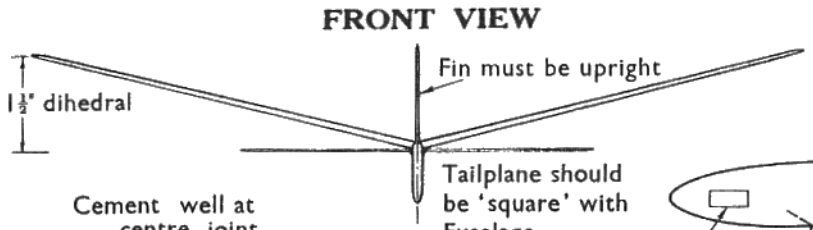
THE FROG

"WASP"

12 in SPAN
SOLID GLIDER



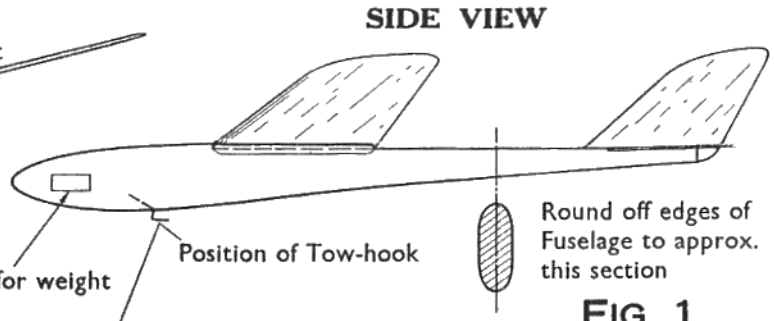
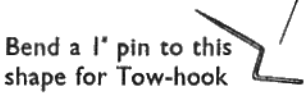
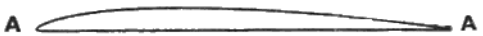


FIG. 1





Wing section—full size

FIG. 3

FIG. 4

PLAN VIEW
1/3 FULL-SIZE

