

FEDERAL AVIATION AGENCY

# HISTORICAL FACT BOOK

A CHRONOLOGY, 1926-1963

1966

D O T  
AIRPORTS DIVISION  
ENGINEERING BRANCH

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## PRELUDE TO THE AIR COMMERCE ACT OF 1926

After kindling a revolution in the strategy and tactics of warfare, the airplane emerged from World War I developed technically to the point that it was potentially a practical transport vehicle. Even before the war ended, the U.S. Government moved to establish regular airmail service between New York and Washington. Army pilots first flew the route on May 15, 1918, but before long the Post Office Department took over the job with its own civilian pilots. The United States Air Mail Service expanded rapidly.

By September 1920 a transcontinental route was operating, but only during daylight hours. While the Army Air Service was putting into operation in June 1922 its "Model Airway System," which linked nine army airfields extending from New York to San Antonio, the Post Office moved ahead with its work of lighting the transcontinental route. During 1923 beacons were first installed on the middle segment between Chicago and Cheyenne. It then became possible for flights to leave New York or San Francisco the morning of one day and reach the opposite coast the evening of the next. Such flights were begun on a regular basis the following year. Regular overnight airmail service between New York and Chicago began in July 1925—6 years before European countries, which had made immediate strides after the war to establish civil aviation on a commercial basis, were able to achieve regular night operations.

For pioneering the development of flight techniques and airway aids essential to safe regular commercial services, the Post Office Department received the Collier Trophy for the years 1923 and 1924. This premier award is given annually for the greatest achievement in aviation in America. Passage of the Kelly Air Mail Act of 1925 took the Post Office out of the flying business, and gave the job of carrying the airmail to private companies after competitive bidding.

In contrast to its early initiative in establishing the technical foundation for regular airmail service, the U.S. Government hesitated to accept responsibility for the regulation and promotion of civil aeronautics. As early as March 1912, a leading aviation journal, *Aeronautics*, had stressed the importance of Federal registration and licensing. But the movement gained little momentum until after World War I. At that time the National Advisory Committee for Aeronautics (NACA), created in 1915 "to supervise and direct the scientific study of the problems of flight, with a view to their practical solution," led the effort to obtain legislation necessary for the orderly development of civil aviation. In 1919 President Wilson submitted to Congress a bill drafted by NACA that would have authorized the Department of Commerce to license pilots, inspect machines, and supervise the use of airfields, but no legislation emerged. One or more bills providing for Federal regulation of civil aviation were introduced annually thereafter until the Air Commerce Act was passed 7 years later. After 1921 the aviation industry itself worked

actively for Federal regulation and thereby revealed at a tender age its uniqueness among private enterprises. Congress' reluctance to legislate on the matter stemmed largely from the controversy over aviation's status in the Nation's defense structure.

By 1925 this controversy, centering around General Billy Mitchell, had become so acute that the Acting Secretary of War and the Secretary of the Navy jointly requested President Coolidge to appoint a special board to study the whole subject of national aviation. The President's Aircraft Board, chaired by Dwight W. Morrow, resulted. After taking voluminous testimony, the Morrow Board recommended the separation of military and civil aviation, the creation of a civilian bureau of air navigation, and the appointment of three additional assistant secretaries of War, Navy, and Commerce to supervise, respectively, the Government's activities in military, naval, and civil aeronautics. The Air Commerce Act of 1926 carried out the Morrow recommendation so far as it applied to civil aviation. Other acts, in June and July, implemented the recommendations applying to naval and military aeronautics, respectively. Establishing a pattern for the regulation of civil aeronautics by the non-military departments of Government, the Air Commerce Act was rightly described as "the legislative corner-stone for the development of commercial aviation in America."

## 1926

**May 20:** President 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 (except airports); arrange for research and development to improve such aids; license pilots; issue airworthiness certificates for aircraft and major aircraft components; and investigate accidents.

**June 3:** An amendment to the original contract air-mail act rendered that act practical and workable. The Air Mail Act of February 2, 1925 (also called the Kelly Act), had provided for transportation of mail by air carriers on the basis of contracts between the Post Office Department and the individual carriers, but the compensation of the carrier was to be computed as a percentage of the actual postage affixed to the mail carried. This computation proved to be very tedious and cumbersome. The 1926 amendment substituted a method under which the airlines were paid by the pound for mail carried. (See May 17, 1928.)

**July 2:** The first known reforestation by airplane was carried out in Hawaii.

**July 3:** Congress passed a joint resolution authorizing the President to detail officers of the Army Air Corps to duty with the Commerce Department in connection with the work of promoting civil aviation. The detail was limited to periods of not more than 1 year.

