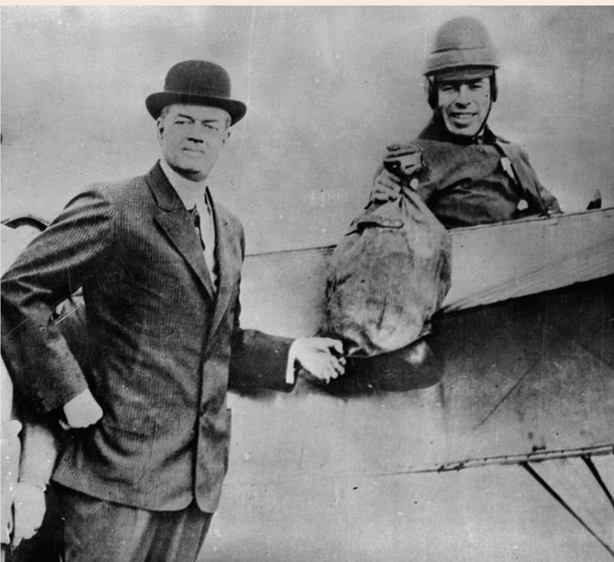
# Up in the air

## How WWI pilots built the nation's airmail network

Top: New York City Postmaster Thomas G. Patten hands off the mail to Lt. Torrey Webb as he prepares for the first airmail flight from New York on May 15, 1918.

Above: Some of the Army pilots who helped create the airmail network

Below: U.S. Postmaster General Frank Harris Hitchcock gives a mailsack to pilot Earle Ovington just before the first airmail flight in America on Sept. 23, 1911.



After Wilbur and Orville Wright achieved the first powered, sustained and controlled airplane flight in 1903, it wasn't long before people wondered how it could be put to use. One of the first answers was airmail. And that innovation would not only spur dramatic changes in mail delivery, it also would help spark the advent of commercial air travel.

U.S. Postmaster General Frank Harris Hitchcock, who had been fascinated by birds since college, saw the potential for airmail. In November 1910, Hitchcock approved a ship-to-shore airmail experiment, but bad weather canceled the first attempt, and a broken propeller ruined the second.

While Hitchcock's attempts weren't getting off the ground, the first official airmail flight was held in British India in 1911. There, a 1910 Humber-Sommer biplane—an early type of aircraft with two pairs of wings, one above the other—carried 6,500 letters 8.1 miles.

Still determined to see U.S. airmail take off, when Hitchcock learned of air trials to be held in Garden City, NY, he convinced organizers to include an experimental mail component. The state's governor put out a call for pilots willing to deliver mail from Garden City to Mineola, NY, a trip of about 5.5 miles. Earle Ovington, a former assistant to inventor Thomas Edison and the first person to fly over Boston and other parts of New England, volunteered to deliver the mail. After hearing about the request, he had asked his wife, "Is this the first time it has ever been carried in America?" If Ovington was successful, it would be.

Ovington was sworn in as the first U.S. airmail pilot, then loaded a mail bag containing 640 letters and 1,280 postcards into his Bleriot Queen tractor-type monoplane's cockpit, tucking it between his legs. At 5:26 p.m., Ovington took off, balancing the sack on his knees so he could steer with his feet. It all began smoothly for the French-trained pilot, as he covered the distance to Mineola in six minutes, circled at 500 feet, took aim, tossed the bag over the side and hit the mark dead center. The delivery was less graceful, with the sack immediately bursting on impact, scattering letters and postcards. But the mail was rapidly retrieved and delivered by letter carriers.

Hitchcock authorized 31 more experimental flights in 16 states throughout 1911 and 1912, and the benefits became apparent. While fast trains could go from Washington, DC, to New York overnight, airplanes could do it

in the same day. In 1913, the Post Office started lobbying Congress to fund an airmail service.

Congress didn't act until 1916, earmarking $50,000 for the service. Even with funding, the Post Office couldn't get very far because World War I had broken out in 1914 and the country's limited aviation industry was fully engaged. All airmail experiments were put on hold by the Post Office until pilots and planes could be freed up from the war effort.

In 1918, Congress added $100,000 for the service, and the U.S. Army Signal Corps, seeing an opportunity for its student aviators to get training experience before sending them to Europe, lent its pilots and planes to the Post Office. Scheduled airmail service between New York and Washington began on May 15, 1918. Army airplanes were to take off at the same time from Washington's Polo Grounds and from Belmont Park, Long Island, each stopping in Philadelphia along the way.

Lt. George Boyle was to pilot the plane taking off from Washington that first flight, but he didn't fare too well. His Curtiss JN-4H "Jenny" wouldn't start, because it had an empty fuel tank. When he finally lifted off, he flew in the wrong direction and damaged his plane while landing in a freshly plowed field to ask a farmer for directions. Boyle brought the mail back to Washington in a truck. Two days later, Boyle became lost again and made an emergency landing at the Philadelphia Country Club after running out of fuel.

The Jenny was the Army's training plane, equipped with 90 horsepower Curtiss OX-5 V-8 engines. It could carry a pilot and mail up to about 6,000 feet at 60 mph. As the service improved, air routes spread across the Northeast, with an airmail stamp costing 24 cents.

By August of 1918, the Post Office took over, hiring civilian pilots and mechanics and buying six Standard JR-1B biplanes. More powerful and faster than the Jenny, the JR-1B could carry up to 180 pounds of mail. JR-1Bs, and other planes at the time, had few instruments, no radios, or other navigational aids. Pilots navigated by dead reckoning, which means using landmarks, rail lines, roads and even telephone lines to help guide them.

