

A SCALE model when finished should look like the real thing in miniature—how many do? This model looks like a "Vampire," takes off like a "Vampire," and has a scale speed approaching that of its big brother.

The whole model is sheeted, including fins and tail, and the additional weight is more than compensated for by the model's ability to take far more knocking about than the usual flying scale.

Weight without rocket is 12 ozs., giving a wing loading of 7.2 ozs. per square foot (approx.).

It is advised that the sequence of making is strictly adhered to as this will save a great deal of trouble.

Fuselage. Formers cut in two halves, cemented and braces cemented top and bottom. Assemble formers in F top and F bottom, and cement; great care needed with F and H for squareness, as mainandrear spars of centre section are cemented to these—these spars may be fixed now.

Two $\frac{1}{3}$ -in. strips are now placed in cuts in side of fuse-lage formers. Fix ribs 1 and 3 either side and cement in position leading edges. Make boxes and cement in position, then fix boom spars.

Before going on with booms cement at least four more strips to keep fuselage more rigid. Cement a strip $\frac{1}{4} \times \frac{1}{18}$ -in. down either side of booms when formers have been placed in position. Make and fix fin shapes and place fin ribs in position.

Make plywood boxes for undercarriage legs and cement in position, then fix trailing edge to centre section—these pass through the booms. Sheet the whole of the fuselage with $\frac{1}{16}$ -in. balsa (medium) then sheet both booms. It is now possible to sheet centre section of wing meeting up with fuselage and booms. The sheeting on centre section should be do in from ribs 1 and halfway across 2, both top and bottom, and then from ribs 2 to 3. This is necessary because of the different slopes between the ribs.

Wings. These are quite straightforward and when spar boxes are fitted both may be sheeted. The drawing shows $\frac{1}{32}$ in, sheet. A better job is made if sheeted with $\frac{1}{16}$ in, and sanded down to $\frac{1}{32}$ in.

Undercarriage. Both front and rear wheels are simple in construction.

Nose. Laminate and carve roughly to shape. Drill hole in position for front wheel. It is suggested that fuselage and booms are sanded before sheeting the fins.

Fins and Tail. When fins are sheeted place paper tube to take $\frac{1}{8}$ in dowelling in position. Maketail-sheet, sandpaper,

and cement to fins. Make and sheet elevator, which can then be placed in position and held with two pieces of $\frac{1}{6}$ in. dowelling, which should be a tight fit in both fins and elevator ends.

Cockpit. This is far more simple than at first appears. Cut pieces of plywood, and cement shaped celluloid pieces at back. Cement front of cockpit in position, then cement two sides. Make up with scrap balsa at top and sand to shape. Carve rear of cockpit from solid and cement in position. Make and cement runners down sides of cockpit, then with sharp knife cut out the inside of cockpit in the fuselage. This makes a neat job and does not weaken the fuselage.

Spars. The spars to fit in the boxes should be made in four strips each box. Each strip to be $\frac{1}{4}$ in. $\times \frac{1}{16}$ in. hardwood. These give the necessary "plug" should the wing hit anything first.

Markings. No roundels are made commercially this size, and must be hand-painted. Similarly the red, white and blue flash on the fins. The yellow, red, white and blue on the booms can be bought at most modelling shops.

Full-size Plans (see the scale reproduction opposite) may be obtained from the Aeromodeller Plans Service for 4/- post free.

