managers for two years after those employees left the agency. The proposed rule would prohibit air carriers, flight schools, repair stations, and other certificated organizations from employing or contracting with former FAA inspectors and managers to represent them in agency matters if the former employee had any direct oversight of the certificate holder in the preceding two years. The rule would apply to anyone who owned or managed a fractional ownership program aircraft. The rule would not keep operators from hiring former inspectors to serve in other positions (e.g., aircraft dispatcher, flight attendant, maintenance technician, pilot, or training instructor) as long as they did not represent the operator in FAA matters. (See September 10, 2008; December 21, 2009.)

20091123 November 23, 2009: FAA issued a notice of proposed rulemaking that would require scheduled airlines to either retrofit their existing fleet with ice-detection equipment or make sure the ice protection system activated at the proper time. For aircraft with an ice-detection system, FAA proposed that the system alert the crew when they should activate the system. The system would either turn on automatically or pilots would manually activate it. For aircraft without ice-detection equipment, the crew would activate the protection system based on cues listed in their airplane's flight manual during climb and descent, and at the first sign of icing when at cruising altitude. FAA estimated the rule would cost operators about $5.5 million to implement. Operators would have two years after the final rule was effective to make the changes. The proposed rule would apply only to in-service aircraft with a takeoff weight less than 60,000 pounds, because most larger airplanes already had equipment that met the requirements. (See April 26, 2007; December 1, 2009.)

20091123 November 23, 2009: FAA withdrew a previously published notice of proposed rulemaking (NPRM) designed to establish consistent and clear duty period limitations, flight time limitations, and rest requirements for domestic, flag, supplemental, commuter, and on-demand operations. In June 2009, FAA had chartered the Flight and Duty Time Limitations and Rest Requirements Aviation Rulemaking Committee, comprised of labor, industry, and FAA representatives, to develop recommendations for a rule based on current fatigue science and a thorough review of international approaches to the issue. (See June 15, 2009; August 1, 2010.)

20091123 November 23, 2009: FAA began using its automatic dependent surveillance-broadcast (ADS-B) system in Louisville, marking the first time U.S. controllers used this technology for handling traffic on a continuous basis. (See November 24, 2008; January 12, 2010.)

20091124 November 24, 2009: The Department of Transportation levied a civil penalty of $100,000 against Continental Airlines and ExpressJet Airlines for their roles in causing the passengers on board Continental Express Flight 2816 to remain on the aircraft at Rochester International Airport for an unreasonable period of time (7 hours) on August 8, 2009. In addition, the Department assessed a civil penalty of $75,000 against Mesaba Airlines, which provided ground handling for the flight, for its role in the incident. (See August 11, 2009; April 29, 2010.)

20091125 November 25, 2009: Edward Stimpson, one of general aviation's most respected advocates in Washington and founder of the General Aviation Manufacturers Association (GAMA), died at home in Boise, Idaho, from cancer. Stimpson was credited, along with former Cessna Chairman and CEO Russ Meyer, with championing the General Aviation Revitalization Act of 1994, which helped reinvigorate the industry by capping manufacturers' product liability to 18 years. He went on to become chairman of the Flight Safety Foundation (FSF). Stimpson joined FAA at the invitation of then-Administrator Najeeb Halaby and served through much of the 1960s as its congressional liaison. He became head of GAMA shortly after it was founded in 1970 and he led the organization almost continuously for 25 years. President Bill Clinton later nominated Stimpson to represent the U.S. at the International Civil Aviation Organization. He served in that ambassadorial post from 1999-2004, ending his tenure at the United Nations agency as vice president of its Assembly.

20091201 December 1, 2009: FAA issued a final rule, effective February 1, 2010, that prohibited operations with polished frost on the wings and stabilizing and control surfaces of aircraft. Under the final rule, operators were required to remove any frost adhering to critical surfaces prior to takeoff. Additionally, the rule restructured language in parts 91, 125, and 135 to clarify that aircraft must have functioning deicing or anti-icing equipment to fly under IFR into known or forecast light or moderate icing conditions, or under VFR into known or forecast light or moderate icing conditions. (See November 23, 2009; June 29, 2010.)

20091203 December 1-3, 2009: FAA, in cooperation with the American Association of Airport Executives (AAAE) and the MITRE Corporation, held its first International Runway Safety Conference in Washington, DC. Nearly 500 people attended the conference, which focused on ways to reduce and eventually eliminate runway incursions and excursions. (See January 24, 2008.)

20091204 December 4, 2009: FAA Administrator Randy Babbitt announced the retirement of acting deputy administrator, Lynne Osmus, effective January 3, 2009. Effective this day, Osmus returned to her permanent post as assistant administrator for security and hazardous materials and David Grizzle, FAA general counsel, became the acting deputy administrator. (See March 27, 2009; December 8, 2009.)

20091208 December 8, 2009: FAA Administrator Randy Babbitt called for the establishment of a group comprised of both FAA and non-agency members to assess the FAA Telecommunications Infrastructure (FTI) outage that caused widespread air traffic delays across the country. An FTI software configuration problem interrupted automated flight plan processing and other electronic traffic flow management tools for four hours on November 19, 2009. While critical safety systems and radar and communications services were unaffected, controllers and flight data communications specialists had to manually input data, which resulted in delays. The panel was tasked with producing two reports by early 2010: one focused on the outage with suggestions for any immediate changes to the FTI system and the other focused on the FTI architecture as it related to future FAA systems. Panel members included: U.S. Navy Vice Admiral (retired) Nancy Brown, former Joint Staff director of command, control, communications and computer systems; Amr ElSawy, President and CEO of Noblis, a nonprofit science, technology, and strategy organization; Federal Chief Technology Officer Aneesh Chopra; Department of Transportation Chief Information Officer (CIO) Nitin Pradhan; FAA CIO Dave Bowen; and FAA's Air Traffic Control Organization CIO Steve Cooper. (See April 18, 2008; November 12, 2010.)

20091208 December 8, 2009: The White House nominated Michael Huerta to be FAA deputy administrator. The White House had announced its intention to nominate Huerta the day before. Huerta had his own consulting firm, which advised clients on transportation policy, technology, and financing. Until April 2009, Huerta was Group President of the Transportation Solutions Group of Affiliated Computer Services, Inc., a technology services provider supporting transportation agencies worldwide. Before joining ACS, he was a managing director with the Salt Lake Organizing Committee for the Olympic Winter Games of 2002. From 1993 to 1998, Huerta served in two senior positions at the Department of Transportation under President Bill Clinton. He also held senior positions in the cities of San Francisco and New York. Huerta has a master's degree from the Woodrow Wilson School of Public and International Affairs at Princeton University and a bachelor's degree from the University of California at Riverside. He is currently Chairman of the Board of Directors of the Intelligent Transportation Society of America and served as a member of President Obama's transition team for the U.S. Department of Transportation. (See December 4, 2009; June 23, 2010.)

20091209 December 9, 2009: FAA announced a new service to provide the public information about airport delays. The Airport Status and Delays web service, registered on Data.gov, combined FAA information about ground delays, airport closures, ground stops, and arrival or departure delays with local weather data from the National Oceanic and Atmospheric Administration.

20091213	December 13, 2009: An American Airlines Boeing 737's wingtips touched the ground during landing at Charlotte, NC, when the part of the plane's landing gear veered off the runway while touching down in low visibility. On December 22, an American Airlines flight overshot the runway during heavy rain in Jamaica. The Boeing 737 broke into three sections; all passengers survived. On December 24 an American Airlines McDonnell Doulas MD-80's wingtip touched the ground while landing at Austin, Texas. On January 1, 2009, FAA issued a statement saying the Agency would conduct a review of the mishaps to determine if there was a larger issue with the airline.
20091214	December 14, 2009: FAA issued a type certificate for Embraer's Phenom 300 light jet. Brazil certified the aircraft on December 3.
20091215	December 15, 2009: After over two years of delays, Boeing's first new aircraft design in over 10 years, the 787 Deamliner made its maiden flight.
20091221	December 21, 2009: The Department of Transportation announced new rules that prohibited U.S. airlines operating domestic flights from permitting an aircraft to remain on the tarmac for more than three hours without deplaning passengers, with exceptions allowed only for safety or security or if air traffic control advises the pilot in command that returning to the terminal would disrupt airport operations. U.S. carriers operating international flights departing from or arriving in the United States must specify, in advance, their own time limits for deplaning passengers, with the same exceptions applicable. Carriers were required to provide adequate food and potable drinking water for passengers within two hours of the aircraft being delayed on the tarmac and to maintain operable lavatories and, if necessary, provide medical attention. This rule was adopted in response to a series of incidents in which passengers were stranded on the ground aboard aircraft for lengthy periods and also in response to the high incidence of flight delays and other consumer problems. The rule also:
	* Prohibited airlines from scheduling chronically delayed flights, subjecting those who do to DOT enforcement action for unfair and deceptive practices;
	* Required airlines to designate an airline employee to monitor the effects of flight delays and cancellations, respond in a timely and substantive fashion to consumer complaints and provide information to consumers on where to file complaints;
	* Required airlines to display on their website flight delay information for each domestic flight they operate;
	* Required airlines to adopt customer service plans and audit their own compliance with their plans; and
	* Prohibited airlines from retroactively applying material changes to their contracts of carriage that could have a negative impact on consumers who already have purchased tickets. (See November 20, 2009.)

20091225	December 25, 2009: A passenger on Northwest Flight 253 from Amsterdam to Detroit tried to explode a device and was subdued by passengers and crew. The flight landed safety at Detroit where the individual was arrested. On January 3, 2010, the Transportation Security Administration issued new security directives to all United States and international air carriers with inbound flights to the U.S. effective January 4, 2010.
20091231	December 31, 2009: FAA granted Delta Air Lines permission to integrate fully its Northwest Airlines subsidiary's planes and flight crews into its fleet. Authority to fly under a single operating certificate allowed the airlines to use common technical manuals and organizational structure. Delta acquired Northwest for $2.8 billion in October 2008. (See October 30, 2008.)

2010

20100112 January 12, 2010: Controllers at the Houston Air Route Traffic Control Center began using automatic dependent surveillance-broadcast (ADS-B) to manage aircraft flying over the Gulf of Mexico. Houston was the first of four sites selected to demonstrate ADS-B services to go live with the service. (See November 23, 2009; April 26, 2010.)

20100119 January 19, 2010: The engineered material arresting systems (EMAS) at Yeager Airport in Charleston, WVA, successfully stopped a PSA Airlines Bombardier CRJ-200 that overran the runway. This was the sixth save by an EMAS, which consisted of a layer of crushed concrete positioned at the end of runways that slows and stops aircraft in runway overruns. EMAS was developed in a research partnership with the FAA and Engineered Arresting Systems Corp. (ESCO), a division of Zodiac Aerospace. (See July 18, 2008; October 1, 2010.)

20100121 January 21, 2010: FAA dispatched a portable, temporary control tower to Haiti to help assist with aircraft operations at Port-au-Prince International Airport after an earthquake destroyed much of the air traffic control equipment at the airport. Shipment of the portable tower came at the request of the Haitian government. FAA air traffic and airport specialists also deployed to Haiti to help with airport reconstruction efforts.

20100131 January 31, 2010: The FAA released action plans outlining how it planned to implement recommendations from an aviation community task force on modernizing the Next Generation Air Transportation System (NextGen). The plans were contained in a report issued in response to recommendations made in September by the RTCA NextGen Mid-Term Implementation Task Force. Responses to the RTCA recommendations focused on improvements in five operational areas: surface, runway access, congested metropolitan airspace (metroplex), cruise, and national airspace system access. They also encompassed two specific NextGen capabilities: automated digital communications and integrated air traffic management. (See September 9, 2009; March 2010.)

20100217 February 16-17, 2010: An air traffic tower controller at New York's John F. Kennedy International Airport (JFK) permitted his 9 year old son to transmit six clearances on JFK's tower frequency. The following day, his 7 year old daughter made a couple of transmissions also under supervision. FAA subsequently put the controller and a supervisor on administrative leave while it investigated the incident. FAA also suspended the tower visitor program, while it reviewed visitor procedures.

20100226 February 26, 2010: FAA announced the selection of Karlin Toner, Ph.D., as the new Director of the NextGen Joint Planning and Development Office. Toner served as senior advisor to Transportation Secretary Ray LaHood on NextGen and continued in that role. In her new position, Toner reported to the FAA deputy administrator. (See January 26, 2009.)

20100331	March 2010: FAA issued an updated version of the NextGen Implementation Plan. The Plan expanded upon earlier efforts by including information on the potential effects the future air traffic control system could have upon airports, the environment, and international initiatives. (See January 31, 2010.)
20100331	March 2010: FAA granted a type certificate to the Cessna Citation CJ4 after a 22-month flight-test program.
20100405	April 5, 2010: Based on industry comments, effective this date, FAA extended the compliance deadline mandating significant upgrades to aircraft cockpit voice and flight data recorders. As compared with the earlier rule adopted in March 2008, this final rule adopted the following flight recorder equipment compliance times:
	* For the ten-minute backup power source for cockpit voice recorders (CVR), the compliance date for newly manufactured aircraft operating under part 91 would be April 6, 2012.
	* For increased digital flight data recorder (DFDR) sampling rates, the compliance date for newly manufactured aircraft operating under part 91 would be April 6, 2012.
	* For increased DFDR sampling rates, the compliance date for newly manufactured aircraft operating under part 121, 125, or 135 was December 6, 2010.
	* For recordation of datalink communications, the compliance date after which newly installed datalink systems must include recording capability for aircraft operating under part 91 would be April 6, 2012.
	* For recordation of datalink communications, the compliance date after which newly installed datalink systems must include recording capability for aircraft operating under part 121, 125, or 135 was December 6, 2010. (See March 10, 2008.)
20100405	April 5, 2010: FAA began allowing, on a case-by-case basis, pilots who take one of four antidepressant medications — Fluoxetine (Prozac), Sertraline (Zoloft), Citalopram (Celexa), or Escitalopram (Lexapro) — to fly provided that they had been satisfactorily treated on the medication for at least 12 months.
20100408	April 8, 2010: FAA awarded CSSI, Inc., a $280 million contract to perform engineering work for NextGen. This was the first of six contracts that would be awarded under an umbrella portfolio contract called System Engineering 2020 (SE-2020), which had a ceiling of $7 billion. (See May 26, 2010.)
20100420	April 20, 2010: In a message to employees, Administrator Randy Babbitt announced changes to the agency's vision and values statement.
	* Old vision statement: We continue to improve the safety and efficiency of flight. We are responsive to our customers and are accountable to the taxpayer and the flying public.

	* New vision statement: We strive to reach the next level of safety, efficiency, environmental responsibility and global leadership. We are accountable to the American public and our stakeholders.
	* Old Value Statement:
	– Safety is our passion. We are world leaders in aerospace safety.
	– Quality is our trademark. We serve our country, our stakeholders, our customers, and each other.
	– Integrity is our character. We do the right thing, even when no one is looking. – People are our strength. We treat people as we want to be treated.
	* New Value Statement:
	– Safety is our passion - We work so all air and space travelers arrive safely at their destinations.
	– Excellence is our promise - We seek results that embody professionalism, transparency and accountability.
	– Integrity is our touchstone - We perform our duties honestly, with moral soundness, and with the highest level of ethics.
	– People are our strength - Our success depends on the respect, diversity, collaboration, and commitment of our workforce.
	– Innovation is our signature - We foster creativity and vision to provide solutions beyond today's boundaries.
20100423	April 23, 2010: Secretary of Transportation Ray LaHood announced that the United States and Israel had reached an Open-Skies aviation agreement that liberalized air services for the carriers of both countries. Israel became the 97th U.S. Open-Skies partner. (See March 13, 2008; May 4, 2010.)
20100426	April 26, 2010: Controllers at Philadelphia International Airport began using ADS-B as part of the FAA demonstration program. (See January 12, 2010; June 24, 2010.)
20100429	April 29, 2010: An airline consumer protection rule went into effect. Under the new rule, U.S. airlines operating domestic flights could not permit an aircraft to remain on the tarmac at large and medium hub airports for more than three hours without deplaning passengers, with exceptions allowed only for safety or security reasons or if air traffic control advises the pilot in command that returning to the terminal would disrupt airport operations. U.S. carriers operating international flights departing from or arriving in the United States were required to specify, in advance, their own time limits for deplaning passengers, with the same exceptions applicable. Carriers were also required to provide adequate food and drinking water for passengers within two hours of the aircraft being delayed on the tarmac and to maintain operable lavatories and, if necessary, provide medical attention. In addition, the rule:
	* Prohibited the largest U.S. airlines from scheduling chronically delayed flights;

	* Required U.S. airlines to designate an airline employee to monitor the effects of flight delays and cancellations, respond in a timely and substantive fashion to consumer complaints, and provide information to consumers on where to file complaints;
	* Required U.S. airlines to adopt customer service plans and audit their own compliance with their plans; and
	* Prohibited U.S. airlines from retroactively applying material changes to their contracts of carriage that could have a negative impact on consumers who already had purchased tickets. (See August 11, 2009; June 2, 2010.)
20100430	April 2010: FAA changed the name of its bimonthly safety magazine for the general aviation community from FAA Aviation News to FAA Safety Briefing beginning with the March/April 2010 issue. FAA Aviation News started in 1961 as a newsletter and expanded to a magazine format in 1962. In 1976, it sharpened its focus on general aviation.
20100503	May 3, 2010: FAA named Julie Oettinger, managing director for international and regulatory affairs at United Airlines, to head the newly reunited Office of Aviation Policy, International Affairs and Environment. Prior to joining United Airlines, Oettinger served as assistant general counsel at US Airways from 1998 to 2002. From 1990 to 1998 — and then again from 2002 to 2003 — Oettinger served as an attorney advisor in the Legal Advisor's Office at the U.S. Department of State.
20100504	May 4, 2010: Secretary of Transportation Ray LaHood announced that the United States and Trinidad and Tobago had reached an Open-Skies aviation agreement that liberalized air services for the carriers of both countries. Trinidad and Tobago became the 98th U.S. Open-Skies partner. (See April 23, 2010; July 2, 2010.)
20100504	May 4, 2010: FAA announced that controllers in Juneau, Alaska, were using a new surveillance technology, the wide-area multilateration system (WAM), to track aircraft along the difficult approach to Juneau – a mountainous area where radar coverage was not possible. WAM, comprised of a network of small sensors deployed around Juneau, sent out signals that received and sent back by aircraft transponders. The system triangulated the returning signals to determine the precise location of each aircraft. Controllers saw those aircraft on their screens as if they were radar targets. (See September 12, 2009.)

20100512 May 12, 2010: U.S. Transportation Secretary Ray LaHood announced the members of a new committee on the future of the U.S. aviation industry. He had formally created the Future of Aviation Advisory Committee in March to provide information, advice, and recommendations principally on five issue areas: ensuring aviation safety; ensuring a world-class aviation workforce; balancing the industry's competitiveness and viability; securing stable funding for aviation systems; and addressing environmental challenges and solutions. The members selected represented airlines, airports, labor, manufacturers, environment, finance, academia, consumer interests, and general aviation stakeholders. Susan Kurland, Assistant Secretary for Aviation and International Affairs at the Department of Transportation, chaired the committee, which included: Juan J. Alonso, Associate Professor, Department of Aeronautics and Astronautics, Stanford University; Susan M. Baer, Director, Aviation Department, Port Authority of NY/NJ; David Barger, President and CEO, JetBlue Airways Corporation; Bryan K. Bedford, Chairman, President and CEO, Republic Airways; Severin Borenstein, Professor, HAAS School of Business, University of California, Berkeley; Thella F. Bowens, President and CEO, San Diego County Regional Airport Authority; John M. Conley, International Administrative Vice President and Air Transport Division Director, Transport Workers Union of America, AFL-CIO; Cynthia M. Egnotovich, Segment President, Nacelles and Interior Systems, Goodrich Corporation; Patricia A. Friend, International President, Association of Flight Attendants-Communications Workers of America, AFL-CIO; Robert L. Lekites, President, UPS Airlines; Ana McAhron-Schulz, Director of Economic and Financial Analysis, Air Line Pilots Association; William J. McGee, Consultant to the Consumers Union; Daniel McKenzie, U.S. Airlines Research Analyst, Hudson Securities; Jack J. Pelton, Chairman, President and CEO, Cessna Aircraft Company; Nicole W. Piasecki, Vice President, Business Development, Boeing Commercial Airplanes; Raul Regalado, President and CEO, Metropolitan Nashville Airport Authority; Glenn F. Tilton, Chairman, President and CEO, UAL Corporation; and Christopher J. Williams, Chairman and CEO, The Williams Capital Group. The committee held its first meeting on May 25. (See December 15, 2010.)

20100517 May 17, 2010: FAA ruled that the 130 offshore turbines planned for Nantucket Sound posed no threat to aircraft, provided they were properly marked and lighted. The 400-foot turbines would occupy a 25-mile stretch off Cape Cod. The decision came a month after U.S. Department of the Interior Secretary Ken Salazar gave his approval.

20100518 May 18, 2010: FAA's Aviation Safety organization released a plan identifying the key roles that its staff would play in setting standards for NextGen and providing oversight for the safe implementation of new technologies, processes, and procedures. The AVS Work Plan for NextGen established the commitments — schedules, resources, management structure, and internal coordination — that the organization would make to ensure the successful transition to the next-generation air traffic control system.

20100523	May 23, 2010: Northwest Beaches International Airport opened in Panama City, FL – the first new commercial passenger airport to open since Denver International Airport opened in 1995.
20100526	May 26, 2010: FAA awarded Boeing, General Dynamics, and ITT contracts worth up to $4.4 billion under the System Engineering 2020 (SE-2020) contract. Under the contract the three companies would conduct large-scale demonstrations, including the use of aircraft as flying laboratories, to see how NextGen concepts, procedures, and technologies could be integrated into the current national airspace system. The FAA would work with the companies to develop and demonstrate new procedures in four dimensions, adding the element of time to the current three-dimensional profile of an aircraft's latitude, longitude, and altitude. Other work to be performed included the development and rollout of modernized weather services. (See April 8, 2010; October 21, 2010.)
20100527	May 27, 2010: FAA issued a final rule mandating performance requirements for aircraft tracking equipment that would be required under NextGen. The avionics would allow aircraft to be controlled and monitored with greater precision and accuracy by a satellite-based system called Automatic Dependent Surveillance – Broadcast (ADS-B). The rule mandated that the broadcast signal meet specific requirements in terms of accuracy, integrity, power, and latency. All planes were required to have the system by 2020. (See October 2, 2007.)
20100527	May 27, 2010: Northrop Grumman Corporation announced a FAA contract award to provide national maintenance services and logistic support of several critical FAA communications products and systems, including the integrated communications switching system, rapid deployment voice switching system, enhanced terminal voice switch, and small tower voice switch. Under the terms of the contract, Northrop Grumman would ensure the existing communications systems, hardware, firmware, and documentation were supported into the year 2015. The company would supply round-the-clock technical assistance support, including next day delivery of critical repairs. The-five year contract encompassed one base year and four additional one-year options with a not-to-exceed value of $32 million.
20100531	May 2010: FAA's Office of Commercial Space Transportation approved a simulator — the only one of its kind — developed by NASTAR that could replicate the G-forces of launch and descent. FAA required crews planning to fly sub-orbital missions to demonstrate an ability to withstand the stresses of spaceflight. (See December 15, 2009; July 1, 2010.)
20100531	May 2010: FAA announced that Atlantic City International Airport would be the first in the national airspace system to deliver digital NOTAMS. The notices had long been posted in difficult-to-read shorthand designed for delivery over teletype machines. The digital versions would be easier to read, more accurate, and would be disseminated quicker.

20100601	June 1, 2010: U.S. Transportation Secretary Ray LaHood joined federal and state officials in breaking ground for a new air traffic control tower at Palm Springs International Airport, CA. American Recovery and Reinvestment Act funding totaling $13.9 million would finance the construction of an approximately 150 foot-tall tower and a 7,000 square-foot base building.
20100601	June 1, 2010: Effective this date, FAA approved a certification of authorization (COA) for an unmanned aerial vehicle to patrol a portion of the U.S.-Mexico border extending from Arizona to the El Paso region of Texas. Three drones were already used along the border in Arizona. Several others were deployed for border patrols in North Dakota and Florida. Officials at Customs and Border Protection intended to deploy the unmanned vehicles along the entire U.S. border by 2015. (See September 28, 2010; June 9, 2010.)
20100602	June 2, 2010: Transportation Secretary LaHood proposed new consumer protections for air travelers, building on the Department of Transportation's earlier rule banning carriers from subjecting passengers to long tarmac delays and other deceptive practices. The proposed rule would:
	* increase compensation for passengers involuntarily bumped from flights
	* allow passengers to make and cancel reservations within 24 hours without penalty
	* require full and prominently displayed disclosure of baggage fees as well as refunds and expense reimbursement when bags are not delivered on time
	* require fair price advertising
	* prohibit price increases after a ticket is purchased
	* require timely notice of flight status changes (See April 29, 2010.)
20100607	June 7, 2010: FAA dedicated its newest laboratory at the William J. Technical Center. The NextGen Integration and Evaluation Capability (NIEC) laboratory, designed to simulate the national airspace system, provided a testbed where researchers could simulate and evaluate the effects of NextGen components on the system.
20100609	June 9, 2010: FAA signed a cooperative research and development agreement with Boeing subsidiary, Insitu Inc., to facilitate FAA understanding of how unmanned aerial systems were constructed and how they functioned and operated in the national airspace system. Insitu provided the FAA with a Scan Eagle system to help the agency develop recommendations for integrating unmanned aircraft into the U.S. airspace system. The system, including two Scan Eagle small unmanned aircraft, was delivered to the FAA's William J. Hughes Technical Center under a cooperative research and development agreement. (See June 1, 2010.)

20100618 June 18, 2010: FAA and the European Commission signed an agreement that recognized the importance of coordinated research and implementation of results into seamless air traffic services between the two continents. The agreement specified 22 specific areas of cooperation that would facilitate joint research and development of NextGen/Single European Sky ATM Research (SESAR) projects. (See July 18, 2006.)

20100621 June 21, 2010: FAA announced the selection of Clay Foushee as director of the Office of Audit and Evaluation. FAA created the office in 2009 to ensure that safety complaints from both inside and outside the agency were handled in a fair and timely manner and that they received proper consideration. The office monitored the progress of the investigations and reported them to the FAA administrator. Foushee had wide experience in the aviation industry, having served in senior executive positions at Northwest Airlines and as chief scientific and technical advisor for human factors at the FAA. His most recent position was on the senior professional staff of the House Committee on Transportation and Infrastructure. (See September 17, 2009.)

20100623 June 23, 2010: The U.S. Senate confirmed Michael P. Huerta as FAA deputy administrator. Prior to his appointment he ran his own consulting firm, advising clients on transportation policy, technology, and financing. He also served as a member of President Obama's transition team for the Department of Transportation. He had been president of the Transportation Solutions Group of Affiliated Computer Services, Inc., a technology services provider supporting transportation agencies worldwide. Huerta served in two senior positions at the Department of Transportation under President Clinton from 1993 to 1998. He held a master's degree from the Woodrow Wilson School of Public and International Affairs at Princeton University and a bachelor's degree from the University of California at Riverside. (See December 8, 2010.)

20100624 June 24, 2010: FAA announced contracts with Boeing, General Electric, Honeywell, Pratt & Whitney, and Rolls-Royce-North America to develop and demonstrate technologies to reduce commercial jet fuel consumption, emissions, and noise. The contracts, part of the FAA's Continuous Lower Energy, Emissions and Noise (CLEEN) program, were expected to total $125 million over the five-year span of the program. Under a cost sharing arrangement, the companies would match or exceed the FAA's contribution, bringing the overall value of the program to more than $250 million.

20100624 June 24, 2010: FAA announced that controllers at the Anchorage Air Route Traffic Control Center and at the Juneau Air Traffic Control Tower were using ADS-B, which is critical in Juneau because, like in the Gulf of Mexico, there was no radar coverage. (See April 26, 2010; October 25, 2010.)

20100629	June 29, 2010: FAA issued a notice of proposed rulemaking that would require plane manufacturers to show that small airliners could fly safely in certain icy weather conditions, such as rain that falls as a liquid but freezes when it touches a plane. To improve the safety of transport category airplanes operating in super cooled large droplet (SLD), mixed phase, and ice crystal icing conditions, the proposed regulations would:
	* Expand the certification icing environment to include freezing rain and freezing drizzle.
	* Require airplanes most affected by SLD icing conditions to meet certain safety standards in the expanded certification icing environment, including additional airplane performance and handling qualities requirements.
	* Expand the engine and engine installation certification, and some airplane component certification regulations (for example, angle of attack and airspeed indicating systems), to include freezing rain, freezing drizzle, ice crystal, and mixed phase icing conditions. (See December 1, 2009.)
20100630	June 2010: FAA agreed to classify the Terrafugia Transition flying car, or roadable aircraft, as a Light Sport Aircraft, even though the vehicle was 120 pounds too heavy to qualify for that class. Pilots needed only 20 hours of flight time (just five of it solo) to qualify for a license to fly a Light Sport Aircraft.
20100701	July 1, 2010: FAA awarded a license to the state of Florida to operate Cape Canaveral Air Force Station's Launch Complex 46 for commercial use. (May 2010; August 3, 2010.)
20100701	July 1, 2010: FAA, the Professional Aviation Safety Specialists (PASS), and the National Air Traffic Controllers Association (NATCA) introduced the Partnership for Safety program to identify safety issues before incidents or accidents occur by seeking input from employees.
20100702	July 2, 2010: The Department of Transportation signed an Open-Skies Agreement with Barbados that liberalized air services for airlines of both the U.S. and Barbados. Barbados became the 99th U.S. Open-Skies partner. (See May 4, 2010; November 11, 2010.)
20100712	July 12, 2010: SRA International announced that its subsidiary company Systems Research and Applications Corporation had won a five-year, $57 million FAA contract to provide research and development services to the FAA William J. Hughes Technical Center in Atlantic City, NJ. The work would involve the areas of airport pavement design and testing; aircraft rescue and fire fighting; wildlife hazards; bird strike mitigation, and runway surface technology. SRA would also provide services in airport capacity analysis and planning, visual guidance and lighting technologies and materials testing.

20100720	July 20, 2010: FAA issued a final rule requiring re-registration of all civil aircraft over the next three years and renewal every three years after that. Re-registration would enhance the aircraft registration database with current data derived from recent contact with aircraft owners. The new regulations also would ensure that aircraft owners gave the FAA updated information at least once every three years when they renewed their registration. The FAA planned to cancel the N-numbers of aircraft that were not reregistered or renewed. (See April 30, 1980.)
20100729	July 29, 2010: FAA commissioned the airport surface detection equipment-model X (ASDE-X) at Ronald Reagan National Airport. (See October 16, 2008.)
20100730	July 30, 2010: FAA announced that Mexico was not in compliance with international safety standards set by the International Civil Aviation Organization (ICAO), following an assessment of the country's civil aviation authority. As a result, the United States downgraded Mexico from a Category 1 to Category 2 rating. As part of the FAA's International Aviation Safety Assessment (IASA) program, the agency assessed the civil aviation authorities of all countries with air carriers that operate or have applied to fly to the United States and made that information available to the public. The assessments determined whether or not foreign civil aviation authorities met ICAO safety standards, not FAA regulations. With the IASA Category 2 rating, Mexican air carriers could not establish new service to the United States, although they could maintain existing service. December 1, 2010, FAA announced that Mexico again complied with international safety standards based on the results of a November FAA review of Mexico's civil aviation authority. Mexico now had a Category 1 rating. (See August 25, 2008; August 23, 2010.)
20100801	August 1, 2010: President Barrack Obama signed the Airline Safety and Federal Aviation Administration Extension Act. The bipartisan bill extended aviation programs and excise taxes through September 30. It also required airline pilots to have a FAA airline Transport pilot license and increased the minimum number of flight hours from 250 to 1500. The bill also extended aviation programs and excise taxes for two months, or for the remainder of fiscal year 2010. (See November 23, 2009; September 14, 2010.)
20100803	August 3, 2010: FAA approved a NASA plan to expand the Mid-Atlantic Regional Spaceport at the Wallops Flight Facility, VA, to accommodate commercial launches. (See July 1, 2010; August 18, 2010; September 30, 2010.)
20100804	August 4, 2010: Lexington Blue Grass Airport opened a new 4,000-foot runway, R 9/27. The $27 million runway would be used for crosswind operations.
20100809	August 9, 2010: A DeHavilland DHC-3T crashed near a remote Alaskan fishing village killing five of the nine people aboard the aircraft. Former Senator Ted Stevens (R-AK) was among the victims. Former NASA administrator Sean O'Keefe and his son survived the accident.

20100818 August 18, 2010: FAA selected New Mexico State University, Las Cruces, NM, to lead a new Air Transportation Center of Excellence for Commercial Space Transportation. The center, a partnership of academia, industry, and government, was established to address current and future challenges for commercial space transportation. The center's research and development efforts would focus on: space launch operations and traffic management; launch vehicle systems, payloads, technologies, and operations; commercial human space flight; and space commerce (including space law, space insurance, space policy, and space regulation). The FAA entered into 50-50 cost-sharing cooperative agreements with the new center, and planned to invest at least $1 million per year for the initial five years of the center's operations. (See January 28, 2004; August 3, 2010; September 30, 2010.)

20100823 August 23, 2010: FAA announced that Nigeria had achieved a Category 1 rating under FAA's International Aviation Safety Assessment program, which meant that Nigeria complied with international safety standards set by the International Civil Aviation Organization. The IASA Category 1 rating was based on the results of a July FAA review of Nigeria's civil aviation authority. With the IASA Category 1 rating, Nigerian air carriers could apply to operate to the United States with their own aircraft. (See July 30, 2010.)

20100914 September 14, 2010: FAA issued a notice of proposed rulemaking that would set a nine-hour minimum for rest prior to a pilot's duty period, a one-hour increase over the current rules. The proposed rule would establish a new method for measuring a pilot's rest period, so that the pilot would have the chance to receive at least eight hours of sleep during the rest period. Cumulative fatigue would be addressed by placing weekly, 28-day, and annual limits on the amount of time a pilot could be assigned any type of duty. Pilots would have to be given at least 30 consecutive hours free from duty on a weekly basis, a 25 percent increase over the then current rules. (See August 1, 2010.)

20100922 September 22, 2010: FAA announced a new safety program that, for the first time, would integrate voluntary safety information self-reported by pilots and air traffic controllers into the Aviation Safety Action Program and the Air Traffic Safety Action Program. This data-sharing program would give the FAA a more complete picture of the national airspace system by collecting, assessing, and reviewing safety events from the perspective of both pilots and air traffic controllers. United Airlines and its pilots became the first to participate in the demonstration program. The FAA expected to sign similar agreements with other carriers. (March 31, 2008; January 30, 2009.)

20100927 September 27, 2010: Southwest Airlines announced it had entered into an agreement to acquire all of the outstanding common stock of AirTran Holdings, Inc., the parent company of AirTran Airways, for a combination of cash and Southwest Airlines' common stock. Southwest said it could take up to two years before all aspects of the merger were complete, including combining of staff and frequent-flier programs and retrofitting of aircraft.

20100928	September 28, 2010: FAA issued a notice of proposed rulemaking that would adjust existing overflight fees by using current FAA cost accounting data and air traffic activity data. The agency believed the adjustment necessary because operational costs for providing air traffic control and related services for overflights had increased steadily since it established the fees in 2001. (See December 17, 2008.)
20100928	September 28, 2010: The Department of Transportation, the International Civil Aviation Organization, the International Air Transport Association, and the European Commission signed a memorandum of understanding covering the Global Safety Information Exchange program. The program provided a framework for identifying what safety information could be shared, how to communicate that information, and the mechanisms to be used for the actual exchange of information.
20100930	September 30, 2010: FAA announced a new grant program designed to fund projects for the development and expansion of the commercial space transportation infrastructure. The first Space Transportation Infrastructure Matching grants included: $43,000 for the New Mexico Spaceport Authority to provide an automated weather observing system; $227,195 to the Alaska Aerospace Corporation for a rocket motor storage facility; $125,000 to the East Kern Airport District in Mojave, CA, for an emergency response vehicle; and, $104,805 to the Jacksonville Airport Authority in Florida to develop a spaceport master plan for Cecil Field. (See August 3, 2010; August 18, 2010.)
20100930	September 2010: FAA awarded Lockheed Martin a three-year contract extension to continue to provide automated flight service station services. The contract option, a follow-on to the initial 2005 contract, was worth $356 million. (See February 1, 2005.)
20101001	October 1, 2010: The engineered material arresting systems (EMAS) at Teterboro Airport in Teterboro, NJ, successfully stopped a G-4 Gulfstream that overran the runway. This was the seventh EMAS save. An EMAS consisted of a layer of crushed concrete positioned at the end of runways that could slow and stop aircraft in runway overruns. EMAS was developed in a research partnership with the FAA and Engineered Arresting Systems Corp. (ESCO), a division of Zodiac Aerospace. (See January 19, 2010.)
20101001	October 1, 2010: United Continental Holdings, Inc., formerly UAL Corporation, announced that a wholly owned subsidiary had merged with Continental Airlines, Inc., and that Continental Airlines and United Air Lines, Inc., were now wholly owned subsidiaries of United Continental Holdings, Inc.

20101007	October 7, 2010: FAA issued a notice of proposed rulemaking that would require each certificate holder to establish a safety management system (SMS) for its entire airfield environment (including movement and non-movement areas) to improve safety at airports hosting air carrier operations. A SMS was a formalized approach to managing safety by developing an organization-wide safety policy, developing formal methods of identifying hazards, analyzing and mitigating risk, developing methods for ensuring continuous safety improvement, and creating organization-wide safety promotion strategies. (See March 9, 2009; November 5, 2010.)
20101008	October 8, 2010: FAA issued a safety alert for operators (SAFO), which summarized research showing that lithium metal (non-rechargeable) and lithium-ion (rechargeable) batteries were highly flammable and capable of igniting during air transport under certain circumstances. The research also indicated that Halon 1301, the suppression agent found in Class C cargo compartments, was ineffective in suppressing lithium metal battery fires. The SAFO recommended procedures air carriers could use when transporting lithium batteries. (See December 29, 2004.)
20101010	October 10, 2010: Controllers began operations in the new air traffic control tower at LaGuardia Airport. FAA formally dedicated the new tower on January 21, 2011.
20101012	October 12, 2010: FAA issued a notice of proposed rulemaking that would require helicopter operators to use the latest on-board technology and equipment to avoid terrain and obstacles. The proposal contained provisions which, when finalized, would require operators to use enhanced procedures for flying in challenging weather, at night, and when landing in remote locations. The proposed rules would require air ambulance operators to:
	* Equip with Helicopter Terrain Awareness and Warning Systems (HTAWS)
	* Conduct operations under Part 135, including flight crew time limitation and rest requirements, when medical personnel are on board
	* Establish operations control centers if they are certificate holders with 10 or more helicopter air ambulances
	* Institute pre-flight risk-analysis programs
	* Conduct safety briefings for medical personnel
	* Amend their operational requirements to include Visual Flight Rules (VFR) weather minimums, Instrument Flight Rules (IFR) operations at airports/heliports without weather reporting, procedures for VFR approaches, and VFR flight planning.
	* Ensure their pilots in command hold an instrument rating
	Under the proposal, all commercial helicopter operators would be required to:
	* Revise IFR alternate airport weather minimums

	* Demonstrate competency in recovery from inadvertent instrument meteorological conditions
	* Equip their helicopters with radio altimeters
	* Change the definition of "extended over-water operation" and require additional equipment for these operations
	In addition, the proposed rules would require all Part 135 aircraft, i.e., helicopter and fixed wing on-demand operators, to:
	* Prepare a load manifest
	* Transmit a copy of load manifest documentation to their base of operations, in lieu of preparing a duplicate copy
	* Specify requirements for retaining a copy of the load manifest in the event that the documentation is destroyed in an aircraft accident
	* Require Part 91 general aviation helicopter operators to revise the VFR weather minimums
	The public had until January 10, 2011, to comment on the proposed rule. (See January 12, 2009.)
20101015	October 15, 2010: FAA broke ground for a new air traffic control tower at Oakland International Airport. Two air traffic control towers served Oakland International Airport. A 158-foot-tall tower on the southern portion of the airfield was built in 1962 as part of a terminal expansion project. In 1972, construction of a large hangar blocked some views from the south tower, requiring the Port of Oakland to build a second tower to handle traffic on the north runways. Replacing both towers with a single one would improve air traffic operations and reduce operating costs.
20101018	October 18, 2010: FAA broke ground for a new air traffic control tower at the Frederick Municipal Airport in Frederick, MD. Approximately 200 general aviation aircraft were based at Frederick Municipal Airport, a reliever airport for Baltimore-Washington International Thurgood Marshall Airport. The airport handled more than 135,000 aircraft operations annually.
20101019	October 19, 2010: FAA's Air Traffic Organization announced its workforce engagement (WE) effort with the launch of the WE website. The ATO contracted with Gallup, a leader in employee engagement, to support ATO's long-term effort to create a better place to work. On December1, ATO invited its employees to take a short, 15 question survey to establish a baseline of employee engagement, which would be used to help measure progress as the WE initiatives progressed.

20101021	October 21, 2010: FAA and the U.S. Department of Agriculture announced a five year agreement to develop aviation fuel from forest and crop residues and other feedstocks to decrease dependence on foreign oil and stabilize aviation fuel costs. Under the partnership, the agencies would assess the availability of different kinds of feedstocks that could be processed by bio-refineries to produce jet fuels. The participants would develop a tool to evaluate the status of different components of a feedstock supply chain, such as availability of biomass from farms and forests, the potential of that biomass for production of jet fuel, and the length of time it would take to ramp up to full-scale production. The agencies already had existing programs and collaborative agreements with private and public partners and resources to help biorefiners develop cost-effective production plans for jet aircraft biofuels.
20101021	October 21, 2010: TASC, Inc., announced a 10-year FAA contract award worth up to $827.8 million for national airspace system support services. The SE-2020 support services contract covered advanced systems engineering, investment and business case analysis, planning and forecasting, as well as business, financial and information management support services related to the development and the transformation of the national air transportation system. (See May 26, 2010.)
20101025	October 25, 2010: ITT Corporation announced it had received clearance from FAA for nationwide deployment of the ADS-B. Achievement of this In Service Decision milestone followed successful tests at four key sites in Alaska, the Gulf of Mexico, Louisville, and Philadelphia. (See June 24, 2010.)
20101026	October 26, 2010: FAA dedicated the new air traffic control tower at Reno-Tahoe Airport, NV. The $29 million tower was 195 feet tall, three times as big as the old one built in 1957.
20101028	October 28, 2010: Law enforcement agencies discovered potential suspicious packages on two cargo planes in transit to the United States. Based on close cooperation among U.S. government agencies and with our foreign allies and partners, authorities identified and examined two suspicious packages, one in East Midlands, United Kingdom, and one in Dubai. Both of these packages originated from Yemen. At the direction of the President and Secretary Napolitano, the Transportation Security Administration and Customs and Border Protection immediately took additional measures to enhance existing protocols for screening inbound cargo, including grounding packages originating from Yemen destined for the United States and deploying a team of inspectors to assist the Government of Yemen with their cargo screening procedures.

20101101	November 1, 2010: An interim FAA requirement mandated that planes landing after Boeing's 747-8 jumbo jet stay at least 10 miles behind went into effect. The FAA said the interim standards were based, in part, on guidance received from international regulatory organizations that studied the wake vortices of the Airbus 380-800 in 2006. After those studies, the International Civil Aviation Organization issued a 10-mile separation standard for the A380 superjumbo jet. This was later relaxed, but a separation of 6 to 8 miles was still required for the A380, depending on the size of the aircraft behind it. Prior to its Boeing 747-8 ruling, the U.S. requirement for large airplanes was just 4 miles separation from other heavy jets and up to 6 miles from light aircraft. (See August 17, 1996.)
20101102	November, 2, 2010: FAA issued a final rule amending the airworthiness standards for transport category airplanes concerning flight crew alerting. The standards updated definitions, prioritization, color requirements, and performance for flight crew alerting to reflect changes in technology and functionality. This amendment added additional alerting functions, and consolidated and standardized definitions and regulations for flight crew warning, caution, and advisory alerting systems. It also harmonized standards between the FAA and the European Aviation Safety Agency. The rule became effective on January 3, 2011.
20101103	November 2-3, 2010: The first meeting of the FAA's National Labor-Management Forum took place in Baltimore, MD. The meeting provided an opportunity for approximately 30 representatives from FAA's labor unions and management to discuss how a National Labor-Management Forum could work to improve the agency. President Obama signed an executive order in December 2008 establishing Labor-Management Forums as a tool to improve labor relations within the federal government. The FAA labor-management participants first came together in June 2010 and jointly decided to create a national forum. Participants at the Baltimore forum agreed to a charter that outlined its responsibilities, procedures, and guiding principles. Participants also set up work groups to take on issues involving metrics, pre-decisional involvement, joint collaboration, training, and communication. In addition, they agreed to meet quarterly and to:
	* Handle high level agency-wide issues
	* Set a tone for the agency that would help facilitate a broad culture change and encourage collaboration efforts
	* Enable and support continuing collaborative efforts and those that have yet to get underway
	* Commit to provide tools for collaboration and dispute resolution
	* Reflect positive interaction

20101105	November 5, 2010: FAA issued a notice of proposed rulemaking that, when finalized, would require each certificate holder operating under 14 CFR part 121 to develop and implement a safety management system (SMS) to improve the safety of their aviation related activities. A SMS included an organization-wide safety policy; formal methods for identifying hazards, controlling, and continually assessing risk; and promotion of a safety culture. (See October 7, 2010.)
20101106	November 6, 2010: Quentin Taylor, a long-time FAA executive died. Taylor started at the FAA in 1958. He served as the agency's first manager of the Office of Civil Rights, later as deputy director of the FAA's Alaska region, and director of its New England region. In 1977, he became the FAA's deputy administrator. He later became director of the Office of International Aviation and then deputy associate administrator for airports. He retired in 1999. (See May 4, 1977.)
20101111	November 11, 2010: Colombia became the United States' 100th Open-Skies partner when representatives of the two countries reached agreement to liberalize U.S.-Colombia air services for airlines of both countries. Once full Open Skies took effect at the end of 2012, airlines from the United States and Colombia would be allowed to select routes, destinations and prices for both passenger and cargo service based on consumer demand and market conditions. (See July 2, 2010; December 3, 2010.)
20101112	November 12, 2010: FAA accepted the final report on the November 2008 telecommunications outage prepared by an independent review panel asked to investigate the incident. Administrator Randy Babbitt had asked the panel to examine the cause of the FAA Telecommunications Infrastructure (FTI) outage and to recommend strategies to reduce the potential for similar future outages. He also asked the panel to examine the FTI's present and future architecture as it relates to emerging technology and future FAA systems. The final report on the FTI outage laid out 14 long-term strategic recommendations the FAA should pursue as it transitions to future network systems. The recommendations focused on:
	* Governance: the decision making process for FAA systems
	* Situational Awareness: FAA network monitoring and information sharing
	* Interoperability: data sharing between systems and stakeholders
	* Resilience: ability of a network to continue operating under a variety of conditions
	* Cyber Security: the ability to thwart, detect, and respond to any attempts to compromise the system (See December 8, 2009.)
20101115	November 15, 2010: SkyWest Inc. announced completion of its $133 million purchase of ExpressJet Holdings Inc. Both SkyWest and ExpressJet provide regional service for bigger carriers.

20101115	November 15, 2010: In a notice of proposed policy, FAA announced its intention to clarify the definition of "actively engaged" for the purposes of evaluating applications for Inspector Authorizations (IA). In the current list of requirements, FAA stated that an applicant must have been "actively involved" in maintaining aircraft certificated and maintained in accordance with FAA regulations. However, it lacked the necessary clarification on what qualified as "actively engaged," leading to a substantial amount of confusion. In the newly proposed policy amendment, FAA addressed the issue by adding language intended to help clarify the requirement. The new policy language, when adopted, would assist aviation safety inspectors in making the appropriate determination when assessing IA applications, as well as prevent applicant confusion. Under the new language, those holding supervisory positions and, as such, were not actively engaged in maintenance activities, would not be permitted to retain their IA. FAA planned for the new policy to go in effect for the next IA renewal cycle in March 2011.
20101115	November 15, 2010: FAA issued a final rule requiring aircraft manufacturers and certification applicants to establish a number of flight cycles or hours a plane could operate and be free from widespread fatigue damage (WFD) without additional inspections for fatigue. Once manufacturers established the flight cycle limits, operators of affected aircraft had to incorporate them into their maintenance programs within 30 to 72 months, depending on the model of aircraft. The new regulation applied to airliners with a takeoff weight of 75,000 lbs. and heavier, as well as all transport designs certificated in the future.
20101116	November 16, 2010: Donald Nyrop, the second administrator of the Civil Aeronautics Administration, died; he was 98. Nyrop joined the CAA in 1939 after graduating from law school and became administrator in 1950. In 1951 he became chairman of the Civil Aeronautics Board and three years later because president of Northwest Airlines. He retired from Northwest in 1978. (See October 4, 1950.)
20101118	November 18, 2010: FAA issued a notice of proposed rulemaking that, if finalized, would require a pilot to carry a pilot certificate with photo with an expiration date of eight years. At the end of this period, the pilot had to update their photo and obtain a new certificate. The proposal responded to section 4022 of the Intelligence Reform and Terrorism Prevention Act. The FAA previously required all pilots to obtain a plastic certificate (excepting temporary certificates and student pilot certificates). The FAA also proposed to require student pilots to obtain a plastic certificate with photo. Student pilot certificates would have the same duration as other pilot certificates. Additionally, because of the new photo requirements, the proposal modified the application process and the fee structure for pilot certificates. The new certificate cost $22.00.

20101122	November 22, 2010: FAA issued its first license permitting the reentry to earth of a privately developed spacecraft to the Space Exploration Technologies Corporation (SpaceX). The Space X Dragon space capsule launched atop the Falcon 9 rocket on December 8 and returned to earth three hours later. The unmanned flight was a precursor to NASA and SpaceX efforts to provide commercial trips to the International Space Station with cargo and crew.
20101123	November 23, 2010: FAA issued an advisory circular (AC 150/5220-25) requiring that radars used for airport wildlife hazard programs must be capable of tracking 1,000 targets simultaneously. The tracking capability within an area 0.3 to 3 nautical miles was a minimum standard set by the 50-page advisory circular, a mandatory document for airports that accepted federal funding or levy passenger facility charges.
20101203	December 3, 2010: The Department of Transportation agreed to implement an Open-Skies Agreement with Brazil that would liberalize air services for airlines of both countries. The agreement immediately removed restrictions on pricing and on the routes between each country that can be served by U.S. and Brazilian scheduled and charter airlines and provided immediately for full code-share rights and additional charter flexibility. When the full Open Skies agreement takes effect in 2015, airlines from the United States and Brazil would be allowed to select routes, destinations, and prices for passenger, cargo, and charter services based on consumer demand and market conditions. Brazil would be the 101st U.S. Open-Skies partner. (See November 11, 2010.)
20101207	December 7, 2010: FAA awarded a contract to Jacobs Engineering Group, Inc., to provide up to $271 million in design-build services for at least the next five years. Jacobs would work with the FAA's en route facilities program, which oversees the management of the nation's 21 air traffic control centers. Specifically, the company would provide strategic facilities planning, cost estimates, construction support, hazardous material abatement, and related services.
20101216	December 16, 2010: The Future of Aviation Advisory Committee presented its final recommendations to Secretary of Transportation Ray LaHood. The Committee made 23 recommendations in 5 categories, including safety, workforce/labor, competitiveness and viability, finance, and environment. Among the recommendations presented by the committee were proposals that federal government assist in funding NextGen equipage on aircraft, ensure greater transparency for consumers in airline pricing, expand the sources of safety data available to the FAA, and ensure that global airline alliances enhance the viability and competitiveness of the U.S. aviation industry. Other specific recommendations included:
	* Developing improved methods of predicting safety risks;
	* Incorporating safety standards into planning for NextGen;
	* Improving links between airports and other forms of transportation;
	* Enhancing science and technology training for the future and current aviation workforce;

	* Ensuring that aircraft operators are able to realize the benefits of NextGen as quickly as possible;
	* Reducing aviation's impact on the environment through use of sustainable fuels and improved aircraft technology, as well as accelerating the use of NextGen equipment to promote greater efficiency.
	After review of the recommendations, the Department of Transportation planned to develop a strategy to implement the recommendations. (See May 12, 2010.)
20101220	December 20, 2010: FAA launched a new web-based job application system called the automated vacancy information access tool for online referral (AVIATOR). The system, which replaced the automated staffing and application process (ASAP) used by the agency since 2005, provided an automated application process and an instant notification of application submissions, and stored applications for future use.
20101227	December 27, 2010: Alfred Kahn, the architect of the historic deregulation of the airline industry, died. As head of the Civil Aeronautics Board in 1977-1978, Kahn oversaw the Carter Administration's airline deregulation policies. In October 1978, President Carter appointed him as his anti-inflation czar with a mandate to curb the rising costs in food, medical care, and energy. Kahn spent most of his career as a professor at Cornell University. (See October 24, 1978.)
20101227	December 27, 2010: FAA issued a proposed airworthiness directive that, if finalized, would mandate software upgrades to onboard aircraft collision avoidance devices manufactured by Aviation Communication and Surveillance Systems, a unit of L-3 Communications Holdings. FAA proposed the directive after reports of anomalies with the devices during a test flight over a high-density airport. Operators had 48 months after the effective date of the AD to install the software upgrade.

2011

20110112 January 12, 2011: The City of St. George, UT, opened a new airport with a 9,300-footlong runway. The new airport replaced the old St. George Municipal Airport.

20110121 January 21, 2011: FAA dedicated a new airport traffic control tower at LaGuardia Airport. The new tower replaced a tower built in 1964. The total cost to design, equip, and construct the new 233-foot high tower was approximately $100 million. (See October 10, 2010.)

20110203 February 3, 2011: FAA announced it had signed an agreement with JetBlue to allow the airline to fly more precise, satellite-based flights from Boston and New York to Florida and the Caribbean beginning in 2012. Under the agreement, as many as 35 of JetBlue's A320 aircraft would be equipped with automatic dependent surveillance-broadcast (ADS-B) avionics over the next two years, enabling them to fly in two major routes off the East Coast even if traditional radar coverage was not available. The agreement also allowed JetBlue to fly a new route to the Caribbean. FAA planned to collect valuable data for its next generation air transportation system (NextGen) by observing and conducting real-time operational evaluations of ADS-B on revenue flights. (See December 16, 2010; February 28, 2011.)

20110225 February 25, 2011: Executive Jet Management, working with the Jeppesen Company, announced it had secured FAA's first approval for use of the iPad for aeronautical charting in all phases of flight. The approval followed three months of testing and 250 flight trials that included a successful rapid decompression test to 51,000 feet and noninterference testing.

20110228 February 28, 2011: FAA and NASA released a new plan focused on human factors research for NextGen. FAA and NASA developed the document titled, "NextGen Human Factors Research Coordination Plan," in response to a 2010 report by the Government Accountability Office – along with previous recommendations from the inter-agency joint planning and development office (JPDO) and the Department of Transportation Inspector General – stating the need for a cross-agency, human factors plan that coordinated research efforts by the two agencies. (See February 3, 2011; September 23, 2011.)

20110309 March 9, 2011: FAA and Sensis Corporation received the Jane's Airport Review Runway Safety Award at the 2011 ATC Global Exhibition and Conference in Amsterdam, the Netherlands. This was the first year for the runway safety award category, which recognized a contribution to improved safety on or near the runway. The award recognized FAA's deployment of Sensis Corporation's airport surface detection equipment, model X (ASDE-X) technology at 35 major U.S. airports, including five of the world's ten busiest airports. (See July 29, 2010.)

20110314	March 14, 2011: FAA commissioned ADS-B equipment on its Airbus 330/340 flight simulator at FAA's Mike Monroney Aeronautical Center. The one year, $1 million project featured other enhancements, such as dual electronic flight bags with traffic information display; an air/ground display of traffic bearing/speed/altitude indicator cueing; a new traffic collision avoidance system (TCAS) integrated with ADS-B; and a fully integrated simulator visual system and electronic flight bag for up to 50 aircraft. (See November 3, 2008; February 3, 2011; January 2, 2013; April 22, 2013.)
20110321	March 21, 2011: Effective this date, FAA prohibited flight operations with the Tripoli Flight Information Region by all U.S. air carriers; U.S. commercial operators; persons exercising the privileges of a U.S. airman certificate, except when such persons operated a U.S.-registered aircraft for a foreign air carrier; and operators of U.S.-registered civil aircraft, except when such operators were foreign air carriers. FAA issued this regulation because the ongoing armed conflict in Libya and presented a potential hazard to civil aviation.
20110322	March 22, 2011: Effective this date, FAA required all certificate holders conducting operations under Part 135 to include in their training programs crew resource management training for crewmembers, including pilots and flight attendants.
20110325	March 25, 2011: As part of the Alaskan aviation camera program begun in 1999, FAA turned on its 150th weather camera in Talkeetna. FAA used these cameras to view sky conditions around airports, air routes, and mountain passes. The cameras also provided pilots with critical weather information to help them decide whether or not it was safe to fly. (See September 30, 2013.)
20110411	April 11, 2011: FAA announced its new David J. Hurley Air Traffic Control System Command Center, located in Warrenton, VA, was fully operational. The new command center, co-located with FAA's Potomac Terminal Radar Approach Control (TRACON), was responsible for managing the overall use of the national airspace system. Traffic management specialists balanced air traffic demand with system capacity, and worked with aviation stakeholders to handle constraints in the system, such as weather, runway closures and delays. (See December 4, 2008.)
20110413	April 13, 2011: FAA announced that effective immediately, it had placed an additional air traffic controller on the midnight shift at 27 control towers around the country staffed with only one controller during that time. FAA took this action after an incident at Reno-Tahoe International Airport when a controller fell asleep while a medical flight carrying an ill patient attempted to land. The medical flight pilot communicated with the Northern California TRACON and landed safely. FAA suspended the controller, who was out of communication for approximately 16 minutes, while it investigated the incident. (See April 14, 2011.)

20110414	April 14, 2011: FAA Administrator Randy Babbitt announced he had accepted the resignation of ATO COO Hank Krakowski. In his statement, Babbitt said, “Over the last few weeks we have seen examples of unprofessional conduct on the part of a few individuals that have rightly caused the traveling public to question our ability to ensure their safety. This conduct must stop immediately.” David Grizzle, FAA’s Chief Counsel, became acting COO, and on July 7, 2011, Administrator Babbitt announced that Grizzle would be the permanent COO. (See October 2, 2007; April 13, 2011; April 17, 2011; August 13, 2013.)
20110417	April 17, 2011: Administrator Babbitt announced changes to air traffic controller scheduling practices after suspending an air traffic controller the day before for falling asleep while on duty during the midnight shift at the Miami ARTCC. The new scheduling rules included:
	* Controllers would now have a minimum of nine hours off between shifts. Currently they may have as few as eight.
	* Controllers would no longer be able to swap shifts unless they have a minimum of 9 hours off between the last shift they worked and the one they want to begin.
	* Controllers would no longer be able to switch to an unscheduled midnight shift following a day off.
	* FAA managers would schedule their own shifts in a way to ensure greater coverage in the early morning and late night hours. (See April 14, 2011; July 1, 2011.)
20110418	April 18, 2011: The United States signed its 102nd Open Skies Agreement with Saudi Arabia that liberalized air services for airlines of both countries. (See December 3, 2010; July 11, 2011.)
20110520	May 20, 2011: FAA dedicated a new airport traffic control tower at Long Island MacArthur Airport. The new 158-foot high tower, which replaced a tower built in 1963, housed a 525-square-foot tower cab. The total cost to design, equip, and construct the new tower was approximately $20 million.
20110602	June 2, 2011: FAA announced it would begin to impose civil penalties against people who point a laser into the cockpit of aircraft. An agency legal interpretation determined shining a laser beam into an aircraft cockpit could disrupt a flight crew's ability to perform its duties while operating an aircraft, in violation of federal aviation regulations. FAA could impose a civil penalty of up to $11,000 on anyone who interfered with a flight crew.
20110701	July 1, 2011: FAA and the National Air Traffic Controllers Association (NATCA) announced agreement on a number of fatigue recommendations developed by a joint FAA-NATCA working group. The agreement reinforced existing FAA policy that prohibited air traffic controllers from sleeping while performing assigned duties. FAA and NATCA also agreed all air traffic controllers must report for work well-rested and mentally alert. As a result of this agreement, air traffic controllers could now request leave if too fatigued to work air traffic. (See April 17, 2011.)

20110701	July 1, 2011: FAA revoked the operating certificate of Bimini Island Air. The Fort Lauderdale-based on-demand operator surrendered its certificate on July 1 after an emergency order of revocation was issued the previous month.
20110711	July 11, 2011: The United States and Macedonia reached an Open-Skies aviation agreement, which allowed airlines of the two countries to select routes, destinations and prices for both passenger and cargo service based on consumer demand and market conditions. It was the first aviation agreement between the two countries, and was the 103rd U.S. open skies agreement. (See April 18, 2011; December 5, 2011.)
20110723	July 23, 2011: FAA furloughed 4,000 employees and stopped work on a number of airport improvement projects when Congress failed to pass the 21st reauthorization extension for the agency. The employees, paid out of the aviation trust fund, included engineers, scientists, administrative assistants, computer specialists, program managers and analysts, environmental protection specialists, and community planners. Congress passed an extension of FAA's reauthorization on August 4, allowing FAA employees to return to work. On September 13, the House passed the 22nd extension; the Senate passed the bill for the four-month extension on September 15. The bill extended then current funding levels through January 31, 2012. (See February 22, 2013.)
20110723	July 23, 2011: FAA dedicated a new, 254-foot-tall airport traffic control tower at Dayton International Airport.
20110726	July 26, 2011: A FAA contract award to Harris Corporation was announced. Under the 10-year contract, worth $85 million, Harris would replace and upgrade the existing satellite communications network linking the Alaska ARTCC in Anchorage with 64 FAA facilities throughout the region.
20110801	August 1, 2011: Effective this date, air traffic controllers could once again ride in aircraft cockpits with commercial pilots as part of a voluntary education program. The flight deck training program, designed to improve safety by giving air traffic controllers a greater understanding of the pilots' experience and workload in the cockpit, replaced a previous program called familiarization training, or FAM trip, which was suspended in 2001. Controllers were limited to two training trips in a calendar year instead of the eight permitted under FAM policies, and controllers could not fly to the same airport on consecutive flights. A controller had to get advanced approval to participate and had to submit an itinerary, as well as medical and security information. Foreign travel was not permitted.
20110819	August 19, 2011: FAA issued a final rule prohibiting air carriers and other certificate holders from employing certain former FAA aviation safety inspectors as company representatives to the agency for a period of two years after they had left the agency. These restrictions applied if the former FAA employee directly served as or was responsible for the oversight of a flight standards service aviation safety inspector and had direct responsibility to inspect, or oversaw the inspection of, the operations of the certificate holder. This rule also applied to persons who owned or managed fractional ownership program aircraft used to conduct certain commercial operations. (See November 20, 2011.)

20110819 August 19, 2011: FAA issued a new rule requiring scheduled airlines to install ice detection equipment in their existing fleets or to update their flight manuals to ensure crews know when to activate their ice protection systems. For aircraft equipped with an ice-detection system, the new rule mandated that the system alert the crew every time they needed to activate ice protection. The system could either automatically turn on the ice protection or pilots could manually activate it. For aircraft without ice-detection equipment, the crew had to activate the protection system based on cues listed in their airplane's flight manual during climb and descent, and at the first sign of icing when at cruising altitude. The rule applied only to in-service aircraft that weighed less than 60,000 pounds because studies showed smaller planes were more affected by undetected icing or late activation of the ice protection system. (See April 26, 2007.)

20110823 August 23, 2011: New consumer protections for airline passengers went into effect mandating airlines to refund any fee for carrying a bag if the bag is lost. Airlines were required to prominently disclose all optional fees on their websites, including but not limited to fees for baggage, meals, canceling or changing reservations, or advanced or upgraded seating. The new rules also doubled the amount of money passengers were eligible to be compensated for in the event they were involuntarily bumped from an oversold flight. The rule expanded the existing ban on lengthy tarmac delays to cover the international flights of foreign airlines at U.S. airports, and established a hard four-hour time limit on tarmac delays for all international flights at U.S. airports. It also extended the three-hour tarmac delay limit for domestic flights, then in place at large-hub and medium-hub airports, to flights at small-hub and non-hub airports. All carriers subjected to the tarmac rule would be required to report lengthy tarmac delays to DOT. In all cases, exceptions to the time limits were allowed only for safety, security, or air traffic control-related reasons. Carriers also had to ensure passengers stuck on the tarmac were provided adequate food and water after two hours, as well as working lavatories and any necessary medical treatment. (See June 2, 2010 and November 14, 2011.) Additional measures under the new rule that would take effect January 24, 2012, included:

* Requiring all taxes and fees to be included in advertised fares.

* Banning post-purchase price increases.

* Allowing passengers to hold a reservation without payment, or to cancel it without penalty, for 24 hours after the reservation is made, if the reservation is made one week or more prior to a flight's departure date.

* Requiring disclosure of baggage fees when passengers book a flight.

* Requiring that the same baggage allowances and fees apply throughout a passenger's journey.

* Requiring disclosure of baggage fee information on e-ticket confirmations.

* Requiring prompt notification of delays of over 30 minutes, as well as cancellations and diversions.