One postal pilot used a half-empty whiskey bottle as an altitude indicator,

**Above: Lt. George Boyle prepares for the first airmail flight from Washington, DC, to New York on May 15, 1918, by having a map attached to his leg. Among the spectators for the flight was President Woodrow Wilson.**

**Below: Lt. Boyle flew this Curtiss JN-4H Jenny biplane for the first airmail flight, but had problems immediately when the plane's engine wouldn't start because there was no fuel in the tank.**

Crashes, like this one, were common for early airmail pilots.

the tilt of the whiskey showing whether his wings were level or not. Another pilot, crossing the Allegheny Mountains, lit a long cigar when climbing above the cloud deck. With no instruments to tell him when he had crossed the mountains, he leisurely puffed the cigar until only two unburned inches remained. With this makeshift timer, he knew when it was safe to descend through the clouds to the landing field in Bellefonte, PA.

Difficult under ideal circumstances, ice and fog could make a pilot's job deadly.

Also crossing the Alleghenies, pilot Charles Lamborn took off from Cleveland for Bellefonte in August 1919. Flying through fog and rain, Lamborn climbed into clouds to pass over Snowshoe Mountain. Without visual reference, he became disoriented and his plane came out of the clouds at 400 feet, nose-down, smashing into the mountain. He was carried out from the wreckage but died before reaching a hospital.

By 1920, the Post Office and Navy Department had installed radio stations at 10 airfields along the New York to San Francisco route to provide weather information, and the Post Office established a transcontinental route from New York to San Francisco. Legs were established from New York to Cleveland, Cleveland to Chicago, Chicago to Omaha, and so on to San Francisco. Giant cement arrow markers were set up along the route to help the pilots navigate. To expedite the trip, mail was flown during the daytime and put on trains to the next airfield at night. The combination cut transcontinental mail delivery from 90 hours by train to 72 hours.

Next up was flying the New York-San Francisco route continuously day and night. The first flight took off from San Francisco on Feb. 22, 1921. Things were proceeding well until Jack Knight, fresh from the hospital after a bad landing the week before, was finishing his leg from North Platte, NE, to Omaha's grass landing strip. He landed at 1:10 a.m. on Feb. 23 in blizzard conditions.

"Who's going to take her on from here?" Knight asked the field manager.

"Nobody," the field manager replied. The pilot for the next stage to Chicago had gotten caught in the weather and hadn't made it to the airfield.

"It's too damn bad to get halfway across the continent and have the flight fizzle out," he said. "I'm going to take this mail to Chicago."

Knight had never flown the Omaha-Chicago leg, even in daylight, the field manager said in protest.

"I know," he sighed. "But I can make it if they keep on lighting bonfires."

At 2 a.m., Knight took off on a compass course for Des Moines, IA, in his De Havilland DH-4 biplane. Using a flashlight, he studied a Rand McNally road map as his guide. There were no signal fires, because postal officials had assumed the flight had been canceled.

With deep snow preventing a landing at Des Moines, Knight pressed on to Iowa City, having to buzz the airfield to get the night watchman—the only person at the airfield—to light road flares for the pilot to see to land. Knight refueled and took off for Chica-

Pilot Jack Knight became famous for his late-night flight from North Platte, NE, to Chicago through a blizzard, which helped establish the transcontinental airmail network.

go. When the snow stopped, fog set in and Knight flew blind until daybreak, when the fog burned off, and he could see Lake Michigan. By now, news of Knight's trip had become known, and when he landed at Chicago's Checkerboard Field he was cheered by a throng of well-wishers.

Two more pilots flew the remaining legs to Hazelhurst Field on Long Island. The letters that had left San Francisco were in New York in 33 hours and 20 minutes.

With transcontinental airmail now possible, Congress set aside $1.25 million to expand the service. In 1925, the Post Office contracted its airmail service to spur commercial aviation, and by 1927, the Post Office disbanded its own flight department, with private airmail carriers transporting all airmail. Those private carriers innovated and led the way to our modern air transportation system.

On May 23, 1926, a carrier called Western Air Express loaded two passengers on each of its regular airmail flights between Los Angeles and Salt Lake City. The passengers sat atop mail sacks for the seven-hour trip, ate a box lunch and were given tin cups to use in the absence of lavatories.

Aviation service expanded further when Postmaster General Walter Folger Brown, operating with enhanced powers under the Airmail Act of 1930, instigated airline mergers and awarded passenger and airmail routes to the industry's largest entities, such as American Airlines and United Airlines.

Airmail as a separate class of domestic mail officially ended on May 1, 1977, as most first-class letters were carried cross-county by air anyway, as they still are today. However, the Postal Service is now aiming to reduce its use of air transportation. Under Postmaster General Louis DeJoy's 10-year plan released last year, USPS would change service standards for First-Class Mail, adding a day or two to the standard. The change would allow USPS to transport approximately 39 percent of First-Class Mail by ground transportation, as a cost-saving measure.

But the modern postal network will always rely on air to move some part of the mail mix, and none of that would have been possible without the airmail pioneers. Airmail was perilous work—described by one pilot as "pretty much a suicide club." Between 1918 and 1927, 35 Post Office pilots died from unpredictable weather, inexperience or unreliable equipment. Their sacrifice helped create the modern mail service we rely on today and played a key role in developing the U.S. aviation industry. **PR**

**By the late 1920s, private companies had taken over many of the air mail routes and had even begun to take on passengers, spurring the development of air transportation. Pictured above, a woman hands over a parcel for airmail delivery by a Western Air Express Fokker F.10 monoplane, circa 1930.**