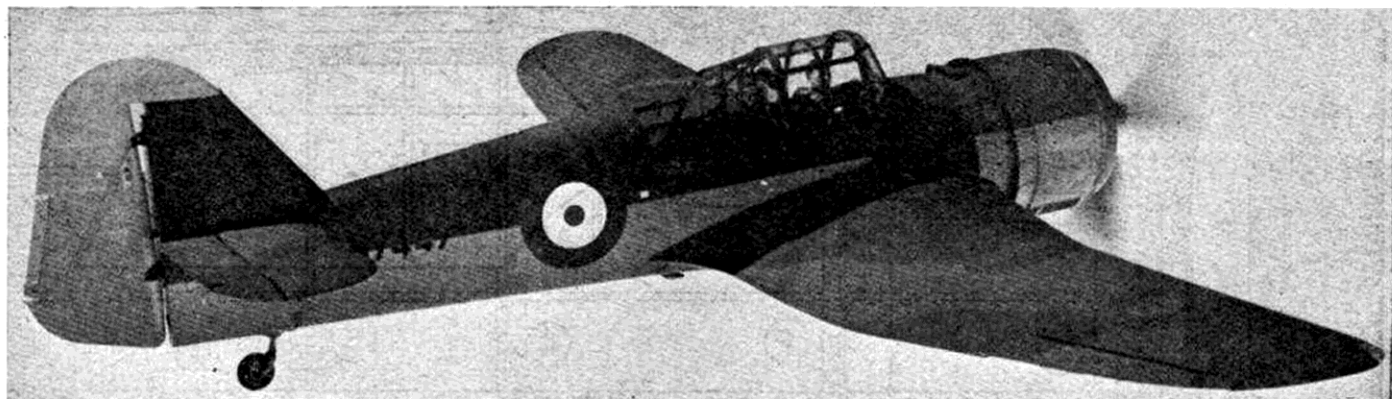


# The "MILES MASTER II" By W. R. JONES



HERE are the plans of the latest R.A.F. training machine, the "Master," fitted with a Mercury engine which gives it a top speed of 275 m.p.h. at 14,000 ft. The plans are drawn to the scale of  $\frac{1}{2}$  in. to 1 ft., and the completed model gives quite a good performance. 30 sec. r.t.p. is an average flight, which is not at all bad for a low-wing scale model. The construction is kept very simple, yet when built it is capable of standing a good deal of rough handling.

## Fuselage.

Cut out the various parts from the wood stated and glue the formers 1 and 8 on to keels, and when dry glue in the remaining formers, making sure that each one is vertical. The top and side stringers may now be added, and when the centre section has been glued in place the under stringers may be glued in place. The centre section spar has to be cut to allow for fitting of these stringers.

## Centre Section and Wings.

Build these up as shown on the plans. The centre section spar is cut away at ribs "D," and the shape here gives correct dihedral angle at wing tips. Note that wing ribs "E" must be fitted upright when building the wings. Trailing edges of centre section must be steamed and curved to get the correct fit. Glue the  $\frac{3}{8}$  in. sheet balsa on to top and bottom surfaces of wings and centre section ribs, and add the capping strip. NOTE: Glue centre section into fuselage before putting the  $\frac{3}{8}$  in. covering in place. This ensures a much better fit. The  $\frac{3}{8}$  in. sheet covering of the nose of the fuselage is now glued in place.

## Tail-plane and Rudder.

Build these components up as shown on the plans and glue in place on fuselage.

## Cowling.

Build up as shown and use hard balsa for the exhaust ring and for the actual cowling.

## Undercarriage.

Build up this component as shown on the plans and plug in blocks on underside of centre section. Blocks may also be glued into the centre section if extra strength is required.

Carve the propeller from hardwood  $\frac{3}{8}$  in. thick or purchase a "Paulownia" three-blade propeller. Make the propeller shaft and bend the forward end and push back into airscrew. Glue a  $\frac{3}{8}$  in. dia. hardwood spinner in place to complete the job.

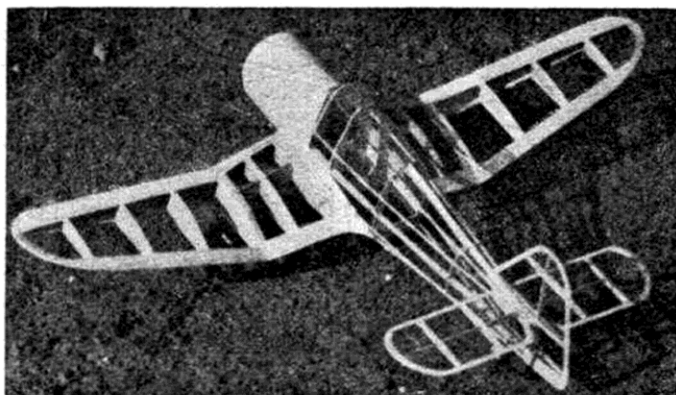
## Covering.

The model is covered with "superfine" yellow tissue, and after "water" shrinking one coat of clear dope and one coat of banana oil applied. If a "super" job is required the upper surfaces of fuselage, wings, tail-plane and the fin may be "shadow shaded" green and brown. This extends down to the dotted lines on the fuselage. Add the "rounders" on fuselage and wings, and put the vertical strips on the fin (red foremost).

## Flying.

Power is three loops of  $\frac{1}{16}$  in. by  $1/80$  in. brown rubber, 12 in. long, well lubricated. The usual test glides should be made, although the original model flew without extra weight on the nose. Give about 200 turns for the first flights and increase this number (if the trim is found to be O.K.) until the maximum has been reached.

NOTE: The original has not yet been tried with maximum turns. The 30 sec. flights referred to have been obtained on 800 turns. If you have difficulty in building any of these scale models I shall be pleased to answer any letters. Write c/o the Editor, and please enclose a stamped and addressed envelope.



Showing the simple yet strong construction.