20110826

August 26, 2011: At an event at Boeing's facility in Everett, Washington, Administrator Babbitt presented Boeing executives with two certificates for the design and production of the Boeing 787 Dreamliner with Rolls-Royce engines. The first, a type certificate, was for FAA's approval of the airplane's design. The second, a production certificate, allowed Boeing to manufacture the 787 following a rigorous review by FAA inspectors of Boeing's quality system, production tooling, manufacturing processes and controls, inspection methods, and supplier control procedures. The Dreamliner made its inaugural flight from Tokyo to Hong Kong with paying passengers on October 26, 2011. (See December 4, 2012.)

20110907

September 7, 2011: Lockheed Martin announced controllers at the Minneapolis-St. Paul International Airport were now using a tool it developed with FAA. The automated terminal proximity alert (ATPA) tool automatically let controllers know what the distance was between aircraft that are flying in-line instrument approaches. The system also visually alerted a controller when a trailing plane was predicted to get too close to an aircraft ahead of it, allowing the controller to take action before a loss of standard separation occurs.

20110913

September 13, 2011: Secretary of Transportation Ray LaHood and Australian Ambassador to the United States Kim Beazley signed a memorandum of agreement to continue research and development of clean, sustainable alternative aviation fuels. The agreement called for Australia and the United States to exchange information about policies, programs, projects, research results, and publications, and to conduct joint studies in areas such as fuel sources and environmental impacts. The memorandum also facilitated analysis of fuel source supply chains. (See October 21, 2010; November 7, 2011.)

20110923

September 23, 2011: In a message to FAA employees, Administrator Babbitt announced Congress had approved FAA's reprogramming request. The request, dated June 30, 2011, proposed to shift approximately $608 million in funding between budget accounts to execute a reorganization of the agency. With congressional approval, FAA moved the organization responsible for NextGen from the ATO to a new office reporting directly to the FAA deputy administrator. The ATO senior vice president for NextGen and operations planning became the assistant administrator for NextGen. The joint planning and development office also became a direct report to the deputy administrator. In addition, the agency created a senior vice president for program management within the ATO. Programs covering approximately 125 capital investment plan budget line items moved into the new organization. A new assistant administrator for finance and management, reporting to the administrator, took over the separate offices that managed acquisition and business services, financial services, and regions and center operations. All of FAA's financial, information technology, non-ATO acquisition, property management, and related administrative functions now reported to this new organization. The assistant administrator had four deputies, once for each functional area. (See February 28, 2011; February 14, 2012; January 17, 2014.)

20111001	October 1, 2011: Effective this date, FAA updated its fee structure. The fee levels that would eventually be achieved reflected increases above then levels of 69 percent in the en route environment and 36 percent in the oceanic environment. This would be accomplished by increasing the fees on October 1 in each of the years 2011 through 2014 at annual compounded rates of 14 percent for en route and 8 percent for oceanic. (See September 28, 2010.) The actual dollar amounts of each fee on the four revision dates would be:
	* October 1, 2011 $38.44 $17.22
	* October 1, 2012 $43.82 $18.60
	* October 1, 2013 $49.95 $20.09
	* October 1, 2014 $56.86 $21.63
20111007	October 7, 2011: FAA announced approval of the first public use helicopter area navigation routes (RNAV) known as TK routes. The new TK routes connected New York City with Washington, DC. Publishing the RNAV routes on IFR en route low altitude charts offered helicopter operators several benefits, such as dedicated routes and IFR capability. (See August 6, 2007.)
20111017	October 17, 2011: FAA broke ground on a new $69 million, 324-foot air traffic control tower and TRACON at Cleveland Hopkins International Airport. The new tower would replace one opened in 1988. FAA expected to commission the new tower and TRACON in late 2014.
20111020	October 20, 2011: FAA dedicated the new $72.6 million, 336-foot-tall air traffic control tower and TRACON at Memphis International Airport.
20111031	October 31, 2011: Beginning this date, FAA required pilots of business jets certified for single-pilot operations to pass yearly proficiency checks. The rule required approximately 3,000 US-based pilots to have flight checks, which had to be performed either in full-flight simulators or in an aircraft with a FAA-designated examiner on board.
20111107	November 7, 2011: United Airlines flew the first-ever commercial domestic flight using a blend of 40 percent biofuel mix created from algae by Solazyme, a San Francisco based company, and traditional jet fuel. (See September 13, 2011; December 1, 2011.)

20111114	November 14, 2011: The Department of Transportation announced it had imposed the first fine for violating the April 2010 three-hour tarmac delay rule. The Department fined American Eagle $900,000 in civil penalties and ordered the air carrier to cease and desist from future violations of the tarmac delay rule. On May 29, 2011, American Eagle had tarmac delays of more than three hours on 15 flights arriving at O'Hare. Those 15 flights had tarmac delays of up to 225 minutes, which was 45 minutes beyond the legal limit. While the airline had a procedure in place to bring passengers subject to an extended tarmac delay back to the gate, the carrier was late in implementing its procedure, resulting in violations of the rule. A total of $650,000 had to be paid within 30 days, and up to $250,000 could be credited for refunds, vouchers, and frequent flyer mile awards to the passengers on the 15 flights, as well as to passengers on future flights that experienced lengthy tarmac delays of less than three hours. (See August 23, 2011.)
20111128	November 28, 2011: The Air Transport Association formally changed its name to Airlines for America with the slogan "We Connect the World." The name change was publically announced on Capitol Hill on November 30. (See January 3, 1936.)
20111129	November 29, 2011: FAA dedicated the new environmental modeling lab at its Washington, DC, headquarters. The facility allowed FAA to develop and use the tools necessary to assess aviation environmental impacts and advise policy and regulatory decision-making processes, both domestically and internationally.
20111129	November 29, 2011: AMR, the parent company of American Airlines filed for chapter 11 bankruptcy. (See February 13, 2013.)
20111130	November 30, 2011: FAA granted United Continental Holdings a single operating certificate allowing Continental and United to operate as one airline. (See October 1, 2010.)

20111130

November 30, 2011: DOT hosted a forum on flight diversions to examine what happened on October 29 when the poor weather caused a massive diversion of flights from the New York area airports to other airports, including Bradley Airport in Hartford, CT. Flights sat on the tarmac for hours at Bradley as the aviation system broke down under the sheer volume and speed of an October snowfall, strong winds, long-scheduled runway maintenance, and equipment outages at the New York area airports. The baggage system also broke down at Bradley because of the volume of air traffic diverted there. In addition, there was insufficient Customs and Border Protection staff to handle diverted flights coming from international destinations. The forum's 100 participants met in three breakout groups – airport operations, airline operations, and the customer experience – to discuss how the events of October 29 could have been prevented. They addressed five FAA proposed recommendations on how to improve procedures at airports to reduce the impact caused by inclement weather. The groups unanimously agreed that increased collaboration and real-time information sharing via an airport information portal managed by FAA would help alleviate prolonged tarmac delays. Other recommendations included coordinating contingency plans among all airports in a given region; clearly identifying diverted flights on the monitoring systems used by air traffic controllers and airport operators to delineate between them and regularly scheduled air traffic at a given airport; and, including smaller airports on FAA's routine strategic planning teleconferences where information was routinely exchanged on diverting flights.

20111201

December 1, 2011: FAA announced it had awarded $7.7 million in contracts to eight companies to help advance alternative, environmentally-friendly, sustainable sources for commercial jet fuel. (See November 7, 2011; December 2, 2014.) FAA funds were distributed by the Department of Transportation's John A. Volpe Center. The eight companies selected for the contracts were to help FAA develop and approve alternative, sustainably-sourced "drop-in" jet fuels that could be used without changing aircraft engine systems or airport fueling infrastructure. As part of that work, the companies would develop these biofuels from sources such as alcohols, sugars, biomass, and organic materials known as pyrolysis oils. In addition, the contracts called for research into alternative jet fuel quality control, examination of how jet biofuels affect engine durability, and guidance to jet biofuel users about factors that affect sustainability. (See November, 7, 2011; February 13, 2013.) Awardees included:

* $1.1 million for Honeywell UOP of Des Plaines, IL
* $3 million for LanzaTech, Inc. of Roselle, IL
* $1.5 million for Virent Energy Systems of Madison, WI
* $1.5 million for Velocys, Inc. of Plain City, OH
* $280,000 for Honeywell Aerospace of Phoenix, AZ
* $250,000 for Metron Aviation, Inc. of Dulles, VA
* $50,000 for Futurepast: Inc. of Arlington, VA
* $25,000 for Life Cycle Associates, LLC of Portola Valley, CA

20111205	December 5, 2011: FAA Administrator Randy Babbitt announced he would be taking an extended leave of absence from the agency. The DOT Secretary appointed FAA Deputy Administrator Michael Huerta acting administrator. The following day, on December 6, Babbitt announced his resignation from FAA.
20111205	December 5, 2011: The United States and Montenegro concluded an Open Skies aviation agreement that liberalized air services for the carriers of both countries. This was the first aviation agreement between Montenegro and the United States. Previously, air rights between the two countries were governed by an agreement between the United States and Yugoslavia. Under the Open Skies agreement, the airlines of both countries could fly to, from, and beyond the other's territory, without restriction on how often carriers flew, the kind of aircraft they used and the prices they charged. The agreement made Montenegro the 105th U.S. Open-Skies partner. (See July 11, 2011; December 13, 2011.)
20111211	December 11, 2011: J. Lynn Helms, FAA's eighth administrator, died at the age of 86. During his tenure as administrator, he played a key role in keeping the NAS operating during the August 3, 1981, air traffic control strike, headed the U.S. delegation to the United Nations emergency session following the Soviet Union's shooting down of Korean Air Flight 007, spearheaded FAA's development of TCAS, and initiated the national airspace review program to develop methods and procedures for improved safety and operational efficiency in the national airspace. Helms originated and oversaw development of the 1982 National Airspace System (NAS) Plan. The 450-page document spelled out specific improvements to be made to facilities and equipment to meet the projected demands of air transportation. (See April 22, 1981.)
20111213	December 13, 2011: Republic Airways Holdings announced plans to sell Frontier Airlines.
20111213	December 13, 2011: The United States and St. Christopher and Nevis signed an Open-Skies aviation agreement to liberalize air services for the carriers of both countries. Previously, aviation relations between the two countries were governed by Bermuda II, the former aviation agreement between the United States and United Kingdom which restricted route rights and pricing. Under the Open-Skies agreement, the airlines of both countries could fly to, from and beyond the other's territory, without restriction on how often carriers flew, the kind of aircraft they used, and the prices they charged. The agreement made St. Christopher and Nevis the 104th U.S. Open-Skies partner. (See December 5, 2011; March 25, 2013.)
20111214	December 14, 2011: FAA certified the passenger version of the new 747-8 intercontinental jumbo jet. At 250 feet long with a 225-foot wingspan, the 747-8 was the largest Boeing jet and could carry 467 passengers in a typical 3-class airline configuration. The list price of the aircraft was $333 million, though aircraft valuation firm Avitas estimated the real market value after standard discounts at about $167 million.
20111215	December 15, 2011: Fort Lauderdale-based regional carrier Gulfstream International Airlines rebranded itself as Silver Airways.

20111216 December 16, 2011: Secretary of State Hillary Clinton and Transportation Secretary Ray LaHood sent a letter to several European Commission (EU) officials, including EU President Jose Manuel Barroso, saying the U.S. would take "appropriate action" if the EU did not change its policy of including international aviation in the emissions trading scheme. The letter stated the U.S. had a "strong record of performance" in reducing emissions and in researching sustainable and other initiatives and the emissions trading policy was inconsistent with international law. The letter did not identify what actions the U.S. might take. The previous week, DOT ordered U.S. and European carriers to submit emission trading scheme data to the U.S. government, in a move that many believed to be the first step in a potential U.S. retaliation against the policy.

20111221 December 21, 2011: FAA issued a final rule mandating pilot flight and duty requirements. (See September 14, 2010; January 4, 2014.) Airlines had two years to comply. The rule did not apply to cargo carriers. Key components of this final rule for commercial passenger flights included:

* Flight duty period. The allowable length of a flight duty period depended on when the pilot's day began and the number of flight segments he or she was expected to fly, and ranged from 9-14 hours for single crew operations. The flight duty period began when a flightcrew member reported for duty, with the intention of conducting a flight and ended when the aircraft was parked after the last flight. It included the period of time before a flight or between flights a pilot was working without an intervening rest period. Flight duty included deadhead transportation, training in an aircraft or flight simulator, and airport standby or reserve duty if these tasks occurred before a flight or between flights without an intervening required rest period.

* Flight time limits of eight or nine hours. FAA limited flight time – when the plane was moving under its own power before, during, or after flight – to 8 or 9 hours depending on the start time of the pilot's entire flight duty period.

* Ten-hour minimum rest period. The rule set a 10-hour minimum rest period prior to the flight duty period, a two-hour increase over the old rules. The new rule also mandated that a pilot must have an opportunity for eight hours of uninterrupted sleep within the 10-hour rest period.

* New cumulative flight duty and flight time limits. The new rule addressed potential cumulative fatigue by placing weekly and 28-day limits on the amount of time a pilot could be assigned any type of flight duty. The rule also placed 28 day and annual limits on actual flight time. It also required that pilots have at least 30 consecutive hours free from duty on a weekly basis, a 25 percent increase over the old rules.

* Fitness for duty. FAA expected pilots and airlines to take joint responsibility when considering if a pilot was fit for duty, including fatigue resulting from pre-duty activities such as commuting. At the beginning of each flight segment, a pilot was required to affirmatively state his or her fitness for duty. If a pilot reported he or she was fatigued and unfit for duty, the airline had to remove that pilot from duty immediately.

* Fatigue Risk Management System. An airline could develop an alternative way of mitigating fatigue based on science and using data validated by FAA and continuously monitored.

2012

20120117	January 17, 2012: FAA's air traffic organization (ATO) reorganized to simplify management and reporting structures. The changes included a simplified reporting structure under the chief operating officer and his deputy and clarified lines of responsibility and accountability. Safety functions and technical training became part of the new ATO safety and technical training organization. A new program management organization pulled together key acquisition programs into one office. ATO consolidated most non-technical operational support under management services and realigned technical operational mission support under mission support services. (See September 23, 2011 and January 30, 2012.)
20120118	January 18, 2012: FAA broke ground for a new $16.4 million, state-of-the-art airport traffic control tower at Fort Lauderdale Executive Airport. When complete, the new facility would include a 117-foot-tall air traffic control tower topped by a 525-square-foot tower cab. A 7,200-square-foot single-story base building housed training rooms, administrative offices, and equipment rooms. FAA planned to commission the new tower in the spring of 2014. It would replace the existing tower, commissioned in 1970.
20120123	January 23, 2012: Transportation Secretary Ray LaHood and Acting FAA Administrator Michael Huerta helped break ground for a $791 million runway expansion at Fort Lauderdale-Hollywood International Airport. The project would extend, shift, and lengthen Runway 9R/27L from 5,276 feet to 8,000 feet, giving the airport two parallel runways that increased the airport's capacity from 84 to 107 flights per hour.
20120124	January 24, 2012: New regulations went into effect requiring airlines and ticket agents to include all mandatory taxes and fees in published airfares and to disclose baggage fees to consumers. The new provisions, part of the airline consumer rule issued by the U.S. Department of Transportation in April 2011, included requirements allowing passengers to hold a reservation without payment, or cancel a booking without penalty, for 24 hours after making a reservation, if they made it one week or more prior to a flight's departure date. In addition, airlines had to notify passengers of flight delays of over 30 minutes, as well as flight cancellations and diversions, and they were prohibited from increasing the price of passenger tickets after purchase. (See November 14, 2011; July 24, 2012; December 5, 2017.)
20120130	January 30, 2012: FAA issued five new orders for ATO's operational service units – en route, terminal, and system operations – that embodied the core principles of the safety management system (SMS). SMS integrated safety-related operational processes, procedures, policies and programs, and provided the framework for the ATO to anticipate potential sources of risk so it could act before they could jeopardize safety. (See November 5, 2010, August 6, 2012, January 7, 2015.)
20120207	February 7, 2012: FAA and airport officials at the Rocky Mountain Metro Airport in Broomfield, CO, dedicated the airport's new control tower. The $23 million tower replaced one built in 1966.

20120210	February 10, 2012: An Airbus A320 test aircraft made the world's first four-dimensional, or 4D, trajectory flight as part of a single European sky air traffic management research (SESAR) initiative. SESAR, founded by the European Commission, Eurocontrol, Airbus, Honeywell, Indra, NORACON, and Thales, reported during the flight from Toulouse, France, to Stockholm, Sweden, the relevant air navigation service providers and airports successfully exchanged the trajectory information containing current and predicted position.
20120214	February 14, 2012: President Barack Obama signed the FAA Modernization and Reform Act of 2012 – a four-year reauthorization bill. The law included provisions for:
	* Advancing NextGen – established deadlines for adopting existing NextGen navigation and surveillance technology and mandated development of precision navigational procedures at the nation's 35 busiest airports by 2015.
	* Enhancing runway safety – directed FAA to develop and implement a plan to improve runway safety by reducing the number and severity of runway incursions and required a plan to develop and install a system to alert pilots and controllers of potential runway incursions.
	* Making laser attacks on aircraft a federal crime.
	* Applying flight and duty time limits to tail-end ferry and maintenance flights – counted flight segments to reposition aircraft that may be added to the end of a pilot's duty day toward flight-time limits by including Part 91 flights in flight-time limits under FAR 121.
	* Improving the safety of lithium battery shipments by air – gave the Department of Transportation the ability to regulate the air transport of lithium metal and lithium ion batteries more stringently than ICAO technical instructions. (See October 8, 2004; April 13, 2015.)
	* Continuing to authorize transpacific alternate airports – kept the alternate airfield open on Midway Island, as well as airports in the Marshall Islands, Micronesia, and Palau.
	* Strengthening voluntary aviation safety data protections – enhanced protections for data collected by the aviation safety action program, the flight operations quality assurance program, line operation safety audits, and safety management systems and voluntarily submitted to FAA by mandating that the data could not be released to the public unless it is completely de-identified.
	* Studying feasibility of installing flight deck doors or alternatives on all-cargo aircraft – took action toward the goal of enhancing all-cargo safety and security by funding studies on the feasibility of adding hardened cockpit doors or alternatives to all-cargo aircraft.
	* Opposing EU environmental trading scheme for commercial aviation – made clear Congress's opinion the European Union should not extend its emissions-trading proposal to international civil aviation operations without working through ICAO.

	* Supporting critical aviation safety research – directed GAO to study the effectiveness of FAA's oversight of the use of new technologies to prevent or reduce danger from smoke in the cockpit. Supported weather research on icing, volcanic ash, and wake vortices. Continued authorization for research and development in areas of fire safety, airworthiness, aircraft catastrophic failure prevention, human factors, aeromedical, unmanned aircraft systems, Safety management systems, atmospheric hazards, airspace management, propulsion and fuel systems, and alternative jet fuel. (See November 22, 2011; March 7, 2012.)
	* Expanding IRA rollover options for airline employees during bankruptcy – expanded choices for qualified airline employees who receive payments during airline bankruptcies to allow the funds to be considered an IRA rollover contribution. (See September 23, 2011; March 6, 2012; September 30, 2015.)
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	* Expanding IRA rollover options for airline employees during bankruptcy – expanded choices for qualified airline employees who receive payments during airline bankruptcies to allow the funds to be considered an IRA rollover contribution. (See September 23, 2011; March 6, 2012; September 30, 2015.)
20120214	February 14, 2012: The Federal Communications Commission revoked the conditional approval it gave LightSquared after the National Telecommunications and Information Administration said there was no practical way to mitigate the potential GPS interference.
20120215	February 15, 2012: FAA contract controllers began controlling aircraft from the Punta Gorda (FL) Airport's first air traffic control tower. A grant from the Florida Department of Transportation and the Charlotte County Airport Authority funded the $4 million tower.
20120227	February 27, 2012: FAA proposed raising the qualification requirements for first officers who fly for U.S. passenger and cargo airlines. Consistent with a mandate in the Airline Safety and Federal Aviation Administration Extension Act of 2010 (see August 1, 2010), the proposed rule would require first officers – also known as co-pilots – to hold an airline transport pilot (ATP) certificate, requiring 1,500 hours of pilot flight time. Previously, first officers had to hold a commercial pilot certificate, which required 250 hours of flight time. The proposal also would require first officers to have an aircraft type rating, which would involve additional training and testing specific to the airplanes they fly. Other highlights of the proposed rule included:

	* A requirement for a pilot to have a minimum of 1,000 flight hours as a pilot in air carrier operations that require an ATP prior to serving as a captain for a U.S. airline.
	* Enhanced training requirements for an ATP certificate, including 50 hours of multi-engine flight experience and completion of a new FAA-approved training program.
	* An allowance for pilots with fewer than 1,500 hours of flight time, but who have an aviation degree or military pilot experience, to obtain a “restricted privileges” ATP certificate. These pilots could serve only as a first officer, not as a captain. Former military pilots with 750 hours of flight time would be able to apply for an ATP certificate with restricted privileges. Graduates of a four-year baccalaureate aviation degree program would be able to obtain an ATP with 1,000 hours of flight time, only if they also obtained a commercial pilot certificate and instrument rating from a pilot school affiliated with the university or college. (See December 21, 2011.)
20120306	March 6, 2012: FAA and the A6 alliance of European air navigation service providers signed a joint statement to work toward an interoperable aviation system. Representatives agreed to create a forum to enhance collaboration on the deployment and implementation of NextGen and SESAR. (See February 14, 2012; August 27, 2012.)
20120307	March 7, 2012: FAA requested public input on the agency’s selection process for six aircraft system (UAS) test sites, as mandated by Congress under the National Defense Authorization Act and the 2012 FAA reauthorization bill. Specifically, the request for comment asked for input on several important questions, such as public versus private management of the sites, research activities and capabilities of the test areas, the requirements for test site operators, and the geographic and climate factors that should influence site selection. (See February 14, 2013.)
20120314	March 14, 2012: FAA and NATCA announced an extension of the NATCA contract for another four years. The contract was enacted in 2009 and was to expire on October 1. The extension, which did not require a vote of the union's members, prolonged the agreement to July 1, 2016. (See August 13, 2009.)
20120320	March 20, 2012: The Little Rock Municipal Airport Commission voted to rename the Little Rock National Airport the Bill and Hillary Clinton National Airport/Adams Field.
20120323	March 23, 2012: Manufacturer Terrafugia flew the first production prototype of its flying car, Transition, from its base in Plattsburgh, NY. The company successfully conducted tests of initial drive and conversion to an aircraft of its two-seat light sport aircraft – designed as a street legal aircraft that can be driven safely on the highway. During the eight-minute flight the aircraft reached an altitude of 1,400 feet. The proof-of-concept Transition took to the skies in 2009 and completed 28 flights. (See June 2010.)

20120327 March 27, 2012: President Barack Obama nominated acting FAA Administrator Michael Huerta to be FAA administrator for a five-year term. Huerta had been confirmed as the agency's deputy administrator in June 2010. The Senate Commerce, Science and Transportation Committee held a confirmation hearing for Huerta on June 21. The hearing, however, was suspended because Senators needed to cast ballots on a bill. The Committee met on July 31and unanimously voted to send the nomination to the full Senate for a vote. Senator Jim DeMint (R-SC), however, placed a hold on the nomination until after the presidential elections. He lifted the hold once the elections were over. The U.S. Senate confirmed Huerta for a five-year term as FAA administrator on January 1, 2013. (See December 5, 2011; January 1, 2013.)

20120404 April 4, 2012: FAA announced release of its seventh annual update to the controller workforce plan, which outlined the agency's strategies to maintain controller staffing levels at air traffic control facilities across the country for the next decade. According to the plan, FAA had hired more than 7,500 new air traffic controllers in the past five years, and currently employed more controllers than in 2000, even though air traffic had declined 23 percent in the past decade. FAA planned to hire 6,200 more controllers over the next five years to keep pace with forecast retirements and traffic growth. In the previous five years, 3,151 controllers had retired. (See March 7, 2007; February 10, 2014.)

20120430 April 30, 2012: Delta Airlines announced it had agreed to purchase the ConocoPhillips refinery in Trainer, PA, for $150 million. Delta expected to decrease annual fuel expenses by $300 million once the refinery was retrofitted and reopened. Delta was the first airline to run its own refinery.

20120502 May 2, 2012: FAA, state, and local officials dedicated a new air traffic control tower at the Abilene (TX) Regional Airport. The 145-foot tower, which replaced the tower commissioned in 1951, cost $9.24 million and included a nearly 400 square foot cab and 9,900 square feet for offices and training and break rooms.

20120510 May 10, 2012: FAA announced a contract award to ITT Exelis and GE Naverus to help accelerate the development of satellite-based procedures that would allow aircraft to fly more directly to their destinations. Under the $2.77 million contract, ITT Exelis, the prime contractor, and GE Naverus, the sub-contractor, would develop required navigation performance (RNP) approach procedures into five airports: Ted Stevens Anchorage International, James M. Cox Dayton International, Charles B. Wheeler Downtown Airport (Kansas City), General Mitchell International (Milwaukee) and Syracuse Hancock International. (See March 2007.)

20120514 May 14, 2012: FAA announced interim rules allowing public safety agencies to fly drones weighing as much as 25 pounds without applying for special approval needed under previous regulations. The rule required agencies to show they could operate a drone before getting a FAA permit. Drones had to fly within 400 feet of the ground, remain in sight of the operator, and stay clear of airports. FAA also streamlined its approval process for the special certificates it required for other agencies to fly drones and for flying larger drones. The new application process expedited approvals for time-sensitive emergency missions and included a procedure allowing for applicant appeals if a permit request was denied. (See June 9, 2010; February 14, 2012.)

20120522 May 22, 2012: The SpaceX Falcon 9 rocket launched and, on May 25, became the first U.S. commercial space rocket to dock at the International Space Station. The SpaceX mission, considered to be the first test of NASA's plan to outsource space missions to privately funded companies, was designed to prove to NASA the Falcon 9 rocket and Dragon capsule could successfully haul cargo, and eventually astronauts, for the space agency. The Dragon capsule returned to earth on May 31. (See November 22, 2010; September 16, 2014.)

20120524 May 24, 2012: Transportation Secretary Ray LaHood announced the appointment of the four members of a new committee to advise him on measures to protect the rights of air travelers. The committee members included Lisa Madigan, Illinois attorney general, who chaired the committee; David A. Berg, senior vice president at Airlines for America; Deborah Ale-Flint, director of aviation at Oakland International Airport; and Charles Leocha, director of the Consumer Travel Alliance. The FAA Modernization and Reform Act of 2012, signed by President Obama on February 14, mandated the establishment of the committee. The law required the Secretary of Transportation to appoint to the committee four members with one representative each of air carriers, airport operators, state or local governments, and nonprofit public interest groups with expertise in consumer protection. According to the law, the committee would terminate on September 30, 2015.

20120607 June 7, 2012: FAA's office of commercial space transportation issued the first experimental permit allowing rocket-powered testing of a spaceship designed to carry humans. The permit, issued to Mojave, CA-based aerospace development company Scaled Composites, LLC, permitted the firm to begin powered test flights of its suborbital spacecraft, SpaceshipTwo, using its carrier aircraft, WhiteKnightTwo. The firm was developing and testing the spaceship for Virgin Galactic, founded by Richard Branson, which planned to offer space flights to paying customers in the future. (See April 1, 2004; December 21, 2008; April 29, 2013.)

20120614 June 14, 2012: FAA decommissioned the four-decades-old HOST computer system at the Seattle and Salt Lake City Air Route Traffic Control Centers (ARTCCs) and replaced the system with the en route automation modernization (ERAM) system. ERAM reached its operational readiness date (ORD) at Salt Lake City on March 27 and at Seattle on April 14. (See June 18, 2009; April 30, 2014.)

20120618 June 18, 2012: FAA and NASA signed a memorandum of understanding to coordinate standards for commercial space travel of government and non-government astronauts to and from low-Earth orbit and the international space station. In addition, the agreement addressed proper protocols for implementation, financial obligations, liability, free exchange of data and information, and other administrative obligations between FAA and NASA. (See November 9, 1999.)

20120622 June 22, 2012: A fire at FAA's William J. Hughes Technical Center forced the evacuation of 1,600 people working at the complex. The fire made some traffic flow systems unavailable. Operations resumed at the Center the following Monday, although 230 employees working the Center's main administrative building had to be relocated. FAA subsequently estimated the fire caused $2.2 million in damages to the facility.

20120629 June 29, 2012: Controllers began work at a temporary tower at East Hamptons (NY) Airport. The air traffic controllers directed planes into and out of the general aviation airport between 7 am and 11pm daily through October. The Town of East Hampton hoped controlled airspace during the busy summer season would mitigate aviation noise, in particular helicopter noise, in the area. The seasonal tower closed at the end of October. (See June 24, 2010; September 18, 2012.)

20120709 July 9, 2012: Transportation Secretary Ray LaHood and acting FAA Administrator Michael Huerta joined federal and local officials in breaking ground for a new air traffic control tower at San Francisco International Airport. When completed in late 2015, the new tower would be 221 feet tall with a 650 square-foot controller work area. The project included a three-story, 44,000 square-foot base building, which would house administrative offices, computer equipment, a backup generator, and secure corridors to allow passengers to transit between terminals without allowing access to the tower. The current tower, which FAA commissioned in 1984, was 190-feet-tall and had a 525 square-foot controller work area. Under a partnership with the airport, FAA would pay up to $69.5 million toward the project's $102 million cost and the airport would pay the additional costs as well as supervise the design and construction work.

20120713 July 13, 2012: FAA proposed a $13.57 million civil penalty against The Boeing Company, the second-largest fine in the agency's history, for missing a deadline to submit service instructions that would enable airlines to further reduce the risk of fuel tank explosions on more than 380 Boeing jetliners. (See March 2, 2009.)

20120718 July 18, 2012: DOT's Inspector General (IG) testified before the House Subcommittee on Aviation regarding FAA's contract tower program. Established in 1982, the program oversaw 250 contract towers providing air traffic control services to airports nationwide. The IG testified contract towers continued to provide safe air traffic services. Those towers had a lower number and rate of reported safety incidents and Agency-identified deficiencies when compared with similar FAA towers. The IG found the average contract tower cost roughly $1.5 million less to operate annually than a comparable FAA tower, largely due to lower staffing and salary levels. However, the IG noted FAA could improve its oversight of the program by implementing a voluntary safety incident reporting program at contract towers, reviewing labor hours worked to ensure contract compliance, and implementing processes to regularly evaluate contract towers as required by Congress. (See February 2, 1994.)

20120724 July 24, 2012: Transportation Secretary Ray LaHood praised the ruling by the U.S. Court of Appeals for the D.C. Circuit in favor of the U.S. Department of Transportation in Spirit Airlines, Inc. v. United States Department of Transportation. Spirit Airlines, Allegiant Air, and Southwest Airlines challenged portions of the Department of Transportation's April 2011 air passenger consumer protection rule requiring airlines and ticket agents to include all mandatory taxes and fees in published airfares, hold reservations without payment or penalty for 24 hours after the reservation was made, and prohibit post purchase baggage price increases after the initial ticket sale. The court ruled it reasonable for DOT to require airlines to add government fees and taxes to the base fare and disclose those as a total price, prominently displayed to prevent confusion over the total cost of their travel. Further, the court concluded the rule properly regulated airline cancellation policies because existing airline cancellation and refund practices were deceptive and unfair, and that the regulation was allowed under DOT's statute that targeted unfair and deceptive practices. Finally, the court ruled it was reasonable for DOT to conclude increasing the prices for baggage after the purchase of a ticket amounted to an unfair consumer practice. (See January 24, 2012.)

20120803 August 3, 2012: President Obama signed the Pilot's Bill of Rights, which expanded the rights of general aviation pilots facing potential penalties from FAA. The bill required FAA to give a pilot under investigation all relevant evidence at least 30 days before a decision to proceed with an enforcement action. FAA also had to provide the pilot access to flight service and tower communications pertinent to the enforcement action.

20120806 August 6, 2012: FAA ATO COO David Grizzle announced Teri Bristol would replace Deputy COO Rick Ducharme upon his retirement on August 31. At the time of the announcement Bristol served as the vice president of ATO's technical operations organization. (See January 30, 2012; January 16, 2013.)

20120809 August 9, 2012: FAA published a notice in the Federal Register asking for comments on plans to decommission the last of the direction finders (DF) in the U.S. – 29 in Alaska. The agency had decommissioned DFs outside of Alaska in 2007. In the notice, FAA said use of DFs for pilot orientation "has become almost nonexistent." The Alaska light service information area groups (AFSIAG) had documented eight flight assists involving lost or disoriented pilots over the past eight years. Of those instances, use of DF equipment for flight assists was documented just three times. There have been no documented flight assists with DFs since 2008.

20120815 August 15, 2012: FAA issued a "does not exceed (DNE)" determination for the proposed construction of 130 wind turbines in Nantucket Sound. A FAA study determined the proposed construction of the 130 wind turbines, individually and as a group, would have no effect on aeronautical operations. Therefore, FAA concluded the project, if constructed as proposed, posed no hazard to air navigation.

20120827 August 27, 2012: FAA announced plans to establish a government-industry group to study the portable electronic devices (PED) policies and procedures aircraft operators used to determine when such devices could be used safely during flight. FAA's mandate to the study group excluded in-flight use of cell phones. Then current FAA regulations required an aircraft operator to determine the radio frequency interference from the devices were not a safety risk before authorizing them for use during certain phases of flight. As the first step in gathering information for the working group, FAA sought public input on the agency's PED policies, guidance, and procedures for operators. The request for comments appeared in the Federal Register on August 28. (See September 30, 2013.)

20120827 August 27, 2012: FAA announced the selection of Harris Corp. to develop the national airspace system (NAS) voice system (NVS) as a replacement for the 40-year-old legacy system. NVS would support ground-to-ground voice communications between air traffic controllers and air-to-ground voice communications between controllers and aircraft. FAA planned to deploy NVS in air traffic control towers, terminal, and en route facilities, and future NextGen facilities. The NVS contract had a five-year base and five two-year options, with a potential total value of $291.6 million. (See March 6, 2012; September 28, 2012.)

20120911	September 11, 2012: FAA and its German counterpart signed a declaration of cooperation to promote, develop, and use sustainable alternative aviation fuels in the United States and Germany. The declaration identified specific areas in which FAA and Germany's Ministry of Transport, Building and Urban Development, might cooperate, including exchanging information about research results, publications, funded research and development activities, and the sharing of best practices in alternative jet fuel conversion research and development and deployment. In addition, the countries could explore possibilities for cooperation in other areas, such as researching the lifecycle impact of the use of candidate alternative fuels on atmospheric emissions. The declaration also created an umbrella for cooperation between the commercial aviation alternative fuels initiative (CAAFI) — comprised of several U.S. agencies and aviation industry groups — and its German counterpart, the aviation initiative for renewable energy.
20120918	September 18, 2012: FAA issued a notice of proposed rulemaking that, if adopted, would mandate more stringent noise certification standards for helicopters certificated in the United States. The rule would apply to new helicopter type designs and for supplemental type certificates for those new type designs. Helicopters type certificated under the new standard would be designated as a Stage 3 helicopter. The new standards would harmonize U.S. standards with those of ICAO. The public had until November 19, 2012, to comment on the proposed rule. (See June 29, 2012; December 4, 2012; March 4, 2014.)
20120920	September 20, 2012: Harris Corp. Government Communications Systems announced FAA had selected it to provide data communications integrated services (DCIS). With a subcontracting team that included ARINC Inc., GE Aviation, and Thales, Harris would develop DataComm to supplement analog voice-only air-to-ground communications system with a digital system. DataComm would provide a two-way data exchange between controllers and flight crews for clearances, instructions, advisories, requests, and reports. FAA planned to install the system in air traffic control towers by 2016 and in air traffic facilities that managed high-altitude traffic beginning in 2019. The $331 million contract covered seven years, with 10 additional one-year options.
20120921	September 21, 2012: The new air traffic control tower at Missoula International Airport (MT) opened, replacing a tower built in 1961.
20120928	September 28, 2012: FAA Acting Administrator Michael Huerta and Secretary of Transportation Ray LaHood dedicated the new $20.5 million air traffic control tower at Wilkes-Barre/Scranton International Airport in PA. The 118-foot tower, equipped with a TRACON facility, provided NextGen capable air-traffic capability for flights within a 57 mile radius of the airport. Air traffic controllers had begun managing flights from the new tower in August. (See August 27, 2012; May 9, 2012.)

20120928	September 28, 2012: FAA's office of airports issued an updated airport design advisory circular (AC) 150/5300-13A, the first major rewrite of the AC in over 20 years. The AC, used by airport operators, airport planners, and engineers, provided guidance and recommendations for the geometric layout and engineering design of runways, taxiways, aprons, and other facilities at civil airports.
20121001	October 1, 2012: A new FAA rule required all pilots to use FAA MedXPress to apply for an airman medical certificate. The electronic system allowed pilots and aviation medical examiners to query the system electronically and determine the status of applications. FAA planned future enhancements to the system to all air traffic control specialists to use MedXPress.
20121012	October 12, 2012: The Mingo County (WVA) Airport Authority held a grand opening ceremony for the new Appalachia Regional Airport. The airport officially opened on June 26 with limited services. The airport consisted of 975 acres of previously mined land donated to the county in 2008 by Alpha Natural Resources. The airport authority said a total of $9 million had been invested in the site to date.
20121012	October 12, 2012: FAA approved the type certificate for the Sikorsky S-76D helicopter. Originally announced in 2005, the S-76D featured all-composite main rotor blades, Pratt & Whitney PW210S engines, and Thales TopDeck avionics.
20121015	October 15, 2012: The first air traffic control tower at Hernando County (FL) Airport began operations. The FAA contract tower operated from 7 am until 10 pm seven days a week. The 82-foot tower cost $2.2 million to construct.
20121015	October 15, 2012: Southwest Airlines announced it had hired former FAA Administrator Randy Babbitt as its senior vice president of labor relations. (See December 5, 2011.)
20121018	October 18, 2012: Officials dedicated a runway extension at the General Wayne A. Downing Peoria (IL) International Airport. A FAA grant paid for the majority of the approximately $950,000 project, which allowed larger turbine powered aircraft to use the airport.
20121025	October 25, 2012: FAA announced it had begun deploying a new web application that made the process of submitting, reviewing, and issuing notices to airmen (NOTAMS) more efficient and accurate. The e-NOTAM II or ENII tool expedited the time it took to publish a NOTAM. With the new system, it took less than three seconds for a NOTAM to be published once a flight service specialist had reviewed and approved it. Previously, specialists had to copy and paste information from a system that handled requested NOTAMs into a system that issued the NOTAMs. They would then submit the NOTAM to a centralized office for approval and publication. (See May 2010.)

20121030	October 29-30, 2012: Hurricane Sandy hit the east coast of the United States causing power outages and damage to FAA facilities and equipment. FAA prepared for the storm by pre-positioning restoration assets, readying control facilities, and working with airlines as they cancelled thousands of flights. FAA reported the storm affected three ARTCCs, nine TRACONS, 40 control towers, and equipment, including 25 airport surveillance radars, 121 localizers, and 74 very high frequency omni directional range facilities with tropical storm force winds, rain, snow, and flooding.
20121031	October 2012: Portland, ME-based Elite Airways received FAA Part 121 air carrier certification.
20121101	November 1, 2012: FAA upgraded Israel to a Category 1 safety rating based on international safety standards set by ICAO. FAA downgraded Israel in 2008 to a category 2, which meant it lacked laws or regulations necessary to oversee airline safety, its civil aviation authority lacked technical expertise or trained personnel, or it was deficient in its record keeping or inspection procedures. (See August 23, 2010; September 10, 2013.)
20121101	November 1, 2012: FAA implemented new wake turbulence categories for aircraft separation standards. Under the re-categorization, aircraft models were placed in one of six categories (labeled A-F) based on considerations other than maximum gross takeoff weight, such as approach speeds, wing characteristics, and lateral control characteristics. FAA split the heavy category (including the "super" Airbus A380) into three wake categories, "A" (super); "B" (upper heavy); and "C" (lower heavy) aircraft. When a lower heavy jet followed an upper heavy jet into an airport, the separation standard remained at four miles. When an upper heavy jet followed a lower heavy jet, the separation could be reduced to three miles. The former method of wake turbulence categorization was based solely on maximum gross takeoff weight. (See November 1, 2010 and May 8, 2013.)
20121101	November 1, 2012: The Department of Transportation Inspector General (IG) issued a report detailing a range of ethical, personnel, and procurement issues at the Metropolitan Washington Airport Authority (MWAA). MWAA operated two-federally owned airports, Reagan National and Dulles International, and had responsibility for managing a two-phased extension of the Silver Line subway. After the IG issued an interim report in May that highlighted systematic procurement and ethical lapses at MWAA, Secretary of Transportation appointed, on July 1, a federal accountability officer to provide MWAA with advice and counsel on improved ethics, procurement, and governance policies. DOT attorney Kimberly Moore served as the accountability officer until Congress established an inspector general position for MWAA. (See June 7, 1987.)

20121108 November 8, 2012: FAA, airlines, and aviation labor unions announced a partnership with NTSB to share summarized safety information that could help prevent accidents. The information, shared through an initiative called the aviation safety information analysis and sharing (ASIAS) executive board, would help NTSB determine if an accident was a unique event or an indication of systemic risks. The agreement outlined the procedures, guidelines, and roles and responsibilities for the executive board to address specific written NTSB requests for ASIAS information. ASIAS used aggregate, protected data from industry and government voluntary reporting programs, without identifying the source of the data, to find potential safety issues, identify safety enhancements, and measure the effectiveness of solutions.

20121113 November 13, 2012: FAA issued a notice of proposed rulemaking to tighten requirements for aircraft maintenance outsourcing. Under the proposal, each carrier that contracted out any of its maintenance had to have policies and procedures in place to ensure the contracted maintenance would be performed in accordance with its maintenance program and manual. The requirement would apply to scheduled service carriers under Part 121 regulations, but also to most commuter and on-demand carriers operating under Part 135 regulations. (See June 16, 1999.)

20121122 November 22, 2012: Dan McKinnon, who helped oversee the deregulation of the U.S. airline industry as the last chairman of the Civil Aeronautics Board (CAB) in the early 1980s, died at the age of 78. In a 1984 speech to the Aero Club of Washington, McKinnon counted among his accomplishments a tough new U.S. policy to negotiate quid pro quos for U.S. aviation interests in bilateral accords; the elimination of antitrust immunity for travel agents to sell airline tickets; and the transfer of the remaining CAB functions to the U.S. Transportation Department. (See December 31, 1984.)

20121126 November 26, 2012: FAA banned the use of velcro-type straps to secure emergency locator transmitters (ELT) designed and built after November 26, 2012. FAA issued technical standard order (TSO-C126b) two years after a high-profile crash that killed Alaska Senator Ted Stevens and four others. The ELT aboard the Otter aircraft they were on came loose on impact and detached from the antenna. Rescuers found it on the floor in the back of plane, activated, but unable to transmit because it was no longer connected to the antenna. (See August 9, 2010.)

20121127 November 27, 2012: President Obama signed the European Union Emission Trading Scheme Prohibition Act, introduced by Senator John Thune (R-SD), which gave the Secretary of Transportation the authority to ensure U.S. aircraft operators would not be penalized or harmed by the European Union's emissions trading system (ETS). Under ETS, the European Union could subject all international flights operating to and from the European Union to pay an emissions tax. (See December 16, 2011.)

20121128	November 28, 2012: The consistency of regulatory interpretation aviation rulemaking committee (ARC) charted by FAA on April 30, 2012, issued its final report. Among other things, it concluded the agency's flight standards service and aircraft certification service offices should review all guidance documents and interpretations to identify and cancel outdated material, and cross-reference material to the applicable rule. Further, the ARC suggested FAA expand its current aviation safety information management system initiative to consolidate all of the aviation safety organization libraries into a single master electronic resource, organized by rule, to allow users access to relevant rules and all active and superseded guidance material and related documents.
20121130	November 30, 2012: FAA, working with the Department of Labor Occupational Safety and Health Administration (OSHA) proposed a new policy for addressing flight attendant workplace safety. While FAA's aviation safety regulations took precedence, the agency proposed OSHA enforce certain occupational safety and health standards currently not covered by FAA oversight. Under the proposal, flight attendants would, for the first time, be able to report workplace injury and illness complaints to OSHA for response and investigation. On December 7, FAA published the proposed policy in the Federal Register and requested comments on that policy by January 7, 2013. (See August 22, 2013.)
20121203	December 3, 2012: FAA and Colorado Department of Transportation (CDOT) announced the activation of technology to help pilots address inclement weather around Montrose Regional Airport in western Colorado. The technology, known as wide area multilateration (WAM), improved safety and efficiency by allowing air traffic controllers to track aircraft in mountainous areas outside radar coverage. The WAM deployment in Montrose was part of the larger Colorado surveillance project, a partnership between FAA and CDOT, which began providing radar-like service to the mountain communities of Craig, Hayden, Steamboat Springs, and Rifle in 2009. FAA and State of Colorado expected to complete the project by deploying WAM in Durango, Gunnison, and Telluride in summer 2013. (See May 4, 2010; July 31, 2013.)
20121204	December 4, 2012: FAA released a report approving commercial passenger flights at Paine Field south of Everett, WA. FAA began studying the issue in 2008 when Allegiant Air expressed interest in providing regional flights from the airport. In the report, FAA stated up to 23 daily flights would not significantly increase noise, traffic, or pollution in nearby communities. (See September 18, 2012; September 3, 2013.)
20121204	December 4, 2012: FAA issued an airworthiness directive ordering airlines to inspect Boeing 787 Dreamliners for improperly installed fuel-line connectors that could result in leaks or fires. Airlines had reported fuel leaks on two in-service 787s, and subsequent inspections by Boeing of jets in service or still in production revealed some fuel line connectors installed incorrectly. Boeing recommended such inspections to 787 customers on November 25; the FAA airworthiness directive made those inspections mandatory. A third aircraft experienced electrical problems after FAA issued the directive. (See August 26, 2011 and January 7, 2013.)

20121206	December 6, 2012: FAA lifted its 16-year ban on commercial flights by U.S. carriers to two international airports, Erbil and Sulaymaniyah, in Kurdish northern Iraq because of increased stability in the region. FAA banned flights to the region on October 16, 1996 (SFAR No. 77) for safety reasons.
20121209	December 9, 2012: A Learjet 25 (N345MC) carrying Los Angeles-based Mexican-American singer Jenni Rivera crashed in northern Mexico approximately 10 minutes after departing the airport in Monterey, Mexico. Six others, including 2 pilots, were on the plane. There were no survivors. NTSB assisted in the accident investigation. The 43-year old aircraft was owned by Starwood Management of Las Vegas, Nevada.
20121214	December 14, 2012: FAA issued a safety directive mandating a three-day deadline for 200 operators of Gulfstream business jets to conduct high-priority inspections and possible fixes of flight-control systems on the aircraft. FAA issued the mandate to avoid grounding Gulfstream 350 and 450 models when it discovered potential problems controlling horizontal stabilizers on the tails of the aircraft.
20121214	December 14, 2012: After an extensive two-year application and development process, FAA awarded Geisinger Life Flight an air carrier certificate. The certificate allowed Geisinger Health System to operate the aircraft assets it leased and owned. In addition, GHS could now employ its own pilots, mechanics, and aviation support personnel a process previously done through contracted air-services vendors. Averaging 2,600 flights per year, Life Flight operated 24-hours a day with a fleet of six twin-engine helicopters from air bases in Danville, State College, Avoca, Williamsport, and Minersville, PA.
20121214	December 14, 2012: FAA and Professional Aviation Safety Specialists (PASS) leaders signed a new five-year contract covering PASS's ATO bargaining units (technical operations, flight inspection services, and mission support services). The agreement became effective on December 16, 2012. Among other things, the new contract contained a variety of provisions regarding pay, including annual increases each year from 2013 through 2017. The new agreement prevented the agency from reducing pay increases, guaranteed PASS would have an active role in modernization of the NAS, and required the agency to notify PASS before it explored the contracting out of a bargaining unit function or service that would significantly change the scope of an employee's work responsibilities.
20121221	December 21, 2012: FAA closed its center for management and executive leadership in Palm Coast, Florida. FAA's lease for the facility, under a contract with Embry-Riddle Aeronautical Center signed in 1987, expired on August 21. FAA planned to hold management training classes at its aeronautical center in Oklahoma City until it found a new location for the training center. (See March 14, 1986.)

20121231

Calendar Year 2012: According to the Netherlands-based Aviation Safety Network, 2012 was the safety year for air travel since 1945. The world's airlines – including passenger and cargo flights – reported only 23 accidents resulting in 475 fatalities last year, compared with the 10-year average of 34 accidents and 773 fatalities per year. In the U.S., the network's data base showed only two fatal commercial airline accidents, resulting in two deaths.

2013

20130101	January 1, 2013: The Senate confirmed Michael Huerta as the new FAA administrator. DOT Secretary Ray LaHood swore him in for a five-year term on January 7. (See March 27, 2012.)
20130102	January 2, 2013: Garmin announced it had received FAA's technical standard order (TSO) authorization and approved model list supplemental type certificate (AML STC) approval for the GDL 88 series, the industry's first dual-link ADS-B solution for certified aircraft. With these certifications, FAA approved the GDL 88 for installation on most Part 23 fixed-wing aircraft. The dual-link capability allowed the GDL 88 to receive both the 978 MHz UAT and 1090 MHz frequency bands. (See March 14, 2011; April 4, 2013.)
20130107	January 7, 2013: A Japan Airline 787 Dreamliner that had flown into Boston's Logan airport from Tokyo caught fire while parked at the gate due to a malfunctioning battery. All passengers and crew from the plane had already departed the aircraft when the fire started. (See December 4, 2012; January 11, 2013.)
20130111	January 11, 2013: In light of a series of recent events with the Boeing 787, FAA announced plans to conduct a comprehensive review of the Boeing 787 critical systems, including design, manufacture, and assembly. FAA planned to validate the work conducted during the certification process to ensure the aircraft met FAA's safety requirements. A team of FAA and Boeing engineers and inspectors conducted the joint review, with an emphasis on the aircraft's electrical power and distribution system. (See January 7, 2013; January 16, 2013.)
20130116	January 16, 2013: FAA ordered all Boeing 787's grounded. FAA's emergency airworthiness directive required the aircraft operator or Boeing to prove the batteries safe before the aircraft could fly again. On this same day, All Nippon Airways Co. and Japan Airlines Co., the world's largest users of Boeing 787 jets, grounded their entire fleets of Dreamliners after one of All Nippon's 787s made an emergency landing in Japan the previous day because of smoke coming from the aircraft. (See January 11, 2013; March 12, 2013.)

20130116	January 16, 2013: In his weekly message to ATO employees, COO David Grizzle announced plans to combine the terminal and en route service organizations into a new air traffic services (AJT) organization. The reorganization would be effective on October 6, 2013, pending congressional approval. He also announced ATO would no longer support its own communications office, and FAA's office of communications would handle ATO needs. As part of the reorganization, he divided the Eastern, Central, and Western service areas into northern and southern regions, with each of those six new areas reporting to a vice president (VP) of the newly formed AJT organization. The AJT would oversee contract towers, other contract operations, and technical issues. In addition, a significant portion of terminal and en route headquarters functions would move into other service units – more than 40 current terminal and en route personnel would move to mission support services, ten or more would move to management services, and several others would move to safety and technical training, and system operations services. FAA received congressional approval the week of October 21 and the reorganization became effective on November 3. (See August 6, 2013; August 13, 2013.)
20130129	January 29, 2013: Secretary of Transportation Ray LaHood announced he would resign his post when the U.S. Senate confirmed his successor. (See April 29, 2013.)
20130212	February 12, 2013: FAA approved the Shanghai Hawker Pacific Business Aviation Service Center as an overseas repair station, making it the first aviation support facility in mainland China to hold Part 145 approval. (See November 20, 2009; August 12, 2014.)
20130213	February 13, 2013: FAA and the Spanish Aviation and Security Agency signed a declaration of cooperation to help develop alternative aviation fuels. (See December 1, 2011; December 2, 2014.)
20130213	February 13, 2013: American Airlines and US Airways agreed to a merger that would create the world's largest airline. (See November 29, 2011; July 12, 2013.)
20130214	February 14, 2013: FAA solicited proposals to create six drone sites around the U.S. in a major step toward opening U.S. airspace to unmanned drones. The tests sites would be used to determine the requirement needed to ensure drones do not interfere with planes in the airspace or endanger people or property on the ground. (See March 7, 2012; June 19, 2013.)
20130222	February 22, 2013: Secretary of Transportation Ray LaHood issued a statement which said as a result of mandatory sequestration, the majority of FAA's nearly 47,000 employees would be furloughed for approximately one day per pay period until the end of the fiscal year. (See July 23, 2011; March 22, 2013.)
20130301	March 1, 2013: Saab Sensis Corporation announced it had partnered with Leesburg Executive Airport in Leesburg, VA, to demonstrate and evaluate remote tower technologies at the airport. The Virginia Department of Aviation and FAA were advisory partners for the project. For the demonstration, the partnership deployed a number of Saab technologies at the airport that provided data directly to a remote tower center also located at the airport. (See November 23, 2016.)

20130312 March 12, 2013: FAA approved the Boeing Commercial Airplane Company's certification plan for the redesigned 787 battery system. The first step in the process to evaluate the 787's return to flight, the certification plan required Boeing to conduct extensive testing and analysis to demonstrate compliance with the applicable safety regulations and special conditions. The plan established specific pass/fail criteria, defined the parameters that should be measured, prescribed the test methodology, and specified the test setup and design. FAA also approved limited test flights for two aircraft to validate the aircraft instrumentation for the battery and battery enclosure testing in addition to product improvements for other systems. (See January 16, 2013; April 19, 2013.)

20130322 March 22, 2013: FAA announced 149 federal contract towers would close beginning on April 7 as part of the agency's sequestration implementation plan. The agency made the decision to keep 24 federal contract towers open it had previously proposed for closure because of national interest considerations. An additional 16 federal contract towers under the "cost share" program would remain open because congressional statute set aside funds every fiscal year for those towers. FAA planned to begin a four-week phased closure of the 149 federal contract towers beginning on April 7. (See February 22, 2013; April 5, 2013.)

20130325 March 25, 2013: The U.S. and Guyana signed an agreement establishing an Open Skies air transportation relationship between the two countries. Prior to this agreement, U.S. Guyana aviation relations had been governed by the 1946 Air Transport Agreement between the United States and the United Kingdom. The Open Skies agreement established a liberalized aviation relationship that permitted unrestricted air service by the airlines of both countries. It eliminated restrictions on how often carriers flew, the kind of aircraft they used, and the prices they charged. This was the 108th such agreement. (See December 13, 2011; May 28, 2013.)

20130404 April 4, 2013: US Airways announced it had received FAA certification, the first airline to receive such approval, to use SafeRoute on its wide-body Airbus A330. The SafeRoute suite of four applications used automatic dependent surveillance-broadcast (ADS-B) technology to provide pilots with more precise position information of the operating aircraft and other airplane traffic. It also included interval management (IM), in-trail procedures (ITP), cockpit display of traffic information to assist in visual separation (CAVS), and surface area movement management (SAMM). IM made use of onboard aircraft surveillance to provide flight deck spacing commands that enable aircraft to follow one another at the safest, most efficient interval possible, from cruise altitude to the runway. ITP improved situational awareness and enabled flight crews to perform desired altitude changes on a more frequent basis in oceanic or non-radar airspace. CAVS allowed the flight crew to continue visual approach procedures using the electronic display to maintain separation if they lost visual contact with traffic-to-follow due to hazy or night conditions. It also assisted the flight crew in properly timing the deceleration to final approach speed, configuring the aircraft for landing and properly spacing aircraft on the final approach segment just prior to landing. SAMM provided a moving map display of the airport surface in the cockpit that showed other traffic operating in the terminal, taxi, and runway areas. (See January 2, 2013; June 9, 2013.)

20130405 April 5, 2013: FAA announced it would delay the closure of all 149 federal contract air traffic control towers until June 15. The previous month, FAA had announced it would eliminate funding for these towers as part of the agency's required $637 million budget cuts under sequestration. This additional time would allow the agency to attempt to resolve multiple legal challenges to the closure decisions. As part of the tower closure implementation process, the agency continued to consult with airports and operators and reviewed appropriate risk mitigations. (See March 22, 2013; April 23, 2013.)

20130408 April 8, 2013: In a settlement agreement and order made public on this date, the Port Authority of New York and New Jersey (PANYNJ) said it would spend the next 12 months creating a dedicated aircraft rescue firefighting (ARFF) force at the four New York-area airports it owned and operated – John F. Kennedy (JFK), Teterboro, LaGuardia, and Newark Liberty International after acknowledging lapses that included allowing untrained Port Authority police officers to serve on active ARFF duty. PANYNJ paid $3.5 million in fines to settle the case and agreed to hire dedicated ARFF firefighters, facility captains, and a fire chief, as well as to set up a training academy to ensure they met basic standards. FAA's investigation began when Port Authority officials could not supply training documentation during a routine inspection at JFK in December 2011. FAA then reviewed training at LaGuardia, Newark Liberty, and Stewart International, and found only Stewart – where DOD provided ARFF services – in compliance. FAA and Port Authority officials planned to meet monthly to review progress on meeting the milestones set out in the settlement, and FAA could impose an additional $1.5 million in fines, plus $27,500 daily for each additional violation, if PANYNJ violated the settlement deal.

20130419 April 19, 2013: FAA took the next step in returning the Boeing 787 to flight by approving Boeing's design for modifications to the 787 battery system. Boeing's changes addressed risks at the battery cell level, the battery level and the aircraft level. FAA subsequently planned to issue instructions to operators for making changes to the aircraft and to publish in the Federal Register the final directive to allow the 787 to return to service with the battery system modifications. FAA also required airlines that operated the 787 to install containment and venting systems for the main and auxiliary system batteries and to replace the batteries and their chargers with modified components. (See March 12, 2013; April 25, 2013.)

20130422 April 22, 2013: Eight months after becoming the first U.S. airline to obtain FAA approval to use Apple iPads on the flight deck during all phases of flight, American Airlines completed its rollout of the off-the-shelf electronic flight bags across its entire mainline fleet. Pilots of the carrier's Boeing 757s and 767s completed a 30-day transition with the iPads as primary flight support and paper charts as backup. American first tested the iPad on a Boeing 777 in January 2011. (See March 14, 2011; June 26, 2013.)

20130423 April 23, 2013: As a result of employee furloughs due to sequestration, which began on April 21, FAA began implementing traffic management initiatives at airports and facilities around the country. FAA announced travelers could expect to see a wide range of delays that would change throughout the day depending on staffing and weather-related issues. For example, FAA experienced staffing challenges at the New York and Los Angeles ARTCCs and at the Dallas-Ft. Worth and Las Vegas TRACONs. Controllers spaced planes farther apart so they could manage traffic with smaller staffs. This resulted in delays at airports including Dallas, Las Vegas and Los Angeles. FAA also expected delays at Newark and LaGuardia because of weather and winds. On April 21, FAA attributed more than 1,200 delays in the system to staffing reductions resulting from the furlough; 1,400 additional delays resulted from weather and other factors. (See April 5, 2013 April 24, 2013.)

20130424 April 24, 2013: FAA announced due to employee furloughs as a result of sequestration, on April 23 the furlough caused more than 1,025 delays in the system. Weather and other delays caused more than 975 additional delays. The following day, FAA announced on April 25, furlough-related staffing reductions at the New York, Washington, Cleveland, Jacksonville, and Los Angeles ARTCCs, the Potomac, Dallas and Southern California TRACONs, and Detroit tower contributed to more than 863 delays, and weather and other factors caused more than 1,269 additional delays. (See April 23, 2013; April 27, 2013.)

20130425 April 25, 2013: FAA published a rule lifting the grounding the Boeing 787s operated by carriers based in the U.S. once those carriers installed modified lithium-ion batteries. The following day, Japanese authorities formally approved Boeing's proposed fixes to the batteries and declared the aircraft fit for use. On April 27, a Boeing 787 flew from Ethiopia to Kenya, the first Dreamliner flight since the plane's grounding in January 2013. United Airlines restarted its Dreamliner flights within the U.S. on May 20. (See April 19, 2013; June 23, 2013; February 14, 2012.)

20130427 April 27, 2013: After Congressional action, FAA suspended all employee furloughs. A typo in the legislation delayed getting the bill to the President, but President Obama signed it on May 1. The law allowed FAA to move as much as $253 million within its budget to end furloughs and gave the agency enough flexibility to cancel the planned June 15 closing of 149 small airport control towers operated by contractors. (See April 24, 2013; May 9, 2013.)

20130429 April 29, 2013: President Barrack Obama nominated Charlotte, NC, Mayor Anthony Foxx to succeed Ray LaHood as Transportation Secretary. (See January 29, 2013; May 22, 2013.)

20130429 April 29, 2013: Virgin Galactic's SpaceShipTwo made its first powered flight. It broke the sound barrier in a test over the Mojave Desert. The flight lasted 10 minutes. It made its second powered flight on September 5. (See June 7, 2012; July 31, 2013; January 10, 2014.)

20130430 April 2013: FAA and other U.S. government agencies completed the third and final operational field test in a two-year, $8 million program to study the physical and electromagnetic interference between radar systems and wind turbine farms, and to identify mitigation techniques to address potential issues. Researchers at Sandia National Laboratories and the Massachusetts Institute of Technology Lincoln Laboratory analyzed data from the third interagency field test and evaluation of wind turbine-radar to help develop long-term mitigation techniques. Interference with radar had been a safety concern for both FAA and the military, as well as a key roadblock to developers of new wind turbine farms, both in the U.S. and abroad.

20130503 May 3, 2013: FAA proposed a new policy aimed at providing better handling of a wide range of certification applications. The draft policy set the maximum delay that the agency could apply to applications for type certificates, amended type certificates, supplemental type certificates and several other approvals, including parts manufacturer approval. Under the draft policy, all projects would be acted on when FAA received an application, and the maximum delay in starting a project would be based on a metric each certification office set to perform a project, plus 90 days. First in the queue would be higher-priority projects, based on the highest value of a safety index developed by FAA. FAA based the draft policy, in part, on input the agency received after posting a request for comments in September 2011. Congress had mandated a broader review of the agency's certification processes under the FAA Modernization and Reform Act of 2012. In response, the agency co-chaired an aviation rulemaking committee that reviewed existing processes and made recommendations in February. (See February 14, 2012; December 11, 2013.)

20130508 May 8, 2013: FAA announced controllers at the San Francisco, Houston, and Memphis international airports would have a new tool to reduce delays beginning on May 15, May 20, and August 5, respectively, as part of a one-year FAA pilot program. The wake turbulence mitigation for departures (WTMD) was a crosswind-based system that enabled closely spaced parallel runway departures to take place without wake turbulence constraints. The system allowed for the crosswind-enabled elimination of wake turbulence separation minima when heavy/B757 aircraft departed the downwind runway and any aircraft followed departing on the upwind runway. WTMD required favorable wind conditions for a specific airport's runway configuration and a minimum ceiling and visibility of 1,000 feet altitude above ground level (AGL) and 3 statute miles (SM). The WTMD system used wind information at the surface and incrementally up to about 1,200 feet AGL to ensure actual crosswinds and a conservative forecast of future crosswinds were sufficiently strong to allow the reduced separation operations. WTMD notified air traffic control supervisors when one of the closely spaced parallel runway (upwind runway) could be used as wake independent from heavy/B757 aircraft departing from the parallel (downwind) runway and allowed them to enable the WTMD procedure. (See November 1, 2012.)

20130509 May 9, 2013: FAA announced it no longer planned to close 72 medium-sized air traffic control facilities overnight because of sequestration. The following day, on May 10, Transportation Secretary Ray LaHood announced the recently enacted Reducing Flight Delays Act of 2013 would allow FAA to transfer sufficient funds to end employee furloughs and keep the 149 low activity contract towers originally slated for closure in June open for the remainder of fiscal year 2013. FAA also planned to put $10 million towards reducing cuts and delays in core NextGen programs and allocated approximately $11 million to partially restore infrastructure support in the national airspace system. (See September 28, 2012; April 27, 2013; May 20, 2013; August 14, 2013; October 1, 2013.)

20130515 May 15, 2013: The White House nominated Michael Whitaker, an airline industry veteran, to fill the deputy administrator role left vacant by Michael Huerta's January 1 appointment as FAA administrator. Whitaker, who worked for the air transport division of Indian conglomerate InterGlobe Enterprises, had more than 20 years of experience in the airline industry, first with Trans World Airlines and then at United Airlines, where he worked for 15 years. Whitaker served as senior vice president for alliances, international, and regulatory affairs at United before joining InterGlobe in 2009. Secretary of Transportation Ray LaHood swore him in on June 3, 2013. (See June 23, 2010.)

20130520 May 20, 2013: The U.S. Court of Appeals for the Ninth Circuit vacated a lawsuit combining claims by airports groups and local communities against FAA over plans to close the contract air traffic control towers. DOT and FAA asked the court to drop the suit, arguing it was moot given the decision to continue funding the contract tower program through fiscal 2013. (See May 9, 2013.)

20130522 May 22, 2013: The Senate Commerce, Science and Transportation Committee held a confirmation hearing for Anthony Foxx to become the next Secretary of Transportation. At the hearings, Representative John Thune (R-SD) placed a hold on the nomination until DOT and FAA answered the questions posed in letters he sent earlier in the year asking for information on budgets, budget cuts, and related decisionmaking processes. After Thune lifted his hold, the Committee approved the nomination on June 10. (See April 29, 2013; June 27, 2013.)

20130528 May 28, 2013: The U.S. and Saudi Arabia signed an Open Skies agreement, which, following a transition period, would permit unrestricted air service by the airlines of both countries between and beyond the other's territory, eliminating restrictions on how often the carriers flew, the kind of aircraft they used, and the prices they charged. This became the 109th such agreement the U.S. signed with other nations. (See March 25, 2013; July 8, 2013.)

