

REPLICA FOKKER TRIPLANES

by

Peter M. Bowers

Interest in World War I vintage aircraft is increasing rapidly, but because of the shortage of restorable aircraft of that period, the boys who would like to own and fly such planes are getting ready to take the obvious step - that of building replicas.

It is not exactly a strange coincidence that at least half a dozen enthusiasts around the country have all picked the same airplane - the Fokker Triplane. It has everything, starting with structural simplicity. The extra wing is no problem, for the spars and ribs are the same for all three. It has great appeal in that it is sufficiently unconventional to attract attention wherever it appears without actually being a freak. The steel tube fuselage construction lends itself to modern construction practices, and results in a simple but rugged structure. Last, the rotary engine cowl will permit the use of a modern small radial engine in place of the original rotary without detracting from the authentic appearance of the replica.

About ten years ago, John Kirk, now of Seattle, started a triplane replica with the help of a carpenter who used to work for Fokker in Germany in 1917, and who laid out the wing spars from memory. This project got shelved when the carpenter died, but the spars are still around. Three years ago, several engineers at Boeing-Seattle started to draw up plans for a full-size replica to be powered by a Warner Scarab. Boeing's stress unit probably put more man-hours in on the analysis of that fuselage than Fokker did on the original, but that project, too, went on the shelf when one of the engineers left the company.

As one of the engineers involved, I am still interested in this project, and have continued to accumulate data on the subject, and to collect some of the material needed for the ship, including a rotary engine and propeller, wire wheels, and birch plywood for ribs and spars. In addition to all of the technical data on the airplane that is available in this country, I have some official German test data as well. Because of my rather well-known interest in World War I airplanes in general, and Fokkers in particular, plus home-builts and other experimentals, a number of the people interested in a Fokker replica have written to me. As a result of all this, I will offer, in the interests of uniformity of the final product and a general smoothing of the technical problems involved, to serve as a coordinator for the overall project. Jim Morrow, a draftsman at Boeing, has offered to turn out production drawings at a reasonable price.

A number of problems must be resolved before drawings can get under way. The first is just how much modernization should be tolerated? Wings and tail can be built exactly as designed, but fuselage and landing gear present problems. The major problem is that of powerplant. Suitable rotaries are few and far between, and some potential builders have expressed a preference for a modern radial. This is logical, and thanks to the particular configuration of the airplane, perhaps both the purists and the moderns can be kept happy. The engine mount on the Fokker was removeable, making it possible to install a modern engine on one mount for test hops and ferry flights, reverting to the rotary for display purposes or to obtain experience with the type.

Another problem is that of brakes. Modern-day operations call for much taxiing about, but the old-time thin wheels don't have brakes, nor can they be easily adapted. A possibility is to modify motorcycle wheels by turning out new hubs and increasing the spoke slope, but this will call for other modifications to the strut-axle combination. Still another problem is whether to use original wire bracing in the fuselage or to simplify the structure by adding diagonal tubes.

Those who are interested in this project, or who have opinions on the subject, are invited to contact me at 13826 Des Moines Way, Seattle 88, Washington. Results won't be evident right away, but everything will go into the hopper, and we'll come up with something workable.

BOEING P-12E RESTORATION

by

Ed Maloney

Of all the aircraft in my historical aircraft collection my most proudest possession is a Boeing P-12E Pursuit, Serial No. 32-17. This trim little fighter of the early thirties was one of 110 P-12E's built out of a grand total of 554 ships in the P-12/F4B series.

This P-12E was built in 1932 by the skilled hands of Boeing craftsmen and was the first fighter to go into service with an all metal monocoque fuselage. Up to this time all previous Air Corps pursuits had had fabric covered fuselages. The P-12E was a favorite among all pilots, streamlining was improved and this pursuit was exceptionally fast and maneuverable for its day.

As far as it is known this is the last remaining P-12E in existence. This P-12E was the 244th P-12 built in the series by the Boeing Airplane Company of Seattle, Washington.

The P-12E was used as a front line pursuit from 1932 until 1936 and served at all the major Air Corps bases in the continental United States. In 1938 it was relegated to training duties in gunnery and acrobatics at Kelly Field, Texas. A number were also exported to serve in Panama, Hawaii and the Philippine Islands. After their training tours were completed and more modern equipment became available, the remaining P-12E and F models were assigned to various Air Reserve Squadrons and so it was that P-12E Serial No. 32-17 was assigned to the Long Beach Air Reserve Squadron and was the number three ship of that squadron. At that time all reserve aircraft were painted silver all over, the yellow and O.D. color scheme having given way to the modern reserve silver. This ship served with this squadron until late 1941, when the reserves were called up and the few remaining P-12's were placed on the inactive list.

At this time this P-12E was given to an aeronautical school in Northern Calif., where it remained as a classroom instructional aircraft for students. As the years passed, WWII ended and more modern equipment became available for school use, the trim little P-12E was relegated to the lowly position of an engine test stand. This writer found it outside and beginning to weather away and managed to save it from