



By J · L · ROBERTS.

General.

The "Brisfit" went into service in 1917 and became, along with the D.H.9, the standard fighting reconnaissance and medium day bombing aircraft of the British Forces in France and the Middle East up to the Armistice. It had a Rolls "Falcon" engine of 250 h.p. which gave it a top speed around 120 m.p.h. and it could climb to 20,000!

Eight small bombs were carried below the lower mainplanes, and the pilot was armed with a fixed Vickers gun mounted between the cylinder banks and firing through the radiator; the observer had sight or twin Lewis guns on a standard Scarff ring mounting.

The "Brisfit" was well liked and a good crew could take on any pair of Fokkers with confidence of victory.

The Model.

Tail areas have been increased for stability, as had the dihedral. Rigging angles have been altered for a stable flying performance. I do *not* recommend this model as a beginner's type, as trimming and rigging are both tricky, and details are liable to break under rough handling. Fly on a calm day.

Fuselage.

First build two flat sides as per side elevation on plan, of 3/32 sq. in. *DO NOT* separate longerons at the tail yet. Assemble basic box structure by cementing in the frames F 3 and F 2 and the cross spacers in between the cockpits, top and bottom. True up and allow to set. Fit all the remaining cross spacers to the tail unit end, top and bottom. Fit and cement frames F 5, F 4, and F 1 into place. Next cement in the top centre stringer from the radiator to the pilot's cockpit. The remaining stringers and the exhaust pipe chamber lining of 1/32 in. sheet can now be cemented in place.

Note.—No spacers across the top longerons at A, B, C. The nose of the fuselage may now be covered with 1/32 in. sheet from the rear of the radiator back to the pilot's cockpit. Cement the sheet covering to the sloping top longerons and trim; it ends at the vertical bracing member at A, *i.e.*, above the front undercarriage leg position. The underneath of the nose is covered with 1/32 in. sheet back to A from F 1. Cut away the covering over the exhaust chambers, and to shape at the pilot's cockpit. Cover the fuselage aft of the sheet covering with strong tissue, spray, shrink dope, and give two coats of olive green dope. The underside is covered with natural tissue (not white) and left with two coats of clear dope. Addition of windscreen, scoops, louvres, Aldis sight, bead and ring sight, blisters on cowling, steps

marked in Indian ink, dashboard and tail skid, complete the fuselages.

Tail Unit.

Great care must be taken to ensure that this is assembled true and flat, as it cannot be built on the drawing. The fin and rudder is so made that it divides horizontally, if a good fit is made, this cannot be seen when the model is flying. Mount the fuselage in its rigging plates. Cement FR 4A, FR 5, and the twin spars of the lower fin, in position adding the sheet FO 4 when you are sure this lower fin is true along the fuselage. Push in the upper fin spars to ensure that the fin is upright. True up, add FR 4, FR 3, FR 2, FR 1, and outlines FO 1, FO 2, FO 3, (note that FR 3 and the two fin spars are cemented to the *top* of the rear fuselage). This may now be cut away as shown by the dividing line on the drawing. The entire tail unit will now lift off, being a push fit, with the fin spars pushing down into the boxes in the lower fin. Cement the tail plane spars into position, add ribs, L.E., T.E., and true up. Cover the fin and tail plane with fine tissue, spray and dope, and give the top of the tail plane two coats of olive green dope. The underside is natural tissue, as per fuselage. The fixed fin is doped chrome yellow; the rudder blue, white and red stripes, blue to the fin. The serial number F2426 is marked in Indian ink on each side of the rudder and "Bristol F2B4" written at 45 degrees across the fin in Indian ink on each side, at the base. Top bracing wires of thin cane are cemented in position, and painted light grey, to complete the tail unit. The cockades have a narrow outer ring of white.

Mainplanes.

These are quite straightforward. Make two of each as per drawing, and two centre sections. Do not on any account omit the spar stiffeners at the outboard strut positions. Make and fit the strut supports. Cover with natural superfine tissue, spray, dope and give two coats of olive green on top. Paint on the cockades.

Rigging.

If the model is to fly correctly, this operation must be accurate. Therefore, go slow, take care, and be accurate. The results are worth it. First mark out the rigging boards on 1/16 in. ply. You will need two for the fuselage, at F 2 and the tail. Dimensions are given on the drawing. When glued on to the assembly board in their positions, the fuselage can be rested in them in rigging position. Two more are needed for the centre sections, which are assembled first. Glue them in position each