20130529 May 29, 2013: State officials dedicated a new air traffic control tower at Kona Airport, Hawaii. The new tower replaced one constructed almost 43 years ago. Officials also formally broke ground for a new 24,000-square-foot aircraft rescue and firefighting facility. FAA and state funds covered the cost of the $14.5 million project.

20130529 May 29, 2013: Savannah/Hilton Head International Airport celebrated the completion of a $29 million project designed to support the expansion of its largest tenant, Gulfstream Aerospace, while making room for future aviation businesses. Announced in late 2010, the north aviation development project involved the realignment of Gulfstream Road, including construction of a tunnel; a new electrical vault; a taxiway bridge; Taxiway H; as well as the extension of existing Taxiway A. FAA grants and airport revenues funded the project.

20130529 May 29, 2013: The Office of Management and Budget told federal agencies to prepare their fiscal 2015 budget requests with three levels of spending in mind, including 5 and 10 percent cuts from the projection provided agencies in April with the 2014 request. The budget-crafting guidance represented the first formal recognition of the long-term effects of the 2011 Budget Control Act, whose first round of widespread, automatic sequestration rescissions took effect in March 2013.

20130531 May 31, 2013: FAA issued an updated version of its 10-year old advisory circular on wildlife collisions, AC 150/5200-32B. The update explained a number of recent improvements to the agency's wildlife strike reporting system.

20130603 June 3, 2013: NASA awarded $38 million in contracts to Boeing, Honeywell, Rockwell Collins, and Saab Sensis to conduct research to develop and improve technologies and methods to improve situational awareness of real-time electronic information. The two-year contracts, with three one-year follow-on options would total $9.5 million if NASA exercised all contract options. NASA tasked the companies with studying the human factors designs of how information could be best presented on flight decks or at control stations, including developing human-machine interfaces that reduced uncertainties associated with real-time information presentation.

20130605 June 5, 2013: Santa Monica, CA-based start-up airline Surf Air announced it had been certified by FAA. The new membership-based airline began flights on June 12. Surf Air offered all-you-can-fly service to its members. The airline had 150 members, each paying $1,350 per month to belong. The airline had another 4,000 people on its waiting list. The company flew Pilatus PC-12 aircraft, a single-engine turboprop plane, configured to seat six people. Its first route linked San Carlos and Burbank.

20130609 June 9, 2013: JetBlue conducted its first ever ADS-B commercial flights from Fort Lauderdale to San Francisco. This was the first commercial aircraft that reached its destination using a route that relied primarily on ADS-B. FAA determined the route over the Gulf of Mexico based on the need for the aircraft to avoid turbulent weather. (See April 4, 2013; April 14, 2014.)

20130610 June 10, 2013: FAA asked the world's fuel producers to submit proposals for fuel options to help the general aviation industry transition to an unleaded fuel. FAA hoped to develop a new unleaded fuel by 2018 that would minimize the impact of replacing 100 octane low-lead fuel for most of the general aviation fleet. The request came in response to the July 2012 unleaded avgas transition aviation rulemaking committee report to FAA, which noted the currently unavailability of an unleaded replacement fuel. (See February 13, 2013; August 14, 2013; September 8, 2014.)

20130618 June 18, 2013: FAA announced the integration of the traffic analysis review program (TARP) at all ARTCCs. The TARP software automatically detected losses of aircraft separation and reported all such losses to the comprehensive electronic data analysis and reporting program (CEDAR). The system TARP replaced – the operational error detection patch – captured losses of separation, but did not transfer them directly into CEDAR. With TARP, alerts automatically showed up in CEDAR as electronic occurrence reports. CEDAR gathered both mandatory and electronic occurrence reports for analysis by ATO's safety and technical training's quality assurance team. The data helped FAA validate and classify events, and then take steps to prevent issues from occurring again. TARP had been used at terminal facilities since 2009.

20130619 June 19, 2013: In testimony before the Senate Judiciary Committee, FBI Director Robert Mueller acknowledged for the first time in public the FBI had used small, unarmed and unmanned drones to conduct surveillance. The FBI released a statement following Mueller's testimony explaining the use of drones allowed the agency to "learn critical information that otherwise would be difficult to obtain without introducing serious risk to law enforcement personnel." The agency also noted it only used drones to conduct surveillance on stationary objects. (See February 14, 2013; July 19, 2013.)

20130619	June 19, 2013: NTSB received a petition urging the agency to reconsider its investigation of the 1996 TWA 800 crash. A group of individuals who took part in a new documentary about the deadly crash initiated the petition. The documentary suggested NTSB investigators had not interviewed any of the eyewitnesses "who claimed to have seen something like a missile leave the shore that night headed toward the" plane. On June 28, NTSB issued a statement and invited journalists to its training center on July 2, saying "Since the accident occurred 17 years ago, many who are now covering the petition filing are less familiar with the details and findings of NTSB's four-year investigation." (See July 17, 1996.)
20130620	June 20, 2013: Controllers began handling flights from a new, 236-foot tower at Oakland International Airport. The new tower replaced two existing towers – the first built in 1962 and the other approximately 10 years ago when a new hanger blocked controllers' view of the north side of the airport. Having all controllers working in one tower reduced the amount of coordination required between the two towers and streamlined operations and procedures. (See October 15, 2010; November 22, 2013.)
20130623	June 23, 2013: A United Airlines Boeing 787 flight from Houston to Denver returned to Houston shortly after takeoff because of an issue with the brake indicator. The previous Thursday, June 20, a United Boeing 787 from London to Houston made an emergency landing in Newark, NJ, because an indicator showed low engine oil. On Tuesday, June 18, a United Boeing 787 from Denver to Tokyo diverted to Seattle because of what the airline called an oil filter issue. (See April 25, 2013; July 25, 2013.)
20130626	June 26, 2013: JetBlue announced it had received regulatory approval from FAA to allow its pilots to use electronic flight bags during all phases of flight. JetBlue had tested the electronic flight bags with a limited number of pilots before gaining approval to equip all of it pilots. Like American Airlines it provided its pilots Apple iPads. (See April 22, 2013; February 10, 2014.)
20130627	June 27, 2013: The Senate confirmed Charlotte, NC, Mayor Anthony Fox as Secretary of Transportation. He was sworn in during a private ceremony on July 2. Vice President Joe Biden publicly swore him in on July 12. (See May 22, 2013.)
20130702	July 2, 2013: Effective this date, a new FAA rule amended design requirements in the airworthiness standards for transport category airplanes to minimize the occurrence of design-related flightcrew errors. The requirements enabled a flight crew member to detect and manage his or her errors when the errors occurred. The rule eliminated regulatory differences between U.S. and European Aviation Safety Agency airworthiness standards without affecting current industry design practices.
20130707	July 7, 2013: Asiana Flight 214 from Seoul, South Korea, crashed at San Francisco International Airport when the plane hit a seawall upon landing. The Boeing 777 had more than 300 people aboard and the accident caused 3 deaths and over 180 injuries.

20130708	July 8, 2013: The United States and the Republic of Suriname signed an Open Skies agreement, which, following a transition period, would allow unrestricted air service by the airlines of both countries between and beyond the other's territory, eliminating restrictions on how often the carriers flew, the kind of aircraft they used, and the prices they charged. This became the 110th such agreement the U.S. signed with other nations. (See May 28, 2013; July 14, 2015.)
20130712	July 12, 2013: US Airways' planned merger with AMR Corp. was approved by the company's shareholders. The vote, cast after the company's annual general meeting in New York, returned a more than 99 percent approval of the deal, which still had to be approved by AMR's bankruptcy court and U.S. regulators. (See February 13, 2013; August 13, 2013.)
20130715	July 15, 2013: A new FAA regulation went into effect requiring a second in command (first officer) in domestic, flag, and supplemental operations to hold an airline transport pilot certificate and an airplane type rating for the aircraft to be flown. An airline transport pilot certificate required a pilot be 23 years of age and have 1,500-hours total time as a pilot. (See December 21, 2011; November 5, 2013.)
20130716	July 16, 2013: FAA issued a final policy statement that permitted general aviation airports to enter into residential through-the-fence (RTTF) agreements with property owners or associations representing property owners. To gain access, the property owner was required to pay access charges; bear the cost of building and maintaining the infrastructure necessary to provide access to the airfield; maintain the property for residential, noncommercial use for the duration of the agreement; prohibit airport access from other adjacent or nearby properties; and prohibit any refueling on the property. FAA clarified that sponsors of commercial service airports were not permitted to enter into RTTF arrangements. However, the sponsors of GA airports could enter into such an arrangement if the airport sponsor complied with certain requirements contained in the FAA Modernization and Reform Act of 2012. (See February 14, 2012.)
20130719	July 19, 2013: FAA issued restricted category type certificates to a pair of unmanned aircraft systems (UAS), a milestone leading to the first approved commercial UAS operations later in the summer. The newly certified UAS – Insitu's Scan Eagle X200 and AeroVironment's PUMA – were small UASs weighing less than 55 pounds. Each was about 4 1/2 feet long, with wingspans of ten and nine feet, respectively. (See June 19, 2013; September 12, 2013.)
20130725	July 25, 2013: FAA issued an airworthiness directive advising airlines to inspect or remove emergency locator transmitters in Boeing's 787 Dreamliner jets. The agency published the directive in the wake of a fire linked to one of the devices. (See June 23, 2013; July 26, 2013.)
20130725	July 25, 2013: The new air traffic control tower in Palm Springs, CA, became operational.

20130726	July 26, 2013: An aviation rulemaking committee (ARC), convened by FAA recommended a broad range of policy and regulatory changes that could significantly improve the safety of general aviation aircraft while simultaneously reducing certification and modification costs for those aircraft. The committee's recommendations covered the areas of design, production, maintenance, and safety. The ARC's goal was to identify ways to streamline the certification process, making it cheaper and easier for manufacturers to incorporate safety improvements into their products, allow for upgrades to the existing fleet, and provide greater flexibility to incorporate future technological advancements.
20130726	July 26, 2013: FAA issued an airworthiness directive (AD) giving Boeing 787 operators 10 days to inspect Honeywell emergency locator transmitters (ELTs) or remove them from service. The AD, triggered by the July 12 fire on an Ethiopian Airlines 787 at London Heathrow Airport, ordered checks of the ELT, its lithium-manganese-dioxide battery, and associated wiring for discrepancies. (See July 25, 2013; September 30, 2013.)
20130731	July 31, 2013: A new ground and satellite-based air traffic control system, the wide area multilateration system went into operation at the Telluride airport in Colorado. The Colorado Division of Aeronautics, FAA, and a $110,000 contribution by the Telluride Regional Airport Authority funded the new system, which allowed controllers to track planes below 12,000 feet all the way to the ground. (See December 3, 2012.)
20130731	July 31, 2013: FAA released its draft "Established Practices for Human Space Flight Safety" for public comment. It updated the draft with its "rationale" on September 23, 2013. According to the report's introduction, FAA developed "this document to share our thoughts about established practices for human space flight occupant safety. Ultimately, our goal is to gain the consensus of government, industry, and academia on established practices as part of our mandate to encourage, facilitate, and promote the continuous improvement of the safety of launch and reentry vehicles designed to carry humans. The outcome of this effort may also serve as a starting point for a future rulemaking project." (See April 29, 2013; December 4, 2013; September 16, 2014; October 15, 2020.)
20130811	August 11, 2013: Rockwell Collins announced it had agreed to purchase ARINC, Inc., for $1.39 billion. The purchase, when completed, would expand Rockwell Collins' aerospace business by combining its avionics and cabin technologies with ARINC's ground-based navigational networks. (See December 2, 1929.)
20130813	August 13, 2013: FAA Administrator Michael Huerta announced that ATO COO David Grizzle would be leaving the agency in December. Grizzle's last day at FAA was December 12, 2013. (See April 24, 2011; January 16, 2013; March 21, 2014.)

20130813	August 13, 2013: The U.S. Department of Justice (DOJ) filed a lawsuit claiming the proposed merger between AMR Corp. and US Airways could be illegal on more than 1,000 domestic city pairs and must be dismantled to stop a clique of national carriers from manipulating services and ticket prices. The lawsuit was jointly filed by Justice, six states, and the District of Colombia. The states included Texas, where AMR was based, and US Airways' home state of Arizona. In a review of the proposed merger, Justice's lawsuit cited numerous public comments and internal communications by senior US Airways executives—some dating to 2006—that it said proved that competition between U.S. airlines would be weakened should the merger be approved. Both airlines reacted immediately, issuing a joint statement calling the DOJ's assessment "wrong," and stopping "this pro-competitive merger will deny customers access to a broader airline network that gives them more choices." (See July 12, 2013; October 28, 2013.)
20130814	August 14, 2013: UPS Flight 1354, an A300 cargo plane en route from Louisville, KY, to Birmingham, AL, crashed approximately 1/2-mile north of runway 18 on approach to Birmingham Shuttlesworth International Airport at about 6 am EDT, killing both pilots onboard.
20130814	August 14, 2013: NASA Administrator Charles Bolden unveiled a new strategic vision for the agency's Aeronautics Research Mission Directorate to align program activities and investments toward progress in six research and technology areas (see May 9, 2013; August 22, 2013):
	* Safe, efficient growth in global operations, including NextGen and technologies to improve safety;
	* Innovation in commercial supersonic aircraft, including work on lowering sonic boom impacts (See March 30 2020.);
	* Ultra-efficient commercial transports, including pioneering technologies for big leaps in efficiency and lessening environmental impacts;
	* Transition to low-carbon propulsion and alternative fuels (See June 10, 2013; September 13, 2013.);
	* Real-time, system-wide safety assurance, with emphasis on new integrated monitoring technology; and
	* Breakthroughs in autonomy with high-impact applications.
20130821	August 21, 2013: FAA published its final policy regarding the procedures for aircraft owners and operators to ask FAA to limit the dissemination of their aircraft situation display to industry data. Under the new policy, owners had to document a legitimate security concern to justify the data-blocking. The FAA notice spelled out the exact information needed in the request, such as the aircraft registration number and the requestor's contact information.
20130821	August 21, 2013: FAA announced it had installed a new system, time-based flow management (TBFM) at all 20 ARTCCs. TBFM replaced the traffic management advisor. The time-based scheduling tool metered aircraft through all phases of flight to deliver the correct number of aircraft to airspace sectors and down to the runway at the exact pace at which the aircraft could be accommodated.

20130822	August 22, 2013: Updates to FAA joint order 7210.3X, the agency's operational guide to air traffic control facility management, took effect. Version three of the guide included a new paragraph requiring facilities to develop procedures to ensure positive control during opposite-direction operations to reduce the likelihood of aircraft being placed in close proximity in a head-on conflict with high closure rates. Another change addressed the complexity of the risk of operations on closed runways. In another update, the well-used radio prefix "Lifeguard" was being replaced by the term "Medevac."
20130822	August 22, 2013: Federal and State officials dedicated the new south runway at Port Columbus International Airport. FAA funded 63 percent of the $140 million project.
20130822	August 22, 2013: Paul Poberezny, founder of the Experimental Aircraft Association (EAA), died at the age of 91. He started EAA as a club for those who built and restored their own aircraft in 1953, and grew the club into an association with more than 180,000 members.
20130822	August 22, 2013: FAA Administrator Michael Huerta announced the selection of Major General Edward L. Bolton, Jr. USAF (Ret.) as the new assistant administrator for NextGen. Bolton began his Air Force career as an enlisted cost and management analyst. He was commissioned in 1983 after completing an electrical engineering degree via the Airmen Education and Commissioning Program and graduating from Officer Training School. He had over twenty years of executive-level experience in acquisition, program management, systems engineering, requirements development, policy development, strategic planning, financial management and congressional engagement. Prior to joining FAA, he has served as the deputy assistant secretary for budget in the office of the assistant secretary of the Air Force for financial management and comptroller. He began his FAA duties on September 9. (See August 14, 2013; September 13, 2013.)
20130822	August 22, 2013: FAA, working with the Department of Labor's Occupational Safety and Health Administration (OSHA), issued a final policy for improving workplace safety for aircraft cabin crewmembers. Aircraft cabin safety issues that fell under OSHA standards included information on hazardous chemicals, exposure to blood-borne pathogens, and hearing conservation programs, as well as rules on record-keeping and access to employee exposure and medical records. FAA and OSHA planned to develop procedures to ensure OSHA did not apply any requirements that could adversely affect aviation safety. On August 26, FAA clarified the policy, stating it covered "all aircraft operations that utilize at least one aircraft cabin crewmember" while the aircraft was in operation. Pilots were exempt from the policy. The new policy replaced ones from 1975 and became effective on September 26, 2013. (See November 30, 2012.)

20130828 August 28, 2013: As part of a joint research effort with FAA, the Navy, and Army, NASA dropped part of a military helicopter from about 30 feet to test improved seat belts and seats at its Langley, VA, facility. Nearly 40 cameras positioned inside and outside the fuselage recorded the effects on 13 crash dummies. The helicopter hit the ground at about 30 miles per hour under conditions meant to be severe, but survivable. (See July 30, 2003; June 29, 2017.)

20130903 September 3, 2013: FAA issued a final rule that prohibited, after December 31, 2015, the operation in the contiguous United States of jet airplanes weighing 75,000 pounds or less that did not meet Stage 3 noise levels as defined in 14 CFR Part 36. Operators of airplanes that did not comply with Stage 3 noise levels could choose to replace them, or to incorporate noise-reduction technologies that might be available to make the airplanes Stage 3 noise compliant. (See December 4, 2012.)

20130912 September 12, 2013: ConocoPhillips made the first commercial flight of an unmanned aircraft. Under a restricted category type certification FAA awarded in July, ConocoPhillips launched an Insitu ScanEagle from the research vessel Westward Wind in the Chukchi Sea, part of the Arctic Ocean west of Alaska, to monitor whale migrations and ice flows in the Chukchi Sea. FAA had an agreement with ConocoPhillips to collect data about the UAVs flight operations. (See July 19, 2013; October 15, 2013.)

20130913 September 13, 2013: Secretary of Transportation Anthony Foxx announced the selection of a team of universities to lead a new FAA air transportation center of excellence (COE) for alternate jet fuels and the environment. Led by Washington State University and the Massachusetts Institute of Technology, the COE would explore ways to meet the environmental and energy goals in NextGen. FAA's COE program was a cost-sharing research partnership between academia, industry and the federal government. FAA anticipated providing this COE with $4 million a year for each of the 10 years of the program. Core team partners included Boston University, Oregon State University, Purdue University, the University of Dayton, the University of Illinois at Urbana-Champaign, the University of Pennsylvania, the University of Washington, Missouri University of Science and Technology, Georgia Institute of Technology, Pennsylvania State University, Stanford University, the University of Hawaii, the University of North Carolina at Chapel Hill, and the University of Tennessee. (See August 14, 2013; August 22, 2013; September 18, 2013; December 3, 2013; December 9, 2021.)

20130915 September 15, 2013: FAA began operations in the new, $33 million, 268-foot, air traffic control tower at the Boise Airport. The new tower replaced a 40-year old, 65-foot tall control tower. The new tower also housed a new TRACON. City officials formally dedicated the tower on November 17, 2013.

20130917 September 17, 2013: FAA issued an airworthiness directive (AD) identical to the August 26 Transport Canada Civil Aviation directive which required airlines to inspect Honeywell emergency locator transmitters by January 14, 2014, to prevent an electrical short and possible ignition source. The AD affected about 4,000 airplanes at a total cost of approximately $325,720.

20130918 September 18, 2013: Richard Stockton College of New Jersey announced the college's board had authorized a three-year agreement making the aviation research park being planned near FAA's William J. Hughes Technical Center an auxiliary organization of the college. The move was made in part due to a FAA request that the park, a registered nonprofit organization, find a stable development partner for the project first announced eight years ago. Long known as the NextGen Aviation Research and Technology Park, the college eliminated "NextGen" from the park's name, instead calling it the Stockton Aviation Research and Technology Park. (See October 19, 2009.)

20130918 September 18, 2013: FAA's national enterprise management center moved into its new building in Salt Lake City. FAA established two such centers two decades ago in Atlanta and Salt Lake City to house redundant operations systems that that collect and distribute weather data and flight plans, manage telecommunications, and host the network security gateways for external stakeholders and international users. FAA completed a new Atlanta facility in January 2011.

20130919 September 19, 2013: FAA dedicated a new air traffic control tower at Palm Springs International Airport. The $24.5 million project — paid for, in part, with $13.9 million in federal stimulus funds – got underway in June 2010. It replaced the control tower built in 1967.

20130920 September 20, 2013: FAA announced Ukraine complied with international safety standards set by ICAO, based on the results of a July FAA review. FAA upgraded Ukraine to Category 1 from the Category 2 safety rating the country received from FAA in June 2005. With the Category 1 rating, Ukraine's air carriers could add flights and service to the United States and carry the code of U.S. carriers. (See November 1, 2012; January 31, 2014.)

20130927 September 27, 2013: A United Airlines pilot suffered a fatal heart attack while flying en route from Houston to Seattle, He was 63 years old. The co-pilot safely landed the plane.

20130930 September 30, 2013: An advisory panel established by FAA to provide recommendations on the use of electronic devices on airplanes delivered its recommendations to the agency. The panel said airline passengers should be allowed to use their personal electronic devices to read, play games, or enjoy movies and music, even when planes were on the ground or flying below 10,000 feet. The panel said restrictions should remain on sending text messages, browsing the Web or checking e-mail after the plane's doors have been closed. Passengers should do that only when the aircraft's Wi-Fi network is turned on, typically above 10,000 feet. The use of cellphones to make voice calls, which was not part of the review, would still be prohibited throughout the flight. (See August 27, 2012; October 31, 2013.)

20130930 September 30, 2013: General Dynamics announced FAA had awarded it a $12 million task order to provide engineering, software design and development, infrastructure, and administrative support to the NextGen integration and evaluation capability laboratory at the William J. Hughes Technical Center. FAA awarded the task order under its system engineering 2020 program, awarded to General Dynamics in 2010. (See September 13, 2013; October 31, 2013.)

20130930 September 30, 2013: Boeing Commercial Airplanes Marketing Vice President Randy Tinseth acknowledged ongoing reliability issues with the 787 Dreamliner at a press conference in Santiago, Chile. The aircraft had suffered an assortment of electrical and safety issues, the latest of which occurred on September 29 when a 787 operated by Poland's carrier LOT had to land unexpectedly in Iceland because of a problem with the plane's identification system. Over the same weekend, Norwegian Air Shuttle ASA grounded a brand new 787 Dreamliner and demanded Boeing repair it after it suffered repeated breakdowns. Tinseth said the process of improving reliability could be a long one, but said the reliability of the 787 was better than 95 percent. (See July 26, 2013; November 22, 2013.)

20130930 September 30, 2013: DOT issued a notice of proposed rulemaking seeking comments on four new proposals to strengthen the legal protections provided to consumers of charter air transportation. First, the proposal would require air taxis and commuter air carriers that sell charter air transportation, but rely on others to perform that air transportation, to make certain consumer disclosures as recommended by NTSB. This proposal would also create a new class of indirect air carriers to be called “air charter brokers” to provide as principals single entity charter air transportation of passengers aboard large and small aircraft. In addition, the proposal would codify the exemption authority granted to indirect air carriers to engage in the sale of air transportation related to air ambulance services. Finally, it would make clear and codify certain air services performed under contract with the Federal Government are in common carriage. The public had until November 29, 2013, to provide comments.

20130930 September 30, 2013: During the fiscal year that ended on this date, FAA installed 25 new aviation weather cameras in Alaska, bringing the total of installed cameras to 215. (See March 25, 2011.)

20131001 October 1, 2013: FAA discontinued direct-to-the-public individual sales of paper aeronautical charts and related paper products. FAA’s aeronautical paper products were now available through authorized sales chart agents. (See November 22, 2013.)

20131001 October 1, 2013: The lack of fiscal year 2014 appropriations resulted in a partial government shutdown. The shutdown led to about 15,500 of the approximately 46,000 FAA employees being furloughed. Late on October 16, Congress passed and the President signed early on October 17 a continuing resolution funding the government through January 15. Employees began returning to work on October 17. Prior to the furlough ending, FAA had recalled approximately 3,000 safety inspectors. (See May 9, 2013; See December 22, 2018.)

20131015 October 15, 2013: Applied Research Associates Inc. (ARA) announced FAA had issued its Nighthawk IV micro-unmanned aircraft system a special airworthiness certificate, which would allow potential customers to apply for agency approval to operate the 2-lb. aircraft in the national airspace. Capable of being operated by one or two personnel, the Nighthawk IV could be hand-launched or launched from a tube. The vehicle flew autonomously while the operator directed the route using a touchpad display. Only four hours of training were required before an operator could conduct a flight, according to ARA. (See September 12, 2013; November 7, 2013.)

20131015 October 15, 2013: Air travel provider De Pere, Wisconsin-based MetJet informed the Department of Transportation it planned to cease operations on October 26. MetJet offered flights from Austin Strauble International Airport in Ashwaubenon, WI, to Orlando and Fort Meyers, FL. MetJet'ss contracted airline, Sun Country, did not cease operations.

20131017 October 17, 2013: A 10,800-foot runway opened at O'Hare International Airport as part of a larger expansion project. The new runway, 10 Center/28 Center, became the airport's only airstrip capable of accommodating the largest planes in the commercial fleet – the Airbus A380 and the Boeing 747-8 Intercontinental. (See November 20, 2005; October 15, 2015.)

20131021 October 21, 2013: United Airlines announced plans to equip up to 397 of its aircraft over the next six years with avionics equipment necessary to provide the pilot-to-controller digital communications under the FAA NextGen data comm avionics equipage program. United became the first carrier to commit to such equipage. On September 20, 2012, FAA awarded Harris Corp., a $331 million data communications integrated services contract as part of the NextGen airspace modernization initiative. Among other things, the contract called for a data comm avionics equipage program, an $80 million fund to encourage equipping a minimum of 1,900 aircraft during the course of the first six years of the contract for the future air navigation systems (FANS) 1/A. (See September 30, 2013.)

20131022 October 22, 2013: Chilton County Airport (Alabama) held a groundbreaking ceremony to mark the beginning of a $2.6 million project that included a new runway lighting system, a resurfaced runway, the installation of a new hangar housing 10 airplanes, and the clearing of six parcels of land to extend the runway to 4,000 feet. FAA and Alabama grants funded the project.

20131022 October 22, 2013: NOAA's office of coast survey announced starting April 13, the federal government would no longer print traditional lithographic (paper) nautical charts, but would continue to provide other forms of nautical charts, including print on demand charts and versions for electronic charting systems. While NOAA had the job of creating and maintaining the charts, beginning in 1999, FAA became responsible for printing them. FAA informed NOAA earlier in October it planned to stop printing the charts. FAA based its decision on several factors, including the declining demand for lithographic charts, the increasing use of digital and electronic charts, and federal budget realities. (See October 1, 2013.)

20131025 October 25, 2013: DOT fined United Airlines $1.1 million for13 weather-related lengthy tarmac delays that took place at Chicago-O'Hare International Airport on July 13, 2012. DOT ordered the airline to cease and desist from future violations of the tarmac-delay rule. This was the largest fine assessed for a tarmac-delay violation since the rule limiting long tarmac delays first took effect in April 2010. Of the $1.1 million, United would pay the United States $475,000; the remainder covered mitigation measures for affected passengers and significant corrective actions by United to enhance future compliance with tarmac delay requirements.

20131028 October 28, 2013: American Airlines, US Airways, and the U.S. Justice Department said in a court filing they had agreed to use a mediator to try to settle the government's lawsuit against the airlines' proposed merger. If mediation failed, a trial would begin on November 25. The court filing also noted most of the discovery in the case had been completed, with the airlines producing more than 1.3 million documents and the Justice Department producing 900,000 documents. The Justice Department argued the merger would lead to higher fares, reduced competition, and a cut in services to smaller cities. American Airlines and US Airways said the merger would help them better compete with other airlines that have grown bigger through mergers of their own. Separately, the judge hearing the government's antitrust case granted the request of four airports dominated by American and US Airways – Dallas-Fort Worth International Airport, Charlotte Douglas International Airport, Phoenix Sky Harbor International and Philadelphia International Airport – the chance to file friend-of-the-court briefs in support of the merger. (See August 13, 2013; November 12, 2013.)

20131031 October 31, 2013: FAA Administrator Michael Huerta announced the agency would allow airlines to permit passenger use of portable electronic devices (PEDs) during all phases of flight, and provided airlines with implementation guidance. The guidance helped airlines assess the risks of potential PED-induced avionics problems for their airplanes and specific operations. Before allowing use of PEDs, airlines had to evaluate avionics as well as changes to stowage rules and passenger announcements. Each airline had to revise manuals, checklists for crewmember training materials, carry-on baggage programs, and passenger briefings before expanding use of PEDs. FAA then had to certify PED use for each model of airplane in an airline's fleet. Each airline determined how and when they would allow passengers broader use of PEDs. FAA did not consider changing the regulations regarding the use of cell phones for voice communications during flight because the issue was under the jurisdiction of the Federal Communications Commission (FCC). On November 8, FAA approved JetBlue Airways and Delta Airlines use of PEDs, and, on November 3, approved American Airlines. By November 15, Alaska Airlines and United Airlines had joined the list of airlines approved for PED use. (See September 30, 2013; February 11, 2014.)

20131101 November 1, 2013: The City of McKinney, Texas, took over operations at Collin County Regional Airport, a general aviation airport established in 1979. The change included a new city-operated fixed base operator, McKinney Air Center. On November 6, the McKinney City Council approved changing the name of the airport to McKinney National Airport.

20131104	November 4, 2013: DOT fined US Airways $1.2 million for failing to provide adequate wheelchair assistance to passengers in Philadelphia, PA, and Charlotte, NC. The fine was one of the largest ever assessed by DOT in a disability case. Under DOT's rules implementing the Air Carrier Access Act, airlines had to provide free, prompt wheelchair assistance upon request to passengers with disabilities. This included helping passengers to move between gates and make connections to other flights.
20131104	November 4, 2013: Transportation Secretary Anthony Foxx announced DOT, as part of its ongoing effort to ensure equal access to air transportation for all travelers, now required airline websites and automated airport kiosks to be accessible to passengers with disabilities. In addition, DOT allowed airlines to choose between stowing wheelchairs in a cabin compartment on new aircraft or strapping them to a row of seats, an option that would ensure two manual, folding wheelchairs could be transported at a time. The new rules were part of DOT's continuing implementation of the Air Carrier Access Act of 1986. (See May 7, 2008.)
20131105	November 5, 2013: FAA issued a final rule to improve pilot training. The rule stemmed in part from the tragic crash of Colgan Air 3407 in February 2009, and addressed a congressional mandate in the Airline Safety and Federal Aviation Administration Extension Act of 2010 to ensure enhanced pilot training. The rule was one of several rulemakings required by the act, including the requirements to prevent pilot fatigue that was finalized in December 2011, and the increased qualification requirements for first officers who fly U.S. passenger and cargo planes that was issued on July 15, 2013 (see that date). The final rule required:
	* ground and flight training enabling pilots to prevent and recover from aircraft stalls and upsets. These new training standards will impact future simulator standards as well (See December 3, 2014);
	* air carriers to use data to track remedial training for pilots with performance deficiencies, such as failing a proficiency check or unsatisfactory performance during flight training;
	* training for more effective pilot monitoring;
	* enhanced runway safety procedures; and
	* expanded crosswind training, including training for wind gusts.
20131107	November 7, 2013: FAA released its first annual roadmap outlining efforts needed to safely integrate unmanned aircraft systems (UAS) into the nation's airspace. The plan outlined FAA's approach to ensuring widespread UAS use was safe, from the perspective of accommodation, integration, and evolution. FAA planned to establish requirements that UAS operators would have to meet to increase access to airspace over the next five to 10 years. The roadmap discussed items such as new or revised regulations, policies, procedures, guidance material, training and understanding of systems, and operations to support routine UAS operations. (See October 15, 2013; December 30, 2013.)

20131112 November 12, 2013: The Justice Department and American Airlines and US Airways settled the lawsuit brought by the Justice Department over the merger of the two airlines. The DOJ filed papers in U.S. District Court in the District of Columbia to announce the settlement that avoided a trial scheduled to start November 25. Under the terms of the settlement, the airlines agreed to sell 104 takeoff and landing slots at Ronald Reagan National Airport in Washington, 34 slots at La Guardia Airport in New York, and two gates each at Boston's Logan airport, O'Hare, Dallas Love Field, Los Angeles, and Miami. A judge overseeing American Airlines' bankruptcy proceeding approved the merger settlement on November 27. The two airlines continued to operate separately until FAA approved unified operations. (See October 28, 2013; December 7, 2013.)

20131114 November 14, 2013: FAA certificated the Learjet 75, a light business jet with a maximum range greater than 2,000 nautical miles at cruise speeds up to Mach 0.81. The Learjet 75 aircraft could fly four passengers and two crew members non-stop from Los Angeles to Toronto and Mumbai to Bangkok. Additionally, it was able to handle a range close to 1,950 nautical miles with eight passengers.

20131119 November 19, 2013: In an editorial published in FAA's Federal Air Surgeon's Medical Bulletin, Federal Air Surgeon Fred Tilton said the agency would soon implement a new policy on obstructive sleep apnea. In particular, airmen and air traffic controllers with a body mass index of 40 or more would have to be evaluated by a physician board certified as a sleep specialist. Anyone diagnosed with obstructive sleep apnea would then have to undergo treatment before being medically certificated. The policy resulted in growing criticism from the aviation community, and a bill introduced in the House of Representatives to prevent FAA from implementing new rules pertaining to pilots with sleep apnea without adhering to the normal rulemaking process. On December 20, the Wall Street Journal reported FAA had put the policy on hold, while it worked with aviation stakeholder groups to provide clear guidance on the agency's plan and FAA planned to pursue a new approach to help physicians diagnose sleep disorders. (See January 23, 2015.)

20131121 November 21, 2013: FAA released a 279-page report that noted, although flying has never been safer, pilot confusion or inattention to cockpit automation has raised concerns in fatal crashes. "Pilots sometimes rely too much on automated systems and may be reluctant to intervene," the report said. The use of technology for calculations and managing flights "is increasing, including implementations that may result in errors and confusion." The report made 18 recommendations to improve safety. Beyond the recommendations in the cockpit-automation report, FAA Administrator Huerta announced FAA would establish a joint government and industry air carrier training steering group early in 2014 to prioritize outstanding recommendations from a variety of sources. He also asked participants at an industry meeting to provide him with the top five focus areas to improve air carrier training. Huerta wanted the new steering group, comprised of safety experts from the airlines, crew-member unions, government and the aviation community, to consider the recommended focus areas as the first order of business when it convened.

20131122 November 22, 2013: FAA dedicated a new, 236-foot tall air traffic control tower at Oakland International Airport. A $33.2 million American Recovery and Reinvestment Act (ARRA) grant helped pay for constructing the tower and a 14,000-square-foot base building. The grant was FAA's largest single ARRA award. The new control tower replaced two air traffic control towers that served Oakland International Airport for more than 40 years. A 158-foot-tall tower on the southern portion of the airfield was built in 1962 as a part of a terminal expansion project. In 1972, construction of a large hangar blocked some views from the south tower, requiring the Port of Oakland to build a second tower to handle traffic on the north runways. The total cost of the new tower, including site preparation, electronics, air traffic control equipment, utilities, and installation of equipment was $51 million. (See October 15, 2010.)

20131122 November 22, 2013: Boeing issued a notice urging carriers to avoid flying 747-8 and 787 Dreamliner planes with engines made by General Electric at high attitude within 50 nautical miles of thunderstorms that might contain ice crystals. The move followed six incidents from April to November involving five 747-8s and one 787 when aircraft powered by GE's GEnx engines suffered temporary loss of thrust while flying at high altitude. The problem was caused by a build-up of ice crystals, initially just behind the front fan, said a GE spokesman, adding that all of the aircraft landed at their planned destinations safely. (See September 30, 2013; November 27, 2013.)

20131123 November 23, 2013: China declared an East China Sea Air Identification Zone, and said unannounced flight in the area would face "defensive emergency measures." On November 29, the U.S. State Department issued a statement saying U.S. airlines should respect a Chinese order to notify Beijing of flights through international airspace where the country recently claimed jurisdiction.

20131125 November 25, 2013: Officials at Barnes Regional Airport in Westfield, MA, opened a new $13.5 million runway. The project, announced in July with groundbreaking in August, was financed with $8.7 million in federal funds toward the total $20 million job that, in addition to the runway, included auxiliary lighting and concrete pads for the F-15 jets.

20131127 November 27, 2013: FAA issued an airworthiness directive requiring airlines that operated Boeing 787s and 747s with GE engines steer clear of thunderstorms with clouds more than 60 miles across. FAA reported it knew of nine instances where ice was sucked into an engine causing it to lose power and two of those incidents caused engine damage. (See November 22, 2013; March 19, 2014.)

20131127 November 27, 2013: President Barack Obama signed the Small Airplane Revitalization Act of 2013 into law. The legislation directed FAA to issue a final rule to advance the safety and continued development of small airplanes by reorganizing the certification requirements to streamline the approval of safety advancements. It also required the final rule to meet certain consensus-based standards and FAA Part 23 Reorganization Aviation Rulemaking Committee objectives, including: (1) establishment of a regulatory regime for small airplane safety; (2) the establishment of broad, outcome-driven objectives that would spur small plane innovation and technology adoption; (3) the replacement of current, prescriptive requirements under Part 23 with performance-based regulations; and (4) the use of FAA-accepted consensus standards to clarify how Part 23 safety objectives may be met using specific small plane safety designs and technologies.

20131129 November 29, 2013: Evergreen International Airlines, Inc., a cargo airline based in McMinnville, Oregon, ceased operations because of financial difficulties. The airline flew its final flight on December 2, from Travis Air Force Base in California to Victorville, California.

20131203 December 3, 2013: Shell announced it had become the first major oil company to develop a lead-free replacement for aviation gasoline (Avgas 100 and 100LL). The formulation was successfully evaluated in industry laboratory engine (bench) tests by Lycoming and in a flight test by Piper. Shell planned to engage the aviation industry, regulators, and authorities, including FAA, American Society for Testing and Materials, and European Aviation Safety Agency to obtain approvals for the unleaded Avgas. Shell also planned to work with other engine manufacturers to continue the testing and refinement program as the approvals process progressed. (See September 13, 2013; September 8, 2014.)

20131204 December 4, 2013: Pam Underwood, FAA deputy division manager at Kennedy Space Center, announced NASA astronauts would fly as “space flight participants” aboard commercial spaceships being developed to taxi crews to and from the international space station. FAA’s definition of crew required them to be employees of the licensee or subcontractor licensee. NASA astronauts are neither, so they would fly under the category of space flight participant, under current FAA regulations. The ruling did not limit the scope of the work government-employed astronauts could perform aboard commercial space taxis, including piloting the vehicle, aborting launch if necessary, overseeing emergency response, and monitoring and operating environmental controls and life support systems. (See August 14, 2013.)

20131207 December 7, 2013: A consumer group, concerned the American Airlines and US Airways merger would lead to increased fares and fewer choices for fliers, filed for an emergency stay to block the merger in a federal appeals court in New York. When the court denied the stay, the group appealed to the U.S. Supreme Court. Justice Ruth Bader Ginsberg declined to hear the stay request. (See November 12, 2013; December 9, 2013.)

20131209	December 9, 2013: FAA renewed Spaceport America's license to host suborbital and horizontal rocket launches. The renewal became effective on December 15 and would last through December 15, 2018. (See December 15, 2013.)
20131209	December 9, 2013: American Airlines exited bankruptcy and completed its merger with US Airways. The merged company, with its new stock symbol, AAL, began trading on the NASDAC. (See December 7, 2013; October 20, 2014.)
20131210	December 10, 2013: The New York ARTCC became the last of FAA's three oceanic control areas to implement reduced oceanic separation standards for aircraft that used advanced navigation technology and fly satellite-based routes. To qualify for the standards, planes traveling through the control area had to have:
	* FANS-1/A avionics, which enabled controllers to communicate clearances to pilots, pilots to submit requests to controllers, and controllers to track aircraft positions;
	* Controller-pilot data link communications, or CPDLC, which streamlined conversations between pilots and controllers via text messages;
	* Automatic Dependent Surveillance-Contract, or ADS-C, which reported flight positions to the center within approved timeframes
	The Ocean21 automation system at the ARTCC collected data from the aircraft's equipment so controllers knew what each aircraft could do, its location, flight path, and any potential future conflicts. Controllers could then separate qualified pairs of planes by either 30 nautical miles lateral and longitudinal or 50 nautical miles lateral and longitudinal. The 30/30 standard was applied to flights that used a category of navigation known as RNP-4. The 50/50 standard was for plane pairings that used RNP-10. RNP is short for required navigation performance, a term for procedures that used satellites to guide aircraft on more precise flight paths.
20131211	December 11, 2013: The House Transportation and Infrastructure Committee's aviation subcommittee tasked the Government Accountability Office (GAO) with evaluating foreign civil aviation authority certification processes to see if any lessons learned could benefit both FAA's process and U.S. manufacturers. GAO's study would cover four areas: how FAA certification compared to foreign counterparts; general lessons learned; challenges U.S. manufacturers had with foreign certification; and how FAA addressed foreign challenges to U.S. approvals. (See May 3, 2013; September 15, 2014.)
20131213	December 13, 2013: FAA awarded airworthiness certification to the HondaJet HF 120 engine built by GE Honda Aero Engines.
20131215	December 15, 2013: FAA contract controllers began operations in the new $2.8 million air traffic control tower at the Mesquite Metro Airport in Mesquite, Texas.

20131230 December 30, 2013: FAA announced the selection of the six public entities to develop UAS research and test sites around the country. These congressionally-mandated test sites would conduct critical research into the certification and operational requirements necessary to safely integrate UAS into the national airspace over the next several years. The sites included: University of Alaska; State of Nevada; New York's Griffiss International Airport; North Dakota Department of Commerce; Texas A&M University; and Virginia Tech. (See November 7, 2013; April 21, 2014.)

2014

20140104	January 4, 2014: FAA's new pilot rules (FAR 117) went into effect. Under the new rules, non-cargo pilots had to have at least 10 hours of rest between shifts, of which 8 hours had to involve uninterrupted sleep. In addition, pilots were only allowed to fly for 8 or 9 hours depending on their start times. (See December 21, 2011.)
20140110	January 10, 2014: Virgin Galactic successfully completed the third rocket-powered supersonic flight of its passenger-carrying reusable space vehicle, SpaceShipTwo. The spacecraft ascended to a record-breaking height of 71,000 feet, at a maximum speed of Mach 1.4. (See April 29, 2013; October 31, 2014; December 13, 2018.)
20140111	January 11, 2014: FAA and the Academy of Model Aeronautics signed a memorandum of agreement to work jointly to ensure the continued safe operation of model aircraft in the national airspace system (NAS). (See June 19, 2013; January 2014; June 23, 2014.)

20140113

January 13, 2014: Secretary of Transportation Anthony Foxx appointed 10 new members to the FAA Management Advisory Council (MAC). The new members included: Steve Alterman, president, Cargo Airline Association; Bill Ayer, former chairman, Alaska Air Group; Montie Brewer, former president and CEO, Air Canada; Ray Conner, vice chairman, The Boeing Co., and president and CEO, Boeing Commercial Airplanes; Craig Fuller, president, the Fuller Co. and former president, Aircraft Owners and Pilots Association; Jane Garvey, Meridiam Infrastructure/MITRE board member and former FAA administrator; Mayor Michael Hancock, City of Denver, CO.; Lee Moak, president, Air Line Pilots Association; John "Jack" Potter, president and CEO, Metropolitan Washington Airports Authority; and, Gwynne Shotwell, president and COO, Space X. Created by the Federal Aviation Reauthorization Act of 1996, the MAC met quarterly to assess and advise FAA on carrying out its aviation safety and air travel efficiency mission. Panel members served three-year terms in a volunteer capacity and retained their private sector positions. By law the MAC has 13 members. The new appointments joined the three incumbent council members: Department of Transportation Acting Deputy Secretary Victor Mendez; Department of Defense Brig. Gen. Steven M Shepro; and Paul Rinaldi, president, National Air Traffic Controllers Association. (See July 11, 2001.) January 17, 2014: President Barrack Obama signed the Consolidated Appropriations Act of 2014 (PL 113-76), which, among other things, eliminated funding for the joint planning and development office (JPDO). FAA had established the office in 2003 under the Vision 100-Century of Aviation legislation that launched the NextGen modernization program. Karlin Toner, who headed the JPDO, became FAA's director of global strategy within FAA's office of policy, international affairs, and environment. In May 2014, FAA created a new interagency office to coordinate federal investment in the NextGen modernization effort following the elimination of the JPDO. FAA said it established an interagency planning office to replace the JPDO under the direction of Gisele Mohler. Consisting of employees from FAA and other federal agencies, the new office "will plan, identify and prioritize key multi-agency research to drive consensus in the development of investment choices and decisions related to NextGen. Part of its mission is to improve efficiencies, reduce redundancy and ensure compatibility across federal agencies, while pooling resources and investments." (See February 26, 2010; September 23, 2011.)

20140121

January 21, 2014: Per language in the 2014 omnibus spending bill signed by President Obama on January 17, DOT's Research and Innovative Technology Administration became the new Office of the Assistant Secretary for Research and Technology.

20140129

January 29, 2014: FAA announced in a Federal Register notice it had combined two divisions – the aircraft engineering division with the production and airworthiness division – to create the design, manufacturing, and airworthiness division within its office of aviation safety. The new group, which assumed the old engineering division's AIR-100 designation, had five branches: certification and procedures, technical and administrative support, systems and equipment standards, operational oversight and policy, and systems performance and development.

20140131	January 31, 2014: FAA down-graded India's aviation-safety ranking from Category 1 to Category 2 because of safety deficiencies. The Category 2 rating signified India's civil aviation safety oversight regime did not comply with ICAO safety standards. It also prohibited any new Indian carriers from starting service to the U.S. and opened up India's aircraft to additional inspections from FAA. (See September 20, 2013; April 8, 2015.)
20140131	January 2014: Colorado banned the use of drones in hunting; Montana followed suit in February. Idaho and Wisconsin had already included drones in their current prohibitions against the use of aircraft for hunting. (See January 11, 2014; March 7, 2014.)
20140131	January 2014: FAA announced Ethiopia had passed the agency's five-day-long safety audit, allowing the country to keep its Category 1 safety status. (See January 31, 2014; March 7, 2014; February 4, 2015.)
20140205	February 5, 2014: FAA simplified design approval requirements for a cockpit instrument called an angle of attack (AOA) indicator. AOA devices, common on military and large civil aircraft, could be added to small planes to supplement airspeed indicators and stall warning systems, alerting pilots of a low airspeed condition before a dangerous aerodynamic stall occurred, especially during takeoff and landing. An angle of attack represents the angle between a plane's wing and the oncoming air. If the angle of attack became too great, the wing could lose lift. If a pilot failed to recognize and correct the situation, a stall could lead to loss of control of the aircraft and an abrupt loss of altitude.
20140206	February 6, 2014: Aviation Partners Boeing announced it had received supplemental type certification (STC) from FAA for split scimitar winglets to be installed on Boeing 737- 800 aircraft. The company planned to develop and certify the split scimitar winglet modification for all the Boeing 737-700, -800, and -900 series aircraft, including Boeing Business Jets. On February 19, United Airlines became the first U.S. airline to use the split scimitar winglets on commercial flights. The new winglet design demonstrated significant aircraft drag reduction over the basic blended winglet, which resulted in a 2.5 percent fuel savings. On October 10, the company announced it had received FAA STC covering the installation of the new winglets on three additional configurations of the Boeing 727-800. FAA approved use of the winglets on all Boeing 737-800 and 737-900ER aircraft.
20140210	February 10, 2014: FAA certified Ohana by Hawaiian, Hawaiian Airlines' new turboprop subsidiary. Ohana planned to enter the inter-island market with flights between Honolulu International Airport and Molokai on March 11 and between Oahu and Lanai on March 18.
20140210	February 10, 2014: Microsoft announced it received FAA authorization for Surface 2 tablets to be used as electronic flight bags. (See June 26, 2013.)

20140210 February 10, 2014: FAA launched a 10-day campaign to recruit air traffic controller (ATC) trainees. Candidates had to have a high school diploma or three years work experience. FAA's collegiate training initiative (CTI) program graduates had to reapply under the new program. All applicants had to pass the normal ATC aptitude test (AT-SAT), as well as a new biographical test. In addition, a single vacancy announcement would be used for all applicant sources, and a single nationwide referral list would be generated containing all candidates who met the qualification standards and passed the assessments. Location preferences would no longer be used as a determining factor for referral or selection. Centralized selection panels would no longer be convened to make selection from the referral list. Selection would now be fully automated, grouping candidate by assessment scores and veteran's preference. FAA notified the 36 CTI schools of the impending change on December 30, 2014, and held a telecon with the schools on January 8, 2014, to discuss the changes. The changes in hiring policy came after FAA released a barrier analysis of air traffic control hiring in April 2013. (See March 7, 2007; April 4, 2010.)

20140211 February 11, 2014: FAA issued a final rule prohibiting flightcrew members in operations under Part 121 from using a personal wireless communications device or laptop computer for personal use while at their duty station on the flight deck when the aircraft was being operated. The rule became effective on April 14, 2014. (See October 31, 2013.)

20140213 February 13, 2014: A federal judge threw out Santa Monica's lawsuit to wrest control of its airport from the U.S. government. Santa Monica sued in October 2013 to free itself from a 1948 agreement that transferred ownership of the property and its 5,000-foot runway back to the city after World War II on the condition that it remain an airport unless the government approved a change in use. The judge ruled Santa Monica had 12 years under the Quiet Title Act to sue to gain unconditional ownership, but that time had expired by 1960. The judge's decision threw out another contention that the government's control of the airport amounted to an illegal taking of municipal property without just compensation. The judge noted the city failed to first seek compensation in the U.S. Court of Federal Claims. On March 25, the Santa Monica City Council voted 6-0 in favor of a plan to take control of the city-owned portion of Santa Monica Airport, and voted to "scale back flight operations, cut the 5,000-foot runway by 2,000 feet, and reduce aviation related services." The Council was open to repaying a $250,000 grant and prepared for additional legal battles to take control over the site and its use. FAA repeated its position that Santa Monica was required to operate the airport unless the agency granted a change.

20140219 February 19, 2014: FAA Administrator Michael Huerta unveiled his four strategic initiatives at a FAA-wide town hall event. He noted that while the transformational agenda would span beyond the next four years, he expected to see significant progress toward the vision in that timeframe. The four initiatives were titled: risk-based decision making; the NAS; global leadership; and workforce of the future. (See September 30, 2003.)

20140220

February 20, 2014: FAA issued a final rule requiring helicopter operators, including air ambulances, to have stricter flight rules and procedures, improved communications, training, and additional on-board safety equipment. Under the new rule, all Part 135 helicopter operators were required to:

* Equip their helicopters with radio altimeters.

* Have occupants wear life preservers.

* Equip helicopters with a 406 MHz Emergency Locator Transmitter (ELT) when a helicopter is operated beyond power-off glide distance from the shore.

* Use higher weather minimums when identifying an alternate airport in a flight plan.

* Require pilots be tested to handle flat-light, whiteout, and brownout conditions and demonstrate competency in recovery from an inadvertent encounter with instrument meteorological conditions.

In addition, all air ambulance operators were required to:

* Equip with Helicopter Terrain Awareness and Warning Systems (HTAWS).

* Equip with a flight data monitoring system within four years.

* Establish operations control centers if they are certificate holders with 10 or more helicopter air ambulances.

* Institute pre-flight risk-analysis programs.

* Ensure their pilots-in-command hold an instrument rating.

* Ensure pilots identify and document the highest obstacle along the planned route before departure.

* Comply with Visual Flight Rules (VFR) weather minimums, Instrument Flight Rules (IFR) operations at airports/heliports without weather reporting, procedures for VFR approaches, and VFR flight planning.

* Conduct the flight using Part 135 weather requirements and flight crew time limitation and rest requirements when medical personnel are on board.

* Conduct safety briefings or training for medical personnel.

The rule was to be effective on April 22, 2014. On April 17, 2014, FAA extended the deadline to April 22, 2015, after the agency determined the rule's original effective date did not provide adequate time for affected certificate holders to implement the new requirements. (See October 12, 2010.)

20140304 March 4, 2014: FAA issued a final rule adopting more stringent noise certification standards for helicopters certificated in the U.S. The rule applied to applications for a new helicopter type design. It also allowed applicants to upgrade Stage 1 and Stage 2 helicopters to Stage 3 when applying for a supplemental type certificate. A helicopter type-certificated under this standard would be designated as a Stage 3 helicopter. This rule adopted the same noise certification standards for helicopters that existed in ICAO standards. The effective date of the new regulation was May 5, 2014. (September 18, 2013.)

20140307 March 7, 2014: FAA issued a notice appealing a March 6 decision by an NTSB Administrative Law Judge in the civil penalty case Huerta v. Pirker. That decision dismissed a proposed civil penalty for unauthorized use of an unmanned aircraft system. FAA proposed a $10,000 civil penalty in August 2011 against Raphael Pirker for acting as pilot-in-command of a Ritewing Zephyr UAS for compensation without possessing a pilot certificate. FAA further charged the UAS was operated "in a careless or reckless manner so as to endanger the life or property of another." Pirker appealed the decision to NTSB, arguing there was no valid rule in the federal aviation regulations covering model aircraft flight operations. While FAA argued model aircraft by definition were aircraft, NTSB said such an "interpretive argument would lead to a conclusion that those definitions include as an aircraft all types of devices/contrivances intended for, or used for, flight in the aircraft. The extension of that conclusion would then result in the risible argument that a flight in the air of, e.g., a paper aircraft, or a toy balsa wood glider, could subject the 'operator' to the regulatory provisions of FAA Part 91." FAA appealed the decision to the full NTSB, which had the effect of staying the decision until the full NTSB ruled. The agency expressed concerned that the decision could impact the safe operation of the national airspace system and the safety of people and property on the ground. On April 7, FAA filed its administrator's appeal brief with NTSB. (See January 2014; November 18, 2014.)

20140307 March 7, 2014: FAA granted the Republic of Azerbaijan a Category 1 rating for aviation safety after an assessment determined it complied with International Civil Aviation Organization (ICAO) safety standards. The country previously did not hold an international aviation safety assessment rating and no carrier of Azerbaijan had provided service to the U.S. According to a FAA statement, the Republic of Azerbaijan's air carriers could now add flights and service to the U.S. and carry the code of U.S. carriers. (See January 2014; April 10, 2014.)

20140308 March 8, 2014: Malaysia Airlines Flight 370, a Boeing 777, disappeared en route to Beijing with 239 people on board. On May 1, as the search for the missing plane continued in the Indian Ocean, the Malaysian government issued a preliminary report on the plane's disappearance. The five-page report included the recordings of communication between the flight-crew and air traffic controllers, which appeared routine. It also noted that it took four hours for the Malaysian search and rescue center to be activated from the time Vietnam told Malaysia the plane was missing.

20140312 March 12, 2014: NTSB Chairwoman Deborah Hersman announced she would be leaving the agency on April 24 to become president and CEO of the National Safety Council.

20140319 March 19, 2014: FAA released the findings of a review team formed in January 2013 to review the Boeing 787's design, manufacture, and assembly processes. The joint team of FAA and Boeing technical experts found the aircraft soundly designed, met its intended safety level, and the manufacturer and FAA had effective processes in place to identify and correct issues that emerged before and after certification. The team identified issues in the manufacturing and supplier quality areas and made four recommendations to Boeing, including the need to: continue to implement and mature gated design and production processes; ensure suppliers were fully aware of their responsibilities; establish a way to ensure suppliers identified realistic program risks; and required its suppliers to follow industry standards for personnel performing Boeing-required inspections. The team made parallel recommendations to FAA for improved, risk-based FAA oversight to account for new business models. The team recommended FAA should: revise its order on certificate management of manufacturers to recognize new aircraft manufacturing business models; revise its order on production approval procedures to more fully address complex, large-scale manufacturers with extended supply chains; and revise other orders to ensure engineering conformity inspections for all projects are based on risk. Based on the team's recommendations, FAA planned to revise its policies, orders, and procedures: to use risk tools to ensure manufacturing surveillance was conducted at the highest risk facilities; to assess risks related to emerging technologies, complex manufacturing processes, and supply chain management; and to make engineering conformity determinations using standardized, risk-based criteria. (See November 27, 2013; May 28, 2014.)

20140320 March 20, 2014: FAA issued its second study of general aviation (GA) airports called “ASSET 2: In-Depth Review of the 497 Unclassified Airports.” The original ASSET, study completed in 2012, categorized nearly 3,000 GA airports into four areas: national, regional, local, and basic. In addition, the study defined the vital and diverse roles small airports play in the national air transportation system. However, 497 airports did not fit into a category under the original study. In January 2013, FAA began working with airport sponsors, state aviation offices, and industry stakeholders to conduct an in-depth review of the unclassified airports to consider all available information. As a result, FAA placed 212 airports into one of the four categories. The study also discovered four airports closed to the public or no longer serving as active airfields. The remaining 281 airports were unable to meet minimum criteria for an existing category. Although the agency could not determine a federal role for these airports, they remained in the national plan of integrated airport systems (NPIAS) plan as unclassified. FAA planned to monitor their activity level and role for possible changes.

20140321	March 21, 2014: FAA extended the expiration date of the prohibition of flight operations within the Tripoli Flight Information Region (FIR) by all U.S. air carriers; U.S. commercial operators; and persons exercising the privileges of an airman certificate issued by FAA, except when such persons operated a U.S.-registered aircraft for a foreign air carrier. FAA believed the extension of the expiration date to March 21, 2015, necessary to prevent a potential hazard to persons and aircraft engaged in such flight operations. (See March 20, 2015.)
20140321	March 21, 2014: FAA Administrator Michael Huerta announced he had selected acting ATO COO Teri Bristol as the new ATO COO. Prior to this appointment she had served as deputy COO; vice president for technical operation services; vice president for the service center; director of terminal mission support; director of terminal operations for the western service area; and the director of terminal program operations. (See August 13, 2013.)
20140321	March 21, 2014: FAA and the Experimental Aircraft Association announced an agreement for the next nine years under which FAA would provide, as it had in past years, air traffic control and other personnel for AirVenture, with the EAA covering the cost of travel, accommodations, and other expenses for air traffic control personnel.
20140326	March 26, 2014: NTSB cautioned airline pilots to exercise vigilance in the approach phase of a flight to avoid “potentially catastrophic mistakes.” The safety alert came after wrong-airport landings by Southwest Airlines in January and Atlas Air in November 2013.
20140327	March 27, 2014: Facebook announced it the purchase of Ascenta, a U.K.-based aerospace company for $20 million to help deliver the Internet to underserved areas by building drones, satellites, and lasers. On April 14, Google announced the purchase of Titan Aerospace, a New Mexico company that manufactured high-altitude drones.
20140328	March 28, 2014: FAA published a revised version of AC No: 20-138D that clarified and added new guidance material to the airworthiness approval process for a variety of GPS systems, including augmented GPS and required navigation (RNAV) equipment for required navigation performance (RNP) operations and baro-Vnav equipment. Several changes covered: the differences between equipment capability and installed limitations; clarification of the database configuration and equipment capability; adding step-down fixes to navigation databases; and a new appendix for demonstrating radius to fix (RF) leg capability and RNP prediction guidance for RNP authorization-required approaches. April 2, 2014: FAA dedicated its new air traffic control facility at George Bush Intercontinental Airport in Houston, TX. The 47,500-square-foot terminal radar approach control (TRACON) facility replaced an outdated structure commissioned more than 40 years ago.

20140402	April 2, 2014: The Supreme Court ruled unanimously “an airline had the right to dump a frequent flier who complained too much.” The Court said airlines “have sole discretion to drop frequent fliers.” The case “involved Rabbi Binyomin Ginsberg, who was ousted from Northwest Airlines’ WorldPerks loyalty program for complaining too often about getting bumped from flights and repeatedly seeking compensation the airline considered unfair.” The airline argued that frequent-flier programs “operate at the sole discretion of the airline,” and that airlines “can’t tailor their programs to a patchwork of consumer laws in 50 states.” Writing for the court in overturning the 9th Circuit Court of Appeals, Justice Samuel Alito said “that travelers have protection from being mistreated because they could sue for possible breach of contract, just not for covenants that Justice Ruth Ginsberg had argued were implied by participating in a loyalty program.”
20140403	April 3, 2014: FAA began using "climb via" phraseology for route transitions and/or the assignment of RNAV standard instrument departure (SID) procedures containing speed and altitude restrictions. These new and revised air traffic procedures were the result of a collaborative effort between the ATO and flight standards personnel, National Air Traffic Controllers Association (NATCA), and industry stakeholders. Concurrent with climb via, FAA also implemented expanded guidance on speed adjustment phraseology. FAA implemented the new phraseology in FAA Order 7110.65V.
20140410	April 10, 2014: FAA reinstated a Category 1 rating to the Republic of the Philippines following the agency’s determination in March the country met ICAO safety standards. The country held a Category 1 rating until January 2008, when FAA downgraded it to a Category 2 because of its failure to meet certain safety criteria. (See March 7, 2014; June 27, 2014.)
20140414	April 14, 2014: FAA issued a final rule prohibiting flightcrew members in operations under Part 121 from using a personal wireless communications device or laptop computer for personal use while at their duty station on the flight deck while operating the aircraft.
20140414	April 14, 2014: FAA announced the nationwide installation of the automatic dependent surveillance-broadcast (ADS-B) radio network that supported a satellite-based surveillance system that tracks aircraft with the help of GPS. Of the 230 air traffic facilities across the country, 100 were using the system to separate traffic. FAA expected to be connected and operating at all 230 facilities by 2019. By January 1, 2020, all aircraft operating in controlled airspace were required to be equipped with ADS-B Out avionics that broadcast the plane’s location by January 1, 2020. (See June 9, 2013; August 27, 2015.)
20140415	April 15, 2014: American Airlines Group and AEA management changed the name of American Eagle Airlines to Envoy Air Inc. to differentiate the airline from other regional airlines flying as American Eagle.

20140421 April 21, 2014: FAA announced the first of six test sites chosen to perform UAS research was operational more than 2 1/2 months ahead of the deadline specified for the program by Congress. FAA granted the North Dakota Department of Commerce team a certificate of waiver or authorization (COA) to begin using a Draganflyer X4ES small UAS at its Northern Plains Unmanned Aircraft Systems Test Site. The COA was effective for two years. The team planned to begin flight operations during the week of May 5. (See December 30, 2013; May 5, 2014.)

20140421 April 21, 2014: EquuSearch, a nonprofit organization that used drones to search for missing persons, filed a petition for review with the U.S. Court of Appeals for the District of Columbia asserting a FAA inspector had wrongly ordered it in a February 2014 email correspondence to cease and desist search and rescue operations using its UASs. On July 18, a three-judge panel for a federal appeals court dismissed the lawsuit. In its ruling, the court said it could not review the case because the email Texas EquuSearch had received did not represent FAA's final conclusion on the use of drones. Final rules on drone use were not expected until 2015.

20140423 April 23, 2014: Secretary of the Interior Sally Jewell and National Park Service Director Jonathan Jarvis announced the designation of the 1956 Grand Canyon TWA-United Airlines Aviation Accident Site, Grand Canyon National Park, AZ, as a national historic landmark. The designation was the first landmark to commemorate something that happened exclusively in the air. On June 30, 1956, a Trans World Airlines Super Constellation L-1049 and a United Airlines DC-7 collided in uncongested airspace 21,000 feet over the Grand Canyon in Arizona, killing all 128 people onboard the two flights. The tragedy spurred an unprecedented effort to modernize and increase safety in America's postwar airways, culminating in the establishment of the Federal Aviation Agency. (See June 30, 1956.)

20140424 April 24, 2014: FAA issued a Federal Register notice seeking public comment on a proposed policy change to protect airspace for emergency operations when an aircraft engine failed during departure. Aircraft operators had to plan for the potential of an engine failure (one engine inoperative, or OEI) during take-off in accordance with 14 CFR Parts 25, 121, and 135. An engine failure could prevent the aircraft from climbing at the normal climb rate and structures near an airport could, under such circumstances, create a safety risk. The agency evaluated certain airport clear zones assuming both engines were operating. The proposal wanted to consider a common departure path for all aircraft in the event of a power failure. The 60-day comment period on the new policy closed on June 24, 2014.

20140425 April 25, 2014: FAA issued a special federal aviation regulation (SAFR) prohibiting "certain flight operations" in a portion of the Simferopol Flight Information Region (FIR) by all U.S. airlines and commercial operators, and, with few exceptions, those with a U.S. airman certificate and operators of U.S.-registered civil aircraft. This prohibited area included sovereign Ukrainian airspace over the Crimean Peninsula and the associated Ukrainian territorial sea, as well as international airspace managed by Ukraine over the Black Sea and the Sea of Azov. The SFAR would remain in effect for one year. FAA said the rule was prompted by the Russian Federation's issuance of a notice to airmen (NOTAM) on March 28 "purporting to establish unilaterally a new FIR, effective April 3, 2014, in a significant portion of the Simferopol (UKFV) FIR," following Russia's annexation of Crimea. (See July 17, 2014.)

20140430 April 30, 2014: FAA issued a ground stop, stopping takeoffs at Southern California airports as a result of a problem with its en route automation modernization (ERAM) computer system at the Los Angeles air route traffic control center (ARTCC). The ground stop, lasting approximately one hour, led to the cancellation or delay of hundreds of flights. On May 5, both the Department of Defense (DOD) and FAA said a U2 plane in the area created the computer problem. The ERAM system interpreted the U2 flight, flying at about 60,000 feet, as a more typical low-altitude operation, and began processing it for a route below 10,000 feet. The extensive number of routings that would have been required to de-conflict the aircraft with lower-altitude flights used a large amount of available memory and interrupted the computer's other flight-processing functions. FAA subsequently increased the amount of flight-processing memory on the computer system. (See June 18, 2012; April 30, 2015.)