**August 11:** William P. MacCracken, Jr., took office as the first Assistant Secretary of Commerce for Aeronautics. (See October 1, 1929.) He thus became the first head of the Aeronautics Branch, which was 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 brought to this position experience as a World War I Army pilot, as chairman of the American Bar Association's committee on aviation law, and as co-general counsel of National Air Transport, a company which he helped organize in 1925 to deliver airmail. MacCracken also assisted with the drafting of the Air Commerce Act of 1926.

**August 11:** With the appointment of the Assistant Secretary of Commerce for Aeronautics (see preceding item), the organization of the Aeronautics Branch of the Department proceeded rapidly. It was Secretary Hoover's opinion that the duties imposed by the Air Commerce Act should be carried out so far as possible by existing components of the Department. Accord-

ingly, though there were five principal units making up the Aeronautics Branch, which ranked as a bureau, only two of these were structurally part of the new Branch. These were the Air Regulations Division and the Air Information Division. The other three units received directions from the Branch concerning work to be undertaken but were structurally within the framework of other bureau-level components of the Department and received detailed guidance and administrative support from these components. 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. (See appendix A, figure 1.)

**November 16:** Dr. Louis Hopewell Bauer was appointed first Medical Director of the Aeronautics Branch, Department of Commerce. A major in the Medical Corps at the time of his appointment, Dr. Bauer was a veteran of 13 years' service in the Army, 7½ years of which was with the Air Service.

**December 7:** The first light erected by the Aeronautics Branch was placed in operation. The light was located 15 miles northeast of Moline, Ill., on the Chicago-Dallas airmail route.

**December 7:** The first official inspection of an American aircraft by the Aeronautics Branch took place. Inspector Ralph Lockwood tested a Stinson Detroiter being delivered to Canadian Air Express.

**December 14:** The famous Ford-Stout trimotor transport went into airline service.

**December 18:** The first issue of the Aeronautics Branch official publication, *Domestic Air News*, appeared.

**December 31:** The first Air Commerce Regulations of the Aeronautics Branch, Department of Commerce, became effective at midnight. 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.

The regulations required all aircraft, whether used in commercial aeronautics or in private flying, to be registered and marked with an appropriate identification number. All pilots engaged in interstate commerce were required to secure either transport or industrial pilot licenses, or both. Mechanics engaged in commercial aeronautics were required to secure

either engine or airplane mechanic licenses, or both. Owners, pilots, and mechanics affected had until March 1 (later extended to May 1), 1927, to get 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 July 1, 1927. Failure to apply as required was punishable by a \$500 fine.

The regulations also prescribed safety rules applying to air traffic.

## 1927

**February 28:** A list of 57 physicians qualified to give medical examinations for pilot licenses was published in *Domestic Air News*, the official journal of the Aeronautics Branch. Scattered over the United States, these physicians had been selected and qualified for this service by Aeronautics Branch Medical Director Louis H. Bauer. By October 1, 1927, the number of qualified physicians had grown to 188, and additional appointees were to be 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.

**March 29:** Aircraft Type Certificate No. 1 was issued by the Aeronautics Branch to the Buhl Airster C-3A, a 3-place open biplane for use on land. This 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. Thereafter, the rate of type certification progressively increased. By the end of fiscal year 1928, the total had reached 47; by the end of fiscal year 1929, 170; by January 15, 1930, 287.)

**April 4:** Regular commercial airline passenger service was initiated between New York and Boston. The carrier was Colonial Air Transport. This was the most substantial operation of this kind thus far, although it was antedated by such short-lived ventures as the St. Petersburg-Tampa Airboat Line (1914) and Aeromarine Airways (1920-1924).

**April 30:** The Aeronautics Branch announced that it had recently acquired two Buhl Airsters and one Stinson-Detroiter (cabin plane). The Branch planned to add at an early date one Wright Travel Air (open cockpit) and one Fairchild FC-1A (cabin plane).

**May 20-31:** Charles A. Lindbergh, a young airmail pilot, made the first nonstop solo flight across the Atlantic Ocean in a heavier-than-air craft (*The Spirit of St. Louis*). Lindbergh took off from Roosevelt Field, Long Island, New York, at 7:52 a.m. on May 20. He landed at Le Bourget air field, Paris, France, at 5:21 p.m. New York time (10:21 p.m. Paris time) on May 21. The distance flown was 3,610 miles; the elapsed time, 33 hours 29 minutes 30 seconds. His feat gave the Nation a hero—with wings—and provided a strong stimulant to the growth of American aviation.

**June 30-July 1:** The transcontinental airway was transferred from the Post Office Department to the

Department of Commerce. Extending from New York to San Francisco, the airway was 2,612 miles long, with 2,041 miles lighted. Its air navigation facilities included 92 intermediate fields, 101 electric beacons, 417 acetylene beacons, and 17 radio stations. Personnel involved in the transfer included 45 radio operators, 14 maintenance mechanics, and 84 caretakers.

At the same time, the Post Office Department relinquished operation of the western section—Chicago to San Francisco—of the transcontinental airmail route to the Boeing Airplane Company of Seattle.

