

The FLETCHER FL-23

By CHARLES A. SCHAAF . . . With its big, low aspect-ratio wing, and 30% stab, this could be the model to break the reign of the Fike E. No struts, T-tail, and trike gear add to the features of this interesting ship.

● The Fletcher FL-23 was built in 1949 to compete for a contract for a new liaison plane then being sponsored by the U.S. Air Force. In the competitive evaluations, it was in a leading position until the government test pilot, in a violent maneuver, managed to detach the stabilizer from the rest of the aircraft. He then left the aircraft in something of a hurry. Surprisingly, the airplane glided back to the ground in an inverted position and was not seriously damaged! The builders were given sixty days to rebuild the aircraft for further consideration, but were unable to meet the deadline. As a result, the Cessna entry won the contest and became the ubiquitous Bird Dog that we see today.

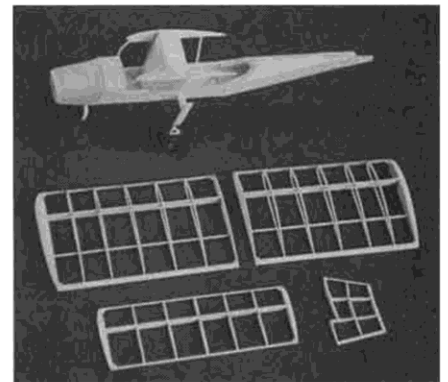
I came across 3-views of this airplane in an old Model Airplane News at the public library, while looking for good Peanut subjects, and was immediately excited. Huge constant-chord wing, 30% stabilizer, no wing struts and 7-1/2° scale downthrust all seemed to point to a perfect Peanut. However, the wing mount appeared to be a problem, and the 3-view showed a fuselage which curved gracefully from nose to tail, making many compound curves and a difficult

building problem. After thinking about the airplane for awhile, I got to wondering why any manufacturer in his right mind would design a simple airplane for liaison work with expensive compound curves in the fuselage.

I took another look at the article and the accompanying pictures, and saw that the pictures showed an airplane with a sharp change of contour at the aft end of the cabin section, and straight taper from there to the tail. I did some more comparing and saw that, while the drawing showed a fuselage that was almost wide enough for two people to sit abreast, the pictures showed a much narrower fuselage, barely wide enough for one person, with sharply angled side windows for good downward vision. Plans show the model that resulted from these observations. As far as I can tell, everything is to scale except that the original airplane did not have any dihedral.

The wings are built with sliced ribs, partly for lightness, and partly because they are easier to make. The 1/32 main

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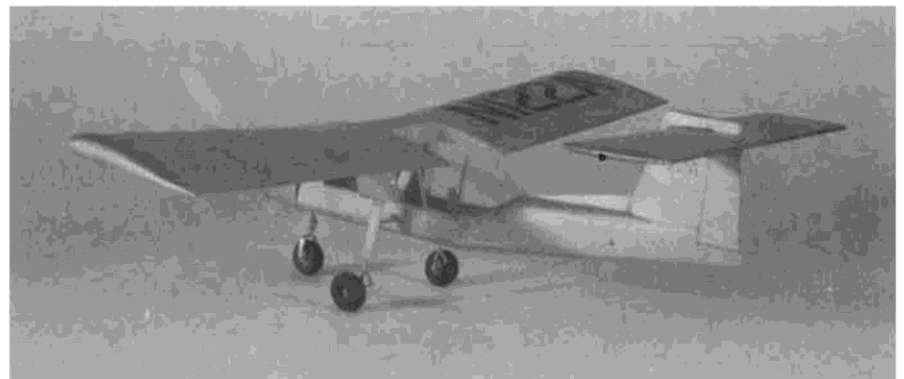
Balsa bones of the Fletcher. Note the split ribs . . . light and a little easier to make.



A "hand" . . . y reminder of the size of Peanut models. Large prop promotes long flights.



Large wing and stab area (scale!) show why this should be a good "Fike E Fighter".



An interesting design from any angle, the Fletcher would make an eye-catching subject in any type of scale model category.

spar rests on the bottom ribs and is notched for the top ribs, so that the spar reaches to the top surface of the wing and provides some turbulation. The original model was built with two separate wings glued to the sides of the cabin structure, but this proved to be impractical, so the plans show a one-piece wing with a dihedral brace.

The only other unusual point in the wings is that the tips are made from one-pound-per-cubic foot density polystyrene foam. I find this invaluable for such things as wing tips and fillets, as it can be easily sanded to shape in seconds, and adds very little weight. In covering the wing, lap narrow strips of Japanese tissue over the foam with white glue diluted 10:1 with water. Also, be careful when putting a coat of dope on the wings not to get any near the foam, or it will dissolve instantly.

The fuselage is begun by building the basic sides, which run from the nose block to the tail, and are simply two pieces of 1/20 square balsa connected by vertical-grain 1/64 sheet balsa. The formers are then glued in place (note that you will have to do some fiddling to get the rear cabin former to the right shape), and the 1/32 sheet sides are glued on the cabin structure. The rest of the sheeting, from section B-B to the rear, is 1/64 balsa soaked in a mixture of water and ammonia, and glued in place with Wilhold glue.

After the landing gear wires have been glued in place with epoxy, the cheek formers should be glued in place with epoxy, the cheek formers should be glued to the outside of the nose structure. The cowl is then wrapped with 1/32 balsa, so that the cowl sides stand proud of the fuselage at section B-B. The rest of the fuselage is old stuff, although you will have to fiddle a bit to cut accurate patterns for the cabin windows. Don't neglect the landing gear details, which add so much to a model of this type.

The stabilizer and rudder are made with rectangular ribs, notched for the leading and trailing edges, and then sanded to shape after the glue is dry. I find that is much easier than trying to cut a batch of tiny ribs to shape. The tips are made in the same fashion as the wing tips.

The original was given one sprayed coat of Floquil Silver, after the tissue-covered areas had received one coat of thinned clear nitrate dope. The control surfaces and cowl flaps were outlined with India ink, and the lettering on the fuselage and rudder was also applied in ink. The license numbers on the wing were cut from black tissue and glued in place with very thin white glue.

The original model flies with a 5-1/2 inch diameter Williams Brothers plastic propeller, and a fourteen inch loop of 1/8 rubber (This means it cannot R.O.G., but the large propeller is a necessity). From the start, it showed a slow glide that bounces in every thermal, and, with the proper thrust adjustments, flies like a Coupe d'Hiver. At its last contest, it was headed out of sight when the nose block fell out. I am not sure whether I want to cure this problem . . . ●