20140505 May 5, 2014: FAA announced the University of Alaska's UAS test site was the second of six to become operational. FAA granted the University of Alaska Fairbanks a certificate of waiver or authorization authorizing flights by an Aeryon Scout small UAS for animal surveys at its Pan-Pacific UAS test range complex in Fairbanks. The COA was effective for two years. The team began the wildlife flight operations on this date. (See April 21, 2014; June 9, 2014.)

20140509 May 9, 2014: FAA issued a special security NOTAM advising due to terrorist activities and civil unrest in Yemen, there was a significant risk to civil flight operations in that country. FAA warned that "terrorists and insurgents in the region possess man-portable air defense systems (manpads) and indirect fire weapons, and have threatened and targeted both international civil aviation and airports in country, most notably, Sanaa International airport. U.S. operators planning to fly in the territory and airspace of Yemen at or below Fl240 had to obtain current threat information, comply with all applicable FAA regulations and directives, and provide advance notice to FAA" with specific flight details.

20140513 May 13, 2014: Smoke resulting from a burning electrical motor at the terminal radar control (TRACON) facility in Elgin, IL, resulted in an evacuation of the facility, causing more than 1,000 flights to be cancelled at O'Hare International Airport and Midway International Airport. FAA stopped flights in and out of the two airports for approximately four hours.

20140528 May 28, 2014: FAA approved extended operations for Boeing's 787 Dreamliner, allowing the plane to fly for up to 330 minutes (5.5 hours) away from an airport rather than the previous 180 minutes. FAA's approval allowed new routings, such as nonstop flights from Los Angeles to Melbourne. It also allowed the longer-range version of the 787, called the 787-9, to fly polar routes. (See March 19, 2014; December 2, 2014.)

20140528 May 28, 2014: FAA and Virgin Galactic signed an agreement setting parameters for how routine space missions launched from Spaceport America would be integrated into the NAS. In particular, the agreement spelled out how FAA's Albuquerque ARTCC and the New Mexico Spaceport Authority would work with Virgin Galactic to safely provide clear airspace for SpaceShipTwo. (See January 10, 2014; October 31, 2014.)

20140609 June 9, 2014: FAA announced the State of Nevada's UAS test site was ready to conduct research vital to integrating UAS into the nation's airspace. Nevada was the third of six congressionally mandated test sites to become operational. FAA granted the State of Nevada team a two-year certificate of waiver or authorization to use an Insitu ScanEagle at the Desert Rock Airport located in Mercury, NV. Desert Rock Airport, owned and operated by the Department of Energy, was a private airport and not for general use. The ScanEagle would fly at or below 3,000 feet, monitored by a visual observer and mission commander. Nevada's research concentrated on UAS standards and operations as well as operator standards and certification requirements. The site's activities also included a concentrated look at how air traffic control procedures would evolve with the introduction of UAS into the civil environment and how those aircraft would integrate with NextGen. (See May 5, 2014; June 20, 2014.)

20140610 June 10, 2014: FAA gave approval for energy corporation BP and unmanned aircraft systems manufacturer AeroVironment to fly an AeroVironment Puma AE for aerial surveys in Alaska – the first time FAA had authorized a commercial UAS operation over land. FAA issued a certificate of waiver or authorization to survey BP pipelines, roads, and equipment at Prudhoe Bay, AK, the largest oilfield in the United States. (See June 9, 2014; June 20, 2014.)

20140620 June 20, 2014: National Park Service Director Jonathan B. Jarvis signed a policy memorandum directing all national park superintendents to write rules barring the launching, landing, or operation of drones. Unmanned aircraft had already been prohibited at several national parks. Those parks initiated bans after noise and nuisance complaints from park visitors, an incident in which park wildlife were harassed, and concerns about the safety of park visitors. (See June 10, 2014; June 20, 2014; October 5, 2017.)

20140620 June 20, 2014: FAA granted the Texas A&M University–Corpus Christi team a two-year certificate of waiver or authorization to use an AAAI RS-16 UAS. The RS-16 weighed approximately 85 pounds and had a wingspan of almost 13 feet. Texas A&M Corpus Christi's research concentrated on multiple areas, including safety of operations and data gathering in authorized airspace, UAS airworthiness standards, command and control link technologies, human-factors issues for UAS control-station layout, and detect-and-avoid technologies. The site was the fourth of six to become operational. (See June 9, 2014; June 20, 2014; August 7, 2014.)

20140623 June 23, 2014: FAA published a notice in the Federal Register on its interpretation of the statutory special rules for model aircraft in the FAA Modernization and Reform Act of 2012. The guidance came after incidents involving the reckless use of unmanned model aircraft near airports and involving large crowds of people. FAA restated the law's definition of "model aircraft," including requirements they not interfere with manned aircraft, be flown within sight of the operator, and be operated only for hobby or recreational purposes. The agency also explained model aircraft operators flying within five miles of an airport must notify the airport operator and air traffic control tower. FAA could take enforcement action against model aircraft operators who operated their aircraft in a manner that endangered NAS safety. In the notice, FAA explained its enforcement authority was designed to protect users of the airspace as well as people and property on the ground. FAA reaffirmed that the act's model aircraft provisions applied only to hobby or recreation operations and did not authorize the use of model aircraft for commercial operations. The notice provided examples of hobby or recreation flights, as well as examples of operations that would not meet that definition. (See January 11, 2014.)

20140624 June 24, 2014: A strike by one of France's air traffic controller unions, UNSA-INCA, forced the cancellation of flights throughout Europe. The controllers' union SNCTA did not join in the strike, which was scheduled to last through June 29. The striking union accused the French government of a lack of investment in air traffic control infrastructure and urged modernization of the system.

20140626 June 26, 2014: FAA certified the Instant Eye small UAS, which was used by an energy company to conduct research, development, and training to see if the system was practical for inspecting infrastructure such as pipelines, power lines, and insulators on towers. It was the first unmanned quadrotor to receive FAA certification. Physical Sciences Incorporated developed Instant Eye with funding from the combating terrorism technical support office, the Army research laboratory, and the Defense Department's newly renamed emerging capabilities and prototyping office. (See June 20, 2014; August 7, 2014.)

20140627	June 27, 2014: FAA announced the Republic of Serbia complied with ICAO safety standards and had been granted a Category 1 rating. The Republic of Serbia had held a Category 2 rating since 2006. A Category 2 rating meant a country either lacked laws or regulations necessary to oversee air carriers in accordance with minimum international standards, or that its civil aviation authority was deficient in one or more areas, such as technical expertise, trained personnel, record-keeping, or inspection procedures. The Category 1 status was based on a March 2014 FAA assessment of the safety oversight provided by the Civil Aviation Directorate of the Republic of Serbia, and an FAA verification of necessary corrective actions during a follow-on visit to the Republic of Serbia this month. With the Category 1 rating, the Republic of Serbia's air carriers, which were able to secure the requisite FAA and DOT authority, could establish service to the United States and carry the code of U.S. carriers. (See April 10, 2014.)
20140702	July 2, 2014: NTSB denied a petition for reconsideration of its findings in the investigation of the 1996 TWA Flight 800 crash. The TWA 800 Project, which filed the petition, claimed a detonation or high-velocity explosion could have caused the crash. NTSB said the crash was the result of an oxygen buildup in a partially empty fuel tank that caused on explosion that destroyed the plane in flight.
20140702	July 2, 2014: Transportation Secretary Anthony Foxx announced a final rule that expanded the Department's requirement that air carriers report to the Department incidents involving the loss, injury, or death of an animal during air transport. The revised rule required, for the first time, all covered carriers file a calendar-year report that included the total number of animals transported in the calendar year as well as the total number of animals that were lost, injured, or died during air transport in the calendar year, if any. The rule would become effective on January 1, 2015.
20140708	July 8, 2014: Embry-Riddle announced it had become the first school to receive approval from FAA for its airline transport pilot (ATP) certification training program. Under a rule, effective August 1, 2014, FAA required all airline pilots to complete an ATP certification training program to qualify to take the ATP airman knowledge test, a prerequisite for employment as a commercial airline pilot in the U.S.
20140714	July 14, 2014: NASA transferred to FAA a new NextGen software technology, called terminal sequence and spacing, that allows air traffic controllers to maximize the benefits of performance based navigation (PBN) procedures on the approach to the runway. With the new technology, controllers see circles – called slot markers – on their display screens that indicate where an aircraft should be to fly a RNAV or required navigation performance route. The software enabled the use of PBN procedures to become more routine, requiring less vectoring, fewer level-offs of aircraft, and less communication between controllers and pilots. FAA, which received an initial technology transfer of the terminal sequence and spacing from NASA in September 2013, planned to make a full investment decision by the end of the year.

20140717	July 17, 2014: FAA issued a notice to airman prohibiting, until further notice, U.S. flight operations in the airspace over eastern Ukraine because of recent events and the potential for continued hazardous activities. A Malaysia Airlines Boeing 777 flying over the Ukraine had been shot down earlier in the day with a suspected surface-to-air missile, with the loss of all 290 people onboard. The restricted area included the entire Simferopol and Dnepropetrovsk flight information regions (FIRs). This action expanded a prohibition of U.S. flight operations issued by FAA in April over the Crimean region of Ukraine and adjacent areas of the Black Sea and the Sea of Azov. No scheduled U.S. airlines flew routes through this airspace. (See April 15, 2014; December 29, 2014; October 13, 2015; October 18, 2018.)
20140722	July 22, 2014: In a notice to airmen issued at 12:15 EDT, FAA prohibited U.S. airlines from flying to or from Israel's Ben Gurion International Airport for a period of up to 24 hours. FAA issued the notice in response to a rocket strike which landed approximately one mile from the airport on the morning of July 22, 2014. The order, which affected 12 U.S. flights per day, was issued to reduce the chance of air travelers becoming casualties in the war between Israel and Hamas. FAA extended the ban for an additional 24 hours on July 23, but later cancelled the notice at 11:45 p.m. ETD.
20140724	July 24, 2014: An Air Algerie MD-83 en route from Burkina Faso to Algeria crashed in Mali. All 116 persons on board died in the crash.
20140804	August 4, 2014: DOT issued new standards to strengthen safety conditions for the shipment of lithium cells and batteries. These changes, some of which focus specifically on shipments by air, will better ensure that lithium cells and batteries are able to withstand normal transportation conditions and are packaged to reduce the possibility of damage that could lead to an unsafe situation. The rule, which became final six months after DOT issued the notice of proposed rulemaking:
	* Enhanced packaging and hazard communication requirements for lithium batteries transported by air.
	* Replaced equivalent lithium content with watt-hours for lithium ion cells and batteries,
	* Adopted separate shipping descriptions for lithium metal batteries and lithium ion batteries.
	* Revised provisions for the transport of small and medium lithium cells and batteries including cells and batteries packed with, or contained in, equipment.
	* Revised the requirements for the transport of lithium batteries for disposal or recycling.
	* Harmonized the provisions for the transport of low production and prototype lithium cells and batteries with the ICAO technical Instructions and the International Maritime Dangerous Goods Code.
	* Adopted new provisions for the transport of damaged, defective, and recalled lithium batteries. (See July 25, 2013; October 8, 2015.)

20140807	August 7, 2014: FAA announced the Griffiss International Airport UAS test site in Rome, NY, was ready to conduct research vital to integrating UAS into the NAS. The site was the fifth of six test sites to become operational. In addition to providing invaluable information for the integration of UAS into the NAS, the research at the Griffiss test site planned to evaluate methods for scouting agricultural fields using different types of sensors, including visual, thermal, and multispectral equipment, which would benefit farmers regionally and nationally. The research would enhance current methods of monitoring crops and provide additional information for continuing field research efforts. (See June 26, 2014; August 13, 2014.)
20140808	August 8, 2014: FAA issued a new notice to airmen restricting U.S. operators from flying in the airspace above Iraq because of the hazardous situation created by an armed conflict. The new NOTAM superseded previous FAA guidance for this airspace.
20140812	August 12, 2014: FAA issued a no-fly zone over Ferguson, MO, to last until August 18, after tensions escalated in the town following the fatal shooting of an unarmed teen. The agency restricted the airspace above the St. Louis suburb to provide a safe environment for law enforcement activities. Only operations under the direction of the state of Missouri could be carried out. On August 18, FAA renewed the ban on aircraft from operating under 3,000 feet through August 25; however, FAA lifted the ban on August 22.
20140812	August 12, 2014: FAA issued a final rule allowing the agency to deny an application for a new repair station certificate if the applicant or certain associated key individuals had materially contributed to the circumstances that caused a previous repair station certificate revocation action. The rule also added a new section prohibiting fraudulent or intentionally false entries or omissions of material facts in any application, record, or report made under the repair station rules, and provided that making the fraudulent or intentionally false entry or omitting or concealing the material fact was grounds for imposing a civil penalty and for suspending or revoking any certificate, approval, or authorization issued by FAA to the person who made or caused the entry or omission. (February 12, 2013.)
20140813	August 13, 2014: FAA announced that the Virginia Polytechnic Institute and State University's UAS test site program was ready to conduct research vital to integrating UAS into the nation's airspace. The site was the last of six nationwide to be declared operational. FAA granted Virginia Tech seven certificates of waiver or authorization for two years. They were for: Smart Road Flyer, eSPAARO, Aeryon Sky Ranger, MANTRA2, Sig Rascal, and two AVID EDF-8 micro UASs. (See August 7, 2014; August 31, 2014.)

20140813 August 13, 2014: FAA issued a legal opinion ruling against peer-to-peer general aviation flight-sharing Internet-based operations that allowed private pilots to offer available seats on flights they intended to take. AirPooler, Inc., had asked FAA for an interpretation of the regulations seeking to confirm a pilot participating in the AirPooler service would not be receiving compensation as prohibited by FAR 61.113, and whether pilots participating in AirPooler were commercial operators and thus required to hold a certificate under Part 119. FAA stated arranging for flights and passengers through the AirPooler website met all elements of common carriage and were not legal under Part 91. FAA noted its position forbidding website-based ride-sharing operations was consistent with rulings it had made previously on nationwide initiatives involving expense-sharing flights. Ride-sharing programs were offered by both AirPooler and Flytenow, both of which argued FAA had overstepped its bounds in the interpretation.

20140818 August 18, 2014: The World Health Organization urged countries affected by Ebola (Liberia, Sierra Leone, and Guinea) to conduct exit screening at international airports, seaports, and land crossings. The recommendation came from a task force that included health officials, the International Civil Aviation Organization; the International Air Transport Association representing 240 airlines; and Airports Council International. (See October 11, 2014.)

20140818 August 18, 2014: FAA issued a notice to airmen restricting U.S. operators from flying in the Damascus flight information region, which included all of Syria. It advised U.S. operators against flying in that airspace and required them to contact FAA before operating in that airspace. Because of the presence of anti-aircraft weapons among the extremist groups and ongoing fighting in various locations throughout Syria, there was a continuing significant potential threat to civil aviation operating in Syrian airspace. (See December 30, 2014; December 10, 2018.)

20140824 August 24, 2014: A magnitude 6.0 earthquake caused damage in Northern California. The quake, the largest in the Bay Area since the deadly Loma Prieta earthquake of 1989, struck three miles northwest of American Canyon. Most of the windows were blown out of the air traffic control tower at the Napa County Airport. The structure was unusable and the Oakland ARTCC took over control of the airspace. FAA sent two temporary towers to the airport – one began operations on August 28 and the other was delivered on September 4. (See October 17, 1989.)

20140831 August 31, 2014: For the first time, FAA permitted an UAS/drone technology demonstration at a national air show at Burke Lakefront Airport in Cleveland, OH. The demonstration featured 10 drones, both fixed-wing and multi-rotors flying simultaneously. (See August 13, 2014; September 10, 2014.)

20140908 September 8, 2014: FAA announced the selection of four unleaded fuels for further evaluation as part of the piston aviation fuels initiative (PAFI), a government and industry initiative designed to help the general aviation industry transition to an unleaded aviation gasoline. Shell and TOTAL, with one fuel each, and Swift Fuels, with two fuels, worked with FAA on Phase 1 testing, which began in the fall of 2014 and was scheduled to conclude in fall 2015. Based on the results of the Phase 1 laboratory and rig testing, FAA anticipated the selection of two or three fuels for Phase 2 engine and aircraft testing. That tests would generate standardized qualification and certification data for candidate fuels, along with property and performance data. FAA expected the testing process to conclude in 2018. (See June 10, 2013.)

20140910 September 10, 2014: FAA approved an emergency certificate of waiver or authorization for the use of an UAS in the search for a missing woman near Dallas, TX. The agency approved emergency certificates for natural disaster relief, search and rescue operations, and other urgent circumstances. Under the emergency COA, Texas EquuSearch could operate its aircraft from September 11 until sunset September 15. FAA issued the COA to the National Institute of Standards and Technology (NIST) of Gaithersburg, MD, at the request of the Plano Police Department. NIST had a previously existing relationship with Texas EquuSearch, a non-profit organization that assisted with locating missing individuals. (See August 31, 2014; September 25, 2014.)

20140915 September 15, 2014: FAA put into place a new certification process, detailed in a standard operating procedure document. Under the new process, FAA would permit complex projects to move forward even if the agency had to limit certain aspects until resources became available. FAA would weigh the availability of designees – company-provided resources approved to verify that projects were done per FAA's requirements – as it sequenced projects. Under the guidelines, FAA resources would be allocated based on a project index. The highest weight would be given to a project's safety index (SI), which factored in overall safety, passenger safety, and fleet size. SI – and the entire sequencing system – was weighted so that airworthiness directives had top priority. Applications also were judged based on the number of "findings" they contain and how many had to be handled by FAA staff vs. organizational designees. (See December 11, 2013.)

20140916 September 16, 2014: FAA released the "Recommended Practices for Human Space Flight Occupant Safety" report, which provided a framework for industry to use in developing consensus standards. The recommended safety practices were broadly written and primarily performance-based, stating a safety objective to be achieved, and leaving the design or operational solution up to the designer or operator. In developing the document, FAA's office of commercial space transportation reviewed existing government and private sector requirements and standards to tap into the wealth of information that has been accrued through 50 years of human space flight. FAA also consulted with a wide audience, including the Commercial Space Transportation Advisory Committee, NASA, FAA's Civil Aerospace Medical Institute, and FAA's Center of Excellence for Commercial Space Transportation. (July 31, 2013.)

20140916	September 16, 2014: NASA awarded contracts to Boeing and SpaceX to ferry astronauts to the International Space Station. The two companies planned to begin ferrying astronauts in 2017. (See May 22, 2012; January 17, 2016.)
20140917	September 17, 2014: FAA approved a space launch site license for Midland International Airport in Texas. Renamed the Midland International Air & Space Port, the airport was the first primary commercial airport to gain FAA certification as a spaceport. It was the ninth commercial spaceport license issued by FAA. (See September 30, 2010; June 30, 2015.)
20140919	September 19, 2014: Fort Lauderdale-Hollywood International Airport opened a new runway. The project, which cost $826 million, gave the airport two parallel runways to accommodate more flights and reduce delays.
20140925	September 25, 2014: Secretary of Transportation Anthony Foxx announced FAA had granted regulatory exemptions to six aerial photo and video production companies in a first step to allowing the film and television industry to use unmanned aircraft systems in the NAS. FAA determined that the UAS to be used in the proposed operations did not need an FAA-issued certificate of airworthiness based on a finding they did not pose a threat to national airspace users or national security. (See September 10, 2014; December 10, 2014.)
20140925	September 25, 2014: FAA evacuated the Chicago ARTCC in Aurora, IL, just before 6:00 a.m. local time, because of a fire reported in a basement telecommunications room. FAA managed traffic through adjacent high-altitude radar centers in Cleveland, Indianapolis, Kansas City, and Minneapolis. Those facilities worked with the TRACON facility in Elgin, IL, and other surrounding large TRACONs in areas such as South Bend, IN, Rockford and Moline IL, and Milwaukee, WI, to track flights on radar and manage departures and arrivals in Chicago ARTCC airspace. FAA re-routed overflights around the airspace. FAA brought in a clean-up crew at the ARTCC to begin drying out water-damaged equipment and to clean and sanitize the area after a fire and attempted suicide in the telecommunications room. After inspecting the damaged equipment, FAA decided to replace the central communications network in a different part of the same building to restore the system as quickly as possible. The agency restored services at the Chicago ARTCC on October 13. (See November 24, 2014.)
20140930	September 30, 2014: FAA issued an updated version of its AIP Program Handbook (Order 5100.38D). FAA's office of airports streamlined the handbook and replaced guidance with references to more appropriate source of guidance (such as in other orders or advisory circulars). This included deleting guidance on airport planning, capital planning, labor rates, and civil rights. The references appeared as the basic publication number without any suffix. The intent was for the reader to use the latest version of the referenced publication. It also had been reorganized and revised to incorporate the Plain Language Act of 2010; to differentiate what was required by law and policy; and to incorporate program guidance letters issued prior to July 30, 2012.

20141008	October 8, 2014: DIGITALiBiz announced it had been awarded a prime contract to continue supporting FAA's flight standards service flight technologies and procedures division under a contract called technical, engineering, administrative, and programmatic support. The scope of work under the contract, valued at nearly $45 million over the next five years, included: providing support in developing policies and procedures for improving flight safety and efficiency; assisting in developing regulations and policy recommendations governing instrument flight procedures and safety, capacity, and efficiency improvements, based on advanced technology and innovative concepts; and supporting flight test or simulator test programs, simulator setup, pilot briefings, and observer responsibilities specifically for data collection in support of test plans.
20141008	October 8, 2014: Gulfstream Aerospace Corp. announced its flagship Gulfstream G650ER had been certified by FAA. The G650ER could travel 7,500 nautical miles/13,890 kilometers at Mach 0.85 and 6,400 nm/11,853 km at Mach 0.90. This represented an increase of up to 500 nm/926 km over the range of the G650, which entered service in 2012. Like the G650, the G650ER had a maximum speed of Mach 0.925. Gulfstream expected to deliver the first fully outfitted G650ER business jets to customers ahead of the projected 2015 delivery date.
20141008	October 8, 2014: FAA and the NextGen advisory committee agreed on the "NextGen Priorities Joint Implementation Plan" that would accelerate the delivery of key NextGen initiatives over the next three years. FAA delivered the plan to Congress on October 17. According to the plan, FAA would institute new NextGen procedures through the use of multiple runway operations at 36 airports nationwide and deploy satellite-based navigation procedures known as performance based navigation at three key metropolitan areas – Northern California, Atlanta, and Charlotte – to provide more direct flight paths; improve airport arrival rates; enhance controller productivity; increase safety and fuel savings, and a reduce aviation's environmental impact. The plan also called for FAA to increase surface operations data-sharing to increase predictability and provide actionable and measurable surface efficiency improvements at the nation's airports. In addition, FAA planned to prioritize its work on data communications services, which would upgrade communication between pilots, air traffic controllers, and airline operations centers from voice to digital. (See March 2010; October 17, 2014.)
20141011	October 11, 2014: The Center for Disease Control and Prevention (CDC) and the Department of Homeland Security began Ebola screening passengers from Guinea, Liberia, and Sierra Leone at New York's John F. Kennedy International Airport. Enhanced screening began at Washington Dulles, Newark, Chicago O'Hare, and Atlanta International airports on October 14. CDC sent additional staff to each of the five airports. After passport review:
	* Travelers from Guinea, Liberia, and Sierra Leone were escorted by U.S. Customs and Border Protection (CPB) agents to an area of the airport set aside for screening.

	* Trained CBP staff would observe them for signs of illness, ask them a series of health and exposure questions and provide health information for Ebola as well as reminders to monitor themselves for symptoms. Trained medical staff took their temperature with a non-contact thermometer.
	* If the travelers had fever, symptoms, or the health questionnaire revealed possible Ebola exposure, they would be evaluated by a CDC quarantine station public health officer. The public health officer would again take a temperature reading and make a public health assessment. Travelers, who after this assessment, were determined to require further evaluation or monitoring were referred to the appropriate public health authority.
	* Travelers from these countries who had neither symptoms/fever nor a known history of exposure received health information for self-monitoring. (See August 18, 2014; October 11, 2014.)
20141011	October 11, 2014: Great Britain announced it planned to introduce measures at airports and rail terminals to screen passengers from countries affected by Ebola. Prime Minister David Cameron said enhanced screening would initially be implemented at London's Heathrow and Gatwick airports and Eurostar terminals. Under the new screening procedures, travelers from Liberia, Sierra Leone, and Guinea would be questioned about their travel history and could be assessed by medical personnel. (See October 11, 2014; October 21, 2014.)
20141014	October 14, 2014: A new FAA rule went into effect permitting informal conferences to occur before the agency took certain actions against certificate holders and/or other parties. The informal conference covered orders issued by the agency that did not involve certificate suspensions/revocations or civil penalties, since the option was already available to such actions. The rule applied to orders of compliance, cease and desist orders, and orders of denial, among others. FAA regulations had already permitted affected parties to request a hearing or to reply in writing to an order. This rule added the informal conference as a third option that could open the possibility of a resolution of an issue or a narrowing of the issue. This could save money and time for both FAA and affected parties. (See June 26, 2015.)
20141017	October 17, 2014: FAA released the "NextGen Priorities Joint Implementation Plan," to Congress. The plan summarized the high-level commitments agreed upon by FAA and the aviation community and provided a timeline of capability milestones and locations. The plan also identified four core priorities designed to cut down on wait time between flights taking off and landing: optimizing airports with multiple runways; reconfiguring the navigation system from radar to GPS-based; increasing the efficiency of surface operations; and improving communications between aircraft and the ground through digital communication systems. (See October 8, 2014.)

20141020	October 20, 2014: American Airlines and US Airways completed combining their cargo operations into the new American Airlines Cargo. This was the first time the operating divisions of the two carriers had become fully combined since receiving approval for their merger. The two airlines expected to receive FAA approval to combine passenger operations in 2015. (See December 9, 2013; April 8, 2015.)
20141020	October 20, 2014: FAA type certificated Embraer Executive Jets' fly-by-wire Legacy 500.
20141021	October 21, 2014: The Obama Administration announced all passengers arriving to the U.S. from Liberia, Sierra Leone, and Guinea must land at one of the five airports with enhanced Ebola screening: John F. Kennedy, Dulles, O'Hare, Newark, or Atlanta. On October 23, Center for Disease Control Director Tom Frieden announced that starting October 27 passengers from the three countries most affected by Ebola would be required to report their temperature daily for 21 days and call a state hotline if they showed any symptoms of the illness. The program began in six states — New York, Pennsylvania, New Jersey, Georgia, Maryland and Virginia – and later expanded to other states. (See October 11, 2014.)
20141024	October 24, 2014: Alan Eustace, a senior vice president at Google, parachuted from a balloon near the top of the stratosphere. He fell faster than the speed of sound and broke the world altitude record. A balloon filled with 35,000 cubic feet of helium had lifted Eustace to an altitude of more than 25 miles. Eustace, who wore a special space suit, cut himself loose from the balloon with the aid of a small explosive device. His descent took approximately 15 minutes at speeds which peaked at 822 miles per hour.
20141028	October 28, 2014: An unmanned Orbital Sciences Antares rocket carrying a Cygnus spacecraft loaded with cargo and supplies for the crew of the International Space Station exploded moments after liftoff at NASA's Wallops Flight Facility in VA. Orbital subsequently indicated an issue in the first stage of the Antares rocket led to a loss of thrust, which led an operator to activate an onboard self-destruct system.
20141031	October 31, 2014: Virgin Galactic's SpaceShipTwo exploded in midair during a test flight, killing one test pilot and injuring another. Virgin Galactic was testing the craft, built by Scaled Composites, in preparation for commercial space tourism. (See May 28, 2014; January 10, 2014; June 26, 2015.)
20141103	November 3, 2014: FAA issued a final rule broadening the coverage of its icing certification standards. The updated standards required U.S. manufacturers to show transport airplanes could operate safely in freezing drizzle or freezing rain conditions that constitute the icing environment known as supercooled large drops. The standard also included ice crystal weather conditions. (See June 29, 2013.)
20141112	November 12, 2014: FAA type certificated the Airbus A350-900. The European Aviation Safety Agency approved the jetliner in September. The aircraft seated approximately 300 passengers and was designed to compete with Boeing Co.'s larger 787 Dreamliners and 777 jets.

20141113 November 13, 2014: In a rule effective this date, FAA eased the pilot pairing requirement for pilots over the age of 60 on international flights. Pilots over the age of 60 could now fly internationally as long as they had a second pilot to back them up, regardless of the other pilot's age. Previously the other pilot had to be under the age of 60. The rule did not apply to domestic flights. (See December 13, 2007; June 12, 2015.)

20141118 November 18, 2014: NTSB affirmed FAA's position the regulation prohibiting operation of an aircraft in a careless or reckless manner applied to unmanned aircraft. FAA had appealed an earlier decision by a NTSB Administrative Law Judge in Huerta v. Pirker after the judge dismissed the Agency's order requiring Raphael Pirker to pay a civil penalty of $10,000 for operating an unmanned aircraft in a careless or reckless manner at the University of Virginia in October 2011. Before FAA could impose a fine, an administrative law judge would have to make a factual determination on the careless and reckless nature of the UAS operation. (See March 7, 2014.)

20141121 November 21, 2014: The Department of Transportation announced a new air service agreement had been reached between the United States and Mexico that expanded opportunities for passenger and cargo carriers and strengthen the economic ties between the two countries. The new agreement included unlimited market access for U.S. and Mexican air carriers, improved intermodal rights, pricing flexibility, and other important commercial rights. In addition, cargo airlines, for the first time, would have expanded opportunities to provide service to new destinations. The agreement would go into force on January 1, 2016.

20141124 November 24, 2014: In the aftermath of the Chicago ARTCC fire, FAA announced a series of changes that would lead to faster disaster recovery and more secure facilities and equipment. FAA's three-stage plan included: making radar, voice radios, flight planning data and weather and aeronautical information more rapidly available to support operations in a new configuration; reducing or eliminating the manual nature of operations by recreating specific sectors and services of the off-line facility at surrounding facilities; and enhancing NextGen capabilities to make services available even more quickly if a facility had a catastrophic loss. (See September 25, 2014.)

20141125 November 25, 2014: Because of law enforcement reports of gunshots fired into the air, FAA activated a temporary flight instruction over Ferguson, MO. For safety reasons, only law enforcement aircraft were permitted to fly through the area. The restricted area was three miles in diameter, up to 3,000 feet above sea level. It remained in effect from 10:15 p.m. Central on November 24, to 4:15 a.m. Central on November 25.

20141130 November 2014: Midway Airport became the first airport to install a new type of arrestor bed to stop aircraft in the event of a runway overrun. Made by Runway Safe, the bed was made of recycled glass, formed into lightweight glass rocks. Until Runway Safe developed its product, Engineered Arresting Systems was the only FAA-approved manufacturer of arresting-bed technology. (See October 1, 2010.)

20141202	December 2, 2014: Boeing announced it had completed the world's first flight using green diesel, a sustainable biofuel widely available and used in ground transportation. The company powered its ecoDemonstrator 787 flight test airplane with a blend of 15 percent green diesel and 85 percent petroleum jet fuel in the left engine. (See February 13, 2013; October 23, 2015.)
20141203	December 3, 2014: FAA issued a final rule in the Federal Register, effective January 20, 2015, increasing the number of hours a pilot could log toward an instrument rating using approved aviation training devices. The rule raised the limit to 20 hours in advanced training devices versus 10 hours under the old rules. Under the rules, Part 61 students could log up to 20 hours of instrument time in an approved advanced aviation training device (AATD) or up to 10 hours of time in an approved basic aviation training device (BATD). Part 141 students would be allowed to accomplish up to 40 percent of their total flight training hour requirements in an aviation training device. In addition, students would no longer be required to wear view-limiting devices while training in AATDs. (See November 5, 2013.)
20141210	December 10, 2014: FAA granted five regulatory exemptions for UAS operations to four companies representing several industries that showed promise to benefit from UAS technology. Trimble Navigation Limited, VDOS Global, LLC, Clayco, Inc., and Woolpert, Inc. (two exemptions) received exemptions to fly UAS to perform operations for aerial surveying, construction site monitoring, and oil rig flare stack inspections. FAA earlier granted exemptions to seven film and video production companies. (See September 25, 2014; February 15, 2015.)
20141228	December 28, 2014: AirAsia Flight QZ8501, an Airbus A320-200 flying from Surabaya to Singapore, disappeared in Indonesian airspace with 162 people on board. Indonesian authorities leading the rescue efforts believed the plane went down in the Java Sea between the islands of Belitung and Borneo.
20141229	December 29, 2014: FAA amended special federal aviation regulation (SFAR) No. 113, “Prohibition Against Certain Flights in the Simferopol (UKFV) flight information region (FIR),” which prohibited certain flight operations in a portion of the Simferopol FIR by all U.S. air carriers, U.S. commercial operators, persons exercising the privileges of a U.S. airman certificate, except when such persons operated a U.S.-registered aircraft for a foreign air carrier, and operators of U.S.-registered civil aircraft, except when such operators were foreign air carriers. The action expanded the area in which flight operations by people subject to SFAR No. 113 were prohibited, to include all of the Simferopol (UKFV) FIR, as well as the entire Dnipropetrovsk (UKDV) FIR. (See July 17, 2014; October 22, 2015.)

20141230 December 30, 2014: FAA expanded its prohibition of certain flight operations in the Damascus FIR by all U.S. air carriers; U.S. commercial operators; persons exercising the privileges of a U.S. airman certificate, except when such persons operated a U.S. registered aircraft for a foreign air carrier; and operators of U.S.-registered civil aircraft, except when such operators were foreign air carriers. FAA previously prohibited such flight operations in NOTAM 4/4936, issued on August 18, 2014, which would have remained in effect until December 31, 2014. The SFAR adopted the prohibitions then in effect via the NOTAM, and required compliance with the prohibitions for 2 additional years unless FAA determined it was necessary to amend or rescind the rule based on the situation in the region. (See August 18, 2014; August 28, 2017.)

20141231 Calendar year 2014: According to Ascend, a Fligthglobal advisory service, 2014 was the best year ever for airline safety. Ascend's director of air safety and insurance, Paul Hayes, stated the global airline fatal accident rate in 2014 was one fatal accident per 2.38 million flights. On this basis 2014 was, narrowly, the safest year ever. The figures excluded the loss of Malaysia flight MH17 on the grounds that it was shot down by a missile and was considered a war risk loss, not an accident. Although doubts exist about the status of missing Malaysia flight MH370, that incident was included in the fatal accident rate.

2015

20150105 January 5, 2015: The Department of Transportation issued a final rule to implement Section 403 of the FAA Modernization and Reform Act of 2012 regarding the carriage of musical instruments as carry-on baggage or checked baggage on commercial passenger flights operated by air carriers. Effective March 6, the rule required carriers to allow a passenger to carry into the cabin and stow a small musical instrument, such as violin or a guitar, in a suitable baggage compartment (for example, the overhead bin or under the seats) in accordance with FAA safety regulations. The rule also encouraged carriers to consider modifying their programs to allow the stowage of large musical instruments in passenger seats, provided all safety requirements were met.

20150107 January 7, 2015: FAA issued a final rule requiring most U.S. commercial airlines to have safety management systems (SMS) in place by 2018. The rule built on the programs many airlines already used to identify and reduce aviation risk. Airlines had to submit their implementation plans to FAA within six months. The rule also required a single accountable executive to oversee SMS. A SMS defined what was expected rather than how the requirement had to be met. This allowed each air carrier to design an SMS to match the size, complexity, and business model of its organization. (See January 30, 2012.)

20150108 January 8, 2015: FAA issued a notice of proposed rulemaking to replace the orders limiting scheduled operations at John F. Kennedy International Airport (JFK), Newark Liberty International Airport (EWR), and LaGuardia Airport (LGA). This proposal was intended to provide a longer-term and comprehensive approach to slot management at JFK, EWR, and LGA. FAA proposed to maintain the limits on scheduled and unscheduled operations in place under the previous orders, limit unscheduled operations at JFK and EWR, and require the use of an allocated slot 80 percent of the time for the same flight or series of flights to retain historic precedence. FAA also proposed five alternatives for a secondary market that would allow carriers to buy, sell, lease, and trade slots. (See May 14, 2009; November 10, 2015.)

20150123 January 23, 2015: FAA issued revised guidance to address sleep apnea, a disorder that might result in daytime sleepiness, impaired alertness, mood changes, and fatigue. The new guidance did not rely on a pilot's body mass index (BMI) to diagnose obstructive sleep apnea (OSA). Rather, the new policy stated, "The risk of OSA will be determined by an integrated assessment of history, symptoms and physical/clinical findings." It incorporated guidance from the American Academy of Sleep Medicine in determining a pilot's airworthiness. Pilots determined to be at significant risk for OSA should receive a regular medical certificate and undergo a sleep apnea evaluation. The evaluation could be performed by any physician, including an aviation medical examiner (AME), and did not require a sleep study unless the physician believed one was needed. Pilots had 90 days to complete the evaluation and forward the results to FAA's aerospace medical certification division, the regional flight surgeon's office, or the AME. (See November 19, 2013.)

20150126	January 26, 2015: The Wichita Airport Authority renamed Wichita Mid-Continent Airport the Wichita Dwight D. Eisenhower National Airport.
20150204	February 4, 2015: FAA issued a final rule removing the prohibition against certain flights within the territory and airspace of Ethiopia contained in SFAR No. 887. (See January 2014.)
20150206	February 6, 2015: In a letter to United Continental Holdings, Inc., FAA informed the company it would increase oversight of the airline because of concerns over recurring safety violations. United provided FAA a plan in March on how it would remedy concerns involving pilot training and scheduling.
20150215	February 15, 2015: FAA proposed a framework of regulations that would allow routine use of certain small UAS in the national airspace system while maintaining flexibility to accommodate future technological innovations. The proposal covered safety rules for small UAS (under 55 pounds) conducting non-recreational operations. The rule would limit flights to daylight and visual-line-of-sight operations. It also addressed height restrictions, operator certification, optional use of a visual observer, aircraft registration and marking, and operational limits. The proposed rule included extensive discussion of the possibility of an additional, more flexible framework for "micro" UAS under 4.4 pounds. FAA asked the public to comment on this possible classification to determine whether it should include the option as part of a final rule. FAA also asked for comment about how the agency could further leverage the UAS test site program and an upcoming UAS Center of Excellence to further spur innovation at "innovation zones." (See December 10, 2014; April 10, 2015; May 19, 2017.)
20150225	February 25, 2015: FAA dedicated a new $16.4 million, state-of-the-art airport traffic control tower at Fort Lauderdale Executive Airport. The new facility's 117-foot tall airport traffic control tower was topped by a 525-square foot tower cab. A 7,200-square foot, single-story base building housed training rooms, administrative offices, and equipment rooms. FAA began working from the new tower on November 4, 2014.
20150304	March 4, 2015: FAA issued a final rule amending the maintenance regulations for domestic, flag, and supplemental operations, and for commuter and on-demand operations for aircraft type certificated with a passenger seating configuration of 10 seats or more (excluding any pilot seat). The new rules required affected air carriers and operators to develop policies, procedures, methods, and instructions for performing contract maintenance acceptable to FAA; the rules also mandated the new policies, procedures, methods, and instructions be included in the air carrier and operator maintenance manuals. The rules required the air carriers and operators to provide FAA with a list of their maintenance personnel.

20150320	March 20, 2015: FAA extended the prohibition of flight operations within the Tripoli FIR by all: U.S. air carriers; U.S. commercial operators; persons exercising the privileges of an airman certificate issued by FAA, except when such persons operated a U.S. registered aircraft for a foreign air carrier; and operators of U.S.-registered civil aircraft, except operators of such aircraft that were foreign air carriers. The extension of the expiration date was necessary to address a potential hazard to persons and aircraft engaged in such flight operations. Additionally, FAA made clear operations by subcontractors under a U.S. Government department, agency, or instrumentality's contract, grant, or cooperative agreement might be included in an approval request. The action extended the prohibition to March 20, 2017. (See March 21, 2014; March 15, 2017.)
20150331	March 31, 2015: A pilot program that allowed people to use an automated complaint system for reporting helicopter noise to FAA began operating. FAA hoped the collected data collected would help "identify patterns and trends in helicopter operations, improve an understanding of community reaction to helicopter noise, and inform future efforts to develop and implement noise abatement measures." FAA contracted with Brüeil & Kjaer to operate the system, which was funded through March 2016.
20150408	April 8, 2015: Transportation Secretary Anthony Foxx announced India complied with international safety standards set by the International Civil Aviation Organization (ICAO) and had been granted a Category 1 rating. (See January 31, 2014; December 19, 2018.)
20150408	April 8, 2015: FAA granted American Airlines and US Airways the authority to operate as a single carrier. The decision allowed the two airlines to combine work forces, websites, and reservations systems, starting in the fall of 2015. (See October 20, 2014; October 16, 2015.)
20150410	April 10, 2015: Auburn University announced it had received FAA approval to operate the nation's first UAS flight school. (See February 15, 2015; May 6, 2015.)
20150430	April 30, 2015: Secretary of Transportation Anthony Foxx announced the completion of the en route automation modernization (ERAM) program. The first ERAM system went online at the Salt Lake City air route traffic control center (ARTCC) in March 2012, and the last system went online in March 2015 at the New York ARTCC. ERAM used nearly two million lines of computer code to process critical data for controllers, including aircraft identity, altitude, speed, and flight path. The system almost doubled the number of flights that could be tracked and displayed to controllers. (See April 30, 2014.)
20150504	May 4, 2015: Science Applications International Corp. announced FAA had awarded it an indefinite delivery, indefinite quantity contract to provide all training and training program support services under the FAA controller training contract. The single-award, firm-fixed price and time-and-materials contract had a 3-year period of performance; two 1-year options, with an estimated contract value of $425 million; and a maximum contract ceiling of $727 million. (See September 9, 2008.)

20150506	May 6, 2015: FAA announced a partnership with industry to explore the next steps in UAS beyond the type of operations the agency proposed in the draft small UAS rule it published in February. Under the new Pathfinder program, FAA would work with industry partners on focus areas, including:
	* Visual line-of-sight operations in urban areas – CNN would examine how UAS might be safely used for newsgathering in populated areas.
	* Extended visual line-of-sight operations in rural areas – this concept involved UAS flights outside the pilot's direct vision. UAS manufacturer PrecisionHawk would explore how this might allow greater UAS use for crop monitoring in precision agriculture operations.
	* Beyond visual line-of-sight in rural/isolated areas – BNSF Railway would explore command-and-control challenges of using UAS to inspect rail system infrastructure.
	* UAS in the vicinity of airports – in October 2015, FAA signed an agreement with CACI International, Inc., to evaluate how the company's technology could help detect UAS in the vicinity of airports. (See April 10, 2015; May 8, 2015.)
20150506	May 6, 2015: FAA demonstrated its new smartphone application called B4UFLY, designed to help model aircraft and unmanned aircraft users know if it was safe and legal to fly in their current or planned location. FAA intended to release the new app to approximately 1,000 beta testers during the summer. (See April 10, 2015; May 8, 2015.)
20150508	May 8, 2015: FAA selected a Mississippi State University team as FAA's center of excellence (COE) for unmanned aircraft systems. The COE focused on research, education, and training in areas critical to safe and successful integration of UAS into the nation's airspace. The team brought together 15 of the nation's leading UAS and aviation universities that had a proven commitment to UAS research and development as well as the necessary resources to provide the matching contribution to the government's investment. Congress appropriated $5 million for the 5-year agreement with the COE, which would be matched by the team members. In addition to Mississippi State University, the other team members included: Drexel University; Embry-Riddle Aeronautical University; Kansas State University; the University of Kansas; Montana State University; New Mexico State University; North Carolina State University; Oregon State University; University of Alabama, Huntsville; University of Alaska, Fairbanks; University of North Dakota; and Wichita State University. (See May 6, 2015; June 14, 2015.)
20150612	June 12, 2015: FAA removed the requirement for a pilot-in-command who had reached age 60 to be paired with a pilot under age 60 in international commercial air transport operations by air carriers conducting flag and supplemental operations, as well as for other pilots serving in certain international operations using civil airplanes on the U.S. registry. The removal of this restriction allowed all pilots serving on airplanes in international commercial air transport that had more than one pilot, to serve until age 65 without having to be paired with a pilot under age 60. (See November 13, 2014.)

20150614 June 14, 2015: FAA issued a notice of proposed rulemaking regarding the recreational use of drones because existing rules did not recognize launch and recovery operations for high-powered amateur rockets in the United States. The rulemaking included proposals to require FAA to issue temporary flight restrictions (TFRs) for so-called "Class 2 and 3" amateur high-powered rocket launches, and to make those launch, reentry, and amateur rocket operation zone TFRs apply to foreign-registered aircraft as well as to U.S. registered aircraft. A TFR excluded flight in airspace defined by lateral and vertical dimensions over a certain period of time. (See May 8, 2015; August 4, 2015.)

20150615 June 15, 2015: Chairman of the House Transportation and Infrastructure Committee, Bill Shuster (R-PA), announced he was drafting legislation to create a federally chartered, but independent, not-for-profit corporation to operate and modernize the U.S. air traffic control system. Some airlines, industry officials, and lawmakers expressed support for privatization proposals, and Secretary of Transportation Anthony Foxx responded to Shuster's announcement, saying, "This country deserves a serious conversation about the future of our transportation system." (See February 3, 2016.)

20150626 June 26, 2015: FAA Administrator Michael Huerta issued a national policy titled "Federal Aviation Administration Compliance Philosophy." The new philosophy, in part, stated, "FAA recognizes that some deviations arise from factors such as flawed procedures, simple mistakes, lack of understanding, or diminished skills. The Agency believes that deviations of this nature can most effectively be corrected through root cause analysis and training, education or other appropriate improvements to procedures or training programs for regulated entities, which are documented and verified to ensure effectiveness. However, reluctance or failure in adopting these methods to remediate deviations or instances of repeated deviations might result in enforcement." (October 14, 2014.)

20150626 June 26, 2015: FAA Administrator Michael P. Huerta and French National Space Agency President Jean-Yves Le Gall signed a memorandum of cooperation to cooperate on research and development related to the safety of private sector orbital space launches and re-entry activities. The research-related, non-binding arrangement was the first of its kind covering research into commercial orbital space operations. FAA also had nonbinding arrangements or exchanges of letters with Curaçao, Italy, Spain, and the United Kingdom that covered FAA assistance with development of domestic regulations relating to commercial space transportation. (See October 31, 2014.)

20150630 June 30, 2015: FAA granted a commercial spaceport license to Houston's Ellington Airport, making it the 10th licensed spaceport in the country. (See September 27, 2014; August 17, 2018.)

20150714 July 14, 2015: The United States and Ukraine signed an open skies agreement. (See July 8, 2013.)

20150722 July 22, 2015: FAA announced it had selected Alexandria International Airport in Alexandria, LA, to participate in the military airport program (MAP). Alexandria International was a nonhub primary airport that would participate in the program for three years. The MAP selection would help the airport complete a major apron rehabilitation project. Since 1990, FAA had provided MAP sponsors with approximately $690 million for a variety of projects, such as building or rehabilitating surface parking lots, fuel farms, hangars, utility systems, access roads, cargo buildings, and other airfield needs. Some of these project types were not normally eligible for airport improvement program funding, but the MAP program carried unique eligibility rules to help convert the airports to civilian or joint-use. (See August 17, 2016.)

20150804 August 4, 2015: FAA announced it had issued 1,008 exemptions to businesses to fly unmanned aircraft in the national airspace. The majority of the exemptions went to companies interested in aerial filming for motion picture productions, precision agriculture, and real estate photography. (See June 14, 2015; October 14, 2015.)

20150815 August 15, 2015: A glitch in newly installed ERAM system at the Washington ARTCC resulted in a large number of flight cancellations for flights flying in to and out of Washington, DC, area airports.

20150827 August 27, 2015: In a response to a petition by airlines, FAA issued a decision saying it would consider extending the deadline for replacing older GPS receivers with newer technology to 2025, but no later. Extensions would be based on individual airline requests. The exemptions would not affect the deadline to implement ADS-B Out by 2020. (April 14, 2014; October 30, 2015.)

20150831 August 31, 2015: CSC announced FAA had awarded its team – including Amazon Web Services (AWS), Microsoft Azure, and other strategic business partners – a contract to deliver cost-effective cloud services, data center consolidation, and cloud migration capabilities. The single-award indefinite-delivery/indefinite-quantity contract was valued at $108,992,884 with the potential to reach $1 billion over 10 years. Under the contract, CSC's team would consolidate FAA data centers and migrate FAA data and systems to a hybrid cloud environment.

20150908 September 8, 2015: FAA announced $100 million contract awards to eight companies to develop and demonstrate technologies that reduced fuel consumption, emissions, and noise under the second phase of its Continuous Lower Energy, Emissions, and Noise (CLEEN II) program. Under CLEEN II, FAA selected eight companies: Aurora Flight Sciences; The Boeing Co.; General Electric (GE) Aviation; Delta TechOps/MDS Coating Technologies/America's Phenix; Honeywell Aerospace; Pratt & Whitney; Rolls-Royce-Corp.; and Rohr, Inc./UTC Aerospace Systems. The companies would match or exceed FAA's investment, bringing the total to at least $200 million. The eight awardees worked to develop a variety of airframe and engine technologies. Each effort would culminate in a demonstration aimed at bringing the product to market. CLEEN II would nurture these technologies through crucial phases in their maturation, including full-scale ground and flight test demonstrations. (See June 24, 2010; September 10, 2021.)

20150908	September 8, 2015: An engine on British Airways Flight 2276, a Boeing 777, caught fire while waiting to take off from McCarran International Airport in Las Vegas. NTSB investigators subsequently found evidence of disk failure in the engine. No passengers or crew suffered major injury while evacuating the plane.
20150914	September 14, 2015: In line with the Agency's new compliance philosophy, FAA issued guidance to offices that handled pilot certificate action, offering an alternative tool for handling FAA violations through remedial training. FAA said it put the new guidance in place in an effort to make the national airspace system safer by correcting deviances through training rather than litigation. The FAA safety team (FAASTeam) would facilitate the remedial training. FAA published the information in a notice directed to affected FAA offices and added into the compliance and enforcement section of FAA's compliance and enforcement program as well as Order 8900.1. The remedial training guidance served as an alternative to administrative or legal enforcement action when appropriate. In addition, because runway incursions were a particularly common violation, the document offered specific guidance for runway incursion remedial training. It also included a specific section in Order 8900.1 dedicated to runway incursions. FAA developed a standardized ground-training curriculum called the runway incursion remedial training program (RIRTP). The RIRTP program would be applied to first-time runway incursions. Repeat offenders who had already completed the RIRTP could be offered the program again or could face litigation. (See June 26, 2015.)
20150914	September 14, 2015: Airbus, based in Toulouse, France, opened its first jetliner factory in the United States, in Mobile, AL. Airbus hoped the new plant could produce 50 narrow body jets a month by 2017.
20150915	September 15, 2015: Secretary of Transportation Anthony Foxx announced the Department of Transportation would provide $5.5 million to help 11 small communities in 11 states develop solutions to improve their local air service needs under the small community air service development program. The communities receiving grant awards included: Tallahassee, FL ($750,000); Salmon, ID ($150,000); Presque Isle, ME ($250,000); Traverse City, MI ($750,000); Great Falls, MT ($385,000); Fargo, ND ($500,000); Redmond, OR ($500,000); Sioux Falls, SD ($500,000); College Station, TX ($475,000); Pasco, WS ($750,000); and Riverton, WY ($481,810).

20150916	September 16, 2015: FAA announced the award of $24.5 million in grants to 14 airports around the country to reduce emissions and improve air quality through FAA's voluntary airport low emission (VALE) and zero emissions airport vehicle (ZEV) programs. VALE was designed to reduce all sources of airport ground emissions in areas that did not meet air quality standards. FAA established the program in 2005 to help airport sponsors meet their air quality responsibilities under the Clean Air Act. Through these programs, airport sponsors could use airport improvement program (AIP) funds and passenger facility charges to help acquire refueling and recharging stations, electrified gates, low-emission vehicles, and other airport-related air quality improvements. The ZEV program, created through the FAA Modernization and Reform Act of 2012, allowed airport sponsors to use AIP funds to purchase vehicles that produce zero exhaust emissions. AIP funds could cover up to 50 percent of these total project costs.
20150930	September 30, 2015: President Barrack Obama signed a 6-month extension of FAA authorization and an additional extension that appropriated funding for federal agencies to continue operations until December 11. (See February 14, 2012).
20151008	October 8, 2015: FAA issued a safety alert to encourage carriers to alert passengers at the point of ticket sales and check-in that spare lithium batteries were prohibited in checked and carry-on luggage. The alert stated: "To reduce the risk of lithium battery fires, the U.S. Department of Transportation's Hazardous Materials Regulations (HMR), and equivalent International Civil Aviation Organization's Technical Instructions for the Safe Transport of Dangerous Goods (ICAO TI), prohibit spare lithium batteries from checked baggage." (See August 4, 2014; October 26, 2015.)
20151013	October 13, 2015: Dutch Safety Board Chairman Tjibbe Joustra said Malaysia Airlines Flight 17 crashed on July 2014 "as a result of the detonation of a warhead outside the airplane," and investigators found "tell-tale fragments of a Russian-made BUK missile" in the bodies of the plane's pilots. Russia rejected the findings, responding the missile was no longer in its arsenal. (See July 17, 2014.)
20151014	October 14, 2015: The Los Angeles City Council approved an ordinance that made violations of drone regulations a misdemeanor that "could be punished with up to $1,000 in fines and six months in jail." Previously, violations resulted in a fine and confiscation of the drone. (See August 4, 2015; October 19, 2015.)
20151015	October 15, 2015: Chicago O'Hare International Airport opened a new $516-million runway as part of its $9-billion modernization project. (See October 17, 2013.)
20151016	October 16, 2015: FAA announced the Republic of Nicaragua complied with ICAO safety standards and was granted a Category 1 rating. With the Category 1 rating, the Republic of Nicaragua's air carriers could secure the requisite FAA and DOT authority, establish service to the United States, and carry the code of U.S. carriers.
20151016	October 16, 2015: US Airways made its last flight prior to its merger with American Airlines. (See April 8, 2015.)

20151019 October 19, 2015: Secretary of Transportation Anthony Foxx and FAA Administrator Michael Huerta announced the creation of a task force to develop recommendations for a registration process for UAS. Comprising the task force were 25 to 30 diverse representatives from the UAS and manned aviation industries, the federal government, and other stakeholders who would advise the Department of Transportation on which aircraft should be exempt from registration due to a low safety risk (toys and certain other small UAS were included in this evaluation). The task force also explored options for a streamlined system that would make registration less burdensome for commercial UAS operators. Secretary Foxx directed the group to deliver its report by November 20, 2015. On that date, DOT published information on the establishment of the task force and an explanation on the need for registration of UAS in the Federal Register on this date. (See October 24, 2015; October 29, 2015.)

20151022 October 22, 2015: FAA extended the prohibition against certain flight operations in the Simferopol and Dnipropetrovsk flight information regions (SFAR No. 113) by all U.S. air carriers; U.S. commercial operators; persons exercising the privileges of a U.S. airman certificate, except when such persons are operating a U.S.-registered aircraft for a foreign air carrier; and operators of U. S.-registered civil aircraft, except when such operators are foreign air carriers. The prohibition was to expire on October 27, 2016. (See December 29, 2014.)

20151023 October 23, 2015: FAA and the Indonesian Directorate General of Civil Aviation (DGCA) signed an agreement to promote the development and use of sustainable, alternative aviation fuels as well as additional environmental collaboration between the two nations. The memorandum of understanding built on the Obama Administration's efforts to protect the environment, reduce greenhouse gas emissions worldwide, and provide the United States and the broader global community with more sustainable energy resources. The agreement also created additional partnership opportunities between the U.S. Commercial Aviation Alternative Fuels Initiative (CAAFI) and Indonesia's Aviation Biofuels and Renewable Energy Task Force (ABRETF). Both organizations shared similar goals and successes, such as developing alternative fuels that could be used in existing engines. (See December 2, 2014; June 5, 2019.)

20151026 October 26, 2015: Department of Transportation Pipeline and Hazardous Materials Safety Administration issued an interim final rule to prohibit passengers and crewmembers from carrying battery-powered portable electronic smoking devices (e.g., e-cigarettes, e-cigs, e-cigars, e-pipes, personal vaporizers, electronic nicotine delivery systems) in checked baggage and prohibit passengers and crewmembers from charging the devices and/or batteries on board the aircraft. On January 22, 2015, FAA had issued a safety alert for operators recommending that air carriers require their passengers to carry e-cigarettes and related devices exclusively in the cabin of the aircraft. On June 9, 2015, ICAO published an addendum to its technical instructions for the safe transport of dangerous goods by air that prohibited the carriage of e-cigarettes in checked baggage and restricted the charging of these devices while on board the aircraft. (See October 8, 2015.)

20151027	October 27, 2015: Delta Air Lines notified Airlines for America, a trade group representing U.S. airlines, it planned to leave the group on April 26, 2016. Delta, which has not supported many Airlines for America decisions, said it could use the $5 million it paid in annual dues to the organization to invest in employees and products.
20151028	October 28, 2015: Delta Air Lines announced it would stop flying to Dubai, effective February 1, 2016. Delta had accused three rival airlines in the Persian Gulf of receiving $42 billion in subsidies from their government owners during the last decade. The Gulf carriers – Emirates, Etihad, and Qatar – denied getting subsidies, and argued their U.S. competitors had received unfair advantages from bankruptcy law unavailable in the United Arab Emirates and Qatar. (See December 9, 2015.)
20151029	October 29, 2015: FAA Administrator Michael Huerta announced the membership of the UAS registration task force. Task force members included:
	* Nancy Egan – 3D Robotics
	* Richard Hanson – Academy of Model Aeronautics
	* George Novak – Aerospace Industries Association
	* Chuck Hogeman and Randy Kenagy – Air Line Pilots Association
	* Jim Coon – Aircraft Owners and Pilots Association
	* Sean Cassidy – Amazon Prime Air
	* Ben Gielow–Amazon Retail
	* Justin Towles – American Association of Airport Executives
	* Brian Wynne – Association of Unmanned Vehicle Systems International
	* Parker Brugge – Best Buy
	* Douglas Johnson – Consumer Electronics Association
	* Brendan Schulman – DJI
	* Paul Feldman – General Aviation Manufacturers Association
	* Dave Vos – GoogleX (Co-Chair)
	* Tony Bates – GoPro
	* Matt Zuccaro – Helicopter Association International
	* Mike Fergus – International Association of Chiefs of Police
	* John Perry – Management Association for Private Photogrammetric Surveyors
	* Brandon Declet – Measure

	* Randall Burdett – National Association of State Aviation Officials
	* Sarah Wolf – National Business Aviation Association
	* Baptiste Tripard – Parrot
	* Tyler Collins – PrecisionHawk
	* Gregory McNeal – Small UAV Coalition
	* Thomas Head – Walmart
	* Earl Lawrence – FAA (Co-Chair)
	The task force held its first meeting on November 3, 2015. (See October 14, 2015; November 23, 2015.)
20151030	October 30, 2015: Effective this date, a new FAA rule required air carriers conducting domestic, flag, and supplemental operations to make available on their websites information to enable passengers to determine which child restraint system could be used on airplanes in these operations. Specifically, the rule required air carriers to make available on their websites the width of the narrowest and widest passenger seats in each class of service for each make, model, and series of airplane used in passenger-carrying operations. (See September 2006.)
20151030	October 30, 2015: FAA announced the Austin air traffic control tower and TRACON facility sustained water damage during flooding from heavy rain. Air traffic controllers provided limited services while FAA assessed the damage. The Houston ARTCC, which normally controlled high-altitude traffic over the area, provided radar separation for flights in the Austin area. Because repairs to the facility were likely to take some time to complete, FAA evaluated options for providing longer-term radar services for lower-altitude aircraft from another facility. Meanwhile, the agency brought in a portable air traffic control tower from storage in Kansas City. For safety reasons, FAA increased the spacing between aircraft using Austin Bergstrom International Airport, which may have resulted in delays during busy periods. The tower and TRACON reopened on November 4.
20151030	October 30, 2015: FAA asked RTCA Special Committee 186, the group that created ADS-B industry standards, to consider the feasibility of encrypting ADS-B Out messages to prevent eavesdropping by the public on aircraft identification, position, speed, and other data available on the satellite link. Unlike with radar surveillance, the public could easily acquire low-cost receivers that captured the unencrypted ADS-B Out data from a growing number of equipped aircraft in the United States and globally. (See August 27, 2015; November 11, 2015.)
20151031	October 31, 2015: A Russian passenger jet, Metrojet Flight 9268, crashed in Egypt's Sinai Peninsula. All 224 people on board the 18-year old Airbus A321-200 died. Debris from the wreck was scattered over 7.7 miles. The Islamic State of Iraq and Syria (ISIS) subsequently took credit for placing a bomb on the aircraft.

20151104	November 4, 2015: The Houston Airport System (HAS) and NASA entered into an agreement that allowed the new commercial spaceport developing at Ellington Airport to tap into the federal space agency's assets and expertise, expanding the possibilities for the growing commercial spaceflight industry. Under the agreement, HAS and NASA would collaborate and NASA would provide access to a number of the unique capabilities at the Johnson Space Center (including safety-specific training, facilities, and technology capabilities) to support suborbital operations and commercial spaceflight endeavors.
20151105	November 5, 2015: FAA announced it would create a working group to review helicopter safety regulations, saying regulators could do a better job increasing the chances that helicopter occupants survived a crash or hard landing. In a notice published in the Federal Register, FAA said it would ask the working group to scrutinize current crash safety regulations, develop cost-benefit estimates for possible changes, and formulate a list of recommendations for the agency to consider.
20151110	November 10, 2015: The Department of Justice filed an anti-trust lawsuit with a federal court in New Jersey, alleging a recently proposed deal between United Airlines and Delta Air Lines to exchange landing and takeoff slots at Newark and JFK airports would expanded United's dominant presence in the New York market at the expense of other carriers. (See January 8, 2015.)
20151110	November 10, 2015: A 10-seat Hawker H25 jet crashed into an apartment building in Akron, Ohio, killing all nine people on the plane but no one on the ground.
20151111	November 11, 2015: Members of the United Nations Telecommunication Union announced at the World Radio Communication Conference a deal had been reached for nations to set aside common radio frequencies so that airplanes equipped with ADS-B could be tracked by satellite. The tracking system, done in response to the disappearance of Malaysia Airlines Flight 370 in 2014, would become effective worldwide in November 2016. (See October 30, 2015.)
20151113	November 13, 2015: After coordinated attacks on civilian targets in Paris, the French government closed its borders to help restore order, prompting transportation officials around the world to come up with emergency plans on how to handle traffic into and out of the country. ISIS claimed responsibility for the attacks, which killed 129 people and injured over 300 others. (See November 23, 2015.)
20151123	November 23, 2015: The State Department issued a worldwide alert to American citizens traveling abroad. Officials warned that the "likelihood of terror attacks will continue as members of ISIL/Da'esh return from Syria and Iraq. Additionally, there is a continuing threat from unaffiliated persons planning attacks inspired by major terrorist organizations but conducted on an individual basis." The travel alert was to expire on February 24, 2016. (See November 13, 2015).

20151123	November 23, 2015: GSA announced it had signed a lease to move FAA's Northwest Mountain Regional Headquarters from Renton, WA, to Des Moines, WA. The new building, when completed in 2018, would consolidate regional employees into one facility. (See June 8, 2016.)
20151123	November 23, 2015: FAA's drone task force recommended, among other things, that:
	1. Drones between 0.55 pound and 55 pounds operated outdoors needed to be registered.
	2. The free registration was owner-based, so a number of drones could be registered to one owner.
	3. Registration would be mandatory at the time of operation and not the point of sale.
	4. Minimum age to register was 13.
	5. A registration certificate would be mailed to the owner.
	6. The registration number would need to be put on each drone.
	FAA planned to use the recommendations, as well as public input, to draft a proposed drone rule. (See October 29, 2015; December 14, 2015.)
20151124	November 24, 2015: Airbus announced FAA and the European Aviation Safety Agency had issued a type certificate to the A320neo (new engine option), powered by Pratt & Whitney's Pure Power PW1100G-JM engine.
20151124	November 24, 2015: The Airline Operators and Pilots Association reported FAA had released a list of the first 35 of 74 VORs it planned to decommission through 2020. More than 200 more would be decommissioned through 2025. FAA planned to retain more than half of the VORs as it established a minimum operational network to serve as a backup to satellite systems. The list of 35 approved VORs, the first in line to be decommissioned, was spread among 17 states. At the time of the announcement, FAA owned and operated 957 VORs in the continental United States. An additional 100 nonfederal VORs were in operation around the country. Included in the list of VORs to be decommissioned were 12 VORs, 155 VOR/DMEs, and 141 VORTACs. The majority were located in the eastern and central regions of the United States. In the case of VOR/DMEs and VORTACs, the DME and TACAN portions of the units would be left in place to facilitate RNAV requirements.
20151125	November 25, 2015: DOT issued a notice reminding airlines they were required to compensate passengers for damage to wheels, straps, zippers, handles, and other protruding parts of checked baggage beyond normal wear and tear. The notice also reminded airlines of their obligation to accept all reports of mishandled baggage from consumers even if an airline's agent believed the airline was not liable. The notice was a result of airport inspections, which uncovered the fact that certain airlines routinely excluded liability for damage to specific parts of checked baggage. DOT's office of aviation enforcement and proceedings planned to take enforcement action against airlines that were not in compliance by January 9, 2016.

