

The ABC Robin . . .



Eye-catching black, orange and silver color scheme, plus new and different lines—to our generation!—make stand-out job on flying field.

England's first light single-seater produced in the middle 'twenties makes a delightful free flight model for that .049 powerplant.

By **LLOYD V. HUNT**

► England of the middle 'twenties was engrossed in this ABC Robin as the first low-powered single-seater to be produced in that country. ABC Motors, Ltd., assigned A.A. Fletcher to its first airplane design venture to utilize the two types of engines which they were already producing: the 30-40 hp Scorpion and the 60-70 hp Hornet. The model presented here is the version powered by the Scorpion. The plans are drawn to scale of 1½ in. to 1 ft.; details of the configuration and construction were supplied by MAN and the NACA Aircraft Circular No. 101 dated Sept.-Feb., 1928-30.

Start construction by cutting the required ribs; notch the TE's and cut to shape the remaining details. Lay the TE flat on the plan and cement all the ribs in place except for the ½ plywood root rib. Block up the TE over the plan and aline all ribs before cementing the LE in place. The two rear spars are cemented in place along with the formers, then the front spars, along with their formers. Complete the assemblies by adding the root ribs (note their angle) and lastly the

The "English Robin" can be carried in a small traveling case, thanks to come-apart design. Interior details on plans. That's a Mac Diesel.



Sweepback, plenty of dihedral, large tail surfaces, adequate profile area, add up to genuine stability. Wing panels are quickly detachable.

balsa blocks at the tips, hardwood dowels and wire hooks. Wrap the strut tubes to the ¼ sq. strip and cement in place as shown; sand completely and cement all joints.

The fuselage is of conventional construction. Select medium balsa for the nose and cowling, shape to the contours and hollow out as shown. Do not sand to final shape until the remaining part of the fuselage is covered. Seat and controls may be added; their general shape and location are approximate. The center section ribs are cemented in place along with the angled aluminum tubes used to house the wing dowels. The tubes are wrapped with thread and boxed in. Before covering the center section, check the ribs for the correct dihedral angles. A window may be added as shown in the top view, but it is optional. The wings are held in place by rubber tension.

Bend the landing gear and cement in place, using Ambroid or a similar adhesive, and wrap to the fuselage structure. The remaining parts of the fuselage are now covered with 1/16 sheet. Brass tubes are used to retain the struts to the fuselage. The struts are shown in true length. Custom bend the ends to fit the tubes in the wings to obtain the correct dihedral. Wrap and cement the wire contour of the struts to the wood frame. Bend two small hooks from straight pins: these are used to secure the ends of the struts to the fuselage with a rubber band stretched under the fuselage. The details of the wheels may be used, but wooden wheels may also be employed.

The horizontal and vertical tails are constructed according to the plan; then sand to contour. Cover the complete model with Japanese tissue or light Silkspan. The model shown was finished this way: fuselage and vertical tail—one coat of clear dope, three coats of black; cowling, spinner and letters—silver; wings and horizontal tail—one coat of clear dope, three coats of orange thinned out 50 per cent.

Flight adjustment for the model will be approximately 1/32 in. right thrust and a slight amount of washout in both tips. Cut or drill a hole in the bottom of the to remember when learning (Continued on page 44)