**July 1:** A Director of Aeronautics was appointed to assist the Assistant Secretary of Commerce for Aeronautics with the details of administering the Aeronautics Branch, which remained under the general supervision of the Assistant Secretary. The first Director of Aeronautics was Clarence M. Young. (See October 1, 1929.)

Young was a lawyer from Des Moines, Iowa, who had learned to fly in the Army in World War I and served as a pilot on the Italian front. After the war he had continued to be active as a civilian in aviation.

**July 15:** The Aeronautics Branch offered for sale its first airways strip map: Moline, Ill., to Kansas City, Mo.

**August 31:** The Post Office Department turned over operation of its last airmail route, New York to Chicago, to National Air Transport, Inc. The entire service would henceforth be conducted by private operators.

**September 1:** Air express operations were begun by American Railway Express and major airlines. Referring to the importance of this event, the *Cleveland Plain Dealer* wrote ". . . though 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."

**October 19:** Pan American Airways began the company's initial operations, flying over the 90-mile route between Key West, Florida, and Havana, Cuba.

**October 24-30:** The Fourth International Air Congress took place at Rome, Italy. Among the six U.S. delegates was one representing the Department of Commerce. The Congress dealt mainly with civil aviation, discussing such subjects as promotion of civil aviation, regulations necessary for international traffic, high-altitude flying, and the judicial and legal side of these questions.

**October 28:** The first air-passenger international station was established at Meacham Field, Key West. The first flight from the station was made by Pan American Airways to Havana, Cuba.

**October:** The International Radio Convention met in Washington, D.C. During sessions that lasted into November, this convention secured international agreements on the use of certain frequencies by aircraft and airways 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.

**November 14:** A special conference was held by Secretary MacCracken with flyers who had made the epochal transoceanic flights of 1927—Lindbergh, Byrd, Maitland, Chamberlin, Goebel, Elder, Halderman, Schluter, Bronte, Hegenberger, Levine, Balchen, Brock, Schlee, Noville—to discuss meteorological conditions and forecasting requirements.

## 1928

**January 31:** An early instance of airplane noise nuisance was reported in the Aeronautics Branch's official journal, *Domestic Air News*. The Postmaster General had received a complaint from the proprietor of the Cackle Corner Poultry Farm, Garrettsville, Ohio, 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 airmail route, suggesting that its planes make a special effort to achieve and maintain altitude over Garrettsville.

**March 28:** The Assistant Secretary of Commerce 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.

**May 16:** Transcontinental Air Transport was formed by a number of prominent industrialists. Marking the entry into commercial aviation of powerful financial groups which allied manufacturers with operating airlines, this was a turning point in the development of U.S. air transportation. Through consolidation and amalgamations the "big four" domestic air carriers—American, United, Eastern and TWA—emerged during the next few years as well as Pan American Airways, the world's largest international operator.

**May 17:** Another amendment to the Air Mail Act of 1925 (see June 3, 1926) provided that air carriers which had operated satisfactorily on mail routes for 2 years could exchange their contracts for "air mail route certificates" for a period not to exceed 10 years. This amendment protected the investment of the airlines in the equipment necessary for carrying out their original contracts. The life of that equipment was considerably longer than the life of those contracts, and, at this time, carrying the mail was virtually the only profitable form of airline operation.

**May:** A board to determine the causes of aircraft accidents was created by the Aeronautics Branch, Department of Commerce.

**June 10:** The first "jet" flight occurred in Germany. After a ground-towed launch, a glider, powered by rockets and piloted by F. Stamer, flew about 1 mile.

**June 16:** Successful tests were made at Wright Field, Dayton, Ohio, of superchargers designed to give sea-level pressure at 30,000 feet, and a new liquid-oxygen system for high-altitude flying.

**July 1:** Teletype machines were introduced to transmit aviation weather information. Among the first airport stations to receive teletypes were those at Hadley Field, N.J.; Cleveland; Chicago; and Bellefonte, Pa. These units were all connected with the central office at Washington, D.C., from which data were exchanged for all locations. By October 1938, the teletype weather communications system had been extended to a total of 21,790 miles, covering all the 48 States except Maine, New Hampshire, and South Dakota.

**July 31:** *Domestic Air News* reported that the successful bidder to carry airmail from Key West to Puerto Rico was Pan American Airways. The bid was \$2 per mile. Service was to be inaugurated about January 1, 1929.

**August 1:** As a first step towards promoting uniform State aeronautical legislation consistent with Federal law, the Aeronautics Branch issued a bulletin (Aeronautics Bulletin No. 18) reviewing the characteristics of various State acts and setting forth suggested drafts of required laws. At this time 20 States had no aeronautical legislation.

**September 15:** Civil aviation accident statistics for the first half of 1928 were published by the Aeronautics Branch. 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, powerplant 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 6 of the fatalities occurred in scheduled flying.