20151201	December 1, 2015: FAA announced the Kingdom of Thailand did not comply with ICAO safety standards and had been assigned a Category 2 rating based on a reassessment of the country's civil aviation authority. A Category 2 rating meant the country either lacked laws or regulations necessary to oversee air carriers in accordance with minimum international standards – or its civil aviation authority (a body equivalent to FAA for aviation safety matters) was deficient in one or more areas, such as technical expertise, trained personnel, record-keeping, or inspection procedures. With a Category 2 rating, Thailand's carriers could continue existing service, but not establish new service, to the United States.
20151208	December 8, 2015: FAA certified HondaJet's model HA-420 business jet. The new jet could seat up to seven and cost approximately $4.5 million.
20151208	December 8, 2015: A group of U.S. and Mexican investors opened Cross Border Xpress, one of the largest privately operated U.S. air terminals. The terminal linked Tijuana International Airport with the new terminal at the San Diego airport. It allowed passengers flying into Tijuana to walk across a 390-foot bridge to enter the United States. The fee to cross was $18.00, and passengers were met by U.S. border inspectors. Prior to the opening of the bridge, passengers entering the United States from Tijuana had to drive about 15 minutes to a congested land crossing where they waited up to several hours to enter San Diego by car or on foot.
20151209	December 9, 2015: United Airlines announced it would end its flights from Washington Dulles International Airport to Dubai on January 25, 2016. United said in a statement: "Even though we successfully operated the Washington-Dubai route for the past seven years, the entry of subsidized carriers such as Emirates Airline and Etihad Airways into the Washington, D.C., market has created an imbalance between supply and demand to the United Arab Emirates." (See October 28, 2015; May 11, 2018.)

20151214 December 14, 2015: FAA announced a streamlined and user-friendly web-based aircraft registration process for owners of small UAS weighing more than 0.55 pounds (250 grams) and less than 55 pounds (approx. 25 kilograms) including payloads such as onboard cameras. Under the rule, any owner of a small UAS who had previously operated an unmanned aircraft exclusively as a model aircraft prior to December 21, 2015, had to register no later than February 19, 2016. Owners of any other UAS purchased for use as a model aircraft after December 21, 2015, had to register before the first flight outdoors. Owners could use either the paper-based process or the new streamlined, web-based system. Owners using the new streamlined web-based system had to be at least 13 years old to register. Registrants needed to provide their name, home address, and e-mail address. Upon completion of the registration process, the web application would generate a certificate of aircraft registration/proof of ownership that included a unique identification number for the UAS owner, which had to be marked on the aircraft. Owners using the model aircraft for hobby or recreation would only have to register once and could use the same identification number for all of their model UASs. The registration was valid for three years. The normal registration fee was $5, but in an effort to encourage as many people as possible to register quickly, FAA waived the fee for the first 30 days (from December 21, 2015 to January 20, 2016). (See November 23, 2015.)

20151216 December 16, 2015: The United States and Cuba reached a bilateral arrangement to establish scheduled air services between the two countries. The agreement continued to allow charter operations and established scheduled air service, which would facilitate an increase in authorized travel, enhance traveler choices, and promote people-to-people links between the two countries. While U.S. law continued to prohibit travel to Cuba for tourist activities, a stronger civil aviation relationship would facilitate growth in authorized travel between the two countries. (See February 16, 2016.)

20151218 December 18, 2015: The United States signed a new air transport agreement with Mexico. The agreement benefited U.S. and Mexican airlines, travelers, businesses, airports, and localities by allowing increased market access for passenger and cargo airlines to fly between any city in Mexico and any city in the United States. Cargo carriers now had expanded opportunities to provide service to new destinations not available under the former, more restrictive agreement.

20151221 December 21, 2015: Southwest Airlines agreed to pay a $2.8 million civil penalty to settle a lawsuit over maintenance of dozens of its Boeing 737 aircraft. The case involved fasteners and supporting equipment that ensured that plane fuselages withstood the forces of flying at different altitudes and temperatures. Southwest could still face $5.5 million in deferred penalties if it failed to enhance oversight and control of other companies, which performed maintenance on its aircraft, to ensure they met FAA safety regulations

20151222

December 22, 2015: FAA announced a comprehensive settlement agreement with Boeing Commercial Airplanes (BCA) that resolved multiple pending and potential enforcement cases. Under the agreement, BCA pledged to implement and improve several certification processes to further enhance the airworthiness and continued compliance of all BCA products. BCA's obligations committed the company to meet specific performance targets. The targets were designed to enhance BCA's early discovery and self-disclosure of potential regulatory compliance problems, as well as the timely development and implementation of effective corrective actions. The company also had to make an immediate payment to the United States Treasury in the amount of $12 million and would face stiff penalties for failing to follow through on its commitments.

2016

20160114 January 14, 2016: FAA issued a notice of proposed rulemaking to establish a new noise standard for certain subsonic jet airplanes and subsonic transport category large airplanes. The noise standard, known as Stage 5, would apply to any person submitting an application for a new airplane type design with a maximum certificated takeoff weight of 121,254 pounds or more on or after December 31, 2017; or with maximum certificated takeoff weight of less than 121,254 pounds on or after December 31, 2020. This change would reduce the noise produced by new airplanes and harmonize the noise certification standards for those airplanes certificated in the United States with the ICAO noise standard in Annex 16, Chapter 14. (See August 4, 2005; November 17, 2017.)

20160117 January 17, 2016: SpaceX launched its Falcon 9 v1.1 rocket, successfully sending NASA's Jason-3 ocean-measuring satellite into orbit. The rocket, however, failed to make a return landing to a drone platform in the Pacific Ocean. (See September 16, 2014; June 15, 2016.)

20160203 February 3, 2016: Republican leaders in the House Transportation and Infrastructure Committee introduced a $69 billion funding bill, the Aviation Innovation, Reform, and Reauthorization Act, that would move air traffic control operations from FAA to a not-for-profit corporation. Bill Shuster (R-PA) sponsored the bill. NATCA and Airlines for America, a trade group for most major airlines, backed the legislation. The committee held hearings on the bill on February 11, and approved the bill the following day. The bill did not go to the full House for a vote. (See June 15, 2015; June 5, 2017.)

20160208 February 8, 2016: The U.S. and 22 other countries reached agreement on the first-ever global carbon standards for commercial aircraft. When fully implemented, the standards were expected to reduce carbon emissions more than 650 million tons between 2020 and 2040, equivalent to removing over 140 million cars from the road for a year. The technology standards, agreed to at ICAO, would apply to aircraft manufacturers when formally adopted by the ICAO Council.

20160216 February 16, 2016: Transportation Secretary Anthony Foxx, Assistant Secretary of State for Economic and Business Affairs Charles Rivkin, Cuban Minister of Transportation Adel Yzquierdo Rodriguez, and President of the Cuban Civil Aviation Institute, Ministry of Transportation Colonel Alfredo Cordero Puig signed an arrangement that provided for the re-establishment of scheduled air services between the United States and Cuba. (See December 16, 2015; August 31, 2016.)

20160216 February 16, 2016: FAA and the Civil Aviation Authority of Singapore signed the first set of maintenance implementation procedures between the U.S. agency and an Asian counterpart. The deal established reciprocal acceptance of maintenance oversight, among other benefits. It built upon a bilateral aviation safety agreement in place since 2004. (See July 12, 2017.)

20160222	February 22, 2016: ICAO voted to ban cargo shipments of lithium ion batteries on passenger planes. The ban became effective on April 1, 2016. (See October 26, 2015; September 8, 2016.)
20160224	February 24, 2016: FAA established the performance standards and requirements for micro unmanned aircraft systems (UAS) aviation rulemaking committee (ARC). The committee provided a forum for discussion and development of recommendations that would be submitted to FAA for consideration in developing a notice of proposed rulemaking (NPRM) regarding the classification and operation of micro UAS. The ARC was specifically tasked to consider recommendations for a performance-based standard that would allow for micro UAS to be operated over people who were not directly participating in the operation of the UAS or under a covered structure. (See December 21, 2015; March 10, 2016.)
20160225	February 25, 2016: Republic Airways, a regional carrier, filed for Chapter 11 bankruptcy protection.
20160304	March 4, 2016: DOT published a final rule in the Federal Register banning passengers on all U.S. and foreign airlines within, into, or out of the U.S. from smoking electronic cigarettes. The ban took effect on April 3. (See October 26, 2015; May 18, 2016.)
20160309	March 9, 2016: FAA issued a NPRM to overhaul the airworthiness standards for small general aviation airplanes (Part 23). FAA's proposal, based on industry recommendations, would reduce the time it took to get safety enhancing technologies for small airplanes into the marketplace, while also reducing cost. (See December 16, 2016.)
20160310	March 10, 2016: Australian startup Flirtey made the first FAA-approved package delivery by an UAS to a house. During the test, working with the University of Nevada at Reno, Flirtey's six-rotor small unmanned aerial system flew a preprogrammed route to deliver a package of food, water, and a first-aid kit to an unoccupied house in a sparsely inhabited area of Hawthorne, near Reno. Navigating by the global positioning system (GPS), with visual observers keeping the UAS within line of sight and a ground pilot on standby, the autonomous UAS flew approximately a half-mile, and then hovered to lower the package to the ground on a tether. In July 2015, Flirtey conducted the first FAA-approved package-delivery demonstration with its UAS making three trips over a 2-hour period to ferry medical supplies from a nearby airport to a free clinic held in fairgrounds near Wise, VA. (See February 24, 2016; December 28, 2016.)
20160329	March 29, 2016: FAA announced that it had selected unleaded fuel formulations from Shell and Swift Fuels for Phase 2 engine and aircraft testing. Test data would help the companies obtain an ASTM international production specification for their fuels and allow FAA to authorize the existing general aviation fleet to use the unleaded replacement fuels. The testing was scheduled to conclude in 2018. (See September 8, 2014.)

20160330	March 30, 2016: FAA issued two new rules dealing with flight simulators and aviation training devices to improve airline pilots' response to a number of unusual situations they might encounter, and give pilots more credit toward the requirements for an instrument rating. The rules set new standards for flight simulator evaluation and qualification, designed to make simulator training and testing more accurate and realistic in scenarios involving stalls, upset recognition and recovery techniques, maneuvers in icing conditions, takeoffs and landings in gusting crosswinds, and bounced landing recovery. FAA required training for most of these maneuvers in a rule published on November 12, 2013. The new rule also addressed a possible lack of simulator fidelity identified in several National Transportation Safety Board (NTSB) safety recommendations and provided greater harmonization with international guidance for flight simulator training. Air carriers had to develop training programs using simulators that met the upgraded requirements by March 12, 2019. (See November 5, 2013.)
20160330	March 30, 2016: President Barack Obama signed a short-term extension of aviation programs, giving lawmakers three and a half more months to work on a long-term bill. The measure (HR 4721) extended aviation authorization through July 15. The previous authority (PL 114-55) expired on this date. (See September 30, 2015; July 15, 2016.)
20160401	April 1, 2016: Under a new rule effective this date aviation medical examiners could no longer issue student pilot certificates. Instead, new pilots had to use a process similar to that used by private pilots. Student pilots had to apply for certificates through their certified flight instructor, a designated pilot examiner, FAA examiner, or Part 141 flight school certificate representative. The changes gave the Transportation Security Administration time to review student pilot applications as part of an anti-terrorism screening program mandated by Congress.
20160406	April 6, 2016: The Micro UAS ARC issued its report and recommended FAA regulate small drones based on the risk they pose to people and set standards manufacturers and operators should meet. FAA planned to examine the recommendations as it formulated a new proposal specific to micro drones. FAA expected to release its next full proposal on drone use in December 2016. (See March 10, 2016; May 4, 2016.)
20160411	April 11, 2016: FAA issued a final rule that increased the aviation training device (ATD) hours pilots could credit toward an instrument rating – up to 10-hours credit in a basic ATD and up to 20-hours credit in an advanced ATD, not to exceed a maximum of 20 total hours under Part 61. The previous maximum allowance was 10 hours in an FAA-approved aviation-training device. (See December 3, 2014.)
20160418	April 18, 2016: The Department of Transportation (DOT) tentatively approved Norwegian Air's request to begin service into the U.S. from a base in Ireland, ending a two-year review of the request that elicited significant opposition from U.S. carriers. DOT planned to hold a number of public information sessions prior to giving final authority. (See December 2, 2016.)

20160420	April 20, 2016: FAA issued a notice of proposed policy to reduce the number of radio frequencies used by flight service stations to communicate with aircraft in flight. Under the proposal, 666 remote communications outlets would be decommissioned. Frequencies especially designated for emergency or military use or for use in Alaska were not included in the proposal.
20160504	May 4, 2016: FAA announced it would immediately begin allowing students to operate UAS for educational and research purposes without first obtaining a Section 333 exemption. They still, however, had to follow the rules for model aircraft. (See April 6, 2016; July 1, 2016.)
20160509	May 9, 2016: Robinson Helicopters announced FAA had certificated its new R44 Cadet helicopter.
20160518	May 18, 2016: The Pipeline and Hazardous Materials Safety Administration issued a final rule prohibiting passengers and crewmembers from carrying battery-powered portable electronic smoking devices (e.g., e-cigarettes, e-cigs, e-cigars, e-pipes, personal vaporizers, and electronic nicotine delivery systems) in checked baggage and prohibited passengers and crewmembers from charging the devices and/or batteries on board an aircraft. (See March 24, 2016.)
20160519	May 19, 2016: EgyptAir Flight 804 en route from Paris to Cairo crashed about 260 miles from Cairo. All 66 passengers and crew died. Black box data indicated there was a fire inside the Airbus 320 at the time of the crash.
20160606	June 6, 2016: Transportation Secretary Anthony Foxx and FAA Deputy Administrator Michael G. Whitaker broke ground for a new 370-foot-tall air traffic control tower and terminal radar approach control (TRACON) facility at Charlotte Douglas International Airport.
20160608	June 8, 2016: FAA broke ground for the Northwest Mountain regional headquarters located in Des Moines, WA. FAA expected the new building to open in February 2018. (See November 23, 2015.)
20160609	June 9, 2016: FAA announced steps to address mental health problems among pilots. FAA said it would not require psychological testing for airline pilots. Rather, the agency said it would enhance training for medical examiners who test pilots being hired by airlines and expand mental health assistance for pilots. FAA's goal was "to break down resistance to seeking treatment because pilots can be grounded for certain medical problems or medications."
20160615	June 15, 2016: Culminating five years of work, FAA replaced the practical test standards (PTS) for the private pilot certificate and the instrument rating with the new airman certification standards (ACS). ACS improved upon the PTS by adding aeronautical knowledge and risk management elements that supported each PTS skill task.
20160615	June 15, 2016: Bombardier Commercial Aviation announced FAA and the European Aviation Safety Agency had certificated the CS100 aircraft.

20160615	June 15, 2016: Space X's attempt to land a Falcon 9 rocket booster on a drone ship at sea failed. It was SpaceX's eighth attempted sea landing, and the fifth time that the rocket did not survive. Before this mission, the company had landed three Falcon 9 boosters in a row over the course of the previous three months. (See January 17, 2016; September 1, 2016.)
20160617	June 17, 2016: Piper Aircraft announced that FAA had type certificated the Piper M600, a single-engine turboprop.
20160621	June 21, 2016: Terrafugia announced FAA approved its 2014 petition for exemption, allowing a vehicle in the Transition® street-legal airplane configuration to be certified as a light sport aircraft (LSA) with a maximum takeoff weight of 1,800 pounds. This was a significant increase over the allowance received in 2010 which granted the Transition® a 1,430-pound weight limit, the same as currently imposed on amphibious LSA. The 1,800 pound weight allowed the Transition® to incorporate automotive occupant protection safety features, including a safety cage, energy absorbing crumple zones, and cabin features that are commonplace in today's automobiles but unavailable in most general aviation aircraft. (See March 23, 2012; January 26, 2021.)
20160622	June 22, 2016: FAA commissioned the new TRACON at Palm Beach International Airport.
20160624	June 24, 2016: Transportation Secretary Anthony Foxx and NASA Administrator Charles Bolden, joined by representatives from the FAA, National Air Traffic Controllers Association (NATCA), American Airlines, celebrated the official opening of a new airspace technology demonstration (ATD-2) laboratory at Charlotte Douglas International Airport. This laboratory was part of a five-year test project aimed to streamline the arrival and departure of aircraft and improve surface operations to increase safety and efficiency and reduce fuel use in the nation's aviation system.
20160630	June 30, 2016: Transportation Secretary Anthony Foxx announced $5.15 million in grants would go to nine small communities to help them improve local air service. The grants were provided through the small community air service development program (SCASDP), which began in 2002 to help small communities address the economic challenges of maintaining local air service. Receiving grants were: Bullhead City, AZ ($750,000); Inyokern, CA ($450,000); Stockton, CA ($650,000); Hailey, ID ($500,000); Billings, MT ($750,000); Missoula, MT ($600,000); Santa Fe, NM ($500,000); Amarillo, TX ($750,000); and Port Angeles, WA ($200,000).
20160701	July 1, 2016: FAA announced expansion of the part of its pathfinder program that focused on detecting and identifying UASs flying too close to airports. FAA signed cooperative research and development agreements (CRDAs) with Gryphon Sensors, Liteye Systems Inc., and Sensofusion. The CRDAs with Gryphon, Liteye and Sensofusion expanded upon collaborative efforts with industry to develop system standards to identify unauthorized UAS flights near airports, which could pose a hazard to manned aircraft. (See May 4, 2016; August 2, 2016.)

20160707	July 7, 2016: Lockheed Martin announced a FAA contract award of $344 million to develop and deploy the terminal flight data manager (TFDM) system. The system would provide electronic flight strips as well as improved surface management tools that would allow streamlined operations in the air traffic control towers for busy airports. The TFDM contract period of performance had a five-year base with seven one-year options.
20160714	July 14, 2016: FAA and NATCA signed a new six-year collective bargaining agreement. The new agreement went into effect on July 24. (See March 14, 2012.)
20160715	July 15, 2016: President Obama signed the FAA Extension, Safety and Security Act of 2016, a stopgap fix that funded aviation security and other programs for 14 months. The legislation reauthorized FAA through September 2017, providing funding for airport improvement and security programs and additional regulations for drones. (See March 30, 2016; November 22, 2016.)
20160716	July 16, 2016: FAA banned flights to and from Turkey following an attempted coup in the country. FAA lifted the ban on July 18.
20160718	July 18, 2016: FAA Administrator Michael Huerta announced Victoria Wassmer would serve as acting deputy administrator. Deputy Administrator Michael Whitaker had left the agency at the end of June. (See June 28m 2017.)
20160720	July 20, 2016: Moon Express Inc., a Florida-based firm started in 2010, announced FAA had granted it permission to conduct an independent moon landing.
20160801	August 1, 2016: Virgin Galactic announced FAA's office of commercial space had granted it a commercial license to operate its SpaceShipTwo. The license reauthorized Virgin Galactic to continue its commercialization process after its spaceship broke up during a rocket-powered test flight over California's Mojave Desert in October 2014. (See October 31, 2014; May 24, 2018.)
20160802	August 2, 2016: FAA announced plans to charter an UAS safety team that would include a wide variety of stakeholders from the drone and aviation industries. Similar to the highly successful commercial aviation safety team, this group would analyze safety data to identify emerging threats that drones may pose to aircraft, people, and property. It would also develop mitigation strategies to address these threats and prevent future accidents. The group held its first meeting on October 21. (See July 1, 2016; August 2, 2016.)
20160802	August 2, 2016: FAA announced it planned to hire 1,400 new controllers to help meet its future workforce demands. Applicants had a one-week window to apply, August 8-15.
20160802	August 2, 2016: FAA granted permission for Google parent company Alphabet to test delivery drones in designated areas. The company could conduct an operational research study, flying drones less than 400 feet, to develop an airspace management system. The data gathered would be shared with government partners to help regulators study questions about critical safety and human factors regarding unmanned aerial vehicle (UAV) cargo deliveries. (See August 2, 2016; August 29, 2016.)

20160812	August 12, 2016: FAA announced the selection of the University of Oklahoma and Embry-Riddle Aeronautical University to lead its new transportation center of excellence for technical training and human performance. The center would conduct research and development on technical training for air traffic controllers, aviation safety inspectors, engineers, pilots, and technicians. (See May 8, 2015.)
20160815	August 15, 2016: FAA announced Indonesia complied with ICAO safety standards and had been granted a Category 1 rating. FAA first assessed Indonesia's civil aviation authority in September 1997 and found it in compliance with ICAO standards and then lowered the rating from Category 1 to Category 2 in April 2007. The Category 1 rating was based on a March 2016 FAA assessment of the safety oversight provided by Indonesia's Directorate General of Civil Aviation. A Category 1 rating means the country's civil aviation authority complied with ICAO standards. With the Category 1 rating, Indonesian air carriers that were able to secure the requisite FAA and DOT authority, could establish service to the United States and carry the code of U.S. carriers.
20160815	August 15, 2016: FAA rejected an appeal by Santa Monica to overturn a recent FAA decision that required the city's airport to remain open at least until 2023. (See)
20160817	August 17, 2016: FAA selected Brunswick Executive Airport in Brunswick, ME, to participate in the fiscal year 2016 military airport program (MAP). The MAP used federal funds to convert former military airports to civilian use and supported improvements to joint-use airports. The MAP funding was a set-aside of the airport improvement program that helped increase civilian aviation capacity by financing projects such as building or rehabilitating parking lots, fuel farms, hangars, utility systems, access roads, cargo buildings, and other airfield projects at former military airports. (See July 22, 2015; June 9, 2017.)
20160821	August 21, 2016: The air transport agreement between the United States and Mexico, signed on December 18, 2015, went into effect. This new agreement expanded travel and trade between the United States and Mexico, and facilitated broader economic growth in both countries.
20160823	August 23, 2016: The Santa Monica city council voted to close the Santa Monica airport as soon as legally permitted, with a goal of on or before July 1, 2018. (See August 15, 2016; September 15, 2016.)
20160828	August 28, 2016: Air traffic controllers at McCarran International Airport began working in a $99 million, 352-foot tall control tower. The new tower doubled the height of the original tower, and became the second-tallest air traffic control tower in the country.
20160829	August 29, 2016: FAA implemented the first operational rules for routine non-hobbyist use of small UAS, or drones. The provisions of the new rule – formally known as Part 107 – were designed to minimize risks to other aircraft and people and property on the ground. (See August 2, 2016; September 16, 2016; December 28, 2016.)

20160831	August 31, 2016: As part of the Obama Administration's effort to normalize relations with Cuba, Transportation Secretary Anthony Foxx arrived in Cuba on the first scheduled flight to the island in over 50 years, on a JetBlue Airways flight from Fort Lauderdale to Santa Clara. (See February 16, 2016; October 25, 2019.)
20160901	September 1, 2016: The SpaceX Falcon 9 launch vehicle exploded during a static fire test at Cape Canaveral, FL. The test was in advance of a September 3 launch of the Amos-6 communications satellite for Israeli satellite operator Spacecom. (See June 15, 2016; March 30, 2018.)
20160902	September 2, 2016: FAA issued a finding of no significant impact/record of decision for the Southern California Metroplex project. The decision enabled the agency to move forward with the project, which would replace dozens of existing conventional air traffic control procedures with new satellite-based procedures. FAA planned to begin phasing in the new procedures starting in November 2016 and continuing through April 2017. The project included 99 new satellite-based procedures, consisting of 41 departures, 37 arrivals, and 21 approach procedures. (See March 26, 2020.)
20160908	September 8, 2016: FAA issued a statement advising airline passengers not to turn on or charge their Samsung Electronics Company, Ltd., Galaxy Note 7 smartphones during flights or stow them in checked baggage, because of concerns over the phones' fire-prone ion-lithium batteries. Samsung subsequently recalled the phones. (See February 22, 2016; October 14, 2016.)
20160915	September 15, 2016: The city of Santa Monica served Atlantic Aviation and American Flyers eviction notices and ordered them to leave Santa Monica airport by October 15 (later extended to November 4). Beginning in June, the city began informing airport tenants that they would not receive new leases. Attorneys for the two companies asked FAA to determine whether the airport's leasing policy violated federal agreements with the city. On September 26, FAA issued a notice of investigation to the City of Santa Monica informing the city it was initiating an investigation into the city's strategy to close the airport by evicting tenants and recommended the city postpone the evictions. (See August 23, 2016; December 13, 2016.)
20160915	September 15, 2016: The Astronautics Corporation of America announced a FAA contract to research and develop a way to identify and assess potential aircraft cybersecurity threats as they relate to aircraft certification and operational safety.
20160916	September 16, 2016: FAA's new drone advisory committee (DAC) met for the first time. Brian Krzanich, Chief Executive Officer of Intel Corp., chaired the committee. FAA had announced plans to establish the committee the previous February. The DAC was formed under the RTCA federal advisory committee and planned to meet at least three times a year. Members discussed key issues and challenges associated with integrating unmanned aircraft in the world's busiest and most complicated airspace system. (See August 29, 2016; May 29, 2018.)

20160919 September 19, 2016: FAA's automatic dependent surveillance-broadcast (ADS-B) rebate website went online. It provided general aviation aircraft owners the opportunity to apply for a $500 rebate to help offset the cost to equip eligible aircraft. ADS-B Out, which FAA required by January 1, 2020, transmitted information about a plane's altitude, speed, and location to air traffic control and other nearby aircraft. ADS-B allowed aircraft to receive traffic and weather information from ground stations and to see nearby aircraft that were broadcasting their positions through ADS-B Out. Owners could choose to install only ADS-B Out equipment to meet the 2020 requirement, or they could purchase an integrated system that also included ADS-B In. (See April 14, 2014; June 26, 2018.)

20160923 September 23, 2016: FAA dedicated the new air traffic control tower at Tucson International Airport. The new tower was 252 feet tall – about double the height of the old tower, which had served the airport for 58 years. It sat atop a 13,000 square-foot base building that housed computer equipment, administrative offices, and a backup power system designed to activate automatically in case of a commercial power outage. FAA expected a 1,600-panel solar farm adjacent to the base building to generate enough power to support all of the facility's electrical needs for several hours a day on sunny days. The total project cost, including computer equipment, electronics, fire suppression systems, and heating and air conditioning, was approximately $40 million.

20160929 September 29, 2016: FAA announced Administrator Michael Huerta had approved the performance-based navigation (PBN) national airspace system navigation strategy. The strategy, which had been in development for two years, set a clear vision of PBN as the daily basis for operations at all locations in U.S. airspace. It established near-, mid- and long-term goals for implementing PBN approaches across the NAS and identified navigation capabilities and services that would be available over the next 15 years. (See October 8, 2014.)

20161001 October 1, 2016: FAA transitioned from its traditional domestic instrument flight rules (IFR) flight plan (Form 7233-1) to the ICAO IFR flight plan (Form 7233-4) for domestic flight plan filing. The agency said the change was intended to simplify the flight planning process and align U.S. flight plans with ICAO standards.

20161003 October 3, 2016: Rockwell Collins announced FAA had renewed its aeronautical mobile communications service agreement. Under the agreement, the company would continue to provide air traffic control communications, including position reports, aircraft requests and air traffic control clearances, between FAA and aircraft flying in U.S. oceanic airspace.

20161007 October 7, 2016: FAA issued a notice of proposed rulemaking to require air carriers conducting domestic, flag, and supplemental operations to provide new-hire pilots with an opportunity to observe flight operations to become familiar with procedures before serving as a flightcrew member in operations; revise the curriculum; provide leadership and command and mentoring training for all pilots in command; and establish pilot professional development committees.

20161010	October 10, 2016: Ground was broken on a new $240 million airport in Williston, North Dakota. FAA provided funding for 50 percent of the project cost, while the city of Williston and the state of North Dakota funded the rest.
20161011	October 11, 2016: FAA and local officials dedicated the new control tower at San Francisco International Airport. Located between Terminals 1 and 2, the tower featured a 147-foot-tall ribbon of glass running down the middle of the structure. The facility also included a three-story, 44,000 square-foot base building, which housed administrative offices, computer equipment, a backup generator, and secure corridors that allowed passengers to transit between terminals without affording access to the tower.
20161014	October 14, 2016: The Department of Transportation, with FAA and the Pipeline and Hazardous Materials Safety Administration, announced an emergency order banning all Samsung Galaxy Note7 smartphone devices from air transportation in the United States. Individuals who owned or possessed a Samsung Galaxy Note7 device could not transport the device on their person, in carry-on baggage, or in checked baggage on flights to, from, or within the United States. This prohibition became effective on October 15, 2016. (See September 8, 2016; January 10, 2017.)
20161017	October 17, 2016: Orbital ATK's Cygnus spacecraft lifted off from the Mid-Atlantic Regional Spaceport at Wallops Island, VA, carrying supplies for the International Space Station. This was the first launch from the spaceport since an Antares rocket and its Cygnus spacecraft were lost in October 2014. (See October 28, 2014.)
20161018	October 18, 2016: FAA and federal and local officials dedicated the new air traffic control tower at Las Vegas' McCarran International Airport. The facility included a 352 foot tall air traffic control tower and a 59,000 square-foot base building, which housed the TRACON, air traffic control training simulators, administrative offices, and equipment.
20161018	October 18, 2016: Transportation Secretary Anthony Foxx announced a number of actions to enhance protections for air travelers and promote competition in the airline industry. The announced actions included (See July 24, 2012):
	* Requiring Refunds for Delayed Baggage
	* Expanding the Number of Carriers Required to Report Data
	* Requiring the Reporting of Data on Flights Operated by Code-Share Partners
	* Providing Consumers with a Clearer Picture of Baggage Delivery
	* Prohibiting Undisclosed Bias by Airlines and Online Ticket Agents
	* Protecting Air Travelers with Disabilities
	* Giving Consumers a Voice by extending its advisory committee for aviation consumer protection. New Orleans Mayor Mitch Landrieu was selected to serve as chair of the committee (See November 15, 2018.)

20161027	October 27, 2016: FAA extended the prohibition against certain flight operations in the Simferopol and Dnipropetrovsk flight information regions by all U.S. air carriers; U.S. commercial operators; persons exercising the privileges of a U.S. airman certificate, except when such persons operated a U.S.-registered aircraft for a foreign air carrier; and operators of U.S.-registered civil aircraft, except when such operators were foreign air carriers. The ban would remain in effect through October 2018. (See October 22, 2015.)
20161027	October 27, 2016: The campaign plane carrying Republican vice-presidential candidate Mike Pence skidded off the runway after landing at New York's LaGuardia Airport. The engineered material arresting system located at the end of the runway safely stopped the aircraft, which carried 37 passengers and crew. (See October 1, 2016.)
20161031	October 31, 2016: Cirrus Aircraft announced FAA had awarded it a FAR Part 23 Type Certificate for its $1.96 million, 300-kt. single-engine turbofan SF50 Vision Jet.
20161110	November 10, 2016: FAA Administrator Michael Huerta outlined the agency's Caribbean initiative. Through this Initiative, FAA's technical experts would work with their Caribbean partners and ICAO to increase airport safety and certification in the region and to improve air traffic flow management through collaborative decisionmaking.
20161122	November 22, 2016: DOT's office of aviation enforcement and proceedings, a unit within the office of the general counsel, issued a new enforcement policy on extended tarmac delays in light of the FAA Extension, Safety, and Security Act of 2016. Under the new policy, the DOT would not take enforcement action against U.S. and foreign airlines for lengthy tarmac delays on departing flights so long as airlines returned their aircraft to the gate or another suitable disembarkation point no later than three hours for domestic flights and no later than four hours for international flights after the main aircraft door had closed in preparation for departure. (See July 15, 2016.)
20161123	November 23, 2016: FAA issued a request for information seeking vendors of remote air traffic control tower systems to compete for a contract to build a system at Northern Colorado Regional Airport. FAA said the remote tower system must allow controllers to provide Class D services with a facility that is local or remote to the airport. FAA was already evaluating a remote-tower demonstration project run by Saab and the State of Virginia at the Leesburg Executive Airport. (See March 1, 2015; September 29, 2021.)
20161128	November 28, 2016: American Airlines Flight 17 landed in Havana, the first U.S. scheduled airline with service to that city in over 50 years. The airline planned to fly four daily flights from Miami International Airport to Havana.

20161202	December 2, 2016: The Department of Transportation gave final approval to allow Norwegian Air International (NAI) to fly to the U.S. NAI, a subsidiary of European low-cost carrier Norwegian Air Shuttle, had applied in December 2013 to serve the U.S. Many U.S. domestic airlines, their unions, and some lawmakers opposed approval arguing that NAI was trying to skirt labor and safety laws, by being headquartered in Ireland, and potentially hiring Asian crews for below-market wages. (See April 18, 2016; May 11, 2018.)
20161206	December 6, 2016: The Justice Department approved the $2.6 billion Alaska Airlines acquisition of Virgin America. As a condition of the acquisition, Alaska Airlines was required to "slim down its code-sharing agreement with American Airlines." Alaska Air and American would be banned from booking passengers on one another's flights on routes where Virgin and American competed, as well as any routes Alaska Air might start in the future. (See December 14, 2016.)
20161206	December 6, 2016: FAA opened its new structures and materials laboratory at its William J. Hughes Technical Center in Atlantic City, New Jersey. The 10,000 square foot building with a 32-foot high ceiling cost $2 million to construct.
20161208	December 8, 2016: DOT announced a proposal to require airlines and ticket agents to disclose in advance to consumers if the carriers operating their flights allowed passengers to make voice calls using mobile wireless devices. Federal Communications Commission rules prohibited the use of mobile devices on certain radio frequencies onboard aircraft, including for voice calls. However, the existing Federal Communications Commission rules did not cover WiFi and other means by which it might become possible to make voice calls. DOT also sought comment on whether disclosure was sufficient or whether it should simply ban voice calls on flights within, to, or from the United States.
20161213	December 13, 2016: FAA issued a cease and desist order to the City of Santa Monica to preserve the status quo while it completed its investigation of the issues in the earlier notice of investigation and the complaints filed by American Flyers and Atlantic Aviation over their letters of eviction from the Santa Monica airport. The City had 30 days to file a response. (See September 15, 2016; January 28, 2016.)
20161214	December 14, 2016: Alaska Air Group completed its $2.6 billion acquisition of Virgin America. The two airlines now planned to work with FAA to operate as a single carrier. (See December 6, 2014).
20161214	December 14, 2016: FAA awarded type validation to the Bombardier CS300 airliner.

20161216 December 16, 2016: FAA issued a new Part 23 rule, which established performance-based standards for airplanes that weighed less than 19,000 pounds with 19 or fewer seats and recognized consensus-based compliance methods for specific designs and technologies. It also added new certification standards to address general aviation loss of control accidents and in-flight icing conditions. Overall, the rule streamlined the approval process, reduced the time it took to move safety enhancing technologies for small airplanes into the marketplace, and lowered overall costs for aviation manufacturers. The rule affected airplane manufacturers, engine manufacturers, and operators of affected equipment. (See March 9, 2016; August 30, 2017.)

20161219 December 19, 2016: DOT announced it had selected 25 stakeholders representing a cross-section of airport officials, state aviation officials, regional airline executives, consultants, and academicians to serve on its working group on improving air service to small communities. DOT created the working group in accordance with Section 2303 of the FAA Extension, Safety, and Security Act of 2016 (Reauthorization Bill), P.L. 114 190. The bill established the group and directed the Secretary of Transportation to issue a report to Congress by July 2017. The group would operate completely independently from DOT. Their deliberations would be guided by the provisions of the statute, specifically those directing the group to:

* consider whether funding for essential air service program (EAS), small community air service development program (SCASDP) and airport improvement program (AIP) is sufficient, and

* identify initiatives to help increase the supply of commercially qualified pilots.

20161228 December 28, 2016: FAA approved a certificate of authorization for the Northern Plains UAS Test Site to oversee unmanned aircraft operations that go beyond the line of sight of the operator. The North Dakota test site was the first in the nation to have such beyondline-of-sight operability. This meant the test site would be able to support the development, testing, and evaluation of a wide range of new applications for UAS technology. (See March 10, 2016; April 9, 2018.)

2017

20170110 January 10, 2017: FAA announced that U.S. airlines would no longer be required to make a pre-boarding notification to passengers that the Samsung Galaxy Note7 phone was prohibited from transport on aircraft. The devices were still prohibited on both passenger and air cargo aircraft, but the DOT lifted the requirement that the airlines make the specific pre-boarding notification. (See October 14, 2016.)

20170113 January 13, 2017: The Department of Transportation (DOT) issued two guidance documents emphasizing federal law guaranteed all passengers the right to fly free from discrimination. The documents superseded prior non-discrimination guidance issued by DOT and were developed in collaboration with representatives of airlines and civil rights organizations. The first document, “Guidance for Airline Personnel on Nondiscrimination in Air Travel,” contained example scenarios to help airline employees and contractors understand their legal obligation not to discriminate on the basis of race, color, national origin, religion, sex, or ancestry in air travel. The second document, “Passengers’ Right to Fly Free from Discrimination,” used a question-and-answer format to assist the flying public understand their rights when flying on commercial airlines.

20170120 January 20, 2017: Donald J. Trump took the oath of office as the President of the United States.

20170128 January 28, 2017: FAA and the City of Santa Monica, CA, announced a settlement agreement to resolve longstanding litigation over the future of Santa Monica Airport. The agreement required the city to maintain continuous and stable operation of the airport for 12 years, until December 31, 2028, and after that the city had the right to close the airport. In recognition of the city's authority to make decisions regarding land use, the agreement allowed Santa Monica to shorten the airport's single runway to 3,500 feet from its then current length of 4,973 feet. The city obligated to enter into leases with private aeronautical service providers to ensure continuity of those services until the runway was shortened and it decided to provide such services on its own. (See December 13, 2016; June 12, 2018.)

20170131 January 31, 2017: Elaine Chao became the Secretary of Transportation.

20170227 February 27, 2017: FAA announced Kenya complied with international safety standards and had been granted a Category 1 rating. A Category 1 rating meant Kenya’s civil aviation authority met International Civil Aviation Organization (ICAO) standards. With the Category 1 rating, Kenyan air carriers that secure the requisite FAA and DOT authority could establish service to the United States and carry the code of U.S. carriers. FAA had not previously assessed Kenya's civil aviation authority for compliance with ICAO standards.

20170315	March 15, 2017: FAA extended the prohibition of flight operations in the Tripoli flight information region (FIR) by all U.S. air carriers; U.S. commercial operators; persons exercising the privileges of a U.S. airman certificate, except when such persons operated a U.S.-registered aircraft for a foreign air carrier; and operators of U.S.-registered civil aircraft, except when such operators were foreign air carriers. FAA found the action necessary because of the continued hazards to persons and aircraft engaged in such flight operations. The prohibition, which was scheduled to remain in effect until March 20, 2017, would now remain in effect until March 20, 2019. (See March 20, 2015.)
20170424	April 24, 2017: Transportation Secretary Chao announced FAA had accepted the City of St. Louis's preliminary application for St. Louis Lambert International Airport to participate in the agency's Airport Privatization Pilot Program. Lambert was the second medium hub airport to join the program. On February 25, 2013, Luís Muñoz Marín Airport in Puerto Rico was the first medium hub airport to join the program. (See April 22, 1997.)
20170427	April 27, 2017: FAA published more than 200 facility maps to streamline the commercial drone authorization process. The maps depicted areas and altitudes near airports where an unmanned aerial system (UAS) could operate safely. Drone operators still needed FAA authorization to fly in those areas. This marked a key first step as FAA and industry worked together to automate the airspace authorization process. The maps helped drone operators improve the quality of their Part 107 airspace authorization requests and helped FAA process the requests more quickly. (See December 28, 2016; June 21, 2017.)
20170501	May 1, 2017: The BasicMed rule became effective, providing general aviation pilots an alternative to FAA's medical qualification process for third class medical certificates. General aviation pilots may take advantage of the regulatory relief in the BasicMed rule or opt to continue to use their FAA medical certificate. Under BasicMed, a pilot was required to complete a medical education course every two years, undergo a medical examination every four years, and comply with aircraft and operating restrictions. For example, pilots using BasicMed could not operate an aircraft with more than six people onboard and the aircraft must not weigh more than 6,000 pounds.
20170519	May 19, 2017: The U.S. Court of Appeals for the D.C. Circuit struck down a FAA rule requiring owners of large recreational drones and other model aircraft to registers their devices. FAA had announced the rule in 2015 in response to growing reports of drones flying near aircraft and airports. The Court ruled that federal law prohibited FAA from issuing rules and regulations pertaining to model aircraft. (See February 15, 2015; December 12, 2017.)

20170605	June 5, 2017: President Donald J. Trump announced plans to reform FAA by separating air traffic control from the agency into a non-profit, self-financing organization. On June 22, House of Representatives Transportation and Infrastructure Committee Chairman Bill Shuster (R-PA) introduced H.R. 2997, FAA reauthorization legislation that would separate air traffic control from FAA. On June 27, the full Transportation and Infrastructure Committee approved the bill by a vote of 32 to 25. The bill did not go to the full House for a vote. (See February 3, 2016; September 28, 2017.)
20170609	June 9, 2017: FAA announced it had extended the participation of two airports in the Military Airport Program (MAP) – Millington Regional Jetport in Millington, TN, and Waynesville-St. Robert Regional Airport in Waynesville, MO. The program used federal funds to convert former military airports to civilian use and supports improvements to joint-use airports. The MAP funding was a set-aside of the airport improvement program (AIP) that helped increase civilian aviation capacity by financing projects such as building or rehabilitating parking lots, fuel farms, hangars, utility systems, access roads, cargo buildings, and other airfield projects at former military airports. The other airports participating in the program included: Brunswick Executive Airport, Brunswick, ME; Alexandria International Airport, Alexandria, LA; and Jose Aponte de la Torre Airport, Ceiba, PR. (See August 17, 2016; October 29, 2021.)
20170621	June 21, 2017: FAA established a new aviation rulemaking committee (ARC) to help the agency create standards for remotely identifying and tracking unmanned aircraft during operations. The rulemaking committee held its first meeting on June 21-23 in Washington, DC. The group's membership represented a diverse variety of stakeholders, including the unmanned aircraft industry, the aviation community and industry member organizations, manufacturers, researchers, and standards groups. The rulemaking committee's tasks included:
	* Identify, categorize, and recommend available and emerging technologies for the remote identification and tracking of UAS.
	* Identify requirements for meeting the security and public safety needs of law enforcement, homeland defense, and national security communities for remote identification and tracking.
	* Evaluate the feasibility and affordability of the available technical solutions, and determine how well they address the needs of law enforcement and air traffic control communities. (See April 27, 2017; December 19, 2017.)
20170622	June 22, 2017: Bell Helicopter announced FAA certification of its new Model 505 Jet Ranger X.

20170628 June 28, 2017: FAA announced the appointment of Dan Elwell as deputy administrator. Elwell previously served as FAA assistant administrator for policy, planning and environment from 2006 to 2008. Most recently, he had been the senior advisor on aviation to U.S. Secretary of Transportation Elaine L. Chao. Before returning to public service, Elwell was president and managing partner of Elwell and Associates, an aviation consulting firm. Elwell also was senior vice president for safety, security and operations at Airlines for America and a vice president at the Aerospace Industries Association. (See July 18, 2016.)

20170629 June 29, 2017: FAA and NASA researchers dropped a 5,180-pound cross-section cut from a 68-passenger regional jet with 10 crash dummies on board from the NASA Langley Research Center's gantry. Both agencies planned to use the data from the drop to help inform the development of the next generation of aircraft frames. (See August 28, 2013.)

20170712 July 12, 2017: FAA signed a maintenance agreement guidance (MAG) with the Civil Aviation Authority of Singapore (CASS). It provided guidance for the implementation of the previously agreed-upon maintenance implementation procedures (MIP). In cases where there were sufficient certificated facilities in both partner countries, MIPs could reduce the number of surveillance activities, free up inspector resources for the authorities, and reduce the regulatory burden on industry. There were 58 FAA-approved repair stations located in Singapore. The MAG furthered the MIP agreement signed by FAA Administrator Michael Huerta and CAAS on February 16, 2016. That agreement was the first of its kind in Asia and reduces costs by allowing the reciprocal acceptance of Singapore and the United States' surveillance of maintenance work. (See February 16, 2016; February 8, 2018.)

20170723 July 23, 2017: FAA restructured its aircraft certification service, which realigned the organization based on function. The organization was structured into five functionally-aligned divisions:

* Policy and Innovation - to improve standards and policy with a particular focus on enabling new technology and innovative business models;

* Compliance and Airworthiness - to maintain and improve the record for certifying and assuring continued airworthiness of specific products;

* System Oversight - to coordinate and integrate safety oversight for the aircraft design and manufacturing community.

* Organizational Performance - to monitor performance relative to internal metrics and leads in planning and implementing strategic changes to improve performance;

* Enterprise Operations - to provide core services including human resources, finance, information management, and workforce development support to assure effective management of resources needed to accomplish the Service's mission.

	An executive director led the organization and is supported by two deputies. One deputy focused on tactical regulatory operations and the other is focused on strategic initiatives.
20170728	July 28, 2017: The U.S. Court of Appeals for the District of Columbia Circuit said FAA must take a second look at its policies in regard to airline seat sizes.
20170820	August 20, 2017: FAA's flight standards service made organizational adjustments that enabled it to operate with greater accountability, better use of resources, and more readiness to adapt to change. Organizational changes included the elimination of regional flight standards offices and the creation of four functional organizations within flight standards: air carrier safety assurance; general aviation safety assurance; safety standards; and foundational business.
20170821	August 21, 2017: Robison Helicopter announced it had received FAA type certification for its R66 Turbine Newscopter.
20170825	August 25, 2017: Hurricane Harvey, a Category 4 hurricane, made landfall near Rockport, Texas. After striking land, the storm moved over the Copano Bay and made a second landfall in Texas just north of Holiday Beach as a Category 3 hurricane. It then weakened to a tropical storm and stalled just inland, dropping very heavy rainfall and causing widespread flash flooding. On August 29, Harvey made its third and final landfall just west of Cameron, Louisiana. During the storm, more than 800 Houston area flights were canceled, including 704 at George Bush Intercontinental Airport and 123 at William P. Hobby Airport. Both airports eventually closed to traffic until storm damage had been assessed and repaired.
20170825	August 25, 2017: FAA Administrator Michael P. Huerta and local and state officials dedicated a new, 8,600-foot runway at Taos Regional Airport, New Mexico. Federal grants totaling about $25 million paid for most of the project cost.
20170828	August 28, 2017: FAA reissued a prohibition of certain flight operations in the Damascus Flight Information Region by all U.S. air carriers; U.S. commercial operators; persons exercising the privileges of an airman certificate issued by FAA, except such persons operating a U.S.-registered aircraft for a foreign air carrier; and operators of U.S. registered civil aircraft, except where the operator was a foreign air carrier. FAA found the action necessary to safeguard against continuing hazards to persons and aircraft engaged in such flight operations. (See December 30, 2014.)
20170830	August 30, 2017: The final rule overhauling airworthiness standards for general aviation airplanes published in December 2016 went into effect. The new part 23 revised standards for airplanes weighing 19,000 pounds or less and with 19 or fewer passenger seats by replacing prescriptive requirements with performance-based standards coupled with consensus-based compliance methods for specific designs and technologies. The rule also added new certification standards to address GA loss of control accidents and in-flight icing conditions. (See December 16, 2016.)

20170830	August 30, 2017: FAA issued a notice of final policy announcing it would reduce the number of radio frequencies used by flight service stations to communicate with aircraft in flight. Remote communications outlets (RCOs) in 641 locations would be decommissioned beginning in late fiscal year 2017. FAA planned to issue notices to airmen (NOTAMs) as it decommissioned each frequency. According to the notice of final policy, the current RCO network was "designed at a time when FSS personnel were handling over 10,000 radio calls per day . . . Today, they handle less than 1,000 calls per day." In addition to lower usage, the RCO infrastructure also included "duplicate, overlapping and seldom used frequencies." Frequencies in Alaska and those designated for emergency or military were not included.
20170904	September 4, 2017: Hurricane Irma made landfall at Barbuda as a Category 5 storm. Irma made successive landfalls at approximately on Sint Maarten, and on Ginger Island and Tortola, in the British Virgin Islands. The storm caused catastrophic damage in Barbuda, Saint Barthélemy, Saint Martin, Anguilla, and the Virgin Islands. On September 10, Irma made landfall in Cudjoi Key, Florida, and then again on Marco Island, and at Naples, Florida.
20170913	September 13, 2017: A FAA mobile tower began operations at the Cyril E. King International Airport in St. Thomas to provide air traffic services for all of the aircraft operating in and out of Key West in support of the relief and recovery efforts in the wake of Hurricane Irma. The existing air traffic control tower at the airport was badly damaged by the storm, and controllers managed air traffic from a tent on the airfield for several days before the mobile tower arrived. FAA shuttled controllers back and forth from San Juan, Puerto Rico to St. Thomas every day to staff the facility. In addition to the air traffic controllers, FAA sent an airport certification safety inspector to St. Thomas to ensure the airport was safe before air carrier operations resumed.
20170917	September 17, 2017: A FAA mobile air traffic tower arrived at Key West International Airport, Florida, to provide air traffic services for all of the aircraft operating in and out of Key West in support of the relief and recovery efforts in the wake of Hurricane Irma. In addition to the mobile tower, FAA deployed a trailer to the site to support the tower controllers with an air-conditioned break room and lavatories. Before the tower arrived, controllers managed air traffic airport from a small tent. FAA also authorized drone operations in Florida to aid rapid damage assessment. FAA authorized over 170 drone operations for the area damaged by Hurricane Irma. The primary authorized drone operations supported power and insurance companies.
20170920	September 20, 2017: Hurricane Maria, a category 4 storm, made landfall on Puerto Rico, after causing substantial damage in the Caribbean, especially on the island of Dominica. Puerto Rico sustained significant damage from winds and floods.

20170920	September 20, 2017: SAE International and Airlines for America presented the annual Better Way Award to a team of researchers from Sandia National Laboratories, FAA, Delta Airlines, NORDAM, and NDT Solutions. They received the award in recognition of efforts for furthering the efficacy and science of nondestructive testing. The recipients include Russell Jones and David Westlund of FAA; John Bohler, Robert Hager and Alexander Melton of Delta; Stephen Neidigk, Tom Rice and Dennis Roach of Sandia; Daryl Graham and Jeff Harper of NORDAM; and Larry Culbertson of NDT Solutions.
20170921	September 21, 2017: The first known mid-air collision between a drone and an aircraft occurred when a civilian drown collided with a U.S. Army UH-60 helicopter east of Staten Island, NY. The Army helicopter sustained damage to its main rotor blade, window frame, and transmission deck. NTSB investigators recovered a motor and arm from the drone, identified as a DJI Phantom 4. On December 14, 2017, NTSB said the collision was caused by the drone operator's failure to see the helicopter.
20170924	September 24, 2017: FAA hurricane recovery efforts began supporting more than a dozen commercial passenger flights per day at Luís Muñoz Marin International Airport in San Juan, Puerto Rico. As the agency continued to restore radars, navigational aids, and other equipment damaged during Hurricane Maria, the agency also implemented a slot reservation system to manage the demand for ramp space at the airport and to separate safely aircraft in the air.
20170928	September 28, 2017: FAA air traffic controllers handled the landing of the first commercial air carrier flight in weeks into the Cyril E. King International Airport in St. Thomas, U.S. Virgin Islands. Working from a mobile air traffic tower FAA moved to the island the previous weekend, the controllers began managing a mix of commercial, military, relief, and recovery flights to and from the storm-ravaged island.
20170928	September 28, 2017: The House and Senate passed the Disaster Tax Relief and Airport and Airway Extension Act of 2017, which extended extend FAA's authority to operate for six months through March 30, 2018. (See June 5, 2017; October 5, 2018.)
20171003	October 3, 2017: Ohio Country (WVA) Commission Administrator Greg Stewart announced the Wheeling-Ohio County Airport manager had received a letter from FAA stating the agency would not renew airport's air traffic control tower when it expired on September 30, 2019. Two contract controllers manned the tower between 8 am and 8 pm.
20171003	October 3, 2017: In a speech on the House Floor, Transportation and Infrastructure Committee Chairman Bill Shuster (R-PA) announced his air traffic control privatization bill would ensure that the new private, non-profit air traffic control corporation would not receive any appropriations or support from the federal government. The proposal would ensure general aviation users would not have to pay user fees, would be able to nominate two members to the new organization's board, and that the general aviation community would not have any airspace restrictions. (See June 5, 2017.)

20171005	October 5, 2017: Effective this date, FAA and the Department of Interior agreed to restrict drone flights up to 400 feet within the lateral boundaries of these sites: Statue of Liberty National Monument, New York, NY; Boston National Historical Park (U.S.S. Constitution), Boston, MA; Independence National Historical Park, Philadelphia, PA; Folsom Dam; Folsom, CA; Glen Canyon Dam; Lake Powell, AZ; Grand Coulee Dam; Grand Coulee, WA; Hoover Dam; Boulder City, NV; Jefferson National Expansion Memorial; St. Louis, MO; Mount Rushmore National Memorial; Keystone, SD; and Shasta Dam; Shasta Lake, CA. (See June 20, 2014; December 18, 2017.)
20171005	October 5, 2017: Tetra Tech, Inc., announced it had received a $356 million contract to provide engineering and technical support services to FAA. Under the five-year navigation technical assistance contract II (NAVTAC II), Tetra Tech would support FAA in the planning, research, development, implementation, maintenance, and decommissioning of FAA's navigation, landing, and lighting systems.
20171018	October 18, 2017: CNN reported it had received a Part 107 waiver from FAA allowing it to fly a small UAS over groups of people – the first FAA waiver of its kind. (See June 21, 2017; October 25, 2017.)
20171025	October 25, 2017: President Donald Trump directed Secretary of Transportation Elaine Chao to launch an initiative that would safely test and validate advanced drone operations in partnership with state and local governments in select jurisdictions. The initiative – the unmanned aircraft systems integration pilot program – would:
	* Give state, local and tribal governments a voice and a stake in the development of a federal regulatory framework for aviation;
	* Allow companies and governments to operate drones in ways currently restricted by FAA regulations – including beyond-visual-line-of-sight flights, nighttime operations and flights over people; and
	* Collect essential operational data on expanded UAS operations and community participation. (See October 18, 2017; November 8, 2017; October 30, 2020.)
20171026	October 26, 2017: A new runway opened at the Bozeman Yellowstone International Airport; the first new runway opened in the state in 30 years.
20171027	October 27, 2017: FAA and the Civil Aviation Administration of China (CAAC) announced the signing of an implementing agreement under the U.S.-China Bilateral Aviation Safety Agreement recognizing each other's regulatory systems with respect to the airworthiness of aviation products and articles. The agreement allowed both FAA and the CAAC to submit applications for validation for all categories of aviation products and addresses globalization challenges such as complex business models separating design and production. (See April 6, 2004; June 3, 2020.)

20171030	October 30, 2017: Workers at Alaska's Utqiagvik (formerly Barrow) airport removed a seal estimated to weigh 450 pounds from the runway. Workers from North Slope Animal Control used a sled to haul the seal off the runway. Alaska's Department of Transportation joined the fun by issuing a warning to pilots of "low sealings" at the airport.
20171108	November 8, 2017: FAA issued information in the Federal Register on the UAS integration pilot program and providing instructions on how to apply to participate in the program. Those interested had to submit to FAA a notice of intent by November 28. (See October 25, 2017.)
20171116	November 16, 2017: U.S. Transportation Secretary Chao announced plans to create a pilot program, called "Forces to Flyers," to help train and certify military veterans as commercial airline pilots.
20171116	November 16, 2017: Airbus announced that both the European Safety Agency and FAA type certificated its A350-1000.
20171117	November 17, 2017: Effective this date, FAA adopted a new noise standard for certain newly certificated subsonic jet airplanes and subsonic transport category large airplanes. The noise standard, known as Stage 5, applied to any person submitting an application for a new airplane type design with a maximum certificated takeoff weight of 121,254 pounds (55,000 kg) or more on or after December 31, 2017; or with maximum certificated takeoff weight of less than 121,254 pounds (55,000 kg) on or after December 31, 2020. As a result of the rule, new large airplane type designs in the subsonic jet airplanes and subsonic transport category will operate at least 7 decibels (dBs) quieter than airplanes in the current fleet. (See January 14, 2016.)
20171205	December 5, 2017: Secretary of Transportation Elaine Chao withdrew an Obama Administration proposal to require airlines and ticket agents to disclose fees for carry-on and checked baggage from the beginning of a fare inquiry. Chao also ended a rulemaking process begun in 2011 that would have required airlines to submit detailed data on ancillary fee revenue to DOT four times per year. (See January 24, 2012.)
20171207	December 7, 2017: FAA released a test version of a federal pilot records database, which provided airlines federal information on potential pilot hires. This allowed airlines to check the qualifications and backgrounds of pilots before they were hired. The database will eventually expand to include airline and state driving records. (See March 30, 2020.)
20171208	December 8, 2017: President Trump signed legislation providing appropriations to fund the government for two weeks through December 22.
20171212	December 12, 2017: President Trump signed the 2018 National Defense Authorization Act, which among other things, restored FAA's right to require small UAS to be registered and marked. (See May 19, 2017.)

20171213	December 13, 2017: FAA announced the United States and European Union (EU) signed amendments to two US-EU agreements that would expand areas for joint efforts on aviation safety and air traffic management harmonization. An amendment to the U.S-EU aviation safety agreement enabled FAA and the EU to finalize arrangements for reciprocal acceptance of approvals associated with flight simulator training devices and pilot licensing. It also allowed for future collaboration in aircraft operations and air traffic safety oversight. A second amendment expanded collaboration in the area of air traffic management modernization.
20171218	December 18, 2017: FAA announced it would ban UAS flights over seven Department of Energy facilities, effective December 29. The ban included Washington State's Hanford Site, Idaho National Laboratory, New Mexico's Los Alamos National Laboratory, South Carolina's Savannah River National Laboratory, Texas' Pantex Site, and Tennessee's Y12 National Security Site and Oak Ridge National Laboratory. (See October 5, 2017.)
20171219	December 19, 2017: The Unmanned Aircraft Systems (UAS) Identification and Tracking ARC chartered in June submitted its report and recommendations to the agency on technologies available to identify and track drones in flight and other associated issues. (See June 21, 2017; May 9, 2018; December 26, 2019.) Those recommendations included:
	* FAA should consider two methods for remote ID and tracking of drones: direct broadcast (transmitting data in one direction only with no specific destination or recipient) and network publishing (transmitting data to an internet service or group of services).
	* The data collected must include a unique identifier for unmanned aircraft, tracking information, and drone owner and remote pilot identification.
	* FAA should promote fast-tracked development of industry standards while a final remote ID and tracking rule is developed.
	* FAA should implement a rule in three stages, with an ultimate goal that all drones manufactured or sold within the United States that comply with the rule must be so labeled.
	* FAA should coordinate any ID and tracking system with the existing air traffic control system and ensure it does not substantially increase workloads.
	* FAA should exempt drones operating under air traffic control or those operating under the agency's discretion (public aircraft operations, security or defense operations, or with a waiver).
	* FAA should review privacy considerations, in consultation with privacy experts and other federal agencies, including developing a secure system that allows for segmented access to the ID and tracking information. Within the system, only persons authorized by FAA (e.g., law enforcement officials, airspace management officials, etc.) would be able to access personally identifiable information.

2018

20180107	January 7, 2018: Michael Huerta's 5-year term as FAA Administrator ended. Deputy Administrator Daniel Elwell became the agency's acting administrator. (See March 27, 2012.)
20180111	January 11, 2018: FAA approved an operating license for Alaska Airlines and Virgin American to operate as a single airline. Alaska Airlines had announced the purchase of Virgin America in April 2016.
20180115	January 15, 2018: A number of airlines, American, Alaska, Hawaiian, Delta, United, and Southwest, prohibited passengers to fly with smart bags that contained nonremovable lithium batteries. The policy change applied to checked- and carry-on bags that used lithium batteries to power high-tech features such as a USB charging station and a location tracker. Other airlines followed suit.
20180119	January 19, 2018: FAA approved Boeing's 787-10 Dreamliner for commercial use. (See December 2, 2014; August 28, 2020.)
20180206	February 6, 2018: FAA announced it had signed an enhanced Bilateral Aviation Safety Agreement Implementation Procedures for Airworthiness (BASA-IPA) with the Civil Aviation Authority of Singapore (CAAS). The BASA-IPA provided for the mutual recognition of airworthiness of civil aeronautical products, and included an expanded scope of modifications and repairs allowed beyond cabin interiors. These enhancements reduced duplicate certification activities for design approvals issued to air operators and aeronautical design industries from both the U.S. and Singapore, resulting in significant time and cost savings. (See July 12, 2017.)
20180216	February 16, 2018: FAA certificated the Boeing 737 MAX-9 jet for commercial operations. (See October 29, 2018.)
20180228	February 28, 2018: The Brazilian Civil Aviation Agency, FAA, and the European Aviation Safety Agency certified the Embraer E190-E2.
20180301	March 1, 2018: Aviation Week announced its 62nd Annual Laureate Award winners. The FAA/Industry Commercial Safety Aviation Safety Team/Aviation Safety Information Analysis and Sharing Initiative won the commercial safety award.
20180322	March 22, 2018: FAA published an emergency order regarding "doors off" and "open-door" operations. The agency issued the order to all operators and pilots of flights for compensation or hire with the doors opened or removed or using aircraft registered in the United States for doors off flights. It prohibited the use of supplemental passenger restraint systems that could not be released quickly in an emergency in doors off flight operations. The order also prohibited passenger-carrying doors off flight operations unless the passengers were at all times properly secured using FAA approved restraints.

20180330	March 30, 2018: The Federal Communications Commission (FCC) gave formal approval to a plan by SpaceX to build a global broadband network using satellites. The FCC said the decision was "the first approval of a US.-licensed satellite constellation to provide broadband services using a new generation of low-Earth orbit satellite technologies." (See September 1, 2016; November 15, 2020.)
20180402	April 2, 2018: NASA announced it had awarded Lockheed Martin a $247.5 million contract to design and build a new X-plane, known as the Low-Boom Flight Demonstrator (LBFD), which may soar silently over the U.S. by 2022.
20180409	April 9, 2018: FAA granted a beyond visual line of sight (BVLOS) waiver to Xcel Energy, the first such waiver for utility inspection operations. Xcel planned to operate a small BVLOS helicopter weighing less than 55 pounds within a designated area approximately 20 miles north of Denver International Airport. On September 12, Xcel launched its first such drone to inspect electric power lines near Fort St. Vrain Generating Station in Platteville, Colorado. (See December 28, 2016; August 20, 2018.)
20180410	April 10, 2018: Bye Aerospace's prototype Sun Flyer 2, an electrically powered fixed-wing aircraft, made its first flight. (See April 26, 2018.)
20180417	April 17, 2018: Southwest flight 1380, A Boeing 737, en route from New York LaGuardia Airport to Dallas Love Field, suffered an engine failure and made an emergency landing at Philadelphia International Airport. One passenger died when an explosion involving the left engine blew out a window and caused the cabin to depressurize. The passenger fatality was the first on a U.S. airline since 2009. (See February 12, 2009.)
20180420	April 20, 2018: FAA issued an emergency airworthiness directive (EAD) that required operators to inspect fan blades on certain CFM56-7B engines within 20 days. The agency based the directive on a CFM International Service Bulletin issued on this date and on information gathered from the investigation of the Southwest Airlines engine failure. Engines with more than 30,000 total cycles from new had to complete inspections within 20 days. The engine manufacturer estimated the corrective action affected 352 engines in the U.S. and 681 engines worldwide.
20180426	April 26, 2018: FAA issued an airworthiness certificate to Slovenia-based light aircraft maker Pipistrel for its Alpha Electro all-electric plane. The two-seat electric trainer, tailored to the needs of flight schools, had an all-composite body with electric motor and 20 kWh battery packs. (See April 10, 2018; June 6, 2019.)
20180509	May 9, 2018: Secretary of Transportation Elaine L. Chao announced DOT had selected 10 participants for the Unmanned Aircraft Systems (UAS) Integration Pilot Program. First announced in October 2017, the initiative partnered FAA with local, state, and tribal governments, which then partnered with private sector participants to safely explore the further integration of drone operations. (See December 19, 2017; July 20, 2018.) The 10 selectees included:
	* Choctaw Nation of Oklahoma, Durant, OK

	* City of San Diego, CA
	* Innovation and Entrepreneurship Investment Authority, Herndon, VA
	* Kansas Department of Transportation, Topeka, KS
	* Lee County Mosquito Control District, Ft. Myers, FL
	* Memphis-Shelby County Airport Authority, Memphis, TN
	* North Carolina Department of Transportation, Raleigh, NC
	* North Dakota Department of Transportation, Bismarck, ND
	* City of Reno, NV
	* University of Alaska-Fairbanks, Fairbanks, AK
20180511	May 11, 2018: The DC Circuit Court of Appeals upheld a lower-court ruling in favor of the Transportation Department's decision to approve flights into the U.S. by Norwegian Air International. Brought by four unions representing 135,000 aviation workers, the appellate case centered on language in so-called Open Skies agreements the U.S. negotiated with other countries. (See December 2, 2016.)
20180511	May 11, 2018: The United States and the United Arab Emirates resolved a years-old disagreement over alleged Emirati government subsidies to its airlines and accusations of unfair competition in the U.S. Under the deal, Dubai-based Emirates and Abu Dhabi-based Etihad Airways agreed to voluntarily publish annual financial statements consistent with international accounting standards. The major U.S. carriers – Delta Air Lines, American Airlines, and United Airlines – had long alleged those financials reports obscured billions in hidden subsidies by the government. The more sensitive issue related to flights operated by Emirates that departed from the UAE, made stops in a second nation, and then continued on to the United States was not included in the deal. Emirates operated two such routes, known in the industry as "Fifth Freedom" flights, with one going from Dubai to Athens to Newark and the other going from Dubai to Milan to New York. The U.S. airlines had sought a binding commitment from the Gulf airlines that they would not start additional Fifth Freedom flights. Instead, they got a letter in which the Emiratis stated they currently had no plans to add more such flights. (See December 9, 2015.)
20180515	May 15, 2018: The Department of Transportation issued a statement instructing U.S. airlines to continue allowing the transport of the most common service animals. The Department said it "wants to ensure that individuals with disabilities can continue using their service animals while also helping to ensure that the fraudulent use of other animals not qualified as service animals is deterred." The Department said it planned to ask for public comment about amending its existing regulations. (See October 5, 2018.)

