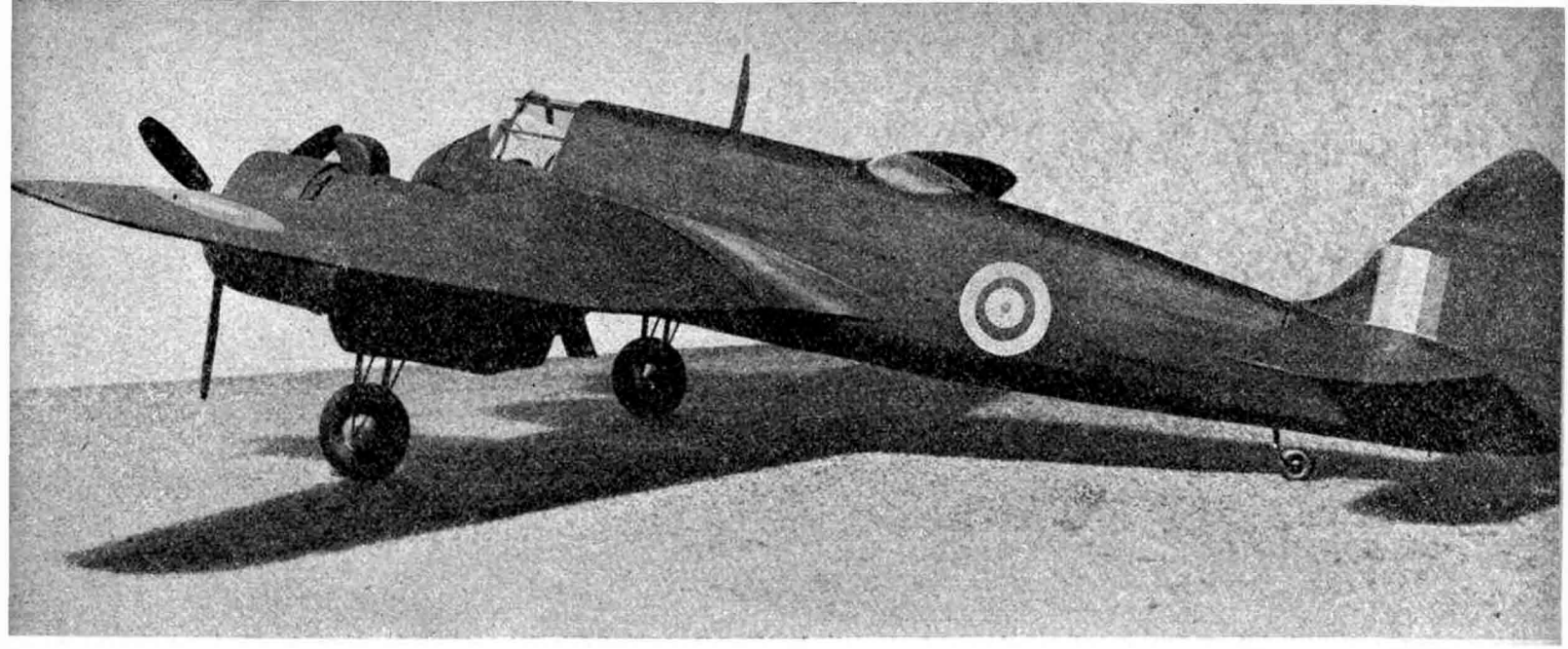

BRISTOL "BEAUFIGHTER" I

By W. R. JONES

HEREWITH are the plans for building Britain's latest night fighter. Several original constructional features have been embodied in the design, resulting in a very robust model which will stand quite a lot of "man-handling." No "super-duration" can be expected of the "Beaufighter"—in fact, the longest flight to date has been one of 26½ seconds. The model is very tricky to trim and fly, but if the instructions are followed "to the letter" reasonable results can be expected; it will also give hours of building enjoyment, and will enable the builder to conduct various experiments in the "twin engine scale model" world.

Fuselage Construction.

This is the most difficult operation and very great care must be taken to ensure accuracy. Cut out formers, keels, etc. Insert keels (top and bottom) into the notches on the formers, and glue in position. Next mark the former positions on the 3/32 in. square longerons and glue into notches on formers (top longerons are fitted first). Steam the top and bottom longerons to take up the curves forward of No. 3 former. Glue all 1/16 in. square stringers (birch if possible) in the former notches.

NOTE:—Fuselage must be trued up from time to time in these operations. The fuselage is now covered with 1/32 in. soft sheet balsa "planked" (i.e. using 1 in. x 1/32 in. strips of wood).

NOTE:—Planking is commenced *after* the windscreen and cockpit covers have been glued in position. The part of fuselage extending from former No. 3 to former No. 5 must be covered last, and when this is done the bottom longeron must be cut at these two formers (see notes on plan) so that it falls away.

The *centre-section spars* are now fitted on to formers 3A and 4A and the ribs are glued into place. This operation may be a little trying, so take care with the building. Cover the *underside* of the centre plane with 1/32 in. wood before the *nacelles* are glued in place. (Drawings show all details of nacelle construction.) Cut away the underside of centre section covering to take the nacelles and then fit the *top rear portion* of the nacelle keel. The top rear nacelle covering is now glued in position (Drawings give all details.)

The *wings*, *tailplane* and *rudder* need no explanation here as the construction is quite straightforward. Plans give all information needed.

The "*undercarriage*" is built up as shown on the drawings.

The *observation hatch* is moulded from celluloid, a "tricky business," but it *can* be done (see photographs). The two formers (inside and outside) are made from wood. Insert celluloid between formers (after putting into boiling water) and push the outer former up into the inner one. Several "boiling water" insertions may be required before the hatch emerges to your satisfaction—that was my experience, anyway!

Tissue covering is applied over the entire framework (including fuselage) and two thin coats of clear dope and one of banana oil are applied. Take care to avoid wrinkles when covering.

Little can be said about *Flying*, but use three loops of 3/16 in. x 1/30 in. brown rubber, well lubricated, and start with 100 turns on each motor (when gliding tests have been successfully concluded). As stated at the beginning of this article, the "Beaufighter" opens up new and very interesting fields and I shall be pleased to hear (through the Editor) of any interesting times, etc. This applies also to any difficulties encountered in the building. Before I leave you I should mention that the original model is painted "night flying black," but it may also be camouflaged for "daylight" operations.