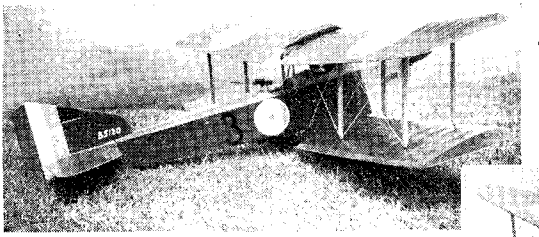
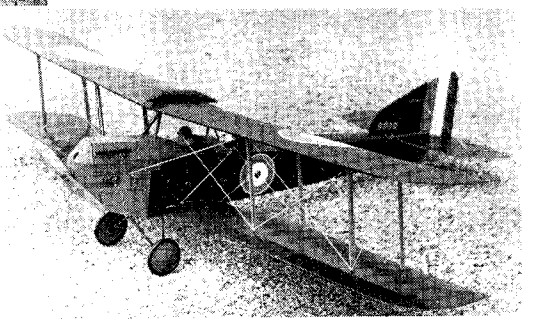
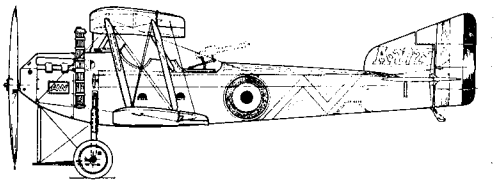
# ARMSTRONG WHITWORTH FK8 "BIG ACK"







**A one twelfth scale model for the already popular R.E.8 and B.E.2e World War One recce types in the Aeromodeller Plans range**

designed by G. Elsegood
to suit ·75cc (·049 cu. in.) engines

IT WAS WITH surprise and delight that I opened the September 1966 *Aeromodeller* to find that the Aircraft Described was a model I was in the process of drawing out to a scale of 1 in. to 1 ft.—the F.K.8. It stated that the model should make a good subject for free flight and I can confirm that this is so. My model flies steadily and stably with a .75 diesel and has proved a worthwhile successor to my F.K.3 full size plan in *Model Aircraft* of December 1963. Incidentally, a number of people have seen the F.K.3 and the F.K.8 but no one has yet, correctly, identified them, but I am sure the September *Aeromodeller* will go a long way to rectifying this in the future.

Make up the two sides of the *fuselage* over the plan, making sure the grain of the $\frac{1}{8}$ in. sheet is vertical. Remove from the plan and fit the formers starting with numbers six and eight. Fit the bearers and spacers, stringers and bind the 18 s.w.g. C/S struts to formers four and seven. Complete the C/S by cutting grooves in the $\frac{1}{8}$ in. ply rib to take the struts and bind them firmly with thread. Coat generously with Araldite and place the $\frac{1}{16}$ in. ply ribs in position on each side of the $\frac{1}{8}$ in. rib. Plank the decking with soft $\frac{3}{32}$ in. balsa. Shape the undercarriage from 16 s.w.g. wire and sew to formers six and eight, bind and solder the 14 s.w.g. wire in position. Make holes for the rubber bands retaining the lower wings, and the holes for the 16 s.w.g. wing dowels which are reinforced with $\frac{1}{16}$ in. ply. Fit the tail skid, ply gun ring and the $\frac{1}{16}$ in. sheet surrounding it, and below it, and finally fill in the bottom of the fuselage with $\frac{1}{8}$ in. sheet, the grain running across the fuselage. Cut out the cockpit and fit the gun mountings with Araldite to the gun ring. Do not fit the radiators, footholds, name plates and exhaust until all painting is complete. Fair all struts with $\frac{1}{8}$ in. sheet and sand to a streamline section and cover with two layers of heavyweight tissue cemented on.

Thread the buried spar carefully through the *wing* ribs making sure that the ply ribs are in the correct position. Then fit the remaining spars and the leading and trailing edges. Bind 16 s.w.g. tubes in position and the wing retaining hooks. One *below* each of the upper wings and projecting through the ply root ribs of the lower wings. Cut away the ribs to fit the No. 1 press studs which are sewn to 1 mm. ply and braced with $\frac{1}{8}$ in. sheet. Fit them so that they are flush with the lower surface of the upper wings and the top surface of the lower wings.

Make up *tailplane and rudder* from $\frac{1}{8}$ in. sheet and hinge with aluminium. The elevators were hinged on the original model but this is not necessary and may be omitted.

## Finishing

Give the entire model two coats of grain filler and sand carefully and cover with heavyweight model span. Add yellow ochre water paints to the water used for shrinking the tissue, this will give the correct creamy yellow colour, without adding the weight of colour dope. Give two or three coats of clear dope, then paint the upper surfaces of the wings and tail and the fuselage with matt green on khaki paint (Humbrol matt enamel is excellent). Paint the nose, the cowling and C/S struts with matt grey paint.

Secure the cowling with two No. 1 press studs. Bolt the engine to 16 s.w.g. aluminium plate and hold down with 4 small wood screws. Make up the struts as shown on the plan and give them three or four coats of clear dope. Refer to the September *Aeromodeller* if more detail is required.

Cement the fin to the tailplane after the tail has been aged against warping. Fit the wire dowels through the C/S and the fuselage, and hold the top wings securely with a rubber band round the hooks below the wing. The lower wing is held with a band through the fuselage. Fit the struts and brace them with shirring elastic *tied* to each strut. (I didn't do this and lost four struts when the model made a heavy landing in long grass).

## Flying

Test glide over long grass and adjust the trim by adding weight to the nose or tail until a flat glide is obtained with no trace of a stall. Trim to fly to the left, gradually increase the power and the length of the motor run; although the climb is fairly slow with a .75 diesel, the glide is very good if the weight is kept down to about 15 oz.