20180524 May 24, 2018: President Donald Trump signed a policy directive to pursue sweeping regulatory reforms the administration said would encourage commercial space innovation. He gave Transportation Secretary Elaine Chao until February 2019 to review space launch and re-entry licensing process and make changes where the regulatory regime proved inefficient, costly, and burdensome to private enterprise. It specified areas of the licensing process that should receive specific attention during the reform process, including the possibility of requiring just one license for all forms of commercial space launch and re-entry. (See August 1, 2016.)

20180525 May 25, 2018: A three-judge panel of the DC Circuit Court of Appeals held that "the FAA can require an insulin-dependent diabetic to submit to expensive and invasive glucose-monitoring to establish that he is medically fit to fly commercial aircraft." (See June 22, 2020.)

20180529 May 29, 2018: RTCA's umbrella charter agreement with the FAA as a federal advisory committee expired. As a result, FAA reestablished its Drone Advisory Committee and the NextGen Advisory Committee as separate entities with their own charters. RTCA had served as a federal advisory committee since 1976. (See September 16, 2016.)

20180612 June 12, 2018: The NBAA filed a petition to overturn a controversial settlement agreement between the FAA and Santa Monica, California, concerning the city's airport. The subsequent ruling by the Court of Appeals for the District of Columbia Circuit did not address the merits of the filing by the NBAA, but rather denied the petition on procedural grounds. (See January 28, 2017.)

20180618 June 18, 2018: FAA approved Boeing's design for the 777X, which featured retractable wings. The design expanded the wingspan to 235 feet, which was too wide for most airports. As a result, Boeing designed the new wings so they could retract and reduce the span to 212 feet – small enough to continue using terminals designed for older 777s. FAA added special conditions to its approval to ensure the plane's safety, such as lockouts and alarms to eliminate any chance of an aircraft attempting to take off while the wingtips were stowed or the wingtips being inadvertently folded in flight.

20180622 June 22, 2018: FAA and the European Commission signed an agreement – called Bilateral Oversight Board Decision 0008 (BOB 0008) – which reduced involvement of the validating authority and opened the door to lower the fees EASA charged U.S. manufacturers. The agreement also permitted the agencies to approve basic aircraft type certifications with minimal scrutiny.

20180623 June 23, 2018: FAA began operations in the new air traffic control tower at Sarasota-Bradenton International Airport. FAA and the Sarasota Manatee Airport Authority (SMAA) built the new, 525 square-foot tower under a unique agreement. The FAA funded the new tower design and engineering and electronic equipment. Agency technicians and engineers installed the electronics and maintained the equipment. SMAA funded, constructed, and owned the new tower. SMAA maintained the facility, which included a 9,000 square foot base building that housed equipment, administrative offices, and training rooms. FAA dedicated the new tower on September 10, 2018.

20180626	June 26, 2018: FAA Acting Administrator Dan Elwell signed a memorandum of agreement (MOA) with the Department of Defense to guide joint efforts on ADS-B Out implementation. Secretary of the Air Force signed the agreement on July 17. FAA required aircraft that fly in most U.S. controlled airspace to be equipped with a Version 2 ADS-B Out system as of 2020. Under the MOA, the agencies "are jointly pursuing a post-2020 accommodation strategy that assures the Defense Department the same level of access to the national airspace system that it continues to have prior to the mandate." "The accommodations will address those Defense Department aircraft that will not be equipped with ADS-B Out by 2020, as well as certain national security mission sets conducted by aircraft that are ADS-B Out equipped." Some military aircraft may not be equipped until 2029. (See September 19, 2016; October 12, 2018.)
20180720	July 20, 2018: In a policy statement, FAA said it had exclusive authority over aircraft operations, including unmanned aircraft systems (UAS), within navigable airspace, although it allowed state and local governments to regulate landing sites. Flight paths, altitudes, or operational bans within navigable airspace – defined by federal regulation as airspace at or above prescribed minimum flight altitudes, including airspace needed for safe takeoff and landing – remained within FAA's purview. (See May 9, 2018; October 1, 2018.)
20180720	July 20, 2018: FAA issued Gulfstream Aerospace a production certificate for its G500 twin-engine business jet.
20180810	August 10, 2018: A suicidal employee of Horizon Air stole an Air Bombardier Q400 turboprop at Seattle's SeaTac International airport and crashed it on Ketron Island.
20180817	August 17, 2018: FAA granted Spaceport Colorado its operator license making it the 11th spaceport in the country. Located at Front Range Airport, the new spaceport could accommodate space planes that take off like a normal jet and then engage rockets. The airport said it planned to change its name to Colorado Air and Space Port. (See June 30, 2015; May 5, 2020.)
20180820	August 20, 2018: In a reorganization of its flight standards organization, FAA moved all flight standards elements under four functionally aligned areas: Office of Air Carrier Safety Assurance, Office of General Aviation Safety Assurance, Office of Safety Standards, and Office of Foundational Business.
20180820	August 20, 2018: General Atomics Aeronautical Systems Inc. flew the first large drone approved by the FAA to fly beyond the line of sight of the pilot and without using a manned airplane to observe the flight. The flight took place at the Northern Plains Test Site in Grand Forks, North Dakota. (See April 9, 2018; October 16, 2018.)
20180904	September 4, 2018: FAA granted Boeing's KC-46 mid-air refueling tank a supplemental type certificate.

20180909	September 9, 2018: FAA issued a notice to airmen updating guidance advising U.S. aircraft operators to exercise caution when flying within or adjacent to the Tehran Flight Information Region (FIR) because of military activities in the Middle East region. Among the threats to civil aviation, FAA listed Russian air-launched cruise missile attacks overflying Iran toward targets in Syria and naval missiles launched from the Caspian Sea. The agency also warned of the potential of Iranian surface-to-surface missile launches from western Iran, targeting Islamic State positions in the region, as well as Iranian GPS jammers. (See June 21, 2019.)
20180918	September 18, 2018: In dual order extensions, the FAA continued restrictions dating to its 1968 High-Density Rule (HDR) that limited arrivals and departures at the New York's LaGuardia and John F. Kennedy International airports during peak demand periods to reduce congestion. With the phase-out of the HDR in 2007, the FAA ordered temporary limits at LGA and JFK that periodically had been extended, most recently in 2016 at both airports.
20180918	September 18, 2018: FAA extended the prohibition against certain flight operations in the Pyongyang Flight Information Region (SFAR 79) to September 18, 2020, because of the hazardous situation created by North Korean military capabilities and activities. (See September 8, 2020.)
20180921	September 21, 2018: FAA signed separate agreements with Brazil's Agência Nacional de Aviação Civil (ANAC) and Transport Canada Civil Aviation (TCCA), which made it easier to approve each country's aircraft and aviation products. The agency signed the first FAA-ANAC Implementation Procedures Agreement (IPA) in September 2006, with two amendments thereafter. The latest revision expanded the IPA to include Part 23 (general aviation aircraft) as well as risk based decision criteria for the U.S. and Brazil to validate each other's aviation products. FAA and TCCA signed a Shared Surveillance Management Plan that defined the process by which they recognized each other's surveillance of manufacturers and their suppliers in the United States and Canada. The Plan ensured manufacturers, certificate holders, production approval holders, and suppliers complied with the responsible countries' applicable regulatory requirements.
20180928	September 28, 2018: FAA received a NASA-developed technology called flight deck interval management (FIM). FIM operated with terminal spacing and sequencing technology to help air traffic controllers manage aircraft arrivals and pilots determine appropriate flight speeds. Using the system, controllers received visual aids with trajectory information they used to guide pilots. The pilots received the information and enter their assessments into the FIM. The technology transfer was part of Air Traffic Management Technology Demonstration 1, a government-industry effort aiming to identify new technologies to help airports reduce delays in arrivals.
20180928	September 28, 2018: FAA announced it would automatically refer cases of drone interference with first responders for legal enforcement action.

20181001 October 1, 2018: FAA announced nine new partners to its Low Altitude Authorization and Notification Capability (LAANC) initiative, a collaboration between the FAA and the drone industry that provided near real-time processing of airspace authorizations for Part 107 drone operators nationwide who fly in controlled airspace. The new partners included: Aeronyde, Airbus, AiRXOS, Altitude Angel, Converge, DJI, KittyHawk, UASidekick and Unifly. The nine joined five companies – AirMap, Harris Corp., Project Wing, Skyward and Thales Group. The companies already met the technical and legal requirements to provide LAANC Services. (See July 23, 2019.)

20181005 October 5, 2018: President Trump signed a five-year FAA reauthorization bill (PL 115– 254), which provided one of the longest reauthorization periods for the agency since the 1980s. Among other things, the legislation required FAA to: establish minimum standards for seat size and pitch on commercial airliners; prohibit airlines from bumping passengers once they were on board; banned the placement of live animals in storage bins and set policies for support animals in the cabin (See May 15, 2018; August 8, 2019.); prohibited customers from using cell phones in flight; required FAA to establish an aviation consumer advocate and create an Office of Spaceports; and determine whether airlines provided adequate lavatory access. The bill also required airlines to provide more information to customers about the assistance they provided in event of weather delays. It established a task force to study in-flight sexual assaults and required most commercial airlines to install a second security barrier – a wire mesh gate – to guard against cockpit intrusions. In addition, it gave FAA, the National Telecommunications and Information Administration, and the Federal Communications Commission 270 days to make a determination on what spectrum drones could use to communicate and report its finding to Congress. (See September 28, 2017.)

20181012 October 12, 2018: FAA announced a relaunch of its $500 ADS-B rebate program effective immediately and ending October 11, 2019. The Agency made $4,900,000 available under the program, which would fund 9,792 ADS-B Out installations. Under the previous rebate program, which ran from September 19, 2016, to September 18, 2017, the FAA issued more than 10,000 rebate payments. (See June 26, 2018; October 11, 2019.)

20181016 October 16, 2018: FAA announced it would provide $40.9 million to Piedmont Triad International Airport toward building a 180-foot air traffic control tower. When completed, the tower would accommodate up to eight positions for air traffic controllers in a 550-square-foot tower cab. It would replace a 90-foot-tall tower that had been in operation since 1974. A 15,650-square-foot base building would anchor the new tower, which would house the terminal radar approach control with up to 10 radar positions for air traffic controllers. The base building also would include administrative offices and a training classroom. The FAA planned to begin construction in early 2019 and commission the facility in early 2022.

20181016	October 16, 2018: Avitas Systems, a GE venture, received the first FAA approval to fly a 55-plus-pound UAS beyond the visual line of sight with no spotter for commercial purposes. Operating on Shell oil facilities in the Permian Basin in part of Loving County, Texas, the company used ground-based radar as its primary enabling technology. (See August 20, 2018; January 8, 2019.)
20181018	October 18, 2018: FAA announced U.S. airlines and code-share partners could resume flights at three Ukrainian airports and over parts of the Black Sea, citing improved safety and security in parts of Ukraine. The agency had barred flights over the war zones of the Crimea and Ukraine in April 2014, and expanded prohibitions after Malaysia Airlines Flight MH17 was shot down while it flew over eastern Ukraine, killing nearly 300 people on board. FAA said it would maintain prohibitions on flights over the Crimea and parts of Ukraine. It would, however, allow takeoffs and landings at Kharkiv, Dnipropetrovsk, and Zaporizhzhia international airports in Ukraine. (See July 17, 2014.)
20181026	October 26, 2018: FAA, in cooperation with DoD and the U.S. Coast Guard, restricted drone flights near U.S. Navy and Coast Guard vessels operating in the vicinity of Naval Base Kitsap in Washington State and Naval Submarine Base Kings Bay in Georgia. Drone operations were required to maintain a distance of at least 3,000 feet laterally and 1,000 feet vertically from these vessels. FAA had earlier imposed restrictions on drone flights near other Department of Defense and Justice facilities.
20181029	October 29, 2018: Indonesian Lion Air Flight JT610, a Boeing 737 Max 8 jet, crashed shortly after takeoff. None of the 189 people onboard survived the crash. After recovering the plane's flight data recorder, the Indonesian National Transportation Safety Committee indicated the Lion Air jet experienced erroneous input from one of its angle of attack sensors. On November 7, Boeing issued a bulletin to airlines worldwide warning of erroneous readings from flight-control software on the Max 8. FAA also issued an emergency notice to all operators of Max 8 and 9 planes. The agency warned airlines that erroneous sensor inputs like the one that came into play in the October 29 crash "could cause the flight crew to have difficulty controlling the airplane," leading to "possible impact with terrain." (See February 16, 2018; March 10, 2019.)
20181101	November 1, 2018: A new airline, California Pacific, began operations with flights from Carlsbad, CA, to San Jose, CA, and Reno, NV. It expanded flights to Las Vegas, NV, and Phoenix, NV, on November 15. Its fleet included four, 50-seat Embraer SA E145 jets. FAA granted its operating certificate in May 2018.
20181107	November 7, 2018: Bombardier Business Aircraft announced its Global 7500 aircraft had received FAA type certification.
20181109	November 9, 2018: In the aftermath of an incapacitated controller found in the Las Vegas airport tower on November 7, the FAA issued a new controller staffing policy. The agency said major airport towers no longer would be able to combine controller responsibilities to one position prior to midnight and 90 minutes after the start of the shift, allowing another controller to go on break.

20181114	November 14, 2018: The Sioux County Iowa officials dedicated the new Sioux County Regional Airport near Maurice, Iowa.
20181115	November 15, 2018: Department of Transportation Secretary Elaine Chao announced she had reconstituted the Aviation Consumer Protection Advisory Committee (ACPAC) and established the National In-Flight Sexual Misconduct Task Force as an ACPAC Subcommittee. The task force would review practices, protocols, and requirements of U.S. airlines in responding to and reporting allegations of sexual misconduct by passengers on board commercial aircraft. It would also provide recommendations on best practices relating to training, reporting, and data collection. (See October 18, 2016.)
20181130	November 30, 2018: FAA announced the U.S. and Argentina signed a new bilateral aviation safety agreement during the G20 summit in Buenos Aires. The agreement replaced an accord the two countries signed in 1989, and allowed the FAA and Argentina's National Civil Aviation Administration (ANAC) to increase collaboration on airworthiness certification of civil aviation products and in the areas of design, production, flight operations, environmental certification and aircraft maintenance. Paired with a new Implementation Procedures for Airworthiness understanding, the agreement permitted ANAC to work on behalf of the U.S. in Argentina, reducing duplication of certification activities for design approvals issued to operators and manufacturers, FAA said. FAA expected the new bilateral agreement to take effect in 2020.
20181204	December 4, 2018: FAA opened its new Atlanta Flight Operations Facility at Cobb County International Airport in Kennesaw, Georgia. The 32,050-square-foot facility, accommodated six King Air 300 aircraft and included shop space for aircraft maintenance and repair and space to accommodate 26 FAA employees.
20181210	December 10, 2018: FAA extended a ban on flights over Syria until 2020, citing the "threat to civil aviation from the multifaceted conflict and extremist threat, and militant activity." The prohibition originally issued in December 2014, applied to all U.S. carriers and commercial operators, as well as anyone flying with a FAA-issued airman certificate or operating a U.S.-registered civil aircraft, except when flown by a foreign carrier. While the ban did not extend to foreign carriers, Transportation Department codeshare authorizations forbid foreign carriers using a U.S. partner's code from operating in prohibited airspace. (See August 18, 2014.)
20181213	December 13, 2018: Virgin Galactic launched a spacecraft more than 50 miles high, reaching FAA's definition of space. The spacecraft reached a height of 51.4 miles, hitting a top speed of Mach 2.9, before descending and returning the company's space port in Mojave, CA. Although it did not reach orbit, the flight became the first launch of a spacecraft from U.S. soil with humans on board to reach the edge of space since the Space Shuttle was retired in 2011. (See January 10, 2014.)

20181218	December 18, 2018: India's Directorate General of Civil Aviation announced that after a FAA audit completed in July 2018, India had retained its Category 1 aviation safety rating. FAA conducted the audit to confirm India's adherence to ICAO standards. (See April 8, 2015.)
20181222	December 22, 2018: Because of a lack of 2019 appropriations funding, the FAA, among other agencies, furloughed employees. Many employees in essential positions, such as air traffic controllers, remained on the job, but without pay. The furlough ended on January 28, when the President signed a continuing resolution providing agencies affected by the lack of an appropriation, funding for three weeks. (See October 1, 2013.)

2019

20190108	January 8, 2019: State Farm announced it received a long-term FAA waiver to fly drones beyond the operator's visual line of sight (BVLOS) and over people. FAA granted State Farm the first such national waiver to operate drones for damage-assessment flights after natural disasters. The waiver would expire in November 2022. The company had received previous waivers to fly drones BVLOS and over people following Hurricanes Florence in September and Michael in October 2018. (See October 16, 2018; July 31, 2019.)
20190118	January 18, 2019: Effective this date, FAA recalled 2,200 furloughed aviation safety inspectors and engineers back to work.
20190125	January 25, 2019: President Donald Trump signed a measure to end the 35-day-long partial federal government shutdown.
20190214	February 14, 2019: FAA announced Vietnam complied with international safety standards and had been granted a Category 1 rating under the agency's International Aviation Safety Assessment (IASA) program. FAA based the Category 1 status on its August 2018 assessment of the safety oversight provided by the Civil Aviation Administration of Vietnam. A Category 1 rating means Vietnam's civil aviation authority met International Civil Aviation Organization (ICAO) standards for personnel licensing, operations, and airworthiness. (See May 13, 2019.)
20190223	February 23, 2019: Effective this date, FAA required drone operators to display their aircraft registration numbers on the outside of the drone.
20190223	February 23, 2019: An Atlas Air Boeing 767 cargo jet operated on behalf of Amazon Air crashed east of Houston, TX, killing all three people onboard.
20190227	February 27, 2019: The Department of Transportation issued an interim final rule prohibiting passenger airlines from carrying rechargeable lithium-ion batteries as cargo, because of the potential for causing uncontrollable fire in cargo holds. The rule also required lithium-ion cells and batteries to be shipped at not more than a 30 percent state of charge when carried aboard cargo-only aircraft.
20190304	March 4, 2019: Commercial service began at Paine Field in Everett, WA, as Alaska Airlines began operations from the airport's new passenger terminal. The airport, also called the Snohomish Country Airport, had previously been used only for Boeing's test flights. FAA had approved the start of commercial flight at the airport on February 20, 2019.

20190308	March 8, 2019: FAA and European Union (EU) officials signed two decisions associated with the Airworthiness Annex of the US/EU Safety Agreement. The Bilateral Oversight Board (BOB) Decision 0008-0001 (PDF) enabled reductions of the EU's European Aviation Safety Agency (EASA) fees for validation of U.S. aerospace products. The decision covered simple design modifications such as basic supplemental type certificates. The second decision, BOB Decision 0009, amended the US/EU Safety Agreement to remove country specific limitations associated with aeronautical products and parts eligible for import into the United States. This amendment treated all EU Member States equally under the agreement and recognized EASA's oversight and standardization processes throughout their jurisdiction.
20190310	March 10, 2019: A Boeing 737 Max 8 operated by Ethiopian Airlines crashed shortly after takeoff killing all 157 people onboard. A Lion Air Boeing 737 Max 8 had crashed on October 29, 2018, killing all 189 people onboard. China immediately ordered Chinese airlines to ground all 96 Boeing 737 MAX 8 aircraft used on domestic flights. Twenty-two airlines and several countries followed China's lead in grounding the aircraft. On March 13, FAA grounded the Boeing 737 Max when it became aware of new satellite data suggesting a link between the Ethiopian air crash and the earlier crash in Indonesia. Canada had grounded the aircraft earlier in the day. (See October 29, 2018; March 25, 2019.)
20190325	March 25, 2019: Secretary of Transportation Elaine Chow announced plans to establish a committee of experts to review how FAA certified the Boeing 737 Max 9. She had asked the Department's Inspector General on March 19 to audit the FAA's certification process.
20190415	April 15, 2019: The Embraer E195-E2 jet received simultaneous type certification from three major regulatory authorities: Brazilian Civil Aviation Agency; FAA; and the European Aviation Safety Agency. (See March 10, 2019; October 11, 2019.)
20190418	April 18, 2019: FAA grounded the fleet of Cirrus Vision SF50 light aircraft because of issues with the aircraft's angle of attack sensor. The agency issued an emergency airworthiness directive following three incidents on Cirrus SF50 aircraft in which the stall warning and protection system or electronic stability and protection system engaged even though there was sufficient airspeed and proper angle of attack for normal flight. Before further flight, the aircraft's angle of attack sensor had to be replaced with an improved sensor.
20190419	April 19, 2019: A custom-made drone flew a human kidney 2.8 miles to a nearby hospital in Baltimore in the world's first drone delivery of a human organ. The nighttime drone flight followed a three-year collaboration among doctors, researchers, engineers, and aviation experts at the University of Maryland Medical Center and the Living Legacy Foundation of Maryland, a Baltimore-based organization that oversees organ procurement in the state.

20190423	April 23, 2019: Department of Transportation Secretary Elaine L. Chao announced FAA had awarded the first air carrier certification to a drone delivery company, Wing Aviation. The certification paved the way for Wing Aviation to begin commercial package delivery in Blacksburg, VA. Wing partnered with the Mid-Atlantic Aviation Partnership and Virginia Tech, as one of the participants in the Department's Unmanned Aircraft Systems Integration Pilot Program.
20190425	April 25, 2019: Local and state officials officially opened the new Greensburg Municipal Airport in Greensburg, Kansas.
20190430	April 30, 2019: Airports Council International-North America (ACI-NA) and the Association for Unmanned Vehicle Systems International (AUVSI) announced the creation of a Blue Ribbon Task Force on UAS Mitigation at Airports comprised of representatives from associations representing airports and unmanned aircraft systems to address the challenge of drone incursions at U.S. airports. Former FAA Administrator Michael Huerta and Deborah Flint, CEO of Los Angeles World Airports, served as the task force co-chairs. The task force hoped to inform UAS mitigation efforts at other facilities, including landmarks, stadiums, prisons, and military bases.
20190513	May 13, 2019: FAA announced the Republic of Costa Rica did not comply with ICAO safety standards and had been assigned a Category 2 rating based on a reassessment of the country's civil aviation authority. A Category 2 rating meant the country either lacked laws or regulations necessary to oversee air carriers in accordance with minimum international standards, or its civil aviation authority – a body equivalent to the FAA for aviation safety matters – was deficient in one or more areas, such as technical expertise, trained personnel, record-keeping, or inspection procedures. In 1996, FAA assigned Costa Rica an initial Category 1 rating. FAA conducted an in-country reassessment of Costa Rica under the IASA program in October 2018. (See February 14, 2019; November 11, 2019.)
20190515	May 15, 2019: With the approval of the Secretary of State and in close coordination with the Acting Secretary of Homeland Security, Secretary of Transportation Chao issued an order suspending air service between the United States and Venezuela. The Acting Secretary of Homeland Security requested the action based on an assessment of security conditions in Venezuela.
20190531	May 31, 2019: FAA announced a collaborative effort with the Air Force to counter the national aircrew shortage. Through this effort, the FAA and Air Force agreed to explore options and establish goals to address aviation workforce issues, with a particular focus on cross-agency collaboration. The work of this collaboration will identify and support solutions based in the following areas:
	* Priming the pipeline: What can be done to attract new people to critical aviation professions?
	* Pathways to proficiency: How can efficiency in training be maximized?

	* Productive partnerships: How can we promote productive partnerships with government, Department of Defense, academia and industry?
20190605	June 5, 2019: FAA broke ground for a new air traffic control tower and terminal radar approach control facility at Piedmont Triad International Airport in Greensboro, NC. FAA planned to invest $61 million in the new facility. The tower would be 180 feet tall, topped by a 550-square-foot tower cab to accommodate up to eight positions for air traffic controllers. The 15,650-square-foot base building would anchor the new tower and house the terminal radar approach control (TRACON) facility. FAA expected to commission the facility in 2020.
20190605	June 5, 2019: United Airlines debuted is Flight for the Planet aircraft, a Boeing 737- 900ER. The plane was the first known aircraft to use sustainable aviation biofuel, zero cabin waste efforts, and carbon offsetting. (See October 23, 2015; November 20, 2020.)
20190606	June 6, 2019: Ampaire unveiled its prototype electric-powered airplane, the Ampaire 337, in a test flight from Camarillo Airport in California. The twin-engine airplane, which could carry seven passengers, was based on the Cessna 337 Skymaster. (See April 26, 2018; January 7, 2020.)
20190621	June 21, 2019: FAA issued an emergency order to U.S. civil aircraft prohibiting all American aircraft operators from entering the Tehran Flight Information Region in the area above the Persian Gulf and Gulf of Oman, the region where a U.S. drone was shot down on June 20. (See September 9, 2018; August 20, 2019.)
20190621	June 21, 2019: FAA and NASA performed a crashworthiness test on a Fokker F28 aircraft at the Landing and Impact Research Facility at NASA's Langley Research Facility in Hampton, VA. Data from the test will help researchers ascertain how portions of the cabin interior and occupants of the aircraft react in a crash. In addition, test results will support the development of a new performance based rule that will simplify the certification process by eliminating or minimizing the use of special conditions to certify aircraft.
20190626	June 26, 2019: Secretary of Transportation Chao and Argentine Minister of Transport Guillermo Dietrich signed a Protocol of Amendment that modernized the 1985 Air Transport Services Agreement between the two countries. The agreement allowed for increased competition and service to more destinations between the two countries. It included unrestricted capacity and frequency, open route rights, a liberal charter regime, and open code-sharing opportunities.
20190628	June 28, 2019: FAA's new airmen certification standards for the airline transport pilot rating became effective. The standards brought together the previously used practical test standards with additional requirements for the certificate, updates to the knowledge exam, and notes formerly distributed across a variety of source materials.
20190628	June 28, 2019: Gulfstream Aerospace Corp. announced FAA type and production certification of its new Gulfstream G600.

20190723	July 23, 2019: Effective this date, FAA expanded the use of the Low Altitude Authorization and Notification Capability (LAANC) to recreational drone uses. LAANC was previously available only to commercial operators. Drone hobbyists could use LAANC to obtain near real-time authorization to fly below 400 feet in controlled airspace around airports. Through the LAANC system, operators request flight authorizations using mobile applications offered by FAA-approved UAS Service Suppliers. The apps match flight plans with airspace grids on FAA UAS facility maps that depict preapproved areas and altitudes where a drone can safely fly. (See October 1, 2018; November 21, 2019.)
20190731	July 31, 2019: Pilots and researchers from the University of Alaska Fairbanks' Alaska Center for Unmanned Aircraft Systems Integration conducted the first official BVLOS unmanned aircraft flight in the country approved by the FAA. (See January 8, 2019; August 14, 2019.)
20190808	August 8, 2019: The Department of Transportation issued guidance designed to clarify rules already in place regarding service animals. The Department limited the number of service animals on a flight, and airlines could deny boarding to an animal too large or heavy or younger than four months. (See October 5, 2019; December 2, 2020.)
20190812	August 12, 2019: Secretary of Transportation Elaine Chow swore in Stephen M. Dickson as the FAA's 18th Administrator. Dickson had recently retired as the Senior Vice President of Flight Operations for Delta Air Lines. He also flew in line operations as an A320 captain, and previously had flown the B727, B737, B757, and B767 during his career. A former United States Air Force Officer and F-15 fighter pilot, Dickson was a Distinguished Graduate of the Class of 1979 at the United States Air Force Academy, as well as a graduate of the Georgia State University College of Law, magna cum laude. He had been confirmed by the Senate on July 24.
20190813	August 13, 2019: Drone delivery system developer Flytrex and jet charter and management company Causey Aviation announced they had received FAA approval to begin food deliveries by drone in Holly Springs, North Carolina. The approval allowed flights of Flytrex multirotor drones along a predetermined delivery route between the Holly Springs Towne Center shopping mall and Ting Park, a nearby outdoor sports and recreation facility.
20190814	August 14, 2019: The Kansas Department of Transportation (KDOT) announced it had received permission to conduct the first ever BVLOS drone operation in the nation leveraging only onboard detect-and-avoid systems. This was the first FAA authorized operation to fly without a requirement for visual observers or ground-based radar and was the result of the 31-member Kansas Unmanned Aircraft Systems Integration Pilot Program (IPP) team effort to advance drone technologies. In a collaborative effort between Kansas State University Polytechnic Campus (K-State Polytechnic), Westar Energy, Iris Automation, and KDOT, the Kansas IPP team flew a nine-mile track to evaluate technologies to inspect power lines in rural Kansas. (See July 31, 2019; November 21, 2019.)

20190816	August 16, 2019: The Italian aircraft manufacturer Tecnam announced FAA had awarded a type certificate to its P2012 Traveller, an 11-seat commuter plane. The aircraft first flew in July 2016 and received EASA type certification in December 2018.
20190820	August 20, 2019: FAA issued guidance to U.S. airlines and other commercial flight operators warning of an "increasing inadvertent risk" to aircraft flying over the Persian Gulf and the Gulf of Oman. "Iran has publicly made threats to U.S. military operations in the Gulf region," the FAA said in a notice. Iran possessed a variety of missiles and military jets capable of intercepting airliners, according to the agency. (See June 21, 2019.)
20190822	August 22, 2019: Secretary of Transportation Elaine Chow announced the appointment of 22 members to the Safety Oversight and Certification Advisory Committee (SOCAC) to advise her on safety issues including aircraft and flight standards, certification processes, safety management systems, risk-based oversight efforts, and the delegation of oversight responsibilities to manufacturers. The committee, chaired by former Alaska Airlines Chairman and CEO William Ayer, included Boeing VP-Safety, Security and Compliance Beth Pasztor, as well as officials from Delta Air Lines, GE Aviation, Gulfstream Aerospace, Pratt & Whitney and United Airlines. Other members included representatives from trade associations and unions such as the National Air Transportation Association, Professional Aviation Safety Specialists, and AFL-CIO.
20190827	August 27, 2019: FAA began requiring all pilots filing flight plans to use the ICAO flight plan format. According to FAA, using the ICAO form allowed for a greater variety of entry types in departure and destination fields including special flight rules area flight plans, transmission of the supplemental pilot data field to the destination facility with the VFR flight plan to reduce search and rescue response times, integration of performance based navigation, and use of more detailed equipment codes to identify better aircraft capabilities.
20190828	August 28, 2019: FAA and local officials broke ground for a new air traffic control tower at Southwest Florida International Airport. The new 200-foot tower and terminal radar approach control facility, scheduled to open in 2022, replaces a tower built in 1982.
20190831	August 2019: Chattanooga, became the first American airport to be 100 percent solar powered. The $5 million dollar solar farm project took seven years to complete, and received funding from the FAA's voluntary airport low emissions program.

20190913	September 13, 2019: Secretary Chao announced the formation of the Air Ambulance and Patient Billing Advisory Committee. The committee will advise the Secretary about issues relating to air ambulance services and patient billing, review options to improve the disclosure of charges and fees for air medical services, better inform consumers of insurance options for such services, and protect consumers from balance billing. Based on its review, the committee will make recommendations regarding disclosure of charges and fees for air ambulance services and insurance coverage, as well as consumer protection and enforcement authorities of both the DOT and state authorities, and the prevention of balance billing to consumers.
20190920	September 20, 2019: Secretary Chao announced the formation of the Air Carrier Access Act Advisory Committee. The committee will advise the Secretary about issues relating to the air travel needs of passengers with disabilities. It will identify and assess disability-related access barriers encountered by air travelers with disabilities, evaluate the extent to which DOT's programs and activities are addressing these disability-related access barriers, and recommend actions to improve the air travel experience of passengers with disabilities. The committee planned to submit its recommendations on or before November 20, 2020.
20191001	October 1, 2019: FAA awarded air carrier and operator certification to UPS Flight Forward. Flight Forward received the first Part 135 Standard certification for drones. The certification allowed the drone and cargo to total 55 pounds and fly at night; previous restrictions that governed earlier UPS flights. It also allowed UPS to expand its drone delivery service to hospital campuses around the country and provide customers outside of the healthcare industry with delivery options.
20191007	October 7, 2019: FAA announced it had completed the operational rollout of ADS-B baseline services with the implementation at the last two of 155 airports slated for the technology, Akron-Canton and Mansfield Lahm Regional airports in Ohio, in September.
20191009	October 9, 2019: Secretary Chao announced FAA's establishment of a Women in Aviation Advisory Board. The Board will focus on analyzing industry trends; coordinating efforts among airlines, nonprofit organizations, and aviation and engineering associations to facilitate support for women pursuing aviation careers; expanding scholarship opportunities; and enhancing training, mentorship, education, and outreach programs for women interested in aviation careers. (See May 15, 2020.)
20191010	October 10, 2019: Williston Basin International Airport, in North Dakota, opened. Williston's old airport, Sloulin Field International, which opened in 1947, had closed the day before. The new airport cost $273 million, financed with $106 million from the FAA, $55 million from the state, and $112 million from bonds supported by airport revenue.
20191011	October 11, 2019: FAA announced the ADS-B rebate program for general aviation aircraft owners had ended. The agency had provided 20,000 rebates. (See October 12, 2018.)

20191011 October 11, 2019: The Joint Authorities Technical Review (JATR) team, staffed by representatives from nine civil aviation agencies and NASA, delivered its findings and recommendations to FAA after a five-month review. The JATR urged FAA to "review the B737 MAX compliance" with three regulations—Part 25.1329 (Flight Guidance System), 25.1581 (Airplane Flight Manual-General) and 25.201 (Stall Demonstration) "and ensure the consistent application and interpretation of regulatory guidance material for the system safety assessment, handling qualities rating method, and conformity requirements for engineering simulators and devices." The task force found that FAA's derivative certification approval process evaluated specific changes from a previous design, but did not always ensure if the changes had an adverse impact on unchanged areas. It also highlighted an insufficient amount of human factors expertise in the certification process. FAA Administrator Steve Dickson thanked the group and said he would "review every recommendation and take appropriate action." The JATR's 28 member team comprised representatives from Australia's Civil Aviation Safety Authority, Transport Canada, the Civil Aviation Administration of China, the European Aviation Safety Agency, Indonesia's Directorate General of Civil Aviation, the Japan Civil Aviation Bureau, the Civil Aviation Authority of Singapore and the United Arab Emirates' General Civil Aviation Authority, FAA, and NASA. Former NTSB Chairman Chris Hart led the team. (See March 25, 2019; October 23, 2019.)

20191018 October 18, 2019: Wing Aviation and FedEx Express completed the first scheduled package delivery by drone to a house in Christiansburg, VA. The delivery by Wing's Hummingbird aircraft made use of the first Part 135 air carrier certificate granted by the FAA for a drone operation.

20191023 October 23, 2019: The Department of Transportation Inspector General released a 58 page report saying FAA needed to restore public confidence in the aircraft certification process following the two Boeing 737 MAX crashes. The report said FAA faced a "significant oversight challenge" to ensure the companies conducting delegated certification tasks "maintain high standards and comply with FAA safety regulations." (See October 11, 2019; October 25, 2019.)

20191025 October 25, 2019: The Department of Transportation announced that as of December 10, 2019, it would ban all flights by U.S. airlines between the U.S. and Cuba with the exception of flights in and out of Havana. The Department took action at the request of the State Department as a means of protesting Cuba's support of the Venezuelan regime and because of Cuba's repression of its own people. (See August 31, 2016; August 13, 2020.)

20191025 October 25, 2019: Indonesia's National Transportation Safety Committee released its report on the Lion Air Boeing 737 Max jet accident. The committee reported a combination of design flaws by Boeing and inadequate pilot training and maintenance lapses by Lion Air that led to the crash. Investigators listed nine contributing factors including an automated system's reliance on a single sensor; the miscalibration of that sensor during repairs; a lack of flight and maintenance documentation; and a failure by the flight crew to manage the chaos in the cockpit as emergency warnings sounded. (See October 23, 2019; November 22, 2019.)

20191031 October 31, 2019: FAA announced that runway status lights (RWSL), the first technology to provide direct warning to pilots about potential runway conflicts, was now operational at all 20 sites approved to receive the technology. The technology alerted pilots and vehicle operators to stop when runways and taxiways were not safe to enter, cross, or begin takeoff. Red lights embedded in the pavement illuminated when the presence of other traffic creates a potential conflict. RWSL used the airport's surface surveillance system to determine the location of aircraft and vehicles. (See June 11, 2009.)

20191106 November 6, 2019: Epic Aircraft announced FAA had granted type certification to its E1000 all-carbon fiber aircraft design.

20191111 November 11, 2019: FAA found that the Civil Aviation Authority of Malaysia (CAAM) did not meet ICAO safety standards and received a Category 2 rating based on a reassessment of the country's civil aviation authority. A Category 2 IASA rating meant CAAM was deficient in one or more areas, such as technical expertise, trained personnel, record-keeping, and/or inspection procedures. In 2003, Malaysia was assigned a Category 1 rating. FAA conducted an in-country reassessment of Malaysia in April 2019, and met with the CAAM in July 2019 to discuss the results. With a Category 2 rating, Malaysia's carriers could continue existing service to the United States, but would not be allowed to establish new service to the United States. (See May 13, 2019; December 13, 2019.)

20191112 November 12, 2019: New York Governor Andrew Cuomo announced completion of a 50-mile unmanned traffic management corridor running from Syracuse International Airport to Rome, New York. The corridor would be used to test unmanned aerial systems and unmanned traffic management technologies. On November 7, Cuomo announced FAA had approved BVLOS drone operations within the first segment of the corridor, an 8 x 4-mile section of airspace between Griffiss International Airport in the city of Rome and the New York State Preparedness Training Center in Oriskany. The State of New York invested approximately $30 million in the UAS corridor project, first introduced in 2016.

20191121 November 21, 2019: FAA announced an expansion of the LAANC. Four airports – Baltimore/Washington International Thurgood Marshall Airport, Dulles International Airport, William P. Hobby Airport in Houston and Newark Liberty International Airport – joined the list of approximately 400 air traffic facilities covering about 600 airports where LAANC was available. (See August 14, 2019; December 26, 2020.)

20191122	November 22, 2019: In a low key ceremony at its Renton, Washington, plant, Boeing unveiled its 737 Max 10, the largest version of the Max jet.
20191126	November 26, 2019: FAA notified Boeing that it would retain authority over the issuance of airworthiness certificates for all newly manufactured 737 Max aircraft. The agency would conduct the final approval of factory-fresh Boeing Co. 737 Max jets rather than allowing company employees to handle routine sign-offs before the planes were delivered. (See October 25, 2019; December 16, 2019.)
20191202	December 2, 2019: FAA Administrator Stephen Dickson approved a reorganization of the agency's commercial space organization. The organization created two new directorates within the office. An operational directorate became responsible for licensing, permitting, safety, and compliance. The other handled issues such as policy, research and development, stakeholder outreach, support services, and the new Office of Spaceports.
20191203	December 3, 2019: Leidos announced FAA had awarded it a contract to continue supporting the general aviation community under the agency's FAA's Future Flight Services Program. Under the contract, Leidos would provide weather data, aeronautical information and flight planning services to the general aviation community across mainland U.S., Puerto Rico, and Hawaii. The single award, firm-fixed-price contract had a five-year base period of performance followed by ten one-year option periods, at an approximate value of $1 billion, if the FAA exercised all options. FAA had awarded Leidos the predecessor Automated Flight Service Station (AFSS) contract in 2005. (See September 2010.)
20191211	December 11, 2019: FAA announced the selection of 12 organization to advise the agency in developing test administration requirements for the recreational UAS aeronautical knowledge and safety test:
	1. Embry Riddle Aeronautical University
	2. Drone Launch Academy Southeastern University
	3. Science Applications International Corp.
	4. DJI
	5. Horizon Hobby, LLC.
	6. Unmanned Aerial Vehicle Coach
	7. King Schools
	8. Unmanned Safety Institute
	9. First Person View Freedom Coalition
	10. Aircraft Owners and Pilots Association
	11. Academy of Model Aeronautics
	12. Drone Racing League

20191213	December 13, 2019: FAA announced the Venezuelan regime did not comply with ICAO safety standards under the IASA program and had been assigned a Category 2 rating. A Category 2 IASA rating means the country either lacked laws or regulations necessary to oversee air carriers in accordance with minimum international standards, or its civil aviation authority was deficient in one or more areas, such as technical expertise, trained personnel, record-keeping, inspection procedures, or resolution of safety concerns. (See November 11, 2019.)
20191216	December 16, 2019: Boeing announced it would halt production on the 737 Max airplanes indefinitely beginning in January 2020. The announced followed the FAA Administrator's earlier decision the FAA would not re-certify the aircraft by the end of 2019. (See November 26, 2019; December 23, 2019.)
20191223	December 23, 2019: Media reported Chicago Executive Airport had launched a sound-insulation program to reduce aircraft noise for nearby residents. Under the program, insulating materials will be provided at no cost to owners of eligible homes, with the FAA funding 90% of the cost and the remainder coming from the airport. The work was expected to extend into 2021 and beyond.
20191223	December 23, 2019: Boeing announced president and CEO Dennis Muilenburg had resigned effective immediately. CFO Greg Smith stepped in as interim CEO until David Calhoun, current non-executive chairman of the Boeing board of directors, took over the roles on a permanent basis starting January 13. (See December 16, 2019; September 11, 2020.)
20191223	December 23, 2019: Bombardier announced it had received FAA type certification of its Global 5500 and Global 6500 business jets. The milestone follows Transport Canada and European Aviation Safety Agency (EASA) certification and entry-into-service in September 2019.
20191226	December 26, 2019: FAA released a 319-page unpublished proposed rule outlining requirements for drones to transmit identifying information to the ground. The proposal described "standard" and "limited" categories of remote identification, with a third category for non-equipped UAS. A drone operated as standard would be capable of connecting to the internet and transmitting data to a Remote ID USS, and of broadcasting its identity directly from the aircraft. A limited-category drone would be capable of transmitting remote identification message elements through an internet connection, while being restricted to operating no more than 400 feet from its control station. The rule would prohibit small drones from using automatic dependent surveillance-broadcast out transponders to send identity and position data. Persons operating drones not equipped for remote identification would have to fly the aircraft within visual line of sight in an "FAA-recognized identification area," such as a flying site established by a community organization (See November 21, 2020). FAA published the proposal as a notice of proposed rulemaking the in the Federal Register on December 31. The cost of the rule to all parties would be $582 million over 10 years, the FAA estimated. (See December 18, 2017.)

2020

20200105 January 5, 2020: Boeing and FAA confirmed they were reviewing a wiring issue that could potentially cause a short circuit on the grounded 737 MAX. During an inspection, Boeing found two bundles of wiring close together, which, if not properly separated, could led to a short circuit. (See December 16, 2019; June 29, 2020.)

20200107 January 7, 2020: Chinese drone maker Ehang demonstrated its autonomous air taxi in the United States for the first time after FAA granted permission for the flight. The all-electric two-seat plane took a five minute flight above a test track south of Raleigh, North Carolina. The Ehang 216, powered by 16 electric rotors, flew along a pre-planned route at over 80 mph. The aircraft weighed about 600 pounds and could carry another 500 to 600 pounds of cargo or passengers. (See June 6, 2019; May 28, 2020.)

20200107 January 7, 2020: The Alaska Volcano Observatory announced Shishaldin Volcano had erupted at 5 a.m. The volcano is located 679 miles southwest of Anchorage near the center of Unimak Island, the largest island in the Aleutians. It sent up an initial ash cloud to 19,000 feet, it then seismicity diminished for a few hours, but increased again. During the increase, the volcano spewed an ash cloud to 25,000 feet, with an increased volume of ash. The ash plume extended approximately 90 miles. The observatory immediately issued a "Code Red" warning for air traffic around the Shishaldin area and FAA issued a warning to aircraft in the area.

20200108 January 8, 2020: Ukraine International Flight 752 crashed shortly after it took off from Tehran, Iran, bound for Kyiv. The Boeing 737-800 carried 176 people; there were no survivors. Iranian forces mistakenly shot down the airliner. The incident came shortly after Iran had fired missiles at U.S. military installations in Iraq in retaliation for a January 3 drone strike by the U.S. that killed an Iranian general. Shortly after the crash, FAA issued a notice to airmen banning U.S. airlines from flying in the airspace over Iran and Iraq and the waters of the Persian Gulf and the Gulf Oman. On January 15, FAA loosened restrictions on U.S. aircraft flying over the Persian Gulf and Gulf of Oman to allow flights into and out of certain airports in the region. The new notice allowed flights to and from airports in Doha, Bahrain, Abu Dhabi, Dubai, Sharjah, and Muscat as long as operators flew on a published instrument procedure or under the direction of air traffic control and minimized overwater flight to the greatest extent possible. The agency still prohibited flights from entering the Tehran Flight Information Region, which covered the airspace over Iran and extended from southern Iran part way into the airspace over the Persian Gulf and the Gulf of Oman. FAA lifted the flight restrictions in February. (See July 11, 2020.)

20200114 January 14, 2020: FAA announced it had opened a new indoor fire research facility in December 2019 at its Technical Center to conduct performance tests of potential replacement fire extinguishing agents. The work conducted in this new $5 million, 2,500 square-foot facility supported research on fluorine-free firefighting foams.

20200116	January 16, 2020: The Special Committee to Review the Federal Aviation Administration's Aircraft Certification Process, appointed by Transportation Secretary Elaine Chao in April 2019 after crashes in Indonesia and Ethiopia killed 346 people, issued its report. The committee concluded FAA correctly treated certification of the Max jet as an update to older 737s and not as a new type of plane, which would have subjected it to more examination. The group, gave high marks overall to FAA's process for certifying planes, calling it safe and effective and a boost to the U.S. aerospace industry. (See January 5, 2020.)
20200125	January 25, 2020: Boeing announced it had completed a successful first flight of its new model 777X jetliner. The flight, over Washington State, lasted three hours and 51 minutes. (See June 18, 2019.)
20200131	January 31, 2020: President Donald Trump issued a proclamation, effective February 2, limiting entry of travelers from the Republic of China into the United State as a result of the COVID-19 outbreak in the Wuhan Province. A second proclamation on January 28 restricted entrance of travelers from Iran into the United States because of a COVID-19 outbreak in that country. As the virus spread to other countries, the President updated the proclamation banning travelers from those countries entry into the United States. U.S. airlines began reducing/cancelling flights into China.
20200202	February 2, 2020: Acting Department of Homeland Security Secretary Chad F. Wolf directed all flights from China and all passengers who had traveled to China within the previous 14 days to be routed through one of eight U.S. airports (three airports added later) where the United States Government had established enhanced screening procedures and the capacity to quarantine passengers, if needed. Additionally, U.S. citizens who had been in China's Hubei province within 14 days of their return were subject to up to 14 days of mandatory quarantine to ensure they had proper medical care and health screening. U.S. citizens who had been in other areas of mainland China also had to undergo proactive entry health screening and up to 14 days of self-quarantine with health monitoring to ensure they had not contracted the virus and did not pose a public health risk. Generally, foreign nationals (other than immediate family of U.S. citizens, permanent residents, and flight crews) who had traveled in China, would be denied entry into the United States. The airports with enhanced screening included:
	* John F. Kennedy International Airport (JFK), New York
	* Chicago O'Hare International Airport (ORD), Illinois
	* San Francisco International Airport (SFO), California
	* Seattle-Tacoma International Airport (SEA), Washington
	* Daniel K. Inouye International Airport (HNL), Hawaii
	* Los Angeles International Airport, (LAX), California
	* Hartsfield-Jackson Atlanta International Airport (ATL), Georgia
	* Washington-Dulles International Airport (IAD), Virginia

	* Newark Liberty International Airport (EWR), New Jersey
	* Detroit Metropolitan Airport (DTW), Michigan
	* Dallas-Ft. Worth International Airport (DFW), Texas
20200213	February 13, 2020: Airbus announced it had received joint type certification from the FAA and the European Aviation Safety Agency (EASA) for its A330-800.
20200303	March 3, 2020: FAA announced the expansion of its weather camera safety program to Colorado. FAA entered into a $226,000 cost-reimbursement agreement with the State of Colorado Division of Aeronautics to install weather cameras on 13 automated weather observing systems (AWOS) in mountainous areas, beginning in the spring of 2020. The 13 Colorado cameras were the first to be integrated into the weather camera program outside of Alaska. Under the terms of the agreement, FAA would assist the state with the camera installations, but the state would own and maintain the cameras. (See September 30, 2013; August 4, 2020.)
20200311	March 11, 2020: FAA temporarily waived minimum slot-use requirements at U.S. airports to help airlines that canceled flights due to the Coronavirus. Under normal circumstances, airlines could lose their slots at congested airports if they failed to use them at least 80 percent of the time. FAA waived the 80-percent-use requirement through
20200313	March 13, 2020: President Trump declared a state of national emergency because of the COVID-19 pandemic.
20200317	March 17, 2020: FAA temporarily closed the air traffic control tower at Chicago Midway International Airport after several technicians tested positive for the coronavirus. Other FAA facilities also temporarily closed after employees tested positive for COVID-19. After thorough cleanings the facilities reopened. This was the first of a number of facilities that were temporarily closed for cleaning throughout the year.
20200318	March 18, 2020: After a 5.7-magnitude, early morning tremor centered in north-central Utah, FAA temporarily evacuated the air traffic control tower at Salt Lake City International Airport and halted flights, diverting inbound aircraft to other airports. FAA's Salt Lake air route traffic control center, which is housed separately from the airport control tower, handled all air traffic in the area until the tower reopened.
20200320	March 20, 2020: FAA announced it would allow air carrier personnel to perform temporarily flight dispatch and flight following duties from their homes on a case by case basis, provided carrier personnel could show they could do so safely.
20200321	March 21, 2020: FAA suspended all departures to Kennedy, LaGuardia, Newark, and because of coronavirus-related staffing issues at a regional air-traffic control center. The agency lifted the restriction after about 30 minutes.

20200323	March 23, 2020: FAA approved certain requirements for passenger flights to Puerto Rico to help with the response to the COVID-19 pandemic. All scheduled and unscheduled commercial air carrier flights had to land at Luis Munoz Marin International Airport (SJU) where public health officials screened arriving passengers. All domestic and foreign general aviation and charter flights arriving from a location outside Puerto Rico were required to land first at SJU, Isla Grande Airport (SIG), or Rafael Hernandez Airport (BQN) for passenger screening before continuing to their final destinations. The restrictions did not apply to air cargo or maintenance flights into Puerto Rico.
20200324	March 24, 2020: The global COVID-19 pandemic led to flight reductions throughout the airline industry. As a result, FAA issued CertAlert #20-02 Temporary Parking of Overflow Aircraft (PDF), for airport operators who were working with airlines on temporary parking plans for their aircraft. The CertAlert contained a list of recommendations an airport operator should consider when making decisions for overflow aircraft parking. On May 5, FAA issued additional information and examples for airport operators to use when producing NOTAMs that closed runways and/or taxiways to temporarily park aircraft.
20200325	March 25, 2020: FAA amended its cockpit oxygen-mask regulation to reduce the potential for pilots to be exposed to any pathogens that may be on the masks.
20200326	March 26, 2020: FAA granted certain training exemptions to scheduled and on-demand air carriers because of the unprecedented circumstances associated with the COVID-19 pandemic. The exemptions gave operators grace periods for completing certain training and qualification requirements, and gave crewmembers relief from having to don protective breathing equipment or oxygen masks in training, checking, or evaluation.
20200326	March 26, 2020: FAA began implementation of the Denver Metroplex Project, which would improve the efficiency of airspace in the Denver Metroplex area by optimizing aircraft arrival and departure procedures to and from various airports, including:
	* Denver International Airport (DEN)
	* Centennial Airport (APA)
	* Greeley-Weld County Airport (GXY)
	* Northern Colorado Regional Airport (FNL)
	* Rocky Mountain Metropolitan Airport (BJC)
	The project would use satellite navigation to move air traffic safely and efficiently through the area. It included 29 new routes and modifications to 15 existing routes. (See September 2, 2016; February 25, 2021.)

20200326	March 26, 2020: FAA issued a policy stating it would not take enforcement action against certain pilots or flight engineers who fly domestically with medical certificates that expired between March 31, 2020 and June 30, 2020. The following week, FAA granted an exemption that extended until June 30, 2020, the duration of medical certificates for certain pilots and flight engineers who conducted scheduled and on-demand operations outside the United States if those medical certificates expired between March 31, 2020, and May 31, 2020.
20200327	March 27, 2020: President Donald Trump signed into law the Coronavirus Aid, Relief and Economic Security (CARES) Act. Under the $2.2 trillion bill, FAA received $10 billion for its Airport Improvement Program, distributed by formula, to maintain operations at airports across the nation that faced a record drop in passengers. The legislation also included:
	Direct grants:
	* $25 billion for commercial airlines.
	* $4 billion for cargo air carriers.
	* $3 billion for contractors who employ baggage handlers, wheelchair attendants, cabin cleaners, food service workers and others at airports. Conditions:
	* The aid must "exclusively be used for the continuation of payment of employee wages, salaries and benefits."
	* Grant recipients cannot cut jobs, pay or benefits through Sept. 30, 2020, and they cannot buy back their stock or pay stock dividends through Sept. 30, 2021.
	* The airlines must maintain service to all the destinations they served on March 1, 2020, through March 1, 2022, which could mean continuing to fly empty or near-empty planes.
	Loans and loan guarantees:
	* $25 billion available to passenger airlines.
	* $4 billion for cargo air carriers.
	* $17 billion in loans and loan guarantees to aerospace "businesses critical to maintaining national security," which industry and congressional sources say in essence means Boeing and its suppliers.
	Conditions:
	* The companies taking out the loans are prohibited from buying back stock and paying stock dividends during the lifetime of the loan.
	* There are limits on compensation, bonuses and golden parachutes for executives earning more than $425,000.
	* Recipients of the loans must maintain March 24, 2020, employment levels "to the extent practicable" and under no circumstance can they cut more than 10% of the company's workforce.

	* The federal government may require an equity stake in the companies as collateral for the loans.
20200327	March 27, 2020: FAA allowed aircraft dispatcher certification course providers to deviate from some standard practices, including instituting or expanding distance-based training for currently enrolled students and suspending course administration.
20200328	March 28, 2020: FAA issued guidance for states, localities, and territories that had implemented or might consider implementing quarantine, travel restrictions, and screening requirements on individuals entering from certain locations within the United States and territories. The guidance stated there should be coordination with aviation stakeholders 48 hours before a restriction was imposed; air transportation workers, federal aviation and security personnel were exempt from any restrictions; and no measure could be taken to close a federally funded airport without FAA approval.
20200330	March 30, 2020: FAA issued a noise certification notice of proposed rulemaking (NPRM) that proposed to add landing and takeoff noise standards for a certain class of new supersonic airplanes. The NPRM followed a 2019 proposed rule to update the requirements to apply for a special flight authorization for flying above Mach 1 in the United States. (See August 14, 2013; August 4, 2020.)
20200330	March 30, 2020: FAA published a NPRM that would require air carriers to enter and share pilot records in a FAA-managed pilot records database before making hiring decisions. Under the proposal, pilots would be required to provide consent for an air carrier to access their records during the hiring process. The records-sharing requirement also would apply to commercial drone operators holding Part 107 remote pilot certificates when an unmanned aircraft system was used in air carrier operations. (See December 17, 2017; May 26, 2021.)
20200331	March 31, 2020: FAA issued a policy statement regarding the use of real-time and recorded video to perform prototype conformity inspections, engineering and ground tests, engineering compliance inspections, production conformity inspections, and inspections for issuing 8130-3s, or airworthiness approval tags. Applicants that wanted to use remote technology had to work with their local aircraft certification office and incorporate specific details in certification, engineering test, or conformity inspection plans. Production-approval holders that used remote technology for 8180-3 inspections had to have the procedures in their quality systems. Organization designation authorization holders could also incorporate remote inspections into their programs.
20200405	April 5, 2020: RavnAir announced that because of the global COVID-19 pandemic and the unprecedented loss of 90% of passenger revenue at all three of its airlines (RavnAir Alaska, PenAir, and RavnAir Connect) it was:
	* Parking all seventy-two (72) of its aircraft;
	* Stopping all operations; and

	* Temporarily laying off all remaining staff until the company was in a position to cover the costs of rehiring, resuming flights, and operating to the many communities it served throughout Alaska.
	Because of the company's critical need for additional funding, Ravn also filed voluntary petitions for relief under Chapter 11 of the Bankruptcy Code in the U.S. Bankruptcy Court for the District of Delaware. Ravn's lenders agreed to provide financing during the pendency of the Chapter 11. The filing allowed the company to await word on its Federal CARES Act grant applications and other sources of financial assistance that would allow it to get through the Coronavirus crisis and successfully restart operations. The company also sought private investment. (See June 25, 2020.)
20200406	April 6, 2020: FAA authorized pilot schools to temporarily use distance learning programs or suspend operations for a period of time because of the COVIS-19 pandemic.
20200408	April 8, 2020: FAA announced it was taking steps to limit the spread of COVID-19 in air traffic control facilities. Each air traffic control facility established separate teams of controllers that would stay together throughout the duty week. Each crew would contain the same employees, limiting the possibility of cross-exposure to COVID-19 that would come through normal shift rotations. If a person on one team got sick, the only people who would be exposed were the other people on that team.
20200408	April 8, 2020: FAA issued an exemption to help protect flight attendants from contracting COVID-19. The exemption allowed flight attendants to relocate from the seats they normally occupied so they could observe social distancing. It also excused them from having to demonstrate the use of certain emergency equipment including life preservers and oxygen masks, allowing for alternative methods to inform passengers regarding the use of such equipment. The exemption ran through June 30. The agency subsequently amended the seat exemption through January 31, 2021, and the deadline for the exemption which gave crewmembers relief from having to don protective breathing equipment or oxygen masks in training, checking, or evaluation through November 30.
20200411	April 11, 2020: Upon the request of the Wyoming governor, President Trump declared a major disaster existed in the state because of the COVID-19 pandemic. With the declaration, federal funding became available to state, tribal, and eligible local governments, as well as certain nonprofit organizations for emergency protective measures. This was the first time in U.S. history that all 50 states were under a major disaster declaration at the same time.

20200413	April 13, 2020: Attorney General William P. Barr issued guidance to Department of Justice components regarding counter-unmanned aircraft systems (C-UAS) actions authorized under the Preventing Emerging Threats Act of 2018. The guidance, a product of extensive collaboration between the Department of Justice, the Department of Transportation, and FAA, outlined the process by which authorized department components could request designation of facilities or assets for protection under the act. It ensured coordination with the FAA when any C-UAS action authorized under the act might affect aviation safety, civilian aviation and aerospace operations, aircraft airworthiness, and the use of the airspace. This included conducting a risk-based assessment in consultation with the Secretary of Transportation to examine potential airspace impacts and other considerations.
20200414	April 14, 2020: Secretary of the Treasury Steven Mnuchin announced Alaska Airlines, Allegiant Air, American Airlines, Delta Air Lines, Frontier Airlines, Hawaiian Airlines, JetBlue Airways, United Airlines, SkyWest Airlines, and Southwest Airlines had agreed in principle to accept $25 billion in grants from the government as part of the Trump Administration's $2 trillion economic stimulus program to combat the economic effects of the COVID-19 pandemic. Under the terms of the deal, 70 percent of the money would be given to the airlines outright and 30 percent would have to be paid back to the government. In addition, the airlines would give the government warrants equal to 10 percent of the amount the carriers received. Warrants are securities that give the holder the right, but not the obligation, to buy a certain number of securities (usually the issuer's common stock).
20200414	April 14, 2020: FAA issued guidance barring pilots from flying if they had taken the antimalarial drug hydroxychloroquine within the past 48 hours. FAA stated "Chloroquine and hydroxychloroquine were both reviewed by the FAA Federal Air Surgeon when they entered the market and have long been considered generally incompatible for those performing safety related aviation duties."
20200415	April 15, 2020: Secretary of Transportation Elaine Chao announced the award of approximately $10 billion to commercial and general aviation airports from the Coronavirus Aid, Relief, and Economic Security (CARES) Act Airport Grant Program. The funding provided support for continuing operations and replacement of lost revenue resulting from the sharp decline in passenger traffic and other airport business because of the COVID-19 public health emergency. The funds were available for airport capital expenditures, airport operating expenses, including payroll and utilities, and airport debt payments.

20200415	April 15, 2020: FAA issued a safety alert (SAFO 20008) allowing passenger airlines to turn their planes into cargo-only aircraft provided they took steps to prevent fires and kept weight balanced. Existing FAA rules also required that carriers perform a risk assessment of the new operations. Airlines could remove seats from cabins to accommodate cargo. The tracks beneath the floor that held seat rows could be used to attach cargo, provided the plane was certified to hold such loads. On May 15, FAA issued information and guidance for agency safety inspectors about the carriage of cargo in the cabin of passenger-carrying planes when no passengers were on board. (See January 7, 2020; May 20, 2020.)
20200416	April 16, 2020: Because the COVID-19 public health emergency affected airport sponsors' operations and ability to meet the original 2020 Airport Improvement Program (AIP) deadlines, FAA extended those deadlines to May 4, 2020, to give notice of intent, and to June 15, 2020, to submit the final grant application.
20200422	April 22, 2020: FAA announced it planned to temporarily adjust the operating hours of approximately 100 control towers nationwide as a result of a significant reduction in flights because of the pandemic.
20200424	April 24, 2020: Boeing announced a planned merger with Brazilian aircraft manufacturer Embraer had been cancelled. The $4.2 billion merger, first announced in 2018, would have given Boeing an 80 percent controlling stake in Embraer.
20200427	April 27, 2020: Effective this date, FAA required air carriers conducting domestic, flag, and supplemental operations to provide new-hire pilots with an opportunity to observe flight operations and become familiar with procedures before serving as a flightcrew member in operations; to revise the upgrade curriculum; and to provide leadership and command and mentoring training for all pilots in command. (See October 7, 2016.)

20200429 April 29, 2020: The Department of Transportation issued a notice to all essential air service (EAS) air carriers that it would authorize payment of 50 percent of the contracted per-flight subsidy for flights not being operated because of the pandemic as long as the EAS air carriers serving a community in the continental United States, Hawaii, and Puerto Rico completed at least one round trip flight a day, six days a week, for the EAS community, and an EAS air carrier serving a community in Alaska completed at least 50 percent of its weekly schedule for that EAS community. In addition, the Department would not initiate enforcement action against EAS air carriers for failing to comply with the statutory level-of-service requirements in situations where the noncompliance took place during the effective period of the notice, the significant reduction in passenger demand due to the COVID-19 public health emergency was the cause of the noncompliance, the EAS air carrier complied with the level-of-service requirements provided in the Notice, and the eligible communities did not object to the change in service levels. The plan applied to all 160 communities in the United States and Puerto Rico that received EAS subsidized service, but it did not apply to the 8 communities receiving alternate EAS grants. The action was retroactive to March 1, 2020, and was in effect through June 30, 2020; later extended through September 30, 2020. On September 21, the deadline was extended again, this time through December 31, 2020.

20200430 April 30, 2020: To ensure the continuity of air ambulance operations during the COVID-19 pandemic, FAA granted an exemption to the timeframes for completing recurrent training and testing requirements for certain air ambulance personnel. Operators had to fulfill specific requirements to exercise the relief offered in the exemption.

20200505 May 5, 2020: FAA issued its 12th spaceport license to the Titusville-Cocoa Airport Authority allowing for commercial space launches from the Space Coast Regional Airport in Titusville, Florida. (See August 17, 2020; December 20, 2021.)

20200505 May 5, 2020: FAA announced the selection of eight companies to assist the agency in establishing requirements for future suppliers of Remote Identification (Remote ID). Remote ID would enable unmanned aircraft systems to provide identification and location information while operating in the nation’s airspace. The companies selected included: Airbus; AirMap; Amazon; Intel; One Sky; Skyward; T-Mobile; and Wing. FAA selected the companies through a Request for Information process, which began in December 2018. (See December 26, 2019; December 28, 2020.)

20200508 May 8, 2020: FAA announced it had assigned a Category 2 rating to the Organization of Eastern Caribbean States (OECS) because it did not comply with International Civil Aviation Organization (ICAO) safety standards under the FAA's International Aviation Safety Assessment (IASA) program. A Category 2 IASA rating meant that laws or regulations lacked the necessary requirements to oversee air carriers in accordance with minimum international standards, or that a civil aviation authority was deficient in one or more areas, including technical expertise, trained personnel, record-keeping, inspection procedures or resolution of safety concerns. Although the OECS's carriers could continue existing service to the United States, they were not allowed to establish new service to the United States. The OECS provided aviation safety oversight for members Antigua and Barbuda, Dominica, Grenada, St. Kitts and Nevis, St. Lucia, St. Vincent, and the Grenadines. (See December 13, 2019.)

20200510 May 10, 2020: Colombian airline Avianca filed for Chapter 11 bankruptcy in the U.S. Southern District of New York, citing coronavirus-related travel restrictions as the reason for the bankruptcy filing.