side of the fuselage, on the assembly board; slide in the centre sections into position; cut, fit and cement struts, (which include undercarriage struts), and cross bracing of thin cane. When all these are set (they should be left overnight) the centre section rigging boards can be carefully removed. All struts and bracing are now painted, struts black, bracing grey. Now four rigging boards will be needed to hold the wings. The centre section boards can be used inboard by opening up the slots to the full section. When marking out the boards at the outer strut positions, don't forget to add dihedral on to the vertical measurement. Now slide the main planes into the rigging boards and try the struts; cut them to fit and lightly cement them into position. The pairs of wings complete with struts are now brought up to the centre sections, the root end ribs of which have been thickly and well coated with Durofix. Quickly cement the rigging boards into position on the assembly board; press up the wings into position on the centre sections, scrape off all the exuded Durofix and use to well cement in the struts. Bracing wires of thin cane are now added. Varnish the struts, paint the wires grey, add balsa fairings to the undercarriage struts; to complete the undercarriage, make and fix wheels as shown on drawing. Leave the whole assembly overnight to set. The outer rigging boards can be taken up and slid off the wings, but the inner ones will need cutting away. Great care must be taken when cutting these away. A slot cut beforehand would ease this operation. Then add the aileron wires, controls, and touch up with paint. The wing tip skids are bent of 20 s.w.g. wire and cemented in place beneath the outer struts. The radiator nose block is carved in mahogany and 3 degrees downthrust incorporated when drilling for the bearing. If the shutters are made neatly and painted light grey, a really good job results. Exhaust pipes of $\frac{1}{8}$ in. diameter balsa are fitted and painted black. The movable Lewis gun and Scarff ring are easily made with a little care, and look well when fitted.

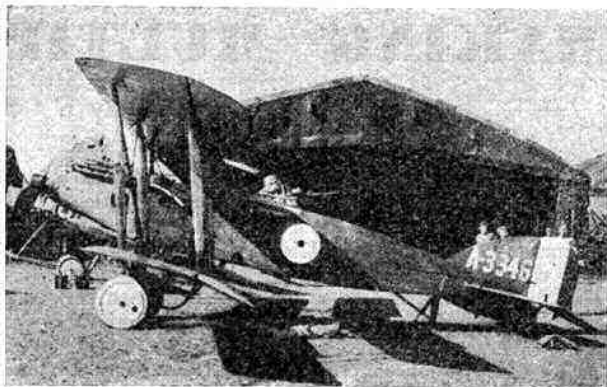


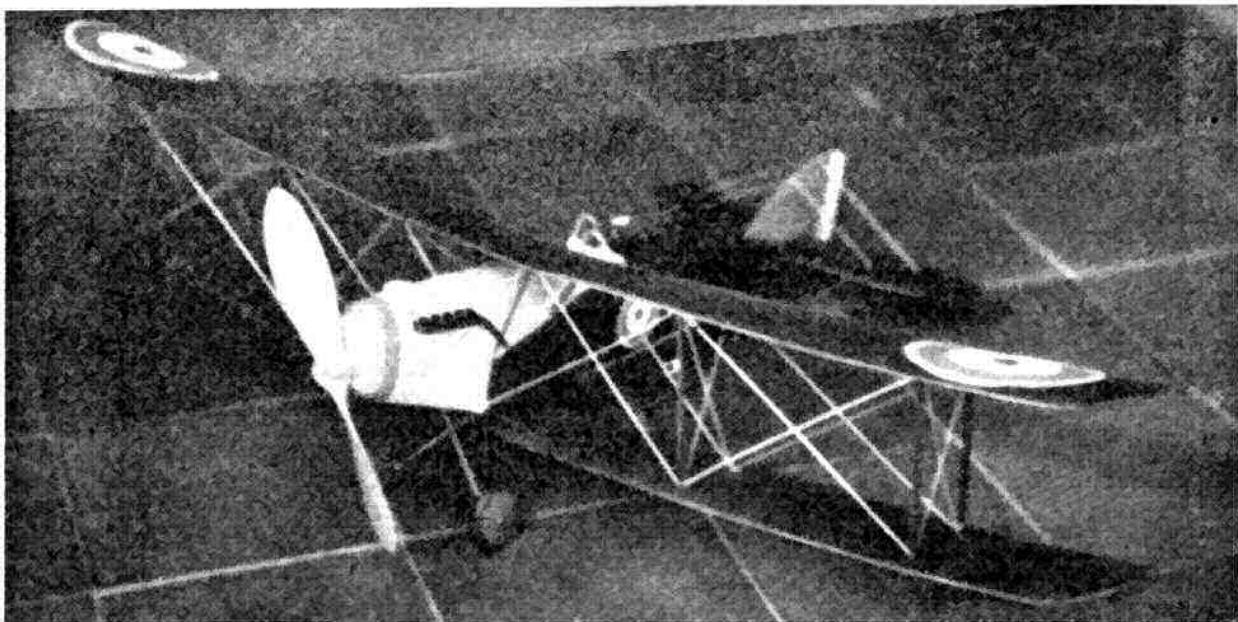
Photo by courtesy of Real Photographs Ltd., Southport

The Genuine Article! A "Brisfit" in service with the R.F.C. "somewhere in France" during the last Great War.

Flying.

The original model had no downthrust and stalled badly under power. Add a little nose weight if necessary by pushing .177 calibre air gun slugs between F 1 and F 2, securing with cement until a flat slow glide is obtained. Do not fly in a wind, as the machine is delicate and not very powerful. A 7 in. diameter prop with wide blades 9 in. pitch, driven by four strands of $\frac{1}{4}$ in. by 20 in. Catons aero strip rubber gives a steady, slow flight remarkably like the full size machine. Durations of 20-30 seconds are easily obtained, and the glide is very flat when the model is trimmed correctly. The original model has been much admired among the local modellers, but I cannot stress too much that all the detail incorporated makes it a "fair weather flyer."

In conclusion, I shall be glad to answer any queries upon construction or flying of the model, sent to me c/o of the Editor.



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