

A 22 INCH SPAN
ACCURATE SCALE
MODEL OF THE
WORLD WAR I
FIGHTER — FOR
.32—.5 c.c. DIESELS

The fabulous FOKKER D. VIII

By Ron Moulton

ANTHONY FOKKER'S famous parasol wing fighter, the D.VIII was not altogether a successful fighting machine: but to the aeromodeller it represents the perfect proportions for a true scale model. Large tail area, low slung wheels for stability and good prop clearance, useful high lift aerofoil section and simple fuselage. Against it there is the lack of dihedral and an awkward strut arrangement; but each of these points is ably dealt with in the 22 in. model given full-size on the next four pages.

This is strictly for fun flying. The power/weight ratio with an E.D. Baby diesel at full revs is sufficient to make the Fokker tear the sky into shreds as it spirals and cavorts in any and every direction, going upwards all the time, and when the power cuts after a long engine run, the ensuing glide is flat but fast. Right thrust is essential and is "built-in," right rudder too may be needed, and a $\frac{1}{4}$ inch washout at each tip compensates for the lack of dihedral. Here then, is the ideal model for the .5 c.c. scale fan who likes a spot of excitement.

Cut the bulkheads F1-5 and assemble with two $\frac{1}{32}$ in. sides; the slots locate each one. Add $\frac{1}{8}$ sq. braces and engine bearer "U". Make the axle wing, bend the u/c and slide the axle through ribs and vee's, then bind and solder. Bind u/c to braces at F2 and 3 and sheet fuselage bottom with $\frac{1}{32}$ nd. Add skid and bend two each, front and rear struts. Now study the wing fixing, cut a piece of balsa $5\frac{7}{8}$ in. \times $2\frac{1}{2}$ in. and use as a dummy c/section by Sellotaping strut ends at each corner. Other ends are bound and soldered to u/c when incidence and front alignment are set. Add 20 s.w.g. bracing around front strut, and sheet fuselage top, cutting out cockpit and add engine fairing cones. Providing incidences are as plan, the sheet tail and fin can be permanently fixed, with rudder adjustable. Scale strut covering is simply stiff paper doubled over and cemented.

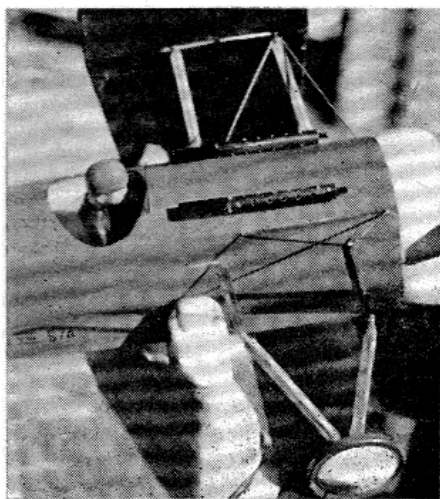
The cowl is shallow, but allows plenty of room for a separate tank beside the engine. Make the

cowl by wrapping $\frac{1}{16}$ th laminations around a "Nescafe" tin, then fitting $\frac{1}{4}$ in. front ring and double $\frac{1}{32}$ laminated (crossgrained) "face" plate. Cement cowl in place, with holes for needle extension and fuel filler tube.

Wheels are also laminated with $\frac{1}{32}$ nd, mounted on a ply disc with tube axle bearing and stiff paper cone. Retain with a blob of solder. Use plenty of cement on the inside of the cone around tube.

The wing should be built in one piece, port half first, then shifted over to complete starboard side. Prop front of t.e. up, and space the pairs of W.1 with tubing and packing. Remove from board, crack for lower surface dihedral and add spars. Washout at tips is helped by the warping effect of the l.c sheet. Wing mounting is now completed by swinging the rear struts forward, entering all four strut ends in wing tubes through uncovered slot, and allowing rear struts to return. This is not only secure in flight, but also crash-proof, though with the total weight at less than $4\frac{1}{4}$ ounces, the model has to hit really hard to do any serious damage.

Guns made from Ladies' hair curlers and the quickly detachable wing fixing are shown in this view. Wing is engaged on port struts only. Struts are paper covered.



FULL-SIZE PLANS OVERLEAF