

VICKERS- ARMSTRONGS

WALRUS II.

Amphibious model of the famous
'Shagbat'—for .75 to 1 c.c. engines

THE WALRUS always has been an elusive scale model subject. Numbers of people have attempted the design, and found themselves in trouble with the centre of gravity position, thrustline, etc., and now, happily, all these problems are solved in this model for small diesel engines.

We were attracted by H. J. Wright's model at last year's All Britain Rally, Radlett, and it is his design which has provided the basis for the scale model presented here. Semi-symmetrical airfoils, upthrust on the engine, and simple sheet fuselage construction with knock-off wings from a rigid wire centre structure, make the Walrus a most attractive model and one which can be operated over land or water.



H. J. Wright demonstrates the starting technique for the Amco .87 on his prototype model. Scale refinements are incorporated in the APS plan. View of the model in flight was taken as it was gliding to a perfect landing on grass at the All-Britain Rally 1956



Construction

Cut two identical sides from 1/16th medium sheet, if using 3-in. wide sheet, join where shown. Then cut formers, reinforcing both faces of F5 and F7 with strips of 1 m.m. ply. Bend front and rear centre section wire to exact shape, bind with strong thread to N1 and N3, and then to F5 and F7, and cement well. It cannot be over-emphasised that this makes or *breaks* the model. Wrap celluloid u/c tubes and bind and cement to F5 and F7. Then bind sea rudder stay to F11. Assemble fuselage, working from the centre outwards, using rubber bands for positioning.

Roughly shape nose-block and glue into position. Install R1 after hollowing out for Sea rudder leg, fin, L.E. and R2, 3 and 4. The front hull to the step can be easily planked in four strips, the after-chine in two pieces, add top decking, sea rudder leg and shape R1, insert engine bearers through N1, N2 and N3, then plank nacelle with 1/16th sheet.

Centre section cross-bracing can now be bound in with fuse wire and soldered, giving a very rigid centre section. The centre section dowel spars can now be well bound into position, CS2, paper tubes, L.E. and C/S spar fitted, the whole covered with 1/16th sheet and then CS2 faced with CS1. Celluloid cabin, gun-pits, and gun-pit covers can now be added. Finish shaping nose-block and lightly sand fuselage. Cover with heavyweight Modelspan applied with dope and give a further two coats of thick dope.

The remainder of the structure is quite simple, and all that need to be emphasised is to waterproof all components thoroughly with banana oil or sanding sealer prior to applying the wartime camouflage. The Walrus has quite a slow flying speed and has exceptional stability, although hand gliding gives no true indication of performance and all test flights should be conducted with the motor running slowly to give it just enough thrust to prolong the glide. The prototype was flown with an ancient Amco .87 giving quite enough power and any of the present-day .8 c.c. diesel or glowplug motors would be ideal.