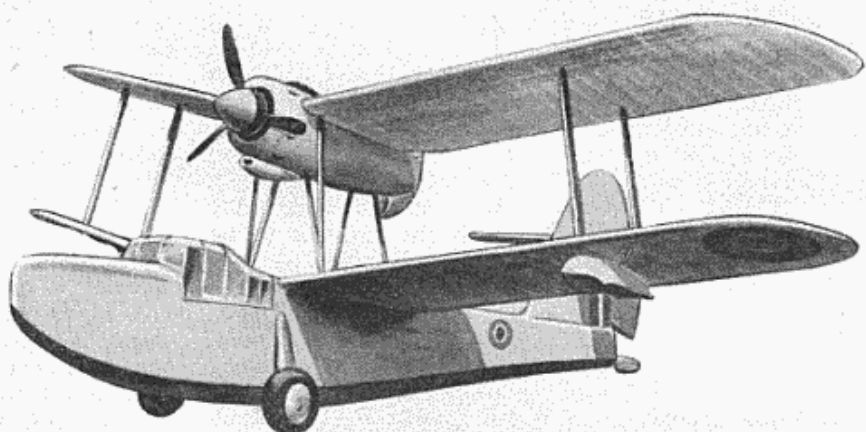


The VICKERS SUPERMARINE

SEA OTTER

By H. G. MOORE



Here is a fine model for the flying scale enthusiasts. With a 30-inch span, it is just right for the Mills .75

DEVELOPED from the *Walrus*, the Vickers Supermarine *Sea Otter* is a Naval reconnaissance and air-sea rescue amphibian with a Bristol "Mercury" engine and a wing span of 46 ft. The model has a span of 30 in. and was designed around the Mills .75.

Hull

Commence by cutting out the bottom keels from hard $\frac{1}{8}$ -in. sheet balsa, and the $\frac{1}{8}$ balsa bulkheads, each in two halves. Pin over the plan the bottom keel and the $\frac{1}{8}$ sq. dorsal keels, and cement the balsa half formers in place. Add the $\frac{1}{8}$ -sq. stringers at the top and bottom of the fuselage side, and when all is dry, remove from the plan. Add the other side of the fuselage and cut out the ply bulkheads, each in one piece. Cut thin tin to the shape of the formers and drill as shown for 10 B.A. bolts. Cut 16-g. wire and shape nacelle struts, and solder in place on the tin, together with the u/c brass tubes. Then fit the bulkheads into the fuselage and bolt on the tin plates with the struts and u/c fixings. Cement well and gusset as shown. Fit window frames but leave the nose until later.

Nacelle

Cut lightening holes in the $\frac{1}{8}$ -ply motor mount and cut another tin plate to fit it. Solder the plate to the wire struts and bolt the ply to it. Add the formers and stringers, not forgetting the detachable front half. Leave the cowling ring until after sheeting.

Wing Roots

These are built up in the hull and nacelle. Cut out the ply root ribs carefully, as they can be used as templates for all the others. $\frac{1}{16}$ balsa ribs are cemented in position on the hull, and nacelle and the spars, L.E. and T.E. are fitted, noting that dihedral and sweepback start right from the hull sides. The

outer balsa-and-ply ribs are fitted, together with the wing dowels taking care to fit them accurately.

To complete the hull, bracing wires are soldered in place as shown and the nacelle struts are faired in neatly with spruce or card. Make up and fit the tailwheel-water rudder and then sheet the whole hull and nacelle with $\frac{1}{64}$ balsa. Fit the hull nose and shape the cowling ring; make up the rest of the cabin and glaze with thin acetate sheet. Carve the oil cooler and hollow to clear the motor; complete scale details and separate top cowling.

Wings and Floats

The wings are quite straightforward. Points to watch are the accurate fitting of the paper tubes for the wing and float fixings. Drill holes in the $\frac{1}{8}$ ribs for the rubber band strut fixings and fit wire loops for flying wires. The floats are carved from soft block balsa, then split and hollowed out carefully so that they weigh equally.

Tail

The tailplane, rudder and top half of the fin are from $\frac{1}{8}$ -sheet and are cemented together. The lower half of the fin and rudder are built up on the hull and the main tail unit attached with bands.

Finishing

Lightly sand the whole model and cover with lightweight Modelspan. Give one coat of dope and pin down the wings until dry. Colour scheme consists of upper surfaces battleship grey, including tops of floats. Under surfaces cream as far up as the top of the flat hull sides and the tailplane. Join the grey and cream with an undulating line.

Trim

Model should balance one third from L.E. of upper wing. If Mills .75 is used, a little nose weight will be necessary.

