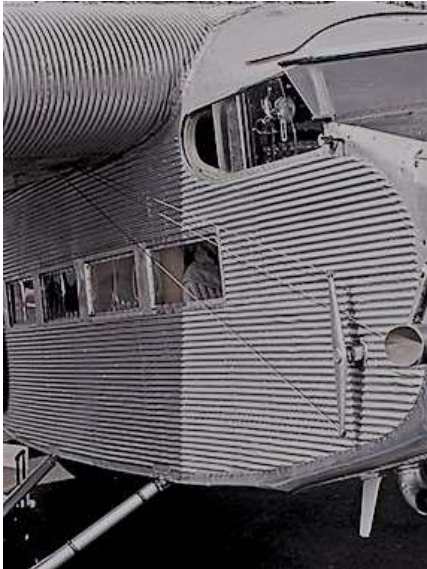


The Mighty Ford Trimotor: Helping to Forge a Global Aviation System

On June 11, 1926, the Ford Trimotor made its first flight. The plane, produced by the Ford Motor Company, and designed by William Bushnell Stout, revolutionized air transportation around the world. The Trimotor, one of the first all-metal airplanes, was the first plane built to carry passengers rather than the mail. The original 4-AT model seated eight passengers, later increased to twelve, and then thirteen passengers. The plane had three engines, which allowed it to fly higher and faster than other airplanes of the same time period. It could reach speeds up to 150 miles per hour.



The plane, affectionately called the Tin Goose or the Flying Washboard, proved exceptionally reliable, able to land safely with just one of its three engines. The nicknames apparently reflected the plane's attributes. Flying Washboard because of its corrugated external body. Tin Goose, perhaps because many called Ford's Model T car, the Tin Lizzie. Writer Larry Janoff offers another explanation for the name: "it 'waddled' down the runway like a goose and the three loud engines could sound like a goose honking."

Ford, like other automobile companies, entered the aviation business during World War I, building Liberty engines. After the war, it returned to auto manufacturing until 1925. That year, Henry Ford acquired the Stout Metal Airplane Company for an estimated \$1 million. In announcing his purchase on August 6, Henry Ford remarked, "The first thing that must be done with aerial navigation is make it fool-proof. . . . What the Ford Motor Company means to do is prove whether commercial flying can be done safely and profitably." Ford remarked that he had never been in the air and had no desire to fly. His interest was solving the engineering problems associated with aviation. [In 1927, while in Dearborn, Michigan, Charles Lindbergh gave Henry Ford his first airplane ride, in the Spirit of St. Louis, built specifically for Lindbergh by Ryan Airlines.]

In February 1927, for example, a Ford Company Trimotor made the first flight using the Department of Commerce Aeronautics' Branch experimental radio beacon navigation system on a flight from Detroit to Dayton. The Aeronautics Branch, FAA's first predecessor agency, conducted two series of flight tests on the New York-Cleveland airway between July 1927 and February 1928. As a result of those tests, 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 June 30, 1929, the Branch reported 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 four-course radio range became the standard civil air navigation aid, and retained that status until after World War II.

The Ford Airplane Company also used one of its Trimotor's to help pioneer air-to-ground communications technology. Working with the Bureau of Standards and the Aeronautics Branch in 1927, Ford demonstrated for the first time a new technology that allowed pilots to talk to ground personnel up to distances of 200 miles. Because of those tests, conducted at the College Park airport in Maryland, by late 1929, some air transport companies were maintaining two-way voice communication with their planes in flight.



In addition, to helping to build the national airspace system, the Trimotor also became a workhorse for U.S. and international airlines. By 1929, it was used by nearly all the major U.S. carriers and played a dominant role in establishing domestic routes throughout the United States, until it was eclipsed in 1934 by the next generation of all-metal airlines, the Boeing 247 and Douglas DC-2. Ford built 199 Trimotors before it closed its airplane division in 1933 because of poor sales during the Great Depression. The plane, however, made its mark on the global aviation community. They would serve all three branches of the U.S. military, many

airlines, many corporations, and 20 foreign countries.

In addition to its pioneering technological work, the Ford Trimotor also witnessed many aviation firsts.

- October 28, 1927: Pan American Airways used Ford Trimotors for its first international scheduled airmail flights from Key West to Havana, Cuba. The company began scheduled passenger service on the route with Trimotors on January 16, 1928. Pan American Airways also used the Trimotor extensively in Central America and South American,
- May of 1928: Scenic Airways (now Grand Canyon Airways) purchased its first Ford Trimotors and began its flightseeing expeditions over the Grand Canyon. The company used Ford Trimotor N414H for 65 years before retiring it to a museum.



- July 7, 1929: The Ford Trimotor pioneered coast-to-coast airline service in the United States when Transcontinental Air Transport, the future TWA, provided regularly scheduled flights from New York to California. Passengers would normally fly by day, and ride aboard sleeper trains at night.
- November 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.
- February 18, 1930: Elm Farm Ollie, the first cow to fly in an aircraft and to be milked mid-flight, travelled in a Ford Trimotor. Ollie flew from Bismarck, Missouri to St. Louis as part of the International Air Exposition.
- October 30, 1930: One of Latin America's earliest airlines, Cubana de Aviación, was the first to use the Ford Trimotor in Latin America.
- July 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.

A number of U.S. airlines used Ford Trimotors, including:



- American Airlines
- Grand Canyon Airlines
- Island Airlines, Bass Islands, Ohio
- Pan American World Airways
- Star Air Service
- Transcontinental Air Transport
- Trans World Airlines
- Wien Air Alaska
- United Airlines