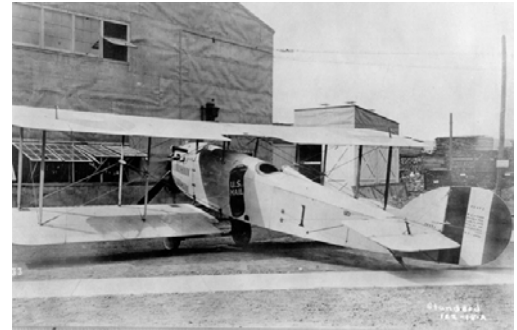


Standard JR-1B Plane #1

In May 1918, the Post Office Department began regularly scheduled airmail service between Washington, D.C., and New York City. Almost immediately, the Department eyed westward expansion — to Cleveland and Chicago — in an effort to hasten delivery of business and financial communications.

The Department contracted with the Standard Aircraft Corporation to purchase six Standard JR-1B biplanes to carry mail. The first of these planes is shown in the picture to the right. With much ceremony, the planes were delivered to the Post Office Department on August 6, 1918, in Elizabeth, New Jersey.



Standard JR-1B airmail plane

Eddie Gardner (right) of the Aerial Mail Service was the first to pilot one of the planes. On the day of delivery, he impressed 10,000 spectators by showcasing the plane's maneuverability with hoops, side slips, and figure eights — later promising postal officials "no more stunts."

Standard Aircraft had modified the design of one of its military planes, which had two cockpits, by covering the front cockpit and converting it to a hold for mail. Standard improved the mail plane in other ways, for instance, by reinforcing the plane's tail skid. All air fields in 1918 were unpaved, and the tail skid — the rounded piece of wood beneath the tail — helped slow a plane upon landing by dragging through dirt or sod. Mail planes took off and landed repeatedly, and their tail skids took a lot of punishment.

The Standard JR-1B's engine was one of the best — a Model I Hispano-Suiza with 170 horsepower, surrounded by metal. The fuselage (body) of the plane consisted of canvas stretched over a wooden frame or former, then doped to stiffen the material. The wings had a spar running their length, much like a backbone, with curved ribs on either side to hold the canvas. The plane was 26 ft. 7 in. long, had a wingspan of 31 ft. 4 in., and an overall height of 10 ft. 10 3/16 in.

The figures seen on the plane's rudder showed it could carry up to 180 pounds of mail and provided other information useful to mechanics, a practice begun by French aviators. The plane's W.E. (weight, empty) was 1,665 pounds, and it could hold 360 pounds of high octane gas, 30 pounds of oil, and a pilot who could weigh up to 165 pounds for a W.T. (weight, total) of 2,400 pounds.



Pilot Eddie Gardner

The center portion of the upper wing was cut away to give the pilot upward visibility. His plane's instruments consisted of a fuel indicator, tachometer, temperature gauge, and a compass that jumped with the plane's vibrations. By the mid-1920s, the compass was much improved, but, in 1918, airmail pilots often relied on dead reckoning. Some carried maps tucked into a pocket on the leg of their flight suit. Usually, they did not know what the weather was like ahead of them — a constant danger since rain could damage the wooden propellers spinning 1,500 to 1,800 times per minute. Sometimes a metal cover protected the propellers.

Very fast for its day, the Standard JR-1B mail plane flew at speeds of up to 100 miles per hour and could fly as high as 10,000 feet. Its best altitude at full speed was 5,000 feet, where it had a range of 280 miles.

The Post Office Department only used the Standard JR-1B for a short time, finding others it preferred. Today, none of the six original Standard mail planes are known to have survived.