20200515 May 15, 2020: Secretary of Transportation Elaine Chao announced the appointment of 30 board members to the newly-formed Women in Aviation Advisory Board (WIAAB). Former U.S. Air Force Secretary Heather Wilson served as chair of the board. At the time of her appointed Wilson was the president of the University of Texas at El Paso. The WIAAB had been mandated by the FAA Reauthorization Act of 2018. The purpose of the WIAAB was to develop strategies and recommendations to encourage women and girls to enter the field of aviation. The WIAAB assessed education, training, mentorship, outreach, and recruitment of women in the aviation industry. (See October 9, 2019.)

20200518 May 18, 2020: Piper Aircraft announced the Piper M600/SLS had received FAA type certification for its new HALO safety system making it the first Garmin Autolandequipped aircraft in the world to receive certification.

20200520 May 20, 2020: FAA issued an exemption allowing U.S. airlines to carry cargo on seats in airplane cabins when no passengers were being transported. FAA determined the exemption would reduce the chance that movement of critical cargo would be interrupted as a result of the COVID-19 public health emergency. To exercise the exemption, airlines had to submit a letter of intent and receive specific authorization from FAA, and observe a number of conditions and limitations. The exemption was effective through December 31, 2020. (See April 15, 2020; July 10, 2020.)

20200522	May 22, 2020: Pakistan International Airlines Flight 8303, an Airbus A320, crashed in Model Colony, a densely populated residential area of Karachi not far from the runway, while on a second final approach to Jinnah International Airport. There were 91 passengers and eight crew on board the aircraft. Ninety-seven of them died, while two passengers survived with injuries. Eight people on the ground were also injured. A preliminary investigation report, published by Pakistan's civil aviation authority, reported the plane's engines had scraped the runway three times on the pilot's first attempt to land, causing friction and sparks. The contacts with the runway may have caused possible damage to the engines' oil tank and fuel pump. (See July 1, 2020.)
20200526	May 26, 2020: Chile's LATAM Airlines Group, the largest carrier in Latin America, filed for Chapter 11 bankruptcy. LATAM's CEO Roberto Alvo cited coronavirus-related travel restrictions as the primary reason for bankruptcy.
20200526	May 26, 2020: Waco Aircraft delivered its first YMF-5F open cockpit biplane on amphibious floats after receiving FAA certification.
20200528	May 28, 2020: A modified Cessna Caravan turboprop powered by electricity made its first flight at Moses Lake, Washington. (See January 7, 2020.)
20200529	May 29, 2020: FAA extended through July 31, 2020, four regulatory exemptions it previously issued to scheduled and on-demand U.S. air carriers. The exemptions gave operators grace periods for completing certain training and qualification requirements, and gave crewmembers relief from having to don protective breathing equipment or oxygen masks in training, checking, or evaluation. The exemptions originally were set to expire on May 31.
20200530	May 30, 2020: SpaceX's Falcon 9 launched Crew Dragon's second demonstration mission from Launch Complex 39A at NASA's Kennedy Space Center in Florida. The following day, Crew Dragon autonomously docked to the International Space Station. With this flight, which delivered NASA astronauts Bob Behnken and Doug Hurley to the space station, the Dragon spacecraft returned human spaceflight to the United States. On August 2, the two astronauts splashed down in the Gulf of Mexico, the first time in 58 years that astronauts used the Gulf as a landing site. (See September 1, 2016; November 15, 2020)

20200531

May 31, 2020: The waiver of the slot usage requirement, applied to John F. Kennedy International Airport (JFK), New York LaGuardia Airport (LGA), and Ronald Reagan Washington National Airport (DCA). Additionally, at four other U.S. airports where the agency has a formal schedule review and approval process – Chicago O'Hare International Airport (ORD), Newark Liberty International Airport (EWR), Los Angeles International Airport (LAX), and San Francisco International Airport (SFO) – FAA gave credit to airlines for flights that were canceled due to the Coronavirus through May 31, 2020. FAA later extended the waiver through October 24. On September 15, FAA proposed to extend through March 27, 2021, the COVID-19-related limited waiver of the minimum slot usage requirement at JFK, LGA, and DCA. The FAA also proposed to extend, through December 31, 2020, its COVID-19-related policy for prioritizing flights canceled at designated International Air Transport Association (IATA) Level 2 airports in the United States. These IATA Level 2 airports include ORD, EWR, LAX, SFO. On October 2, FAA extended the slot waiver and the policy for prioritizing flights through March 27, 2021.

20200603

June 3, 2020: The Department of Transportation took regulatory action in response to the failure of China to permit U.S. carriers to perform scheduled passenger air services in accordance with China's obligations under the U.S.-China Air Transport Agreement. On June 4, the Civil Aviation Authority of China responded by revising its restrictions to permit U.S. carriers the ability to operate one flight per week each. As a result, the Department revised its June 3 order and granted Chinese carriers, in aggregate, the right to operate two weekly passenger flights to the United States. On June 15, Chinese officials notified the Department of Transportation that U.S. carriers had been approved to fly four weekly flights to China. In return, the Department amended its order to allow the Chinese air carriers to continue to fly four weekly flights between China and the United States. On July 30, DOT issued an order disapproving future schedules that Chinese carriers filed with the Department pursuant to the original May 22 order. None of the schedules that Chinese carriers filed could be operated because of the Chinese government's restrictions on international flights. DOT conveyed to its Chinese counterparts that the order was a procedural matter. "The Department continues to indicate our willingness to revisit our action should the Chinese aviation authorities adjust their policies to bring about the necessary improved situation for U.S. carriers in which both they and the Chinese carriers could fully exercise their bilateral rights." On August 18, DOT announced it would allow the four Chinese airlines that had scheduled passenger service to the U.S. to increase their flights to eight weekly round-trip flights. DOT approved the increased service after China permitted, on August 12, United Airlines and Delta Air Lines to increase their number of flights into China. (See October 27, 2017.)

20200605

June 5, 2020: Indonesia's largest low-cost airline Lion Air suspended all flights citing poor passenger carriage as travelers struggled to fulfill the strict requirements needed to fly during the pandemic. The announcement also affected Lion Air Group subsidiaries Batik Air and Wings Air. (See October 25, 2019.)

20200613	June 13, 2020: Sky Harbor Regional Airport in Duluth, Minnesota, opened a new 2,600 foot runway. FAA funded nearly the entire cost of the $13.2 million project.
20200622	June 22, 2020: The Department of Transportation issued an order requiring Indian air carriers to apply to the Department for statements of authorization prior to conducting charter flights. The Department took the action because the Government of India engaged in unfair and discriminatory practices with respect to U.S. charter air transportation services to and from India. The order allowed the Department to scrutinize charter flights by Indian carriers on a case-by-case basis. The Department wanted to restore a level playing field for U.S. airlines, as provided for in the U.S.-India Air Transport Agreement. A subsequent agreement between the two nations allowed commercial flights to resume on July 23.
20200622	June 22, 2020: Southwest Airlines Flight 370 became the first United States commercial flight flown by a pilot with insulin-treated Type A diabetes at the controls. (See May 25, 2018.)
20200625	June 25, 2020: United States Bankruptcy Court for the District of Delaware approved RAVN Air's Plan of Liquidation that included an auction of the company and its three airlines. The auction would offer Ravn, with its secured lenders, an opportunity to sell the company and all or a substantial portion of its assets in a sale that would be approved by the Court on July 9. Approximately 30 bidders had expressed interest in buying all or some of the Air Group's assets. Of these, five buyers submitted bids. (See April 5, 2020; July 7, 2020.)
20200629	June 29, 2020: FAA and Boeing began a series of certification flights to evaluate Boeing's proposed changes to the automated flight control system on the 737 MAX. The flights included a wide array of maneuvers and emergency procedures to assess whether the changes met FAA certification standards. Test pilots and engineers from FAA and Boeing conducted the tests. (See January 25, 2020; August 4, 2020.)
20200630	June 30, 2020: The European Union announced it would open its borders to the residents of 25 nations. Travelers from the United States, Russia, and Brazil were among those banned from going into the European Union because of the number of COVID-19 cases in those countries.
20200701	July 1, 2020: The Department of Transportation banned Pakistan International Airlines from flying into United States for six months after it was revealed that about a third of its pilots were flying with "inaccuracies with their licenses." (See May 22, 2020; July 13, 2020.)
20200701	July 1, 2020: FAA issued SAFO 20011, "Operations in Oceanic Airspace During the COVID-19 Public Health Emergency." The SAFO advised flightcrews of the potential loss of air traffic control services in the event of an oceanic ATC facility shutdown and recommended mitigating procedures.

20200702	July 2, 2020: Transportation Secretary Chao announced public health guidance to airlines and airports for the recovery of the air transportation system from the COVID-19 public health emergency. The Departments of Transportation, Health and Human Services, and Homeland Security developed the "Runway to Recovery." It provided general guidance and recommended specific public health measures airlines and airports should take to mitigate risks associated with COVID-19. The recommendations included:
	The measures included:
	* Educating and communicating with passengers and employees
	* Passengers should wear face coverings everywhere in the air transportation environment
	* Promoting social distancing
	* Enhancing disinfection and cleaning procedures
	* Requiring health assessments from passengers and employees
	* Collecting passenger contact information to enable notification in the event of suspected or confirmed exposure to COVID-19, a process known as contact tracing
	* Protecting employees and separating passengers and crew
	* Minimizing in-person interaction and shared objects, documents and surfaces
	* Reporting the daily status of public health risk mitigation efforts
	* Enhancing airport security checkpoint operations to reduce exposure
	* Using new technology to support mitigation measures
20200706	July 6, 2020: FAA issued Safety Alert for Operators (SAFO) 20012 advising air carriers and other commercial operators on how to continue operating safely in terminal airspace when an ATC facility with responsibility for that airspace closed unexpectedly.

20200707 July 7, 2020: At an auction, RavnAir Group sold 15 of its Cessna planes for $10 million to Grant Aviation; four Cessnas to Fairbanks-based Wright Air Service, which also bought Ravn buildings and equipment in Fairbanks, the North Slope communities of Utqiagvik and Deadhorse, and the Yukon River village of Galena for a total of $12.8 million; 14 Cessna planes to Bethel-based Yute Commuter Service for $1.5 million as well as two of Ravn's buildings, in Bethel and St. Mary's; and 8 Beechcraft planes to Anchorage-based ACE Air Cargo for $5 million. A bankruptcy court approved the sales on July 8. On July 9, Ravn announced the sale of six Dash-8 planes and two of its Part 121 federal operating certificates to Float Shuttle, a California commuter flight service, for $8 million. Float Shuttle intended to take advantage of a $31.6 million payroll support loan the Trump administration offered to a Ravn successor. The $8 million sales price was far below the $19 million Ravn had originally asked for as a minimum bid at a failed auction for the certificates and nine Dash-8 planes. (See June 25, 2020; August 7, 2020.)

20200708 July 8, 2020: FAA and the Switzerland Federal Office of Civil Aviation announced they had reached an agreement to harmonize domestic and international safety standards for UAS. The two nations planned to collaborate under a declaration of intent (DOI) on UAS issues of mutual interest and benefit. The primary objectives of the DOI were to provide opportunities to engage in research and development; exchange ideas, personnel, and information; provide coordination with other government entities and stakeholders; and to collaborate on other initiatives and projects determined to be of mutual interest and benefit in relation to UAS operations.

20200710 July 10, 2020: FAA gave permission to passenger aircraft operators to remove passenger seats and transport cargo on the floor of the cabin in aircraft being deployed on cargo-only flights. The exemption to existing regulations governing aircraft operations would last for one year. FAA also extended until July 10, 2021, its prior ruling that airlines could fly with cargo strapped into the seats through the end of this year. (See May 20, 2020; July 9, 2021.)

20200711 July 11, 2020: Iran's Civil Aviation Organization said "a misaligned missile battery, miscommunication between troops and their commanders, and a decision to fire without authorization led to Iran's Revolutionary Guard shooting down a Ukrainian jetliner in January, killing all 176 people on board." (See January 8, 2020.)

20200713 July 13, 2020: FAA downgraded Pakistan's air safety rating after the agency raised concerns about pilot certifications. The previous month, Pakistan had grounded almost a third of its pilots after discovering they might have falsified their qualifications. (See July 1, 2020.)

20200804	August 4, 2020: Virgin Galactic and its subsidiary, The Spaceship Company, introduced a new supersonic jet design concept aimed at the long-distance commercial aviation segment. In addition, the companies announced the signing of a memorandum of understanding with Rolls-Royce to develop and design "engine propulsion technology for high speed commercial aircraft." According to Virgin Galactic, the FAA's Center for Emerging Concepts and Innovation reviewed the project direction last week and authorized FAA resources to work with the company on outlining a certification framework for the design. (See March 30, 2020.)
20200804	August 4, 2020: FAA proposed an airworthiness directive that listed requirements Boeing had to meet before the 737 Max would be allowed to fly again. The changes included installing new flight control computer software; revising the existing airplane flight manual to incorporate new and revised flightcrew procedures; installing new display system software; changing the horizontal stabilizer trim wire routing installations; completing an angle of attack sensor system test; and performing an operational readiness flight. FAA gave the public 45 days to comment. (See June 29, 2020.)
20200804	August 4, 2020: FAA and the Colorado Division of Aeronautics announced the availability of 53 new weather cameras installed on the Division's network of 13 AWOS sites. The initiative was funded by the Division with $226,000 of funds and allocated to FAA under a reimbursable agreement. Under the arrangement, the FAA and the Governor's Office of Information Technology installed and configured four weather cameras on each of Colorado's Mountain 13 AWOS units. These were the first weather cameras installed outside of Alaska. (See March 3, 2020; February 8, 2021.)
20200805	August 5, 2020: FAA proposed two civil penalties totaling $1.25 million against The Boeing Company for alleged violations in the program that allowed the aircraft manufacturer to perform certain functions on behalf of FAA. The agency alleged that Boeing managers exerted undue pressure or interfered with the work of FAA designees at the company's plant in South Carolina.
20200807	August 7, 2020: Float Shuttle announced it had completed acquisition of the RAVNAir assets it purchased at auction. It anticipated the newly named RAVN Alaska would begin flying as a charter service in November serving Homer and a few other remote Alaska communities. On October 13, RAVN Alaska announced FAA granted permission for it to begin flying charter flights, and the DOT issued what's called a "show cause order," which opened a 14-day window for anyone to show cause for the DOT not to find the air carrier fit, willing, and able to provide scheduled air service. On November 13, Ravn Alaska began flying scheduled public chartered flights between Anchorage and Unalaska, Sand Point, Homer, Kenai, and Valdez. (See July 7, 2020.)
20200811	August 11, 2020: New York's Monroe County Legislature approved the renaming of Rochester's airport the Frederick Douglass – Greater Rochester International Airport. The decision did not require FAA approval, but the airport had to file paperwork with the agency to the change the airport's name.

20200813	August 13, 2020: DOT issued an order suspending all charter flights between the United States and all airports in Cuba, except for authorized public charters to and from Havana and other authorized charter flights for emergency medical purposes, search and rescue, and other travel deemed to be in the interest of the United States. DOT took the action at the request of the Department of State. For most charter carriers, the suspension allowed a 60-day wind-down period and became effective on October 13, 2020. (See October 25, 2019.)
20200817	August 17, 2020: FAA, Department of Justice (DOJ), Department of Homeland Security (DHS), and the Federal Communications Commission (FCC) issued guidance to help non-federal public and private entities better understand the federal laws and regulations that might apply to the use of capabilities to detect and mitigate threats posed by UAS operations. The "Advisory on the Application of Federal Laws to the Acquisition and Use of Technology to Detect and Mitigate Unmanned Aircraft Systems" provided a brief overview of various provisions of the U.S. criminal code enforced by DOJ, as well as federal laws and regulations related to aviation safety and efficiency, transportation and airport security, and the radiofrequency spectrum administered respectively by the FAA, DHS, and FCC.
20200818	August 18, 2020: FAA announced it had selected 26 schools to participate in the Unmanned Aircraft Systems Collegiate Training Initiative (UAS-CTI), which it launched in April. The program allowed educational institutions to collaborate with the agency to prepare students for careers in UAS. Participating institutions would work with FAA, other participants, general industry, local governments, law enforcement, and regional economic development entities to address labor force needs. FAA selected the following schools to participate in the program:
	* Blue Mountain Community College, Pendleton, Oregon
	* Central Oregon Community College, Bend, Oregon
	* Dakota College, Bottineau, North Dakota
	* Embry Riddle Aeronautical University, Daytona Beach, FL, Prescott, AZ, and Worldwide Campus
	* Green River College, Auburn, Washington
	* Gulf Coast Community College, Panama City, Florida
	* Hazard Community and Technical College, Hazard, Kentucky
	* Hinds Community College, Bolton, Mississippi
	* Idaho State University, Poncatello, Idaho
	* Indiana State University, Terra Haute, Indiana
	* MiraCosta College, Carlsbad, California
	* Mountain Empire Community College, Big Stone Gap, Virginia

* Mountwest Community and Technical College, Huntington, West Virginia
* Niagara Community College, Sanborn, New York
* North Carolina State University, Raleigh, North Carolina
* Northeastern Technical College, Cheraw, South Carolina
* Northland Community and Technical College, Thief River Falls, Minnesota
* Northwestern Michigan College, Traverse, Michigan
* Oklahoma City Community College, Stillwater, Oklahoma
* Palomar College District, San Marcos, California
* Santa Rosa Junior College, Windsor, California
* Southwestern College, Chula Vista, California
* Tallahassee Community College, Tallahassee, Florida
* University of Maine at Augusta, August, Maine
* University of North Dakota, Grand Forks, North Dakota
* WSU Tech, Wichita, Kansas
The FAA Reauthorization Act of 2018 (Public Law 115-254) required the FAA to establish a collegiate training initiative program relating to unmanned aircraft and to establish a process to designate consortia of public, two-year institutions of higher education as Community and Technical College Centers of Excellence in Small Unmanned Aircraft System Technology Training. On September 16, FAA announced 15 more schools have been selected to participate in the program.
The new schools included:
* Austin Community College, Austin, Texas
* Atlantic Cape Community College, Mays Landing, New Jersey
* Big Bend Community College, Moses Lake, Washington
* Blue Ridge Community and Technical College, Martinsburg, West Virginia
* Carroll Community College, Westminster, Maryland
* Clark State Community College, Springfield, Ohio
* Elizabeth City State University, Elizabeth City, North Carolina
* Florida State University, Tallahassee, Florida
* Fullerton College, Fullerton California
* Kansas State Polytechnic, Salina, Kansas
* Liberty University, Lynchburg, Virginia

	* Middle Tennessee State University, Murfreesboro, Tennessee
	* Mitchell Technical College, Mitchell, South Dakota
	* Southern West Virginia Community and Technical College, Mount Gay, West Virginia
	* Yavapai College, Prescott, Arizona
20200821	August 21, 2020: FAA announced it planned to evaluate technologies and systems that could detect and mitigate potential safety risks posed by unmanned aircraft. The agency planned to test and evaluate at least 10 technologies or systems. It expected to begin the evaluations at its Technical Center in New Jersey in 2020. After the initial testing and evaluation in New Jersey, the agency expected to expand the effort to four additional U.S. airports.
20200825	August 25, 2020: FAA awarded Leidos a prime contract to design and develop a system to provide real-time access to essential weather, aeronautical, and NAS information through a common, NAS-wide Enterprise-Information Display System (E-IDS). The new system replaced five legacy systems as part of FAA's NextGen modernization program. The single award contract had an approximate value of $292 million. It included a four-year base period and 11 one-year options.
20200828	August 28, 2020: Boeing announced it had found manufacturing defects on eight of its 787 Dreamliners. The company said the planes had to be inspected and repaired before they could be flown. It was working with the FAA to determine the cause of the problem. Boeing did not identify the exact problem and did not identify the airlines flying the eight planes. On September 8, Boing announced it had discovered an issue on the tails of two-aisle 787s after finding that pieces were clamped together too tightly, which could lead to premature fatigue of the horizontal stabilizer. The company said that the problem could affect 893 of the nearly 1,000 787s built. Boeing delayed deliveries of the 787s while it inspected the aircraft. Boeing later confirmed it had uncovered a manufacturing problem with 787 vertical fins – the fourth production-quality issue linked to the widebody twinjet program. (See January 19, 2018.)
20200831	August 31, 2020: FAA announced it had issued a Part 135 air carrier certificate to Amazon for its fleet of Prime Air drones and would allow Amazon to begin testing drone deliveries to customers on a limited basis. FAA had previously allowed UPS and Alphabet's Wing to test drone deliveries.
20200902	September 2, 2020: Magician David Blaine flew about 24,500 feet into the air tethered to 52 weather balloons. He lifted off from the Page airport in Arizona, and landed safely in the desert near the airport. FAA approved flight on September 1. The FAA deemed the flight a research and development project and classified his balloons as an experimental aircraft. The agency required Blaine to get licensed for hot-air balloon piloting before the stunt.

20200904	September 4, 2020: The Gulf Shores (Alabama) Airport Authority broke ground for a new federal contract air traffic control tower at Jack Edwards National Airport. The authority received $6.13 million in funding from the FAA and the Cares Act to help pay for the construction. The Authority expected the new tower to open in mid-2021.
20200908	September 8, 2020: FAA announced an Aviation Maintenance Technical Workforce Development Grant Program to recruit students for careers in aviation maintenance. The program was designed to support projects such as establishing new educational programs, providing scholarships or apprenticeships, supporting career outreach efforts, and enhancing aviation maintenance technical education. Congress appropriated $5 million in fiscal year 2020 to fund projects to address the projected shortages of aviation maintenance technical workers. Eligible groups could apply for grants from $25,000 to $500,000 for any one grant in any one fiscal year. (See September 9, 2020.)
20200908	September 8, 2020: FAA extended the special federal aviation regulation from September 18, 2020 to September 18, 2023, that prohibited certain flight operations in the Pyongyang Flight Information Region by all: U.S. air carriers; U.S. commercial operators; persons exercising the privileges of an airman certificate issued by the FAA, except when such persons are operating U.S.-registered aircraft for a foreign air carrier; and operators of U.S.-registered civil aircraft, except when the operator of such aircraft is a foreign air carrier. (See September 18, 2018.)
20200909	September 9, 2020: FAA issued a notice in the Federal Register announcing the Aircraft Pilots Workforce Development Grant Program. The program was designed to help expand the pilot workforce and help high school students receive training to become aerospace engineers or unmanned aircraft systems operators. The program also would help prepare teachers to train students for jobs in the aviation industry. In fiscal year 2020, Congress appropriated $5 million to create and deliver a training curriculum to address the projected shortages of aircraft pilots. Eligible groups could apply for grants from $25,000 to $500,000. (See September 8, 2020.)
20200911	September 11, 2020: The European Aviation Safety Agency (EASA) announced it had completed Boeing 737 MAX flight testing, clearing the way for joint regulatory agency evaluations of the grounded model's updated training. In the next step in its evaluation of the aircraft for return to service, EASA began analyzing the data and other information gathered during the flights tests in preparation for the Joint Operations Evaluation Board (JOEB). The JOEB includes participation from Brazilian, Canadian, European, and U.S. pilots and regulators and was planned to start on September 14 at London Gatwick Airport. The board evaluated proposed MAX training for pilots and fed an FAA-led Flight Standardization Board report that established minimum training curriculum. (See December 23, 2019; September 17, 2020.)

20200917	September 17, 2020: The House Transportation & Infrastructure Committee issued final 238-page report on the design, development and certification of 737 MAX, citing Lion Air and Ethiopian crashes were a horrific culmination of a series of faulty technical assumptions by Boeing engineers, a lack of transparency by Boeing management to compete with Airbus and deliver profits, and insufficient oversight by the FAA. (See September 11, 2020; September 30, 2020.)
20200918	September 18, 2020: FAA announced its policy for approving drone designs as a special class of aircraft. The policy statement confirmed a notice the agency released in February. The earlier notice informed the public of its plan to treat drones as a special class of aircraft under its Part 21.17 regulation for very light airplanes when assessing if the design of a model complies with airworthiness standards. With the new policy, the FAA began issuing type certificates, or design approvals, for unmanned aircraft systems (UAS) under a Part 21.17(b) process. The agency said it could still tailor design approvals for some drones, where appropriate, using airworthiness criteria from other categories of airplanes and helicopters under Part 21.17(a).
20200924	September 24, 2020: FAA announced had added 133 additional air traffic facilities to its Low Altitude Authorization and Notification Capability (LAANC) system. LAANC provided near-real-time approval for qualified drone pilots making requests to fly below 400 feet in controlled airspace. Nationwide beta testing for the program began in April 2018 and included nearly 300 air traffic facilities covering almost 500 airports. (See November 21, 2019.)
20200928	September 28, 2020: FAA announced it had certified the largest commercial jet engine ever built, the General Electric GE9x, designed for Boeing's new fleet of 777X aircraft. The new engine had 16 blades and delivered 110,000 pounds of thrust at takeoff.
20200930	September 30, 2020: FAA Administrator Steve Dickson flew the Boeing 373 Max in a two-hour test flight during which he flew high angle-of-attack patterns and activated the flight control software that provide erroneous information on the MAX crash flights in Indonesia and Ethiopia that killed 346 people. Dickson went through new pilot training procedures for the aircraft, plus spent time in a 737 Max simulator ahead his flight. Before the plane can return to service, several steps need to be completed: Flight Standardization Board (FSB) Report, Final Design Documentation and Technical Advisory Board Report, Continued Airworthiness Notification to the International Community (CANIC) & AD, rescinding grounding order, issuing Certificates of Airworthiness, and finalizing training programs. (See September 18, 2020; October 6, 2020.)

20200930	September 30, 2020: U.S. Ambassador Earl R. Miller and Bangladesh Ministry of Civil Aviation and Tourism Senior Secretary Mohamed Mohibul Haque signed the Air Transport Agreement between the Government of the United States of America and the Government of the People's Republic of Bangladesh. This bilateral Agreement established a modern civil aviation relationship with Bangladesh consistent with U.S. Open Skies international aviation policy. It included unrestricted capacity and frequency of services, open route rights, a liberal charter regime, and open code-sharing opportunities. FAA had to conduct an inspection before carriers could begin direct air services.
20200930	September 30, 2020: Regional airline ExpressJet Airlines ceased operation. As one of the country's largest regional airlines, ExpressJet had operated flights for a number of larger airlines, including American Airlines, Delta Air Lines and, most recently, United Airlines.
20201006	October 6, 2020: FAA placed the draft Boeing 737 MAX Flight Standardization Board (FSB) report online. The report incorporated the recommendations from the Joint Operations Evaluation Board (JOEB) which was comprised of civil aviation authorities from the United States, Canada, Brazil, and the European Union. The FAA planned to publish a final FSB report after reviewing and addressing public comments on the draft. Several key milestones remained before the Boeing 737 Max could fly again:
	* Final Design Documentation and Technical Advisory Board (TAB) Report – The FAA must review Boeing's final design documentation to evaluate compliance with all FAA regulations. The multi-agency TAB would also review the final Boeing submission and issue a final report prior to a final determination of compliance by the FAA.
	* Continued Airworthiness Notification to the International Community (CANIC) & AD – The FAA will issue a CANIC providing notice of pending significant safety actions and will publish a final AD that addresses the known issues for grounding. The AD will advise operators of required corrective actions before aircraft may re-enter commercial service.
	* FAA Rescinds Grounding Order – This marks the official ungrounding of the aircraft, pending completion by operators of the work specified in the AD, along with any required training.
	* Certificates of Airworthiness – The FAA will retain its authority to issue airworthiness certificates and export certificates for all new 737 MAX airplanes manufactured since the grounding. The FAA will perform in-person, individual reviews of these aircraft.
	* Operator Training Programs – The FAA will review and approve training programs for all Part 121 operators.
	These actions were applicable only to U.S. air carriers and U.S.-registered aircraft. (See September 30, 2020; November 20, 2020.)

20201015	October 15, 2020: FAA issued the Streamlined Launch and Reentry Licensing Requirements Final Rule (PDF) for commercial space transportation launches and reentries. The rule consolidated four regulatory parts and applied a single set of licensing and safety regulations for all types of vehicle operations. The final rule's application processes allowed:
	* A single operator's license that can be used to support multiple launches or reentries from potentially multiple launch site locations.
	* Early review when applicants submit portions of their license application incrementally.
	* Applicants to negotiate mutually agreeable reduced time frames for submittals and application review periods.
	* Applicants to apply for a safety element approval with a license application, instead of needing to submit a separate application.
	* Additional flexibility on how to demonstrate high consequence event protection.
	* Neighboring operations personnel to stay during launch or reentry in certain circumstances.
	* Ground safety oversight to be scoped to better fit the safety risks and reduce duplicative requirements when operating at a federal site.
	This rule became effective 90 days after issuance. Legacy licenses could be used for up to five years after the rule's effective date. (See July 31, 2013; March 21, 2021.)
20201019	October 19, 2020: A 7.5 magnitude earthquake, centered near Sand Point, Alaska, and a subsequent tsunami warning disrupted air traffic in the region for a short period. The quake was felt widely in communities along the southern coast, including Sand Point, Chignik, Unalaska, and the Kenai Peninsula, according to the Alaska Earthquake Center, which reported a magnitude 5.2 aftershock 11 minutes later.
20201030	October 30, 2020: Secretary of Transportation Elaine Chao announced the three-year Unmanned Aircraft Systems Integration Pilot Program successfully concluded on October 25. Eight of the nine state, local and tribal governments that participated in the program have signed new agreements with the FAA to continue to tackle remaining UAS integration challenges. (October 25, 2017.) This new initiative called BEYOND, included the following participants:
	* Choctaw Nation of Oklahoma
	* Innovation and Entrepreneurship Investment Authority of Virginia
	* Kansas Department of Transportation
	* Memphis-Shelby County Airport Authority
	* North Carolina Department of Transportation
	* North Dakota Department of Transportation

	* City of Reno, Nevada
	* University of Alaska-Fairbanks
20201104	November 4, 2020: FAA issued a Special Airworthiness Information Bulletin (SAIB) to advise owners and operators of transport category airplanes of important airworthiness information and guidelines with respect to disinfecting airplane interiors. The information and guidelines might also apply to other categories of aircraft. FAA warned, although disinfection is not directly related to aircraft airworthiness, too frequent or improper application could result in negative impacts, which could include the following conditions:
	* Corrosion
	* Embrittlement
	* Increased flammability
	* Electrical short circuit
	Depending on the system or part affected, any of these conditions could create either an immediate or latent airworthiness issue, according to FAA.
20201112	November 12, 2020: Aireon announced an agreement with FAA allowing the agency access to its satellite-routed aircraft surveillance data to evaluate different air traffic control (ATC) applications. Under the agreement, FAA "will have broad, intra-agency access" to Aireon's space-based automatic dependent surveillance-broadcast (ADS-B) data feed to integrate in its ATC automation platforms, Aireon said. L3Harris Technologies, which operated FAA's ground-based ADS-B surveillance network, will act as prime contractor. Aireon receiver payloads carried by Iridium Next satellites capture ADS-B messages that are continuously broadcast by transponder-equipped aircraft below, then stream the data to Aireon's ground-based teleport network. Aireon processes the data and distributes it to air navigation service providers that subscribe to its service. FAA plans to evaluate the use of Aireon's data feed for airspace safety analysis, search and rescue, airport surface applications and commercial space launch operations, according to the announcement.
20201115	November 15, 2020: A SpaceX capsule carried four astronauts to the International Space Station in SpaceX's "first regular NASA mission to the" station. The Crew-1 mission was also the first human orbital flight licensed by FAA, which had responsibility for public safety because the flight was conducted by a commercial company. (See May 30, 2020; December 9, 2020.)

20201117 November 17, 2020: The US and the UK officially signed a new Open Skies agreement on, ensuring air transport between the nations continues seamlessly in a post-Brexit environment. The accord allowed nonstop passenger flights operated by US and UK airlines from one country to another to continue unimpeded. US all-cargo carriers will also receive additional traffic rights on US-UK routes. Air traffic between the US and the UK had been covered under the US-European Union (EU) Open Skies regime, but the UK's exit from the EU made a new agreement necessary. Secretary of Transportation Elaine Chao and Secretary of State Mike Pompeo signed the agreement on behalf of the US on November 10. British transport minister Grant Shapps signed the agreement on November 17 on behalf of the UK.

20201119 November 19, 2020: The FBI arrested a Hollywood, California, man on charges that he crashed a drone into a Los Angeles Police Department (LAPD) helicopter in September. According to a press release issued by the U.S. Attorney's Office for the Central District of California, the collision took place during the early morning of September 18 as the helicopter crew responded to a report of a burglary at a pharmacy in Hollywood, which is part of Los Angeles. The impact caused the pilot to make an emergency landing at the LAPD's rooftop Hooper Heliport. The helicopter sustained damage to its nose, antenna and bottom cowlings. After colliding with the helicopter, the drone fell to the ground and damaged a car parked near the pharmacy, according to the press release. Its operator, a 22-year-old man living across the street from the pharmacy, faced a misdemeanor charge of unsafe operation of an unmanned aircraft, which carried a maximum sentence of one year in federal prison. The case against the man "is believed to be the first criminal case in the nation alleging the unsafe operation of an unmanned aircraft," the U.S. Attorney's Office said.

20201120 November 20, 2020: FAA Administrator Steve Dickson signed an order that paved the way for the Boeing 737 MAX to return to commercial service. Administrator Dickson's action followed a comprehensive and methodical safety review process that took 20 months to complete. In addition to rescinding the order that grounded the aircraft, the FAA published an airworthiness directive specifying design changes that must be made before the aircraft returns to service, issued a continued airworthiness notification to the international community, and published the MAX training requirements. These actions did not allow the MAX to return immediately to the skies. The FAA had to approve 737 MAX pilot training program revisions for each U.S. airline operating the MAX and would retain its authority to issue airworthiness certificates and export certificates of airworthiness for all new 737 MAX aircraft manufactured since the FAA issued the grounding order. Furthermore, airlines that had parked their MAX aircraft had to take required maintenance steps to prepare them to fly again. On November 25, Brazil adopted the FAA requirements for the 737 Max to return to service. (See October 6, 2020; December 1, 2020.)

20201120 November 20, 2020: The University of Tennessee Institute of Agriculture announced it had received a one-year $250,000 grant from the FAA to study the possible use of certain farming biomass in the production of jet fuel. The institute said the FAA "grant will fuel a one-year study that looks into the use of pennycress, soybean, canola, carinata and camelina, and softwood logging residues." The study "is expected to involve airports around Nashville; Memphis; Chattanooga; Birmingham, Alabama; and Atlanta, Georgia." According to the university, "The use of biomass feedstock may reduce greenhouse gas emissions by as much as 80% compared to petroleum-based fuels." (See June 5, 2019; October 15, 2021.)

20201127 November 27, 2020: The Department of Transportation issued a final rule codifying its longstanding definitions for the terms "unfair" and "deceptive" when the Department used its statutory authority to prohibit unfair or deceptive practices by airlines or ticket agents. Most of the Department's aviation consumer protection regulations, such as the Department's tarmac delay rule and rules on overbooking, are based on the Department's authority to prohibit unfair or deceptive practices. As defined by the final rule, a practice is "unfair" to consumers if it causes or is likely to cause substantial injury, which is not reasonably avoidable, and the harm is not outweighed by benefits to consumers or competition. The final rule also stated a practice is "deceptive" to consumers if it is likely to mislead a consumer, acting reasonably under the circumstances, with respect to a material matter. A matter is material if it likely affected the consumer's conduct or decision with respect to a product or service. Proof of intent is not necessary to establish unfairness or deception.

20201201 December 1, 2020: The Department of Transportation announced that all necessary regulatory measures had been taken for the safe, rapid transportation of the COVID-19 vaccine by land and air. Transportation agencies and Operation Warp Speed officials coordinated with the private sector companies that plan to carry the vaccines from manufacturing facilities to the distribution centers and inoculation points. The Department established the appropriate safety requirements for all potential hazards involved in shipping the vaccine, including standards for dry ice and lithium batteries. In October, the FAA COVID-19 Vaccine Air Transport Team was established as part of the Department's effort to support the safe and expedited transportation and distribution of approved COVID-19 vaccines, including providing support to Operation Warp Speed. Key to this effort has been coordination with the Department's Pipeline and Hazardous Materials Safety Administration to ensure the safe transportation of hazardous materials.

20201201 December 1, 2020: FAA extended through March 31, 2021, two regulatory exemptions (18509, 18512) it previously issued to scheduled and on-demand U.S. air carriers. The exemptions gave crewmembers relief from having to don protective breathing equipment or oxygen masks in training, checking, or evaluation. They originally were going to expire on November 30, 2020.

20201201 December 1, 2020: FAA announced it had issued its first airworthiness certificate for a Boeing 737 MAX built since March 2019. Boeing had about 450 737 MAX airplanes built since 2019 awaiting approval by the FAA before they could be delivered to airlines. (See November 20, 2020; December 9, 2020.)

20201202 December 2, 2020: The Department of Transportation issued a final rule revising its Air Carrier Access Act regulation on the transportation of service animals by air. (See August 8, 2019.) The Traveling by Air with Service Animals final rule:

* Defined a service animal as a dog that is individually trained to do work or perform tasks for the benefit of a person with a disability

* No longer considered an emotional support animal to be a service animal

* Required airlines to treat psychiatric service animals the same as other service animals

* Allowed airlines to require forms developed by DOT attesting to a service animal's health, behavior, and training, and if taking a long flight attesting that the service animal can either not relieve itself, or can relieve itself in a sanitary manner

* Allowed airlines to require individuals traveling with a service animal to provide the DOT service animal form(s) up to 48 hours in advance of the date of travel if the passenger's reservation was made prior to that time

* Prohibited airlines from requiring passengers with a disability who are traveling with a service animal to physically check-in at the airport instead of using the online check-in process

* Allowed airlines to require a person with a disability seeking to travel with a service animal to provide the DOT service animal form(s) at the passenger's departure gate on the date of travel

* Allowed airlines to limit the number of service animals traveling with a single passenger with a disability to two service animals;

* Allowed airlines to require a service animal to fit within its handler's foot space on the aircraft

* Allowed airlines to require that service animals be harnessed, leashed, or tethered at all times in the airport and on the aircraft

* Continued to allow airlines to refuse transportation to service animals that exhibit aggressive behavior and that pose a direct threat to the health or safety of others

* Continued to prohibit airlines from refusing to transport a service animal solely based on breed

On December 29, Alaska Airlines became the first U.S. airline to announce, that beginning January 11, 2021, it would only transport service dogs specially trained to perform tasks for the benefit of a qualified individual with a disability.

20201204	December 4, 2020: The airport in Burlington, Vermont, opened its new $35.4 million taxiway paralleling the main runway. FAA funded 90 percent of construction through an airport improvement program grant.
20201209	December 9, 2020: Brazil's Gol Linhas Aéreas began flying the Max, the earliest of any global airline, on domestic routes from Sao Paulo. On December 29, American Airlines became the first U.S. airline to fly scheduled Max flights. (See December 1, 2020.) December 9, 2020: A full-size prototype of SpaceX's heavy-lift Starship launch vehicle soared high into the atmosphere in a test flight over South Texas, and successfully guided itself to a beachside landing site before exploding at touchdown. (See November 15, 2020; April 8, 2021.)
20201210	December 10, 2020: The U.S. Air Force gave a safety endorsement to Joby Aviation's electric-powered vertical-takeoff-and-landing (eVTOL) vehicle – the first safety endorsement the service has given to an eVTOL. The endorsement allows Joby Aviation to use its vehicle to transport military equipment, but industry and military officials said the endorsement could be the first step towards eventual civilian certification.
20201217	December 17, 2020: FAA and the Kansas Department of Transportation (KDOT) announced an agreement to establish a flight corridor for testing civil supersonic aircraft. The Kansas Supersonic Transportation Corridor (SSTC), a 770-nm, racetrack-shaped flight route, ran the length of the state at Flight Level 390 (39,000 ft.) and above. Located in low-volume airspace just north of the Kansas-Oklahoma border, the route supported sustained flight speeds to Mach 3 and was within reach of numerous airports. Aircraft entered the SSTC at specific points and operators were required to clear flight routes prior to takeoff. The KDOT Division of Aviation, FAA's Central Region and its Kansas City Air Route Traffic Control Center, and Lemasters Group Consulting wrote new procedures to provide safety margins during supersonic flights.
20201221	December 21, 2020: Under FAA Exemption No. 19685, FAA increased the time frame for a check airman to conduct a proficiency or competency check under the observation of an FAA inspector or an aircrew designated examiner from 24 to 36 months. FAA also granted a petition to extend relief on crew training deadlines for completing recurrent training and qualification requirements for ground personnel and crewmembers through March 31, 2021. The extension provided relief for requirements due in January, February, and March 2021.
20201227	December 27, 2020: President Trump signed into law H.R. 133, an Act making consolidated appropriations for the fiscal year ending September 30, 2021, providing coronavirus emergency response and relief, and for other purposes. The bill included mandates for FAA to reform its certification processes. Among other things, the bill:
	* Required aviation manufacturers to adopt safety management systems;
	* Ordered an independent review of Boeing's organization delegation authorization (ODA), safety culture, and capability to perform FAA-delegated functions;

	* Reformed the FAA's greater oversight of manufacturer's ODA units and FAA-designees working within those units;
	* Authorized civil penalties against aviation manufacturer supervisors who interfere with or place undue pressure on other employees who are empowered to act as FAA designees in finding that a design or product complies with design requirements;
	* Required FAA to approve each new designee who performs those functions;
	* Authorized more than $75 million over three years for FAA to recruit and retain engineers, safety inspectors, human factors specialists, software and cybersecurity experts, and other qualified technical experts;
	* Required FAA to consider whether there comes a point at which a derivative of an old aircraft design should no longer be certificated as a derivative instead of as a new design;
	* Locked in new requirements on the disclosure of safety-critical systems;
	* Expanded whistleblower protections;
	* Required FAA to review pilot training, including manual flying skills training, and the assumptions relied upon by FAA and manufacturers when designing an airplane, and to work with the international community to improve pilot training globally; and
	* Ensured better understanding of human factors and how to integrate them into the aircraft certification process.
20201228	December 28, 2020: FAA announced final rules for unmanned aircraft. The new rules required Remote Identification (Remote ID) of drones and allow operators of small drones to fly over people and at night under certain conditions. Remote ID will help mitigate risks associated with expanded drone operations, such as flights over people and at night, and both rules support technological and operational innovation and advancements. The Remote ID rule (PDF) applies to all operators of drones that require FAA registration. There are three ways to comply with the operational requirements:
	1. Operate a standard Remote ID drone that broadcasts identification and location information of the drone and control station;
	2. Operate a drone with a Remote ID broadcast module (may be a separate device attached to the drone), which broadcasts identification, location, and take-off information; or
	3. Operate a drone without Remote ID but at specific FAA-recognized identification areas.

	The Operations Over People and at Night rule applied to Part 107 operators. The ability to fly over people and moving vehicles varies depending on the level of risk a small drone operation presents to people on the ground. The rule allowed for operations at night under certain conditions. The final rule required that small drone operators have their remote pilot certificate and identification in their physical possession when operating, ready to present to authorities if needed. This rule also expanded the class of authorities who may request these forms from a remote pilot. The final rule replaces the requirement to complete a recurrent test every 24 calendar months with the requirement to complete updated recurrent training that included operating at night in identified subject areas. Both rules became effective 60 days after publication in the Federal Register. The Remote ID rule included two compliance dates. Drone manufacturers had 18 months to begin producing drones with Remote ID, with operators having an additional year to start using drones with Remote ID. (See May 5, 2020; April 21, 2021.)
20201228	December 28, 2020: The U.S. Environmental Protection Agency (EPA) finalized emissions standards for airplanes used in commercial aviation and large business jets. This action will align U.S. standards with the international carbon dioxide (CO2) emissions standards set by the International Civil Aviation Organization (ICAO), ensuring domestically manufactured aircraft remain competitive in the global marketplace.
20201228	December 28, 2020: Effective this date, the Centers for Disease Control and Prevention required that anyone traveling from the United Kingdom to the United States Passengers get a viral test (i.e., a test for current infection) for COVID-19 within three days before their flight from the U.K. to the U.S. departs, and provide written documentation of their laboratory test result (in hard copy or electronic) to the airline. Airlines had to confirm the negative test result for all passengers before they boarded the aircraft. If a passenger chose not to take a test, the airline had to deny boarding to the passenger.
20201231	December 31, 2020: The Coronavirus Response and Relief Supplemental Appropriation Act (CRRSAA) (H.R. 133), signed into law by the President on December 27, 2020, included $2 billion in funds to be awarded as economic relief to eligible U.S. airports and eligible concessions at those airports to prevent, prepare for, and respond to the coronavirus disease 2019 (COVID-19) public health emergency. To distribute these funds, FAA announced establishment of the Airport Coronavirus Response Grant Program. The agency plans to make grants to all eligible airports that are part of the national airport system, including all commercial service airports, all reliever airports, and some public-owned general aviation airports. Under this new grant program:
	* Primary commercial service airports, those with more than 10,000 annual passenger boardings, will share $1.75 billion based on the number of annual boardings, in a similar way to how they currently receive Airport Improvement Program (AIP) entitlement funds.

* Primary commercial service airports will share an additional $200 million based on the number of annual boardings, and these funds will then be available for these airports to provide relief from rent and minimum annual guarantees to on-airport car rental, on-airport parking, and in-terminal airport concessions. Airports will provide this relief to each airport concession based on its proportional share of the total annual rent and minimum annual guarantees for the airport.

* Non-primary commercial service and general aviation airports will share $45 million based on their airport categories, such as National, Regional, Local, and Basic. Of that $45 million, airports that participate in the FAA Contract Tower Program will divide $5 million equally.

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20210106	January 6, 2021: FAA issued a final rule to facilitate the safe development of civil supersonic aircraft. The rule streamlined and clarified procedures to obtain agency approval for supersonic flight testing in the United States. (See September 23, 1977.)
20210108	January 8, 2021: FAA and NASA signed a memorandum of understanding (MOU) to support commercial space activities related to the transport of government and non-government passengers, cargo, and payloads for both orbital and suborbital missions. Under the MOU, the two agencies planned to build a stable launch and reentry framework for the U.S. space industry that was transparent and avoided conflicting requirements and multiple sets of standards. The two agencies planned to establish a point-to-point commercial suborbital pilot program with designated spaceports and airspace designs. Other existing collaboration between FAA and NASA included the Flight Opportunities Program to help develop a framework for flying researchers from industry and academia on commercial suborbital flights and efforts to extend suborbital space transportation capabilities for NASA astronauts and other NASA personnel.
20210113	January 13, 2021: FAA Administrator Steve Dickson signed an order directing a stricter legal enforcement policy against unruly airline passengers in the wake of recent incidents. Effective immediately, the agency would pursue legal enforcement action against any passenger who assaulted, threatened, intimidated, or interfered with airline crew members. The policy would be in effect through March 30, 2021. Passengers who interfered with, physically assaulted, or threatened to physically assault aircraft crew or anyone else on an aircraft faced stiff penalties, including fines of up to $35,000 and imprisonment. FAA subsequently extended the zero tolerance order. (See July 13, 2021.)
20210119	January 19, 2021: FAA announced the availability of two Aviation Workforce Development Grant programs aimed at developing and inspiring a more inclusive pool of pilots and aviation maintenance technicians to join the next generation of aviation professionals. The Aircraft Pilots Workforce Development Grants provided money to expand the pilot workforce and educate students to become pilots, aerospace engineers, or unmanned aircraft systems operators. The Aviation Maintenance Technical Workers Workforce Development Grants was designed to prepare aviation maintenance technicians. Applicants from academia and the aviation community could submit applications through March 22, 2021.
20210120	January 20, 2021: Joe Biden became the 46th President of the United States.

20210126	January 26, 2021: Terrafugia announced it had received a FAA Special Light-Sport Aircraft airworthiness certificate for its Transition® roadable aircraft. As a unique integration of a two-seat aircraft and an automobile, the Transition® was designed to meet safety standards from both FAA and the National Highway and Traffic Safety Administration. The vehicle that received the certificate was legal for flight only and represented the initial version of the Transition® roadable aircraft. Terrafugia planned to produce and sell additional initial (flight-only) versions to interested parties and hoped to develop the driving portion of the Transition® design, with the goal of being legal both in the sky and on local roads in 2022. (See June 21, 2016.)
20210131	January 31, 2021: TSA announced that starting on February 21, it would require travelers to wear face masks when in airports, bus, and rail stations, as well as while on passenger aircraft, public transportation, passenger railroads, and over-the-road buses operating on scheduled fixed-routes. On April 30, TSA announced an extension to the face mask requirement, originally set to expire on May 11, through September 13, 2021. On August 20, TSA again extended the requirement to January 21, 2022. (See September 10, 2021).
20210203	February 3, 2021: Pete Buttigieg became Secretary of Transportation.
20210208	February 8, 2021: FAA announced expansion of its weather camera program to Hawaii. FAA planned to install 23 camera facilities throughout the islands. The agency began camera installations on Kauai in March. (See August 4, 2020.)
20210211	February 11, 2021: FAA announced the Republic of Costa Rica complied with international safety standards and had been granted the highest international ranking. Costa Rica received a Category 2 rating in May 2019 after it failed to comply with ICAO's safety standards. The Category 1 status was based on a reassessment in 2020 and a January 2021 safety oversight meeting with the Directorate General of Civil Aviation (DGAC). A Category 1 rating meant the country's civil aviation authority complied with ICAO standards. Under Category 1 rating, properly authorized Costa Rican air carriers were permitted to serve the United States and carry the code of U.S. carriers without limitation.
20210224	February 24, 2021: FAA issued an emergency airworthiness directive (AD) requiring U.S. operators of airplanes equipped with certain Pratt & Whitney PW4000 engines to inspect those engines before further flight. FAA took action as the result of a fan-blade failure that occurred February 20 on a Boeing 777-200 that had departed from Denver International Airport. Although the aircraft landed safely, the failure resulted in damage to the engine, an in-flight engine fire, and damage to the airplane. After reviewing the available data and considering other safety factors, FAA determined operators must conduct a thermal acoustic image (TAI) inspection of the large titanium fan blades located at the front of each engine. TAI technology could detect cracks on the interior surfaces of the hollow fan blades, or in areas that could not be seen during a visual inspection.

20210225	February 25, 2021: FAA assessed $5.4 million in deferred civil penalties against the Boeing Company for failing to meet performance obligations under a 2015 settlement agreement. Under the 2015 agreement, Boeing pledged to change its internal processes to improve and prioritize regulatory compliance. The agreement required the company to meet specific performance targets, and authorized FAA to assess deferred penalties if it failed to do so. The Chicago-based aircraft manufacturer also agreed to pay $1.21 million to settle two pending FAA enforcement cases. One case alleged the company implemented an improper structure of its FAA-approved Organization Designation Authorization (ODA) program and exerted undue pressure or interfered with ODA unit members. The other case alleged it failed to follow its quality-control processes and subjected ODA members to undue pressure or interference in relation to an aircraft airworthiness inspection.
20210225	February 25, 2021: FAA implemented its Las Vegas Metroplex project, one of 11 such projects nationwide. The project used satellite navigation to create new direct routes for McCarran International Airport, Henderson Executive Airport, and North Las Vegas Airport, which automatically separated aircraft from each other and provided efficient climb and descent profiles. (See March 26, 2020; April 22, 2021.)
20210302	March 2, 2021: FAA selected five host airports to evaluate technologies and systems that might be able to detect and mitigate potential safety risks posed by unmanned aircraft. Researchers planned to test and evaluate at least 10 technologies or systems at the following airports:
	* Atlantic City International Airport in Atlantic City, New Jersey
	* Syracuse Hancock International Airport in Syracuse, New York
	* Rickenbacker International Airport in Columbus, Ohio
	* Huntsville International Airport in Huntsville, Alabama
	* Seattle-Tacoma International Airport in Seattle, Washington
20210317	March 17, 2021: FAA renewed two unmanned aerial system launch operator licenses for Orbital Sciences, LLC, a subsidiary of Northrop Grumman. The licenses were valid for five years and authorized the company to conduct flights of its Pegasus launch vehicle from the Wallops Flight Facility in Virginia and the Cape Canaveral Space Force Station in Florida. Orbital Sciences still had to receive FAA authorization for specific launches.
20210321	March 21, 2021: FAA issued a final rule that streamlined and modernized its commercial space launch and reentry licensing regulations by eliminating obsolete requirements, replacing most prescriptive requirements with performance-based criteria, and reducing duplicative regulations. It also established a single set of licensing and safety regulations for several types of commercial space operations and vehicles. (See October 15, 2020.)

20210325	March 25, 2021: The United States and the United Kingdom completed an exchange of diplomatic notes that brought into force a new air transport agreement. The United States and the United Kingdom signed the agreement on November 10 and November 17, 2020, respectively, and began applying the terms of the agreement on January 1, 2021. The agreement met all the criteria of the U.S. Open-Skies policy and provided for additional traffic rights for U.S. all-cargo operations to and from the United Kingdom. The agreement also included the UK Overseas Territories and Crown Dependencies, expanding and modernizing our air transport relationship with those regions.
20210328	March 28, 2021: FAA's Mike Monroney Center Aeronautical Center announced a three-year MOU with the Choctaw Nation of Oklahoma to study how Unmanned Aircraft Systems (UAS) could best transport cargo, including parcels, at lower altitudes.
20210408	April 8, 2021: Boeing notified FAA it had recommended operators of certain Boeing 737 MAX airplanes to temporarily remove them from service to address a manufacturing issue that could affect the operation of a backup power control unit. (See December 9, 2020; May 27, 2021.)
20210421	April 21, 2021: Effective this date, FAA's Remote Identification (Remote ID) rule provided for identifying drones in flight and the location of their control stations. The rule applied to all drones requiring FAA registration. The new Operations over People rule, also effective this date, applied to pilots who flew under Part 107 of the Federal Aviation Regulations. Under that rule, the ability to fly over people and over moving vehicles varied depending on the level of risk a small drone posed to people on the ground. Additionally, the rule allowed operations at night under certain conditions provided pilots completed certain training or passed knowledge tests. (See December 28, 2020.)
20210422	April 22, 2021: FAA implemented the first phase of the South-Central Florida Metroplex when it published 54 new air traffic procedures. Metroplex procedures allowed more direct flights and more efficient climb and descent profiles. Seventeen of the procedures required additional training of air traffic controllers and automation upgrades at air traffic control facilities before they could be implemented. (See February 25, 2021; August 12, 2021.)
20210430	April 30, 2021: FAA and the Civil Aviation Authority of Singapore (CAAS) released the first in a series of joint videos to share lessons learned during the COVID-19 crisis. The five episode executive video series covered resilient leadership, safety oversight, emerging technology, risk-based decision-making and women in aviation. The videos presented lessons learned to benefit both agencies as well as the international aviation community. It is one of several collaborations under a longstanding partnership between FAA and the CAAS.

20210505	May 5, 2021: FAA announced it had added space launch activity areas to the navigation charts used by pilots who fly visually. The agency now represented all 12 FAA-licensed spaceports, and other federal and private launch and reentry sites, on the charts by a rocket symbol. These areas were in Alaska, California, Colorado, Florida, New Mexico, Oklahoma, Texas and Virginia. Pilots could download the free charts and reference FAA's Aeronautical Chart User's Guide for more information.
20210522	May 22, 2021: The Virgin Galactic SpaceShipTwo flight from SpacePort America in New Mexico marked the 400th FAA licensed commercial space launch. The first space launch occurred in 1989 at Whites Sands Missile Range in New Mexico. (See December 13, 2018; July 11, 2021.)
20210525	May 25, 2021: FAA announced Mexico did not meet International Civil Aviation Organization (ICAO) safety standards. Based on a reassessment of Mexico's civil aviation authority, FAA downgraded Mexico's rating to Category 2. While the new rating allowed Mexican air carriers to continue existing service to the United States, it prohibited any new service and routes. U.S. airlines no longer were allowed to market and sell tickets with their names and designator codes on Mexican-operated flights.
20210526	May 26, 2021: FAA issued the final rule for the Pilot Records Database, which required air carriers and certain other operators to report pilots' employment history, training, and qualifications to the database. The rule also required air carriers and certain operators to review records contained in the database when considering pilots for employment. (See March 30, 2020.) The database included the following information:
	* FAA pilot certificate information, such as certificates and ratings
	* FAA summaries of unsatisfactory pilot applications for new certificates or ratings
	* FAA records of accidents, incidents, and enforcement actions
	* Records from employers on pilot training, qualification, and proficiency
	* Pilot drug and alcohol records
	* Employers' final disciplinary action records
	* Pilot records concerning separation of employment
	* Verification of pilot motor vehicle driving record
	The rule took effect 60 days after publication in the Federal Register. Additional actions and timelines to support implementation of the rule included:
	* Six months after the rule was published, operators had to begin reviewing FAA records electronically in the database instead of submitting a form requesting records
	* One year after the rule was published, operators had to begin reporting and reviewing records to the database

	* Operators had three years and 90 days to transition and fully comply with the rule
20210527	May 27, 2021: FAA announced the Boeing Company would pay at least $17 million in penalties and undertake multiple corrective actions with its production under a settlement agreement. FAA found that the Chicago-based manufacturer installed equipment on 759 Boeing 737 MAX and NG aircraft that contained sensors not approved for that equipment; submitted approximately 178 Boeing 737 MAX aircraft for airworthiness certification when the aircraft potentially had nonconforming slat tracks installed; and improperly marked those slat tracks. Boeing paid the $17 million penalty within 30 days after signing the agreement. If Boeing did not complete certain corrective actions within specific timeframes, FAA would levy up to $10.1 million in additional penalties. The corrective actions included:
	* Strengthening procedures to ensure that it does not install on aircraft any parts that fail to conform to their approved design
	* Performing Safety Risk Management analyses to determine whether its supply-chain oversight processes are appropriate and whether the company is ready to safely increase the Boeing 737 production rate
	* Revising its production procedures to enable FAA to observe production rate readiness assessments, the data on which the company bases the assessments, and the results of the assessments
	* Taking steps to reduce the chance that it presents to the FAA aircraft with nonconforming parts for airworthiness certification or a Certificate of Export
	* Enhancing processes to improve its oversight of parts suppliers (See April 8, 2021; October 14, 2021.)
20210528	May 28, 2021: FAA issued an alert advising U.S. passenger airlines to exercise extreme caution while flying over Belarus. The notice to airmen said airlines should continue to exercise extreme caution until the agency could better assess Belarus' actions surrounding the May 23 diversion of a passenger jet and the potential for Belarus to repeat similar actions in the future. FAA planned to continue its oversight of Boeing's engineering and production activities and implemented oversight provisions from the 2020 Aircraft Certification, Safety, and Accountability Act. (See June 29, 2021.)
20210604	June 4, 2021: FAA revoked Universal Flight Services' ability to charge passengers for flights and revoked the owner's pilot certification for conducting illegal charter flights. The company conducted 26 illegal passenger flights without a FAA certificate from October 22, 2015, to February 17, 2019. In March 2019, the Florida-based company had received the required FAA certificate to conduct passenger flights. However, between September 9, 2019, and September 20, 2020, the company operated seven flights with unauthorized pilots and/or aircraft. Additionally, all flights from October 2015 to September 2020, were flown by pilots who had not passed the required tests and checks.

20210604	June 4, 2021: FAA renewed the spaceport license for the Oklahoma Space Industry Development Authority, authorizing them to operate a launch site at Clinton-Sherman Industrial Airpark. The license had to be renewed every five years. The Authority is one of twelve FAA-licensed commercial spaceports.
20210621	June 21 2021: FAA launched a new Voluntary Safety Reporting Program for those who worked in FAA's Aviation Safety organization. The system gave employees the ability to report confidentially any safety concerns without fear of punitive action. The agency's aviation safety workforce included about 7,400 professionals who provided oversight of airlines, manufacturers, maintenance providers, aviation medical practitioners and flight crews.
20210621	June 21, 2021: FAA and the Department of the Air Force signed an agreement for commercial activities at U.S. Space Force ranges. Under the agreement, the two agencies merged safety protocols at the ranges and eliminated duplicative processes and approvals. FAA accepted the Air Force's safety rules as long if they met FAA regulations. The Air Force received FAA licensing decisions and did not impose its own requirements. The two agencies agreed to consult and coordinate actions before responding to requests and publishing safety materials.
20210622	June 22, 2021: FAA selected sixteen organizations to administer its Recreational Unmanned Aircraft Systems Safety Test (TRUST). The agency developed the test to provide recreational drone flyers with aeronautical safety knowledge and an overview of the rules for operating drones in the national airspace system. The test could be taken through the following approved organizations:
	* Academy of Model Aeronautics
	* Boy Scouts of America
	* Chippewa Valley Technical College
	* Community College of Allegheny County–West Hills Center
	* CrossFlight Sky Solutions LLC
	* Drone Launch Academy LLC
	* Drone U
	* Embry-Riddle Aeronautical University
	* HSU Educational Foundation
	* Lake Area Technical College
	* Pilot Institute
	* Proctorio Incorporated
	* Tactical Aviation
	* UAV Coach
	* University of Arizona Global Campus

	* Volatus Aerospace Corp
20210624	June 24, 2021: DOT renewed the Commercial Space Transportation Advisory Committee through June 2023. The committee, established in 1984, advised DOT and FAA on the commercial space transportation industry.
20210629	June 29, 2021: DOT issued an order proposing to block the sales of air transportation tickets between the US and Belarus. The U.S. would make exemptions on a case-by-case basis for necessary travel to the Eastern European country. This decision came as the result of the diversion of the Ryanair flight 4978, where Belarus forced the plane to land in its territory. (See May 28, 2021.)
20210630	June 30, 2021: FAA, for the first time, used its new Space Data Integrator (SDI) prototype during the SpaceX Transponder 2 launch from Cape Canaveral Space Force Station in Florida. SDI automated the delivery of vehicle-related telemetry data to the FAA Air Traffic Control System Command Center. The information improved FAA's situational awareness of where the vehicle was as it travels to space or as it returned to the Earth. In addition to existing tools, FAA used SDI to manage air traffic more efficiently and address contingencies in the event of an anomaly during a mission.
20210701	July 1, 2021: FAA implemented an alternative air traffic procedure for arrivals to Runway 19 at Teterboro Airport in New Jersey. The procedure used satellite-based technology to guide a mix of aircraft along a pathway that generally followed New Jersey State Route 17 to Runway 19 at Teterboro Airport. The alternative procedure did not replace the existing conventional instrument approach which remained the preferred approach for Runway 19. FAA developed the procedure at the request of the Port Authority of New York and New Jersey and the Teterboro Airport Noise Abatement Advisory Committee. The procedure provided a viable alternative approach to Runway 19 that helped reduce the number of aircraft flying over the Hackensack University Medical Center and the surrounding residential areas.
20210709	July 9, 2021: FAA extended two cargo exemptions through December 31. The first exemption authorized airlines to transport cargo secured to the seat tracks of a passenger aircraft when seats were removed and no passengers were in the cabin. The second exemption allowed airlines to secure cargo to passengers' seats if no passengers were in the cabin. (See July 10, 2020.)
20210711	July 11, 2021: Virgin founder Richard Branson soared more than 50 miles above the New Mexico desert aboard a Virgin Galactic rocket plane and safely returned in the vehicle's first fully crewed test flight to space. (See May 22, 2021; September 2, 2021.)
20210713	July 13, 2021: In light of increasing unruly passenger incidents, FAA launched a toolkit to inform passengers about its zero tolerance policy against unruly passengers. The toolkit included a public service announcement from Dickson, a video of kids discussing disruptive behavior on flights, and several social media memes. (See January 13, 2021; December 21, 2021.)

20210714	July 14, 2021: Secretary Buttigieg announced the appointment and reappointment of four members of the Aviation Consumer Protection Advisory Committee (ACPAC). Attorney General Maura Healy served as the new chairperson. He also announced the creation of the new Anti-Discrimination Subcommittee of the ACPAC, dedicated to ensuring the fair treatment of airline passengers. The subcommittee reviewed airline policies, procedures, and practices to prevent discrimination.
20210716	July 16, 2021: FAA suspended operations of Rhoades Aviation, the parent company of Transair. The decision came after the crash of Transair Flight 810 on July 2, which sent the two pilots to the hospital. By stripping Rhoades Aviation the ability to conduct maintenance inspections, it prevented the company from operating and grounded all flights.
20210716	July 16, 2021: FAA ordered all operators of Boeing 737 series aircraft to carry out inspections of cabin altitude pressure switches, after FAA found a high rate of switch failure. The switches ensured cabins were properly pressured throughout the flight.
20210719	July 19, 2021: FAA opened a safety field office in Houston to increase its oversight of commercial space operations in Texas and New Mexico. From this location, FAA inspectors could more effectively and efficiently monitor the ongoing testing programs and commercial space tourism operations of SpaceX and Blue Origin in Texas and Virgin Galactic in New Mexico, along with others in the region. (See July 11, 2021; July 20, 2021.)
20210720	July 20, 2021: FAA issued its decision on the environmental review for the LaGuardia Airport AirTrain. The decision allowed the Port Authority of New York and New Jersey to build the train, which would connect LaGuardia to the New York City Transit Subway 7 Line and the Long Island Railroad Port Washington Branch at Mets-Willets Point. The $2 billion project to build a rail link connecting New York City to LaGuardia Airport was officially put on hold on October 12, after weeks of criticism from public officials and a lawsuit from neighborhood and environmental groups. In a news release, the Port Authority of New York and New Jersey said it is pausing the project to consider alternatives.

20210720	July 20, 2021: FAA updated its FAA Commercial Space Astronaut Wings Program, inaugurated in 2004. The original policy stated that a person qualified for astronaut status if they flew 50 miles above the Earth's surface. This change came in light of Richard Branson's space flight on July 11 and Jeff Bezos's Blue Origin flight on July 20. The new policy would became effective in January 2022. To earn such wings, commercial launch crew members had to be employed by a FAA-certified company performing the launch; they had to reach an altitude higher than 50 miles above the surface of the Earth during flight; and they had to have demonstrated activities during the mission "essential to public safety, or contributed to human space flight safety." Space tourists who paid for space joy rides were not eligible to receive astronaut wings. On December 10, FAA revised the program and announced it would end its Commercial Space Astronaut Wings Program in 2022. Beginning in 2022 FAA would recognize individuals who reach space on its website instead of issuing Commercial Space Astronaut Wings. Before the program ended, FAA awarded wings to those who had qualifying space travel in 2021.
20210722	July 22, 2021: FAA approved Trailwind Air's seaplane route from Boston Harbor to Manhattan. The airline made its first flight on August 3.
20210725	July 25, 2021: In an emergency announcement, FAA imposed new flight restrictions over Afghanistan for U.S. airlines and other U.S. operators in response to the risk posed by extremist/ militant activity. FAA prohibited flights operating below 26,000 feet in the Kabul Flight Information Region, which largely covered Afghanistan, unless operating in and out of Hamid Karzai International Airport. (See August 20, 2021.)
20210730	July 30, 2021: FAA requested applications for air traffic controller positions. The announcement closed on August 2, 2021. During that time, FAA released campaigns encouraging women and minorities to apply. For the first time FAA asked for people with video gaming skills, because the skills needed for air traffic control were similar to those used for gaming.
20210812	August 12, 2021: FAA began operations under the second phase of new air traffic routes and procedures in South-Central Florida. The project, referred to as the South-Central Florida Metroplex initiative, optimized aircraft arrival and departure procedures to and from 21 airports. New routes included changes in aircraft flight paths and altitudes in certain areas, but did not increase the number of aircraft operations at any of the airports. It was one of 11 Metroplex projects nationwide to improve traffic flow and reduce congestion in major metropolitan areas across the country. (See February 25, 2021.)

20210820 August 20, 2021: The Department of Defense activated Stage 1 of the Civil Reserve Air Fleet, calling for carriers to support the military's effort to evacuate people from Afghanistan. The activation called for 18 aircraft: three each from American Airlines, Atlas Air, Delta Air Lines and Omni Air; two from Hawaiian Airlines; and four from United Airlines. CRAF activated aircraft did not fly into Hamid Karzai International Airport in Kabul, but rather moved passengers from temporary safe havens and interim staging bases outside of Afghanistan. This was only the third time the Civil Reserve Air Fleet had been activated since its establishment in 1951. The program was voluntary, and participating carriers were given preference in carrying commercial peacetime cargo and passenger traffic for DOD. (See May 14, 1991; July 25, 2021.)

20210827 August 27, 2021: FAA released a final environmental assessment that found "no significant impact" for Virgin Orbit to conduct launches using its Boeing 747-400 carrier aircraft and LauncherOne rocket from Andersen Air Force Base in Guam. According to FAA's report, Virgin Orbit proposed to conduct a maximum of 25 launches over the next five years to place small satellites into a variety of low Earth orbits. The company also had to meet FAA safety, risk, and financial responsibility requirements.

20210902 September 2, 2021: FAA grounded Virgin Galactic's SpaceShipTwo suborbital spaceplane until it completed an investigation into a problem on the vehicle's previous flight in July. FAA needed to determine if the issues related to the incident affected public safety. The statement came a day after a New Yorker article said the two SpaceShipTwo pilots ignored an "entry glide cone warning" during the July 11 flight from Spaceport America in New Mexico. That warning indicated the vehicle was outside the volume of space known as the glide cone where it had enough energy to glide back to a runway landing at the spaceport. The warning appeared late in the powered portion of the flight, showing SpaceShipTwo was not climbing steeply enough. (See July 19, 2021; September 2, 2021.)

20210910 September 10, 2021: TSA announced an increase in the range of civil penalties that might be imposed on individuals who violated the federal mask mandate at airports, on commercial aircraft, and in various modes of surface transportation, including passenger railroads, intercity bus services, and other public transportation. The new range of penalties were $500-$1000 for first offenders and $1000-$3000 for second offenders. (See January 31, 2021.)

20210910 September 10, 2021: FAA announced it had awarded more than $100 million for companies to help develop technologies that reduce fuel use, emissions and noise. Under the Continuous Lower Energy, Emissions and Noise (CLEEN) Program's phase 2, FAA and six industry partners planned to focus on reducing aviation emissions and noise, including pursuing goals of reducing carbon dioxide (CO2) emissions by improving fuel efficiency by at least 20 percent below the relevant ICAO standard; NOx emissions by 70 percent relative to the most recent ICAO standard; particulate matter emissions below the ICAO standard; and noise by 25 dB cumulative relative to the FAA Stage 5 standard. (See September 8, 2015.)

20210913	September 13, 2021: DOT announced it would offer $482.3 million in funding to 313 aerospace businesses, under the Aviation Manufacturing Jobs Protection Program, a new jobs-saving program created as part of the Biden-Harris administration's American Rescue Plan. The funding went to companies based in 37 states and Puerto Rico. On November 8, DOT said it would offer an additional $184 million in funding provided by the American Rescue Plan to 158 more aviation manufacturing businesses. The program had already helped protect nearly 30,000 American manufacturing jobs across 41 states and Puerto Rico.
20210915	September 15, 2021: Elon Musk's SpaceX launched four people into space on the Inspiration4 mission – the first time a spacecraft circled Earth with an all-amateur crew and no professional astronauts. The spacecraft hit an altitude of about 363 miles. The rocket's first-stage booster, after separating from the spacecraft's top half, flew itself back to Earth and touched down safely on a landing platform floating in the Atlantic. The spaceship landed on September 18, splashing down into the ocean off the east coast of Florida. Previous tourists who traveled that deep into space had to purchase seats on Russian government rockets. (See July 19, 2021.)
20210921	September 21, 2021: The Justice Department filed a lawsuit to block an alliance between American Airlines and JetBlue, criticizing it as a "de facto merger" that reduced competition. The lawsuit comes after President Biden specifically named the airline industry as being too heavily concentrated in a July executive order to crack down on anti-competitive practices.
20210924	September 24, 2021: DOT fined United Airlines $1.9 million for violating federal statutes and the department's rule prohibiting long tarmac delays. DOT also ordered the airline to cease and desist from future similar violations. This is the largest fine issued by the Department for tarmac delay violations. An extensive investigation by the Department's Office of Aviation Consumer Protection found that between December 2015 and February 2021, United allowed twenty domestic flights and five international flights at various airports throughout the United States to remain on the tarmac for a lengthy period of time without providing passengers an opportunity to deplane, in violation of the Department's tarmac delay rule. The tarmac delays affected a total of 3,218 passengers. Under the DOT tarmac delay rule, airlines operating aircraft with 30 or more passenger seats are prohibited from allowing their domestic flights to remain on the tarmac for more than three hours at U.S. airports and their international flights to remain on the tarmac for more than four hours at U.S. airports without giving passengers an opportunity to leave the plane. The rule prohibiting long tarmac delays for domestic flights took effect 2010 and was expanded to include international flights in 2011.

20210929	September 29, 2021: FAA cleared Virgin Galactic to operate space flights again, but found the company failed to communicate a mistake that occurred during a high-profile mission earlier in the year. FAA completed a probe into the July flight that carried billionaire Richard Branson, the founder of Virgin Galactic, and five others to the edge of space and back to a facility in New Mexico. The agency found the company's spacecraft deviated from its assigned airspace during its descent back to Earth, and Virgin Galactic failed to report that error to the FAA as required. (See September 2, 2021.)
20210929	September 29, 2021: FAA issued an operational viability decision for the continued use of the remote air traffic control tower at Leesburg Executive Airport in Virginia. Swedish aerospace company SAAB partnered with nonprofit scientific organization Virginia SATSLab and the town of Leesburg in 2014 to launch the system, which became the first project under the FAA's Remote Tower Pilot Program. (See November 23, 2016.)
20211013	October 13, 2021: Blue Origin successfully completed its second human spaceflight on board New Shepard. The 10 minute, 17 second flight included passengers Dr. Chris Boshuizen, Glen de Vries, Audrey Powers, and William Shatner. (See July 20, 2021.)
20211014	October 14, 2021: Italian airline Alitalia made its final flight. The seventy-five year old airline had entered bankruptcy protection in 2007. A new airline, Italia Trasporto Aero, owned by the Italian government, took over some of the airline's fifty-two aircraft, most of its airport slots, and about a quarter of its employees.
20211014	October 14, 2021: FAA released recommendations on how to increase aviation safety in Alaska after a yearlong, sweeping examination of safety issues specific to the challenges of flying in Alaska, where more than 80 percent of its communities are accessible only by air. The report included five primary recommendations:
	* Install Automated Weather Observing Systems (AWOS) at airports that don't have them and where the systems would have the biggest safety benefit, and continue testing a new technology called Visual Weather Observation System (VWOS)
	* Develop a comprehensive Alaska airspace navigation strategy, including creating lower-altitude flight routes and improving GPS backup systems
	* Continue a collaborative working group initiative in partnership with the Aircraft Owners and Pilots Association that's verifying and adding mountain pass information on aeronautical charts, and continue to hold FAA bi-annual charting meetings, allocating time for Alaska-specific discussions
	* Continue efforts to expand ADS-B services to areas that don't have it, and continue outreach efforts to encourage operators to equip their aircraft with ADS-B
	* Continue existing safety outreach programs and look for new opportunities where different FAA divisions could work together to address safety issues from multiple perspectives

	The FAA planned to develop a draft roadmap by mid-February 2022, identify the resources necessary to implement it, and then seek aviation stakeholder feedback on the roadmap through May 2022. The agency said it would continue initiatives already underway and would begin to incorporate aspects of the new initiatives by summer 2022. It hoped to issue a progress report to stakeholders by September 30, 2022. In October 2020, the FAA Administrator launched the FAA Alaska Aviation Safety Initiative to discuss recommendations the National Transportation Safety Board made about Alaska charter and commuter operations. The agency then directed the formation of a group of FAA experts to focus on safety issues particular to Alaska, which resulted in the safety initiative. Throughout the spring and summer of 2021, the FAA hosted 12 virtual meetings with aviation stakeholders – including pilots, trade associations, airports and state officials – to get their feedback on current and planned safety efforts in Alaska.
20211014	October 14, 2021: The U.S. Department of Justice announced a U.S. federal grand jury indicted former Boeing 737 MAX chief technical pilot Mark Forkner, alleging he intentionally withheld crucial information about flight control software changes from FAA officials during the model's certification, helping set the stage for two fatal accidents linked to the software. The indictment charged Forkner with two counts of fraud involving aircraft parts in interstate commerce, for knowingly sending false information—737 MAX training documents—to American Airlines and Southwest Airlines in 2017, and four counts of wire fraud linked to electronic invoices Boeing sent the airlines as part of their orders. (See May 27, 2021.)
20211015	October 15, 2021: London-based jet engine maker Rolls-Royce carried out a flight test on a Boeing 747 test plane at Tucson International Airport with one of its engines burning 100% low-carbon, sustainable biofuel, and the three other engines running on standard jet fuel. The engine burning the bio-fuel had no engineering issues during the 54-minute flight. (See November 20, 2020; December 1, 2021.)
20211020	October 20, 2021: FAA issued a safety alert to operators warning of the risk of inadvertently activating the go-around mode switch on Boeing 757s and 767s. The alert pointed out the switches' proximity to the speed brake and flap lever could result in inadvertent activation. It also urged flight crews to adhere to established pilot monitoring and flight path management practices.
20211021	October 21, 2021: FAA published a notice of proposed rulemaking to provide an extra hour of rest to flight attendants in between shifts. The proposal would extend the federal minimum rest hour requirement for flight attendants from nine hours to ten hours when scheduled for a duty period of fourteen hours or less.
20211028	October 28, 2021: FAA launched a nationwide solicitation to find a new design for control towers that could be built and operated sustainably at regional and municipal airports. (See Nov 5, 1962.)

20211029 October 29, 2021: FAA selected three airports to be eligible for grants to add civilian aviation operations at former and current military airfields: Kelly Field in San Antonio, Texas; Mobile Downtown Airport in Mobile, Alabama; and Salina Regional Airport in Salina, Kansas. The Military Airport Program (MAP) provides funding as a set aside of the airport improvement program to help increase civilian aviation capacity at current or former military airports by funding projects such as surface parking lots, fuel farms, hangars, utility systems, access roads, cargo buildings, and other airfield-related infrastructure. (SEE June 9, 2017.)

20211029 October 29, 2021: As part of an ongoing 15-year FAA-sponsored research program titled Crashworthiness Certification of Composite and Metallic Aircraft Structures, the National Institute for Aviation Research (NIAR) at Wichita State University conducted a full-scale fuselage drop test. Among other things, NIAR planned to use the data collected during the test to verify and validate finite element modeling techniques and human body models.

20211102 November 2, 2021: FAA issued a Special Airworthiness Information Bulletin alerting aviation manufacturers, operators, and pilots to the potential adverse effects of new 5G wireless networks on radio altimeters. The bulletin—AIR-21-18—recommended aircraft and avionics manufacturers and operators voluntarily provide FAA with information on radio altimeter design, functionality, and number of systems installed, and test their equipment to determine its susceptibility to interference from emissions in the 3700-3980 MHz frequency range. Radio altimeters, also called radar altimeters, track an aircraft's altitude over terrain by measuring reflected signals from about 2,500 ft. above ground level, operating between 4200-4400 MHz. (See November 4, 2021.)

20211102 November 2, 2021: FAA proposed a rule requiring commercial hot-air-balloon pilots to hold medical certificates when operating for hire. The rule would mandate a second-class medical certificate, the same standard required for commercial pilots.

20211104 November 4, 2021: FAA and the Federal Communications Commission issued a joint statement saying AT&T and Verizon would delay the launch of 5G on key frequencies amid concern that it might interfere with airplane safety systems. The companies planned to delay their rollouts until January 5, 2022. The announcement came after FAA issued a bulletin to aircraft manufacturers and pilots on November 2, warning them action might be needed to address potential interference from the 5G expansion. (See November 2, 2021; December 7, 2021.)

20211120 November 20, 2021: Astra Space launched its LV0007 vehicle from the Pacific Spaceport Complex – Alaska on Kodiak Island, Alaska. The vehicle reached orbit at an altitude of 500 kilometers as part of a commercial launch on behalf of a U.S. Department of Defense's Space Force contract to test a payload under its space test program. The launch came almost three months after aborting a mission because of an engine malfunction. After the malfunction, Astra conducted an investigation with the FAA that led to a rocket redesign and improvement of verification processes for both design and rocket operations.

20211129	November 29, 2021: Vietnam Airlines inaugurated the first non-stop passenger service from the United States to Vietnam on a flight from San Francisco International Airport to Tan Son Nhat International Airport in Ho Chi Min City. (See February 14, 2019.)
20211201	December 1, 2021: A United Airlines flight from Chicago's O'Hare airport to Washington, DC's, Reagan National Airport, made the first commercial flight carrying passengers operating on 100% sustainable fuel in one of two engines. (See October 15, 2021; December 9, 2021.)
20211207	December 7, 2021: Sikorsky announced FAA had completed certification of the S-70M Black Hawk helicopter by issuing it a Restricted Category Special Airworthiness Certificate. Sikorsky expected FAA certification, and the establishment of a pilot type rating, to broaden the market for the military-designed helicopter by allowing civil and commercial operators in the United States to purchase new Black Hawk aircraft direct from the factory. Sikorsky received a type certificate for the S-70M aircraft from the FAA in February 2019.
20211207	December 7, 2021: FAA issued airworthiness directives requiring operators of helicopters and passenger-carrying airplanes to prohibit certain operations requiring radio altimeter (RadAlt) data when in the presence of 5G wireless transmissions. AD 2021-23 12, which applied to transport- and commuter-category airplanes, and AD 2021-23-13, which covered all helicopters equipped with RadAlts, were "prompted by a determination that radio altimeters cannot be relied upon to perform their intended function if they experience interference from wireless broadband operations in the 3.7-3.98 GHz frequency band," the agency stated. (See November 4, 2021.)
20211208	December 8, 2021: The Drone Racing League (DRL) announced FAA accredited it as the first UAS event organizer. DRL also announced its participation in FAA's Partnership for Safety Plan (PSP) Program where it will work to establish a standardized set of safety protocols for individuals and organizations seeking to conduct UAS demonstrations, air shows, exhibitions and events in front of live audiences.
20211209	December 9, 2021: FAA announced grant awards totaling more than $1.4 million to five universities to undertake research to build sustainable aviation fuel supply chains in different regions across the United States. Since 2014, the FAA has invested more than $13 million in the effort being conducted by ASCENT, the FAA Center of Excellence for Alternative Jet Fuels and Environment. The research teams on this project include:
	* Washington State University: $412,000 – to examine the potential for retrofitting existing pulp and paper mills, sugarcane mills, dry corn ethanol plants, and petroleum refineries to enable jet fuel production from forest harvests, waste materials, and various crops, and evaluate supply chains for their ability to create jobs, aid U.S. industry, and add resiliency to the national liquid fuel supply.
	* Massachusetts Institute of Technology: $450,000 – to consider the economic and environmental sustainability of a range of fuel pathways, including the coproduction of sustainable aviation fuel in existing petroleum refineries.

	* University of Tennessee: $100,000 – to support the development of an industry to produce sustainable aviation fuel using woody biomass feedstock in the Central Appalachian Region.
	* University of Hawaii: $100,000 – to develop a model for tropical oil supply chains and assess gasification systems to produce fuel and/or hydrogen from construction and demolition landfill waste.
	* Purdue University: $350,000 – to understand the land use impacts of sustainable aviation fuels on greenhouse gas emissions. (See September 13, 2013; December 1, 2021.)
20211214	December 14, 2021: The name of Las Vegas McCarran International Airport changed to Harry Reid International Airport. The airport, first known as Alamo Airport, opened in 1942. It took on the name McCarran Field in 1948 after Clark County purchased the airport. In 1968, the airport gained its international designation after the facility expanded and the first international flight from Mexico arrived.
20211220	December 20, 2021: FAA granted a five-year launch site operator license to Spaceport Camden in Camden County, Georgia, for small-rocket launches to low Earth orbit. The spaceport became the thirteenth licensed spaceport in the United States. (See May 5, 2020.)
20211221	December 21, 2021: FAA and TSA announced a program under which FAA will share information of passengers facing fines for unruly behavior with TSA who may remove the passenger from TSA PreCheck® screening eligibility, which is a privilege reserved for low-risk travelers. In addition to the FAA providing the TSA with information of passengers who receive proposed fines for unruly behavior, the TSA will share information to help the FAA identify and locate unruly passengers to serve them with penalty notices. (See July 13, 2021.)

2022

20220113	January 13, 2022: FAA awarded $5 million in Aviation Maintenance Technical Workers Workforce Development Grants to organizations that will teach technical skills and prepare participants to pursue aviation maintenance careers. (See January 19, 2021.) Grant recipients included:
	* Macon County School District, Tuskegee, AL
	* Pima County Community College District, Tucson, AZ
	* North Orange County Community College District, Anaheim, CA
	* San Bernardino Community College District, San Bernardino, CA
	* International Brotherhood of Teamsters, Washington, DC
	* DLK Aviation Inc., Kennesaw, GA
	* Iowa Western Community College, Council Bluffs, IA
	* Southern University at Shreveport, Shreveport, LA
	* Dutchess Community College, Fairview, NY
	* Guilford County School System, High Point, NC
	* Columbus State Community College, Columbus, OH
	* Oklahoma State University, Stillwater, OK
	* Pennsylvania College of Technology, Williamsport, PA
	* South Carolina Department of Education, Charleston, SC
	* Wisconsin Department of Transportation, Madison, WI
20220113	January 13, 2022: FAA awarded $5 million in Aircraft Pilots Aviation Workforce Development Grants to accredited higher-education institutions, high schools, state and local governments, and flight schools. Grantees can use the funding to create and deliver curriculum designed to prepare students to become aircraft pilots, aerospace engineers, or unmanned aircraft systems operators. (See January 19, 2021.) Grant recipients included:
	* Florida State College at Jacksonville, Jacksonville, FL
	* Northwestern Michigan College, Traverse City, MI
	* Elizabeth City State University, Elizabeth City, NC
	* University of North Dakota, Grand Forks, ND
	* County of Scottsbluff School District #16, Gering, NE
	* Vaughn College of Aeronautics and Technology, Flushing, NY
	* Aerotrek Flight Academy, LLC, Wadsworth, OH

	* Oklahoma Aeronautics Commission, Oklahoma City, OK
	* Harrisburg University of Science & Technology, Harrisburg, PA
	* Spartanburg County School District #5 (James. F. Byrnes High School), Duncan, SC
	* South Carolina Department of Education, Columbia, SC
	* Florence School District One, Florence, SC
	* Crowley Independent School District #912, Crowley, TX
	* Utah State University, Logan, UT
	* Randolph Macon Academy, Front Royal, VA
	* Old Dominion University Research Foundation/Virginia Space Grant Consortium, Norfolk, VA
	Grantees could use the funds to establish new educational programs; provide scholarships or apprenticeships for individuals pursuing employment in the aviation maintenance industry; conduct outreach about careers in the aviation maintenance industry to primary, secondary and post-secondary school students; and support educational opportunities related to aviation maintenance in economically disadvantaged areas.
20220124	January 24, 2022: DOT announced a final rule that enabled it to speed up the rulemaking process and protect consumers by providing greater flexibility to appoint appropriate hearing officers, eliminate the requirement for the officer to issue a detailed report, and provide more options for the officer on when and how testimony would be presented at the hearing. It also clarified that hearings would only be granted if they were in the public interest.
20220126	January 26, 2022: FAA and the United Kingdom Civil Aviation Authority finalized an agreement that allowed the two countries to share each other's evaluation and acceptance of flight simulators. (See March 25, 2021.)
20220223	February 23, 2022: FAA announced a new initiative that outlined how the U.S. could safely eliminate the use of leaded aviation fuel by the end of 2030. The effort was based on four action pillars involving FAA, the Environmental Protection Agency, fuel suppliers, distributors, airports, engine and aircraft manufacturers, research institutions, associations, environmental experts, communities, and other key stakeholders. (See December 9, 2021; April 22, 2022.) The pillars included:
	• Develop Unleaded Fuels Infrastructure and Assess Commercial Viability
	• Support Research & Development and Technology Innovations
	• Continue to Evaluate and Authorize Safe Unleaded Fuels
	• Establish Any Necessary Policies

20220301	March 1, 2022: FAA began installing eight new Automated Weather Observing Systems AWOS) across Alaska that would provide continuous, real-time, and accurate weather information to remote areas of the state. The eight new stations were in Akiachak, Coldfoot, Crooked Creek, Kotlik, Nulato, Perryville, Tok Junction, and Tununak. Weather information from these locations provided pilots a preview of what to expect when arriving. It allowed IFR pilots to conduct instrument approaches to the lowest possible minimums, increasing the safety and predictability of operations. (See October 14, 2021.)
20220302	March 2, 2022: FAA issued orders blocking Russian aircraft and airlines from entering and using all domestic U.S. airspace as a result of Russia's invasion of Ukraine. The notice and regulatory orders suspended operations of all aircraft owned, certified, operated, registered, chartered, leased, or controlled by, for, or for the benefit of, a person who was a citizen of Russia. It included passenger and cargo flights, and scheduled and charter flights, effectively closing U.S. air space to all Russian commercial air carriers and other Russian civil aircraft. (January 8, 2020.)
20220323	March 23, 2022: A jury in federal district court in Fort Worth, Texas, acquitted former Boeing 737 MAX Chief Technical Pilot Mark Forkner on felony charges of deceiving FAA about a key flight-control system involving 737 Max jets. The jury cleared him of criminal charges of four counts of wire fraud brought by the U.S. Justice Department. (See October 14, 2021; September 22, 2022).
20220331	March 31, 2022: Steve Dickson resigned as FAA Administrator. Billy Nolen, the Associate Administrator for Aviation Safety, became acting administrator. (See August 12, 2019; July 6, 2022; March 31, 2023.)
20220405	April 5, 2022: FAA dedicated the newly commissioned air traffic control tower at Charlotte Douglas International Airport. The 370-foot-tall, 850-square-foot tower cab provides air traffic controllers with a clear view of the airfield. A 42,000-square-foot building houses an expanded terminal radar approach control (TRACON) that handles flights departing and arriving at the Charlotte airspace. The tower is the second tallest in the nation after the 398-foot-tall tower at Hartsfield-Jackson Atlanta International Airport. The existing tower was commissioned in 1979. (See June 6, 2016.)
20220415	April 15, 2022: FAA announced $4.4 million in drone research, education, and training grants to seven universities. The research focused on electromagnetic compatibility, detecting and avoiding classifications, and cybersecurity oversight. The grant awardees included the University of North Dakota, the University of Kansas, Drexel University, Ohio State University, Embry-Riddle Aeronautical University, Mississippi State University, and Oregon State University.
20220418	April 18, 2022: A federal judge in Florida declared the U.S. government's mask mandate for air travel unlawful. (See September 10, 2021.)

20220420	April 20, 2022: FAA announced it planned to make its zero tolerance policy against unruly passengers permanent. FAA implemented the policy on January 13, 2021, after seeing a disturbing increase in unruly passenger incidents. (See December 21, 2021.)
20220420	April 20, 2022: FAA announced it had added a new feature to MedXPress that allowed pilots to track the status of their medical certificates online throughout the application and review process.
20220421	April 21, 2022: FAA downgraded the air safety rating for Russia, restricting any expansion of service or partnerships since Russia's Federal Agency for Air Transport did not comply with International Civil Aviation Organization (ICAO) safety standards. Under the International Aviation Safety Assessment (IASA) program, FAA assesses the civil aviation authorities of all countries with air carriers that have applied to fly to the United States, currently conducting operations to the United States, or participating in code-sharing arrangements with U.S. partner airlines. Air carriers from countries with Category 2 ratings are not allowed to initiate new service to the United States, are restricted to current levels of existing service to the United States and are not permitted to carry the code of U.S. carriers on any flights. At the time of the assessment, no airlines operated regularly scheduled flights between Russia and the United States. (See May 8, 2020.)
20220422	April 22, 2022: FAA and U.S. airports launched an Airport Climate Challenge to help achieve a goal of net-zero emissions by 2050. FAA offered several funding programs to meet the goal, including grants for low- or zero-emissions vehicles, renewable energy production, energy assessments, and other efforts. Airports could receive funding through the Voluntary Airport Low Emissions Program, Zero Emissions Vehicle (ZEV) Program, and the Airport Sustainability Planning Program. The agency also announced plans to develop a tool for airports to voluntarily estimate, track, and report on the emissions reduction achieved when implementing projects supported by the airport programs. (See February 23, 2022; June 15, 2022.)
20220503	May 3, 2022: Norman Mineta died. He served as Secretary of Transportation from January 25, 2001-July, 7, 2006, the longest-serving Secretary in the department's history.
20220513	May 13, 2022: FAA issued a license to the Huntsville-Madison Airport Authority in Alabama to operate the Huntsville International Airport (HSV) as a commercial space reentry site. The license allowed the airport to offer its place for Sierra Space Dream Chaser vehicles returning to Earth from future NASA resupply missions to the International Space Station. The Reentry Site Operator License is valid for five years. The Huntsville site is the 14th FAA-licensed commercial spaceport. (See December 20, 2021.)
20220526	May 26, 2022: FAA issued a rule to improve and modernize training requirements for aviation maintenance technician schools (AMTS). The previous AMTS requirements were almost 50 years old, which limited schools from aligning curriculums with modern industry standards.

20220602	June 2, 2022: FAA sought public comments for its Draft Environmental Assessment and Draft Conformity Determination of the Chicago O'Hare International Airport proposed terminal area plan and changes to air traffic procedures. The assessment would determine whether proposed projects could decrease environmental effects.
20220607	June 7, 2022: FAA awarded $518 million to build safer, more accessible airports nationwide. The grants helped fund various projects like maintaining airfields, buying equipment, and fixing runways.
20220608	June 8, 2022: FAA launched the "Be ATC" campaign to recruit the next generation of diverse air traffic controllers. The application window was from June 24-27. (See July 30, 2021.)
20220608	June 8, 2022: FAA updated guidelines on developing and establishing sound insulation programs near airports to mitigate sound exposure. The updated "Guidelines for Sound Insulation of Structure Exposed to Aircraft Noise" provided standards, procedures, and processes for creating and facilitating a sound insulation program.
20220610	June 10, 2022: U.S. Secretary of Transportation Pete Buttigieg announced the end of the requirement for a pre-departure COVID-19 test for U.S.-bound air travelers.
20220613	June 13, 2022: FAA required SpaceX to take more than 75 actions to mitigate environmental impacts before the next launch in Boca Chica, Texas. Measures included addressing effects on wildlife and resources protected by the National Historic Preservation Act and real-time monitoring of the closure of State Highway 4. SpaceX also had to meet all the requirements for a FAA Launch Operator License and FAA risk, safety, and financial responsibility requirements. (September 15, 2021.)
20220615	June 15, 2022: FAA proposed a rule, *Airplane Fuel Efficiency Certification,* to require more fuel efficiency for subsonic jet aircraft, large turboprop, and propeller aircraft or for new aircraft manufactured after January 1, 2028. The proposed rule was part of the U.S. Aviation Climate Action Plan, hoping to achieve net-zero greenhouse gas emissions from U.S. aviation by 2050. The proposal also aligned with the ICAO CO2 emission standards and EPA regulations. (See April 22, 2022.)
20220617	June 17, 2022: FAA released a statement on 5G regarding an update for C-band. The aviation and wireless industries have collaborated to protect air travel from 5g C-band interference while allowing providers to improve service around airports. FAA issued a phased approach to limit interference, ordering regional aircraft operators with susceptible radio altimeters to retrofit them with radio frequency filters before the end of the year. Filters for mainline commercial fleets will be available by July 2023. (See December 7, 2021.)
20220701	July 1, 2022: FAA awarded $371 million in AIP funds for safety, airfield, and improvement projects at 169 airports in 40 states.

20220705	July 5, 2022: DOT reassigned with conditions 16 peak-hour runway timings from Southwest Airlines to Spirit Airlines at Newark-Liberty International Airport. Southwest Airlines had discounted service from the airport.
20220706	July 6, 2022: President Joe Biden nominated Phillip Washington as the next FAA administrator. A Chicago native, Washington spent 25 years in the U.S. Army, retiring in 2000 with the rank of command sergeant major. He joined Denver's Regional Transportation District and later became its CEO. In 2015, he left to head the Los Angeles County's Metropolitan Transportation Authority, where he stayed until becoming the CEO of Denver International Airport in 2021. (See March 31, 2022; January 3, 2023.)
20220707	July 7, 2022: FAA announced it would award almost $1 billion in grants from the Bipartisan Infrastructure Law to 85 airports to improve terminals, promote competition, expand accessibility for disabled individuals, increase energy efficiency, and build air traffic control towers.
20220708	July 8, 2022: DOT published an Airline Passengers with Disabilities Bill of Rights and issued a notice urging airlines to guarantee that children aged 13 and younger would be seated next to their accompanying adults. After receiving input from the Air Carrier Access Act Advisory Committee, DOT crafted the bill of rights.
20220713	July 13, 2022: DOT approved American Airlines flight schedules between Miami and Cuba. The flights began in November 2022. The flights were the first approved flights since a May announcement regarding steps to strengthen US and Cuban ties. (See August 13, 2020.)
20220721	July 21, 2022: DOT issued a Notice of Proposed Rulemaking to update the Disadvantaged Business Enterprise and Airport Concession program regulations. Both programs were created to prevent discrimination and alleviate the effects of previous bias toward small businesses owned and operated by disadvantaged individuals. The proposal included:
	●Increasing the personal net worth (PNW) limit from $1.32 million to $1.6 million and excluding retirement assets from PNW calculations
	●Formally adopting COVID-19 flexibilities such as virtual on-site visits
	●Empowering certified firms to market themselves to prime contractors via expanded State directories
	●Helping more small businesses participate in FAA-assisted airport projects by requiring airports to remove obstacles and adopt more race-neutral strategies
	●Strengthening prompt payment monitoring and oversight requirements to help ensure that DBEs in all subcontracting tiers are promptly paid
20220727	July 27, 2022: FAA proposed mandating a second barrier to flight decks on select commercial aircraft to protect flight decks from unwanted intrusion when the flight deck door was opened.

20220803	August 3, 2022: DOT awarded $16.9 million in grants from the Small Community Air Service Development Program to help 25 communities in 20 states improve local air service needs. The grants gave financial incentives to study, conduct marking programs, and carry out studies on expansion. The money allowed communities to create new or first air services, provide support, or re-establish old services.
20220803	August 3, 2022: DOT announced a proposed rule to enhance protections for customers seeking refunds on airline tickets. The proposal was in response to the increased complaints from consumers who were refused refunds because they could not travel due to COVID issues or airlines canceling or changing flights. If passed, the rule would clearly define "significant change and cancellation" and codify failure to refund passengers as an unfair practice. Additionally, the rule would require airlines and agents to provide non-expiring vouchers or flight credits when passengers could not fly due to COVID issues.
20220810	August 10, 2022: American Airlines formally accepted a 787-8 from Boeing's Charleston, South Carolina, production site, officially marking the resumption of deliveries of the aircraft following a 14-month suspension because of production-quality issues. The resumption of deliveries followed FAA's July 29 approval of Boeing's plan to correct the issues and inspect the 118 undelivered aircraft. The plan, which addressed inspection and repair procedures, provided airframe-specific compliance processes that Boeing would use to show each aircraft conformed to specifications.
20220818	August 18, 2022: FAA awarded $2.7 million for drone research to support growing research on their effectiveness in assisting disaster preparedness and emergencies. Awardees included: the University of Vermont, the University of Alabama Huntsville, New Mexico State University, North Carolina State University, and Kansas State University. The funding was part of the Alliance for Safety of UAS through Research Excellence (ASSURE).
20220901	September 1, 2022: DOT launched a new online dashboard to help air travelers know their rights when they experience airline flight disruptions. The dashboard provided air travelers a one-stop location to obtain information on the services and amenities they should receive from airlines if they experienced delays or cancelations caused by something within the airline's control like a mechanical or staffing issue. The dashboard also provided a clear comparison of amenities the airlines have committed to provide. The department said it would hold airlines accountable if they failed to provide the promised services.

20220907	September 7, 2022: FAA issued a new policy requiring Organization Designation Authorization (ODA) holders to protect employees authorized to act on behalf of the agency from feeling pressure to ignore possible safety risks and ensure they have direct lines of communication with the agency. The policy codified a 2020 law that called for more protections of ODA employees delegated to work on behalf of the FAA. The new requirements included: documented procedures for monitoring interference among UMs, annual anonymous surveys soliciting feedback on whether workers have experienced or witnessed pressure, clearly established protocols for addressing reports of interference, and clear lines of communication with FAA Organization Management Teams.
20220907	September 7, 2022: FAA issued type certificate to Matternet Inc.'s Model M2, a four-rotor copter capable of carrying a 4-pound (1.8-kilogram) package, the first flying drone built specifically for shipping packages.
20220908	September 8, 2022: FAA announced it planned to establish the agency's largest solar project to date at the Mike Monroney Aeronautical Center in Oklahoma City. The panels are expected to produce 2,600 megawatt hours annually, the equivalent needed to power 260 average homes. The project will reduce the Center's electric bill by an estimated $170,000 - $200,000 annually.
20220909	September 9, 2022: The FAA and NASA signed a new memorandum of agreement outlining their roles investigating commercial space accidents. Under the agreement, the NTSB will be the lead agency for investigating mishaps that involve a fatality or serious injury as well as those that involve damage to property outside the launch site from debris that could reasonably be expected to cause death or serious injury. The FAA will lead all other commercial spaceflight investigations.
20220914	September 14, 2022: Nextgov.com highlighted FAA's new interactive online dashboard designed to make the agency's data more accessible and understandable to the general public. The interactive Fact Book includes, in part, data and figures on air traffic, safety, airspace modernization and unmanned aircraft systems.
20220922	September 22, 2022: The Securities and Exchange Commission said that Boeing will pay $200 million to settle charges that the company and its former CEO misled investors about the safety of its 737 Max after two of the airliners crashed, killing 346 people. It charged the aircraft maker and former CEO Dennis Muilenburg with making significant misleading public statements about the plane and an automated flight-control system that was implicated in the crashes in Indonesia and Ethiopia. Neither Boeing nor Muilenburg admitted wrongdoing, but they offered to settle and pay penalties, including $1 million to be paid by Muilenburg. (See March 23, 2022; January 5, 2023.)

20220926	September 26, 2022: President Biden proposed requiring airlines and ticket sales websites to disclose additional fees up front, aiming to add a dose of transparency to booking travel. According to the Department of Transportation, the disclosures would cover any fees for passengers to sit with their children, change or cancel a flight, and bring checked or carry-on bags. The fees would be required to be displayed the first time a ticket price is shown.
20220926	September 26, 2022: FAA announced it would work with countries when it sees early indications that civil aviation authorities are not meeting safety standards. Previously, the agency would offer assistance only after the country's safety rating had been downgraded. The agency planned to work with a country to address developing safety risks before downgrading it. The agency said if it notifies a country of a safety concern, it will limit foreign operators' direct service and code sharing to current levels as it reviews whether to issue a downgrade.
20220926	September 26, 2022: FAA released new design guidelines for vertiports – infrastructure supporting Advanced Air Mobility (AAM) aircraft. The design standards will serve as the initial step to provide critical information for airport owners, operators, and infrastructure developers to begin the development of facilities that will support operations of AAM aircraft that are electrically powered and take off and land vertically.
20221001	October 1, 2022: ICAO voted to remove Russia from its governing council. Historically, G7 countries, Australia, Brazil, China, and Russia, have held permanent spots as "states of chief importance in air transport." Russia secured only 80 votes to remain on the governing council during the vote, while 86 votes were needed.
20221003	October 3, 2022: FAA announced it had upgraded Malaysia's air safety rating to a Category 1 nearly three years after it took action to restrict the country's airlines from adding new flights to the United States. In November 2019, FAA lowered Malaysia from Category 1 to Category 2, meaning Malaysian airlines were restricted to current levels of any existing U.S. service and subject to additional inspections at U.S. airports.
20221004	October 4, 2022: FAA issued a final rule requiring that flight attendants receive longer rest periods between shifts. The new rule increases the rest period from 9 to 10 consecutive hours.
20221011	October 11, 2022: FAA announced it would publish 54 Global Positioning System (GPS)-guided routes in Alaska, allowing pilots to navigate direct flight paths at lower altitudes to avoid icing conditions. The 30 new and 24 amended Terminal Transition Routes, known as T-routes, are part of FAA's Alaska Aviation Safety Initiative. Pilots use T-routes to navigate along specific points while flying under instrument flight rules (IFR) using approved GPS/Global Navigation Satellite System (GNSS) equipment.
20221018	October 18, 2022: FAA and the Japan Civil Aviation Bureau (JCAB) signed a Declaration of Cooperation to support future Advanced Air Mobility (AAM) aircraft development and operation. The declaration continues the safety agencies' long partnership and formalizes ongoing discussions on certifying and validating new AAM aircraft, production, continued airworthiness, operations, and personnel licensing.

20221024	October 24, 2022: FAA issued guidance on how to become a FAA-recognized community-based organization for recreational drone flying. Under federal law, recreational drone flyers must follow the safety guidelines of a FAA-recognized community-based organization. The organization must develop its safety guidelines in coordination with FAA, and an applicant may wish to tailor them to a particular type of uncrewed aircraft.
20221115	November 15, 2022: FAA dedicated the Senator Kay Hagan Air Traffic Control Tower at Piedmont Triad International Airport, designed by women engineers.
20221116	November 16, 2022: FAA adopted a final rule requiring commercial hot-air balloon pilots to hold medical certificates when flying paying passengers. The rule mandated a second-class medical certificate, the same standard required for other commercial pilots.
20221121	November 21, 2022: FAA completed the environmental review of the proposed new passenger terminals at Chicago's O'Hare International Airport. The study analyzed Chicago Department of Aviation projects, including new terminals, on-airport hotels, airfield and taxiway improvements, and support facilities. It also reviewed FAA's proposal to make permanent angled approaches to Runway 10R/28L to allow simultaneous arrival to multiple runways. The agency concluded that proposed construction projects and changes to air traffic procedures will not significantly affect any environmental resources, including noise, air quality, water resources, and historic sites.
20221123	November 23, 2022: FAA announced that the Republic of Rwanda had achieved an International Aviation Safety Assessment (IASA) Category 1 rating and complies with International Civil Aviation Organization (ICAO) standards.

2023

20230103 January 3, 2023: President Biden renominated Phillip Washington for FAA administrator; he had first nominated him on July 6, 2022. On March 30, 2023, the Biden administration announced that Washington withdrew his name from consideration. (See September 7, 2023.)

20230105 January 5, 2023: FAA announced the names of 24 aviation experts to review Boeing's safety management processes and how they influenced Boeing's safety culture after two fatal 737 MAX crashes killed 346 people. The panel, required by Congress under a 2020 law to reform how FAA certifies new airplanes, included MIT lecturer and aerospace engineer Javier de Luis, whose sister was killed in a MAX crash, as well as experts from NASA, FAA, labor unions, Airbus, Southwest Airlines, American Airlines, United Airlines, GE Aviation, FedEx Express, and Pratt & Whitney. The panel had nine months to complete its review and issue findings and recommendations. (See September 22, 2022; March 30, 2023.)

20230109 January 9, 2023: FAA and the Korea Office of Civil Aviation agreed to partner on future Advanced Air Mobility (AAM) aircraft development and operations. The agencies signed a Declaration of Cooperation under which they will collaborate on AAM projects and share ideas, information, skills, and techniques. The two agencies plan to work together to promote the safety oversight of AAM, including airworthiness, licensing, and operations. The announcement followed FAA's partnerships with Japan, the United Kingdom, Canada, Australia, and New Zealand in the National Aviation Authorities Network to harmonize certification criteria and integration plans. (See October 18, 2022; May 4, 2023.)

20230111 January 11, 2023: When the NOTAM system failed, FAA issued a ground stop order on all flights. In the second such order in agency history, the agency ordered airlines to delay all departing flights just before 7:30 a.m. and lifted the order at about 9 a.m. The disruption, however, was far from over as airlines struggled to get back to normal throughout the day. Delays cascaded throughout the system, and by the afternoon, about 9,000 flights had been delayed and 1,300 had been canceled. FAA subsequently determined that contract personnel unintentionally deleted files while working to correct synchronization between the live primary database and a backup database. (See September 11, 2001; June 3, 2023.)

20230120 January 20, 2023: The State Department announced FAA would be opening its first office in Mexico. The office provided legal advice to help Mexico implement the requirements and recommendations through legislative channels to recover FAA's civil aviation Category 1. (See September 14, 2020; September 26, 2022; November 23, 2022; July 13, 2023.)

20230125	January 25, 2023: Construction began on a new air traffic control tower at the Asheville Regional Airport. FAA committed $15 million for the new tower, which will be 127 feet tall, topped by a 440-square-foot cab with three air traffic controllers. The 13,300-square-foot base building will house the Terminal Radar Approach Control (TRACON) with five air traffic controllers.
20230130	January 30, 2023: FAA announced new Optimized Profile Descents (OPDs) for planes heading to Orlando, Kansas City, Omaha, Reno, and six airports in South Florida. OPDs safely eliminate the need for the fuel-consuming stair-step descent procedure. Under traditional methods, aircraft repeatedly level off and power up the engines. This burns more fuel and requires air traffic controllers to issue instructions at each step. With optimized descents, aircraft descend from cruising altitude to the runway in a smooth, continuous path with the engines at near idle.
20230207	February 7, 2023: Boeing delivered its final 747 to Atlas Air.
20230216	February 16, 2023: FAA issued a new rule to help airports detect and mitigate safety problems before accidents or incidents occur. The regulation requires certain airports to develop and implement a safety management system (SMS). The final rule applied to over 200 of America's busiest commercial airports. The timeline to implement SMS ranges from four to five and a half years, depending on the airports' classification and operations.
20230227	February 27, 2023: FAA awarded nearly $1 billion to 99 airports nationwide. The funding would help meet the growing demand for air travel and invest in key areas to help get travelers in and out of airports more quickly and improve the passenger experience by investing in new baggage systems, larger security checkpoints, and improved ground transportation. Other projects focused on increasing terminal sustainability and improving accessibility for disabled individuals. Several grants addressed the needs of aging air traffic control towers. The investments went to airports in 47 states and two territories.
20230228	February 28, 2023: The new $1.5 million terminal at Kansas City International Airport opened.
20230302	March 2, 2023: FAA announced grant awards to 23 schools to help attract and train students for careers as pilots and aviation maintenance technicians. Twelve schools received $5 million from FAA's Aircraft Pilots Aviation Workforce Development Grants program. The other $5 million went to 11 schools as part of FAA's Aviation Maintenance Technical Workers Workforce Development program.
20230327	March 27, 2023: FAA granted a limited waiver of slot usage requirements "due to post-pandemic effects" at high-density slot-controlled Level 3 airports JFK, LGA, and Ronald Reagan Washington National (DCA), and at Newark (EWR), a Level 2 slot facilitated airport. The limited waivers were valid from May 15, 2023, through September 15, 2023, for carriers who identified the slots and timings before April 30. The agency extended the slot and scheduling usage waivers through October 28, 2023.

20230406	April 6, 2023: FAA awarded $19 million to 14 universities nationwide as part of the Aviation Sustainability Center (ASCENT). The research projects focused on noise reduction for new aircraft, noise and advanced air mobility aircraft, drones, rotorcraft, and noise and communities. (See January 9, 2023.)
20230411	April 11, 2023: FAA established a new office to provide independent reviews and decisions on allegations of manager misconduct at the agency. The Office of Investigations and Professional Responsibility's work helped protect whistleblowers and others raising safety concerns.
20230420	April 20, 2023: FAA announced the selection of a sustainable design for new air traffic control towers to be used primarily at municipal and smaller airports. The design by the Practice for Architecture and Urbanism (PAU) of New York met essential sustainability requirements. The design allowed for adjustments to tower height to meet each airport's traffic and sightline requirements while reducing construction and operational costs.
20230420	April 20, 2023: SpaceX's Starship, with its first-of-a-kind super heavy booster, exploded during its inaugural flight over its launch site in South Texas. (See June 13, 2023; September 8, 2023.)
20230426	April 26, 2023: FAA named a new independent National Airspace System Safety Review Team to examine ways to enhance safety and reliability in the nation's air traffic system. The team expected to complete its work by October 2023. (See November 15, 2023.) Team members included:
20230426	• Former NASA Administrator and astronaut Charles Bolden Jr.
20230426	• Former Air Line Pilots Association, International President Captain Tim Canoll
20230426	• Former National Air Traffic Controllers Association Executive Vice President Patricia Gilbert
20230426	• Former FAA Chief Operating Officer David Grizzle
20230426	• Former FAA Administrator Michael Huerta
20230426	• Former NTSB Chair Robert Sumwalt
20230501	May 1, 2023: FAA activated 169 new routes along the East Coast that were more direct, saving passengers time and airline fuel consumption and increasing safety. The change helped prevent delays by giving the agency more capacity to direct traffic to specific routes based on the aircraft's destination.
20230504	May 4, 2023: FAA created the UAS Detection and Mitigation Systems Aviation Rulemaking Committee to ensure that new technologies designed to detect and mitigate risks from errant or hostile UAS do not adversely impact the safe and efficient operation of the nation's airspace. The ARC's 58 members represented a diverse set of aviation stakeholders.

20230504	May 4, 2023: FAA released an updated blueprint for airspace and procedure changes to accommodate future air taxis and other advanced air mobility (AAM) operations. Under the blueprint, developed in coordination with NASA and industry, AAM operations would begin slowly with air taxis flying like helicopters. AAM operations would use existing routes and infrastructure, such as helipads and vertiports. (See January 9, 2023; July 18, 2023.)
20230509	May 9, 2023: Secretary of Transportation Pete Buttigieg and Administrator Robin Carnahan of the General Services Administration led a ceremony announcing the naming of the headquarters of the Department of Transportation after the fourth Secretary of Transportation, William T. Coleman, Jr. (1975-1977) and the 14th and longest serving Secretary, Norman Y. Mineta (2001- 2006).
20230522	May 22, 2023: FAA announced it had awarded more than $100 million to 12 airports nationwide to reduce runway incursions. Planned projects included reconfiguring taxiways that may cause confusion, installing airfield lighting, or constructing new taxiways to provide more flexibility on the airfield. The agency developed its Runway Incursion Mitigation Program to identify airports with risk factors that might contribute to runway incursions.
20230530	May 30, 2023: U.S. District Judge Jorge Alonso in the Northern District of Illinois ruled that relatives of people who died in a 2019 Boeing 737 MAX crash could seek compensation for the victim's pain and suffering before the plane crashed in Ethiopia. (See January 5, 2023.)
20230603	June 3, 2023: President Biden signed into law HR 346, which required the FAA administrator to establish a task force to provide recommendations for improving the Notice to Air Missions system. The task force would review existing methods for publishing NOTAMs and flight operations information for pilots; review regulations, policies, systems, and international standards relating to NOTAMs, including their content and presentation to pilots; evaluate and determine best practices to organize, prioritize, and present flight operations information in a manner that optimizes pilot review and retention of relevant information; provide recommendations to improve the publication and delivery of NOTAM information; and report to Congress on its reviews and evaluations. By September 30, 2024, FAA must complete the implementation of a federal NOTAM system and implement a backup system and brief Congress on a plan to enhance information delivery through this federal system to promote further global harmonization and provide users of the National Airspace System a consistent format for domestic and international operations. (See January 11, 2023.)
20230604	June 4, 2023: A Cessna Citation entered restricted Washington, DC, airspace, leading the Air Force to scramble jets. The jets, which went supersonic, triggered a sonic boom in the region. The Cessna crashed in Virginia. Accident investigators believed pilot and passenger incapacitation may have caused the crash because of hypoxia.

20230608	June 8, 2023: President Biden designated Polly Trottenberg to serve as acting FAA administrator upon the resignation of acting administrator Billy Nolan. Katie Thomson, FAA's chief of staff, was selected as the agency's new deputy administrator. Keith Washington, DOT Deputy Assistant Secretary for Administration, became the agency's acting chief of staff. DOT also announced that FAA Deputy Administrator A. Bradley Mims was moving to the Office of the Secretary to lead the Office of Small and Disadvantaged Business Utilization at DOT. (See March 31, 2022.)
20230612	June 12, 2023: FAA issued a special airworthiness certificate to a flying car model developed by California-based Alef Aeronautics, allowing the aircraft to fly in limited locations for exhibition, research, and development. The Armada Model Zero, dubbed the "Model A," was a fully electric flying car that could take off and land vertically.
20230614	June 14, 2023: FAA issued a final rule requiring a secondary barrier on the flight deck of new commercial airplanes to ensure the safety of aircraft, flight crew, and air passengers. The rule would be implemented 60 days after publication in the *Federal Register.* (See July 27, 2022.)
20230622	June 22, 2023: FAA began operating a mobile tower at Leesburg Executive Airport after canceling the remote tower being tested there. The airport expected the mobile platform—a tower cab with radios and weather sensors mounted on a trailer—would stay in place until 2028 when the town hoped to erect a permanent ATC tower. The agency covered the cost of leasing the mobile tower through September 2023, after which Leesburg rented the structure for $10,000 a month. FAA agreed to pay controllers' salaries through September 2028. (See September 29, 2021.)
20230629	June 29, 2023: In a six-day flight demonstration, FAA Japan, Singapore, and Thailand demonstrated the ability to jointly manage flights across multiple countries by using trajectory-based operations (TBO) to predict the location of an aircraft in flight. TBO used precise aircraft trajectory data (latitude, longitude, altitude, and time) to show where the aircraft expected to be on its route from takeoff to touchdown. It allowed aircraft to fly precise flight paths with seamless information exchange between air and ground systems.
20230629	June 29, 2023: FAA asked for public comment on the environmental assessment to replace 31 outdated airport traffic control towers at smaller airports nationwide. The agency had set aside over $500 million from the Bipartisan Infrastructure Law to support site evaluation, preparation, and early construction activities. Comments were due by July 31, 2023.
20230708	July 8, 2023: Northern Pacific Airways announced it had received FAA approval to begin commercial flights. The Anchorage-based carrier expected to begin service on July 14 with weekly flights between southern California's Ontario International Airport and Las Vegas.

20230711	July 11, 2023: FAA announced nearly $92 million in investments to help airports reach the president's goal of net zero emissions by 2050. As part of almost $268 million in grants, about $92 million went to 21 airports for solar panels, electric buses, charging stations, and electrification studies. As a part of this sustainability effort, the agency also provided funding to help general aviation airports safely transition to unleaded fuel for piston-engine aircraft. (See June 15, 2022.)
20230713	July 13, 2023: FAA announced that San Marino achieved its first International Aviation Safety Assessment (IASA) with a Category 1 rating. Under the Category 1 rating, San Marino's civil aviation authority followed ICAO safety standards. As a result of the rating, it could provide service in the United States and enter into code-share agreements with U.S. carriers without limitation. FAA's IASA program assesses a country's ability to follow ICAO's safety standards. Carriers from the countries FAA assesses have either applied to fly in the U.S., currently conduct operations in the U.S., or participate in code-sharing agreements with U.S. airlines. (See January 20, 2023; July 13, 2023.)
20230713	July 13, 2023: FAA announced that Latvia achieved its first IASA with a Category 1 rating. (See January 20, 2023; September 14, 2023.)
20230718	July 18, 2023: FAA released an implementation plan detailing the steps it and others must take to enable advanced air mobility operations in the near term. The "Innovate 28" plan included various components and the sequence needed for operations at one or more sites by 2028. (See May 4, 2023; October 25, 2023.)
20230726	July 26, 2023: DOT issued a new rule that required airlines to make lavatories on new single-aisle aircraft large enough to permit a passenger with a disability and attendant, both equivalent in size to a 95th percentile male, to approach, enter, and maneuver within as necessary to use the aircraft lavatory.
20230731	July 31, 2023: FAA named Kyle A. deCant, senior labor policy advisor. He will oversee strategic planning on labor issues and advise the agency's acting administrator and deputy administrator. This is the first time FAA's front office has had a permanent position focused on labor issues. August 4, 2023: In connection with the official state visit between Vice President Kamala Harris and Prime Minister Oyun-Erdene Luvsannamsrai, U.S. Transportation Secretary Pete Buttigieg and Mongolia Road and Transport Development Minister Byambatsogt Sandag signed the U.S.- Mongolia Open Skies Agreement. The agreement facilitates greater air connectivity between the United States and Mongolia and will provide the legal framework for nonstop passenger flights.
20230810	August 10, 2023: Virgin Galactic rocketed to the edge of space with its first tourists. The space plane glided back to a runway, landing at Spaceport America in the New Mexico desert after a brief flight that gave passengers a few minutes of weightlessness.

20230823	August 23, 2023: FAA approved an experimental airworthiness certificate for Boom Supersonic's XB-1 technology demonstrator, clearing the way for flight testing at the Mojave Air and Space Port, California.
20230907	September 7, 2023: President Biden nominated Michael Whitaker to be FAA Administrator. Whitaker began his career in aviation as an attorney for TWA in New York and Washington and then spent 15 years at United Airlines in Chicago, where he served as senior vice president of alliances, international and regulatory affairs. After leaving United, he served as Group CEO at InterGlobe, India's largest travel conglomerate based in Delhi. In 2013, President Obama appointed Whitaker as deputy administrator of FAA, where he served until 2016. He earned a private pilot license while at the agency and holds bachelor's degrees in political science and French from the University of Louisville and a juris doctorate from Georgetown University Law Center. The U.S. Senate confirmed Whitaker as FAA administrator on October 24, 2023. (See January 3, 2023.) The Senate confirmed Whitaker on October 24, 2023, for a five-year term as FAA administrator. On October 27, Transportation Secretary Pete Buttigieg and Deputy Secretary Polly Trottenberg (who had been running FAA on an acting basis) swore Whitaker into office.
20230908	September 8, 2023: FAA closed the SpaceX Starship Super Heavy mishap investigation. The final report cited multiple root causes of the April 20, 2023, mishap and 63 corrective actions SpaceX must take to prevent mishap reoccurrence. Corrective actions included redesigns of vehicle hardware to avoid leaks and fires, redesign of the launch pad to increase its robustness, incorporation of additional reviews in the design process, further analysis and testing of safety-critical systems and components, including the Autonomous Flight Safety System, and the application of other change control practices. (See April 20, 2022; November 15, 2023.)
20230913	September 13, 2023: FAA gave U.S. drone operators a six-month extension to March 16, 2024, to equip their aircraft with remote identification modules.
20230914	September 14, 2023: FAA returned Mexico's aviation safety rating to Category 1 following more than two years of close work between the civil aviation authorities in both countries. The agency provided expertise and resources via technical assistance agreements to Mexico's Agencia Federal de Aviación Civil to resolve the safety issues that led to the downgrade. With a return to Category 1 status, Mexico could add new services and routes to the U.S. U.S. airlines could resume marketing and selling tickets with their names and designator codes on Mexican-operated flights. (See January 20, 2023; July 13, 2023.)
20230920	September 20, 2023: FAA issued a notice of proposed rulemaking that, if finalized, would require that upper stages of commercial launch vehicles and other components resulting from launch or reentry be removed from orbit within 25 years after launch, either through atmospheric disposal or maneuver to an acceptable disposal orbit.

20230926	September 26, 2023: Transportation Secretary Pete Buttigieg helped celebrate the completion of a nearly $51 million stretch of taxiway at Denver International Airport. FAA funded the project. September 27, 2023: FAA announced it had closed the closure of the Blue Origin New Shepard 23 mishap investigation. The final report cited the proximate cause of the September 12, 2022, mishap as the structural failure of an engine nozzle caused by higher-than-expected engine operating temperatures. FAA required Blue Origin to implement 21 corrective actions to prevent mishap reoccurrence, including redesigning engine and nozzle components to improve structural performance during operation and organizational changes. During the mishap, the onboard launch vehicle systems detected the anomaly, triggered an abort and separation of the capsule from the propulsion module as intended, and shut down the engine. The capsule landed safely, and the propulsion module was destroyed upon impact with the ground. All debris landed within the designated hazard area.
20230930	September 30, 2023: Congress passed, and the president signed a continuing resolution (CR) funding the federal government through November 17. Included in the CR was a three-month reauthorization of FAA. In December, Congress extended the short-term reauthorization to March 8, 2024.
20231025	October 25, 2023: FAA signed a memorandum of agreement with the Air Force Research Laboratory to exchange data and share capabilities and expertise to integrate safely Advanced Air Mobility aircraft into the national airspace system. (See July 18, 2023.)
20231031	October 31, 2023: FAA completed a safety review of the SpaceX Starship-Super Heavy license. The agency continued to work on an environmental review and consultation with the U.S. Fish and Wildlife Service (USFWS) on an updated Biological Assessment under the Endangered Species Act. FAA and the USFWS must complete this consultation before the environmental review portion of the license evaluation is completed. (See September 8, 2023; November 15, 2023.)
20231109	November 9, 2023: The Sampson Sky Switchblade flying car made its first flight at the Grant County International Airport in Washington.
20231112	November 12, 2023: Joby Aviation, a company developing electric vertical take-off and landing (eVTOL) aircraft for commercial passenger service, performed an exhibition flight in New York City, marking the first-ever electric air taxi flight in the city and the first time Joby has flown in an urban setting. The aircraft, a piloted, four-passenger electric aircraft, has zero operating emissions. (See December 1, 2023.)
20231115	November 15, 2023: The group of outside experts appointed by FAA in April issued a 52-page report, calling for “urgent action” to address safety risks in the nation’s aviation system, highlighting issues like staffing shortages among air traffic controllers and outdated technology. The panel recommended changes in how the agency is funded and warned about the risks posed by aging technology. (See April 26, 2023; November 17, 2023.)

20231115	November 15, 2023: FAA reinstated SpaceX's Starship launch license, noting "SpaceX met all safety, environmental, policy and financial responsibility requirements." SpaceX applied for and received authorization for one flight. The license indicated FAA was satisfied with SpaceX's modifications to its rocket and launchpad. (See September 8, 2023; November 18, 2023.)
20231117	November 17, 2023: FAA announced it is taking steps to enhance air traffic controller training and safety reporting following the release of the National Airspace System Safety Review Team report. (See November 15, 2023.) Those actions included:
20231117	• Providing additional support to colleges and universities in the Air Traffic-Collegiate Training Initiative (AT-CTI) Program. The FAA will work with AT-CTI programs to ensure that graduates from these programs have the necessary skills to begin on-the-job training at a facility. These graduates still must pass the Air Traffic Skills Assessment (ATSA) exam and meet medical and security requirements. Previously, these graduates were required to attend the FAA Air Traffic Controller Academy before being assigned to a facility.
20231117	• Announcing a year-round hiring track for experienced military and private industry controllers.
20231117	• Filling every seat at the FAA Academy and increasing classroom capacity beyond current limits.
20231117	• Expanding the use of advanced training across the country.
20231117	• Finishing deployment of tower simulator systems to 95 facilities by December 2025. The first system will be delivered to Austin by January 2024.
20231117	• Providing reports from the Air Traffic Safety Oversight Service to the FAA Administrator and Aviation Safety Associate Administrator.
20231118	November 18, 2023: SpaceX's uncrewed spacecraft Starship failed shortly after lifting off from its launch site near Boca Chica, Texas. The rocket's Super Heavy first stage booster exploded over the Gulf of Mexico shortly after detaching. The launch was the second attempt to fly Starship mounted atop its towering Super Heavy rocket booster, following an April attempt that ended in explosive failure about four minutes after lift-off. (See November 15, 2023.)
20231130	November 30, 2023: FAA proposed to increase the cockpit voice-recording requirement from two to twenty-five days for all newly manufactured aircraft. The change would align the FAA regulations with the International Civil Aviation Organization and the European Union Aviation Safety Agency rules.
20231201	December 1, 2023: Miami-based Doroni Aerospace announced its all-electric flying car, the Doroni HI, received FAA airworthiness certification, the second flying car, or vertical takeoff and landing (eVTOL) aircraft to be certified. Powered by ten independent propulsion systems, the all-electric flying car has a claimed top speed of 140 mph (100 mph cruising speed) and a 60-mile range. (See November 12, 2023.)

20231203	December 3, 2023: Alaska Airlines announced a deal to buy Hawaiian Airlines for $1.9 billion.
20231203	December 3, 2023: FAA's thirteenth administrator, David Hinson, passed away in Roseville, CA, at the age of 90. He served as administrator from 1993-1996.
20231205	December 5, 2023: FAA announced that the agency had officially established the Mental Health and Aviation Medical Clearances Rulemaking Committee (ARC). FAA expects the ARC to submit recommendations by the end of March 2024 on how the FAA can identify and break down any remaining barriers that discourage pilots from reporting and seeking care for mental health issues.
20231213	December 13, 2023: FAA Administrator Mike Whitaker directed the executive director of Air Traffic Safety Oversight to report to him and the Associate Administrator of Aviation Safety to address better safety risks.
20231218	December 18, 2023: The Transportation Department announced a $140 million fine against Southwest Airlines over a meltdown last winter that disrupted travel for about two million people during the holiday season. Of the $140 million, Southwest Airlines will pay $35 million to the federal government. For the remaining amount, the department is giving the airline credit for providing frequent-flier points as an apology to customers affected by the meltdown and agreeing to give out tens of millions of dollars in vouchers to customers affected by future delays and cancellations. The fine is roughly 30 times what had previously been the department's largest penalty against an airline for consumer protection violations, a $4.5 million settlement with Air Canada in 2021 over customer refunds.
20231220	December 20, 2023: FAA Administrator Michael Whitaker announced he had established a three-member panel, led by former National Transportation Safety Board member Mark Rosekind, to "examine how the latest science on sleep needs and fatigue considerations could be applied to controller work requirements and scheduling." He asked the panel for their recommendations in six weeks. The other two members of the panel were Charles Czeisler, chief and senior physician, Division of Sleep and Circadian Disorders, Departments of Medicine and Neurology, Brigham and Women's Hospital, and Dr. Erin Flynn-Evans, head of the NASA Ames Research Center Fatigue Countermeasures Laboratory.
20231226	December 26, 2023: Mexico launched its army-run airline when the first Mexicana Airlines flight took off from Mexico City bound for the Caribbean resort of Tulum. It was another sign of the outsized role that President Andrés Manuel López Obrador has given to Mexico's armed forces. The airline's military-run holding company now also operates about a dozen airports, hotels, trains, the country's customs service, and tourist parks.

20231228	December 28, 2023: FAA announced it was closely monitoring targeted inspections of Boeing 737 MAX airplanes to look for a possible loose bolt in the rudder control system. Under consultation with FAA, Boeing issued a Multi-Operator Message (MOM), urging operators of newer single-aisle airplanes to inspect specific tie rods that control rudder movement for possible loose hardware. FAA said it would remain in contact with Boeing and the airlines while the inspections are underway. The agency will consider additional action based on further discovery of loose or missing hardware. Boeing recommended the inspections after an international operator discovered a bolt with a missing nut while performing routine maintenance on a mechanism in the rudder-control linkage.
20231228	December 28, 2023: Chinese manufacturer EHang demonstrated the world's first commercial eVTOL air taxi flight. Inaugural trips aboard the two-passenger, self-flying air taxi took place in Guangzhou and Hefei. Passengers—including high-ranking government officials and citizens alike—were invited to fly and did not need to pay for their tickets. The cities posted no-fly notices to keep the airspace clear.
20231229	December 29, 2023: SpaceX conducted a dual test of engines on the giant Starship and Super Heavy rocket stages at SpaceX's Starbase proving ground in Boca Chica, Texas. The test, which lasted about 10 seconds, successfully fired all 33 Raptor engines on the Super Heavy booster, which serves as the first stage of the Starship rocket.