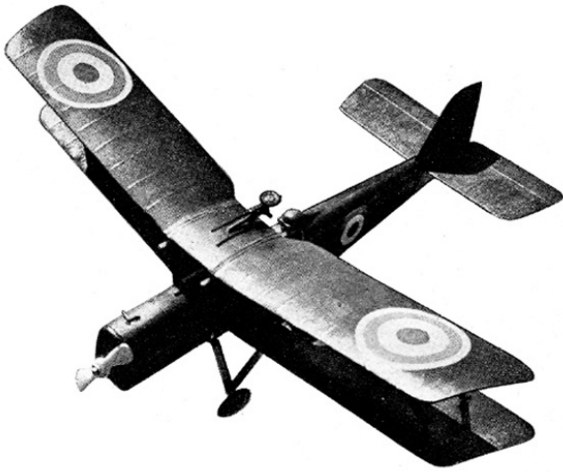


## S.E.5



### **An easy to build all balsa model of this famous World War I Fighter by P. Lambert.**

It was the S.E.5, together with the Sopwith Camel, that finally clinched victory in the air during the latter part of the 1914-18 war.

It was fitted with a Hispano-Suiza engine of 200 h.p. which gave it a top speed of 120 m.p.h. The S.E.5 was well liked by R.F.C. pilots because of its stability and strength. Armament consisted of a synchronised Vickers machine-gun just forward of the cockpit, and a Lewis gun mounted on the upper center-section.

The model presented here is extremely simple to build and fly, and can be recommended to anyone building his first power scale model. The sheet wings save a lot of complication during building and are very easy to repair in the event of any damage.

The only materials required are four 3/32 x 4 x 36 in. sheets of medium soft balsa, a small piece 1/8 in. ply, a small amount of 1 mm. ply, one 1/16 x 3 x 36 in. of sheet balsa, and 36 in. of 18 S.W.G. wire.

Begin construction by cutting out all the fuselage formers from 3/32 in. sheet. Cut out two fuselage sides and cement formers 1-6 in place (leaving out the two C1 formers). Cut the engine mount from 1/8 in. ply, drill engine holes and cement in place. Note downthrust. When dry join fuselage sides at rear and cement remainder of formers in place.

Bend wing struts from 18 S.W.G. wire and cement in place, reinforcing with silk or tissue. Next cement U/C tube to the bottom of F.6 and reinforce with a strip of

silk. The top of the fuselage can then be planked with 3/32 in. sheet balsa. The underside is sheeted with 3/32 in. sheet with the exception of the lower wing cut-out, which is sheeted with 1/16 in. balsa with the grain direction across the fuselage.

Now cut the nose planking where marked on plan to form detachable cowling. Cement C1 formers inside cowling for reinforcement, sand entire fuselage smooth, and cut cockpit out as shown.

Cut the outer wing panels from 3/32 in. sheet and sand smooth. Before proceeding any further the underneath of the wings should now be covered with tissue which is doped on. This is important, as it helps the sheet to curve without any fear of splitting. When thoroughly dry, cement ribs in place. The root rib is angled to allow for dihedral. The center sections are made next and these are sheeted underneath with 3/32 in. sheet. Then cement the wing sections together allowing if 1 3/4 in. dihedral under each tip.

The simulated ribs on the wings and tail are made from cotton, the method being as follows:—mark position of “ ribs ” on upper surfaces only and put a dab of cement on the leading edge and attach cotton. Work your way along the wing like this, then come back to the first cotton, pull tight across wing and cement at trailing edge. Trim off surplus cotton, and give wing a coat of clear dope to hold “ ribs ” in place.

Cut the fin and tailplane from 3/32 in. sheet and sand smooth. Carve the small tail fairing from soft block and cement to top of tailplane. Cement fin in place on fairing. Make up the undercarriage from 18 S.W.G. wire, and cement the small undercarriage retaining hooks (20 S.W.G.) to the sides of the fuselage, reinforcing with a small square of tissue. The undercarriage is a free fit in the tube, and can be removed for packing, etc. The undercarriage fairing is cut from 1 mm. ply and is held in place with small strips of Sellotape.

The struts are fitted next and care should be taken to ensure that they are a free fit in the tubes, to be able to knock off in a heavy landing.

The model is now ready for covering, use lightweight Modelspan for this, doping tissue on to all surfaces.

## S.E.5

S.E.5's were usually khaki on top, with yellow undersurfaces, or drab green on upper surfaces, with white or yellow underneath.

The method of colouring on the original model, was to cover the entire model in yellow tissue, and colour dope the top surfaces only, green. The underside being left yellow.

The final details should now be added. Guns, pilot, windscreen, etc., and also the roundels. The roundels on the top wing had an extra white band round the edge, and this can be painted in if desired.

**Trimming and Flying:** The model should be hand glided in the normal way, bending the elevators to obtain the final trim. Do not alter the wing incidence. A 6 X 4 in. plastic prop was used on the original. First flights should be made with reduced revs, gradually opening up the engine as the trim is found. This model can spin on its wingtip in a left turn without losing height, but go steady on the right turn. With the engine going flat out, F/F stunts are possible.

So there you have it; just a few sheets of balsa, and you can have a quick to build, easy to fly, first world war scale model that is just the job for those restricted spaces we all have to fly in these days.

**Model Aircraft Magazine July 1957**