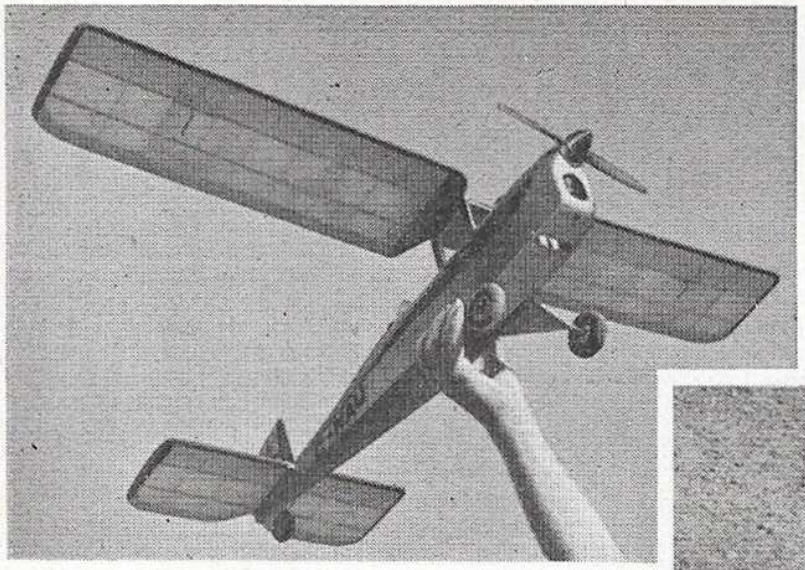
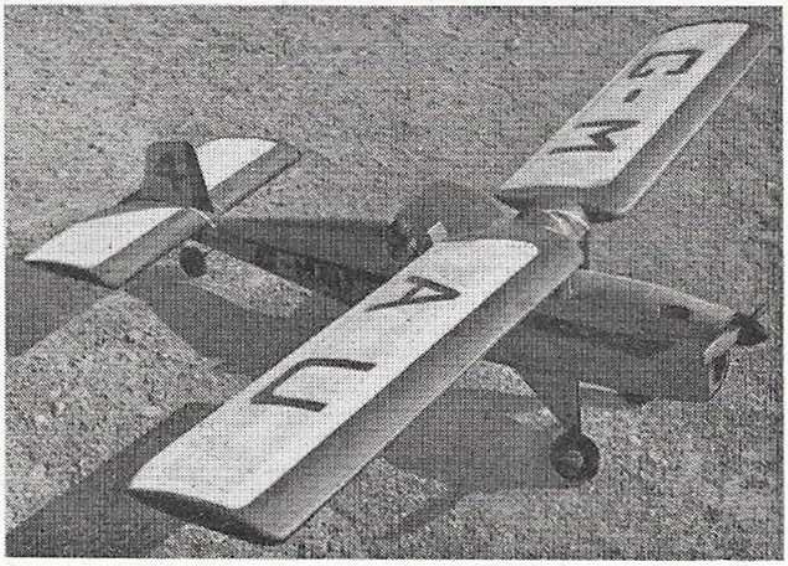


Junior Jim

For .75 to 1.3.c.c engines



A TOUGH LITTLE 40 inch SPORT FLYER WITH A PARASOL WING MOUNTING FROM MAURIPUR, PAKISTAN

by J. Jacobson

IN MANY WAYS THIS PERT little parasol number is full of novelty. The wings are in two pieces, yet seat on a narrow centre section quite securely without need for strutting, the nose is capacious enough to take a wide variety of power units, and the tailplane is on the large side to cure any wayward looping tendencies. There is a little more to this latter point than meets the eye, for Junior started life as a Biplane!

Registration on the original stands for R.A.F. Station Mauripur, near Karachi in Pakistan, and is *not*, as the hawkeyes might want to correct, a mistaken use of the last civil registered Hurricane G-AMAU lettering. Colouring is black and white wings with a metallic purple fuselage.

This is one model that the sport flyer can really pour plenty of cement into without fear of coming out overweight. Twenty ounces is a mere nothing to Junior Jim, and most of the hard balsa fanatics who like to gusset every joint with a liberal wedge of clear cement will find it difficult to get beyond this figure, unless of course they resort to tar and canvas for covering!

Ready to start? The fuselage can be made in either of two ways. "Jake" Jacobson recommends that the longerons are cemented to the 1/16 in. sides, then the formers added, while we feel that beginners in particular will find it more easy to assemble the formers on the longerons, then to sheet the sides. In both cases the undercarriage should first be bound to F3 and F4, and the tailwheel to F9, before assembly. When this basic fuselage is set, and bearers added to F2 and F3 the hardwood centre section struts can be fitted. Note that all the $\frac{1}{8}$ in. formers are cross-grained, *i.e.*, they are cut across the width of the balsa sheet and an $\frac{1}{8}$ in. square brace used to keep them firm. This system prevents the sides from sagging during eventual hard use of the flying field.

Add the cockpit "floor" and nose cowling parts, then fit the top and bottom sheeting, headrest, pilot and windshield. Complete the centre section strutting, making all joints as neat and strong as possible, then fit the wing and tailplane retaining dowels.

Apart from the centre section, the Jim's wings are a straightforward assembly of ribs upon lower spars, leading and trailing edges, then the upper spar and sheeting are added. Dihedral begins at the junction of the centre-section and mainplane as will be seen in the sectional front view. Build the complete C/section attached to the Port wing half by fitting the ply brace between spars at the root, then when the Port half is finished to the sheeting stage, cock it up at the tip with 1 in. packing and the centre will now be flat on the building board. Sheet the undersurface first, add the ribs with the paper tube fitted, then the top surface sheet. It is a good idea to extend the upper spar direct into the C/section for additional strength, and if this is done on both sides, then the Starboard panel has to be added before the top sheeting is completed. To do this, the Port half can be lifted up at an angle while the rest of the wing is made flat on the board. Last stage is to cut very carefully right through exact centre of the flat panel and this is best done with a small "Eclipse" hacksaw. Dowel in the two tubes will hold the halves together (if a two-piece wing is at all desired) and the firm seating in the fuselage platform will keep all square if the retaining rubber bands are arranged diagonally.

Tail unit is similar in construction: but if a biplane modification is desired, the tailplane should be extended by two rib bays on each side. Wings can be duplicated, the lower set fitting between F3 and F5 which conveniently line up with the leading and tailing edges.

All that remains is to cover with lightweight tissue, give two coats of clear dope and colour according to your whim.