THE PIPER 135 TRI-PACER

AN ATTRACTIVE SCALE MODEL FOR POINT FIVE POWER

by A. Warren

FOR sports flying from small areas, the Piper Tri-Pacer is ideal, and it can be flown successfully and often with the minimum of checking and aligning. The prototype was test flown in a 15 m.p.h. wind and since then has never had a chance to show its capabilities in really calm weather. The Frog 50 p ovides ample power with a 6 × 4 in. prop.

Fuselage

Build a fuselage side over the plan, including the sheet fill-in at the tail, and then build the second side on top of the first. Separate carefully when dry, and then add formers F4 and F5 to make up the cabin box.

Fix securely while drying, and clip the fuselage ends together—do not cement ends together at this stage as the tailplane has to be inserted. Now the remaining rear fuselage spacers can be positioned, together with the small triangular top formers. When this stage is completed add $\frac{1}{4} \times \frac{1}{8}$ in. strips to the cabin roof edges.

Now make up the former F1 of ply, on which the ply engine bearer is mounted by means of a mortice and tenon joint. Before cementing, be sure to drill out the holes in the two pieces to take the undercarriage wire binding thread. Having firmly affixed the wire, the complete bearer and former can be cemented in position on the fuselage, and also F2 and F3. A $\frac{1}{8}$ in. square strip extends from F1 to F3 on the top of the fuselage.

Between F1 and F3 cover with bristol board or cartridge paper; this extends down to the $\frac{1}{8}$ in. sheeting as shown on the plan. This sheeting can also be added at this stage, remembering to fix in place the press studs for the V struts.

The undercarriage is from 16 S.W.G. wire securely bound on $\frac{1}{8}$ in. ply, sized to fit neatly into the underside of the fuselage. Also on the ply is the wing retaining hook. The $1\frac{1}{2}$ in. dia. wheels are added, with cup washers. The complete unit should not be cemented to the fuselage until the model is completed, as it can then be positioned to locate the c.g. correctly.

Tail Unit

The fin is shaped from $\frac{1}{8}$ in. medium balsa and cemented to the fuselage; a small trim tab is fitted by means of an aluminium hinge. The tailplane is shaped from $\frac{1}{8}$ in. balsa and divided—two $\frac{1}{8}$ in. dowels being fixed into each unit. Adjustment for a negative or positive movement is by means of a 6 B.A. screw bolt as shown in the diagram on the plan.

The remaining details can be added to the fuselage such as the windscreen, dashboard, cabin outline and so on.

Wings

The wing is built up in one piece then cracked, and the dihedral braces added. Cover the underside of the centre section with $\frac{1}{8}$ in. sheet so that it fits neatly into the top of the cabin, and add the fuselage attachment hook. Two of the outer wing panels are also covered with $\frac{1}{8}$ in. sheet as shown, to take the stud fasteners which retain the V struts.

Cover the complete model with lightweight Modelspan and give two coats of clear dope. The Tri-pacer can be finished in a variety of attractive two-tone colour schemes including yellow/maroon, dark green/apple green, or blue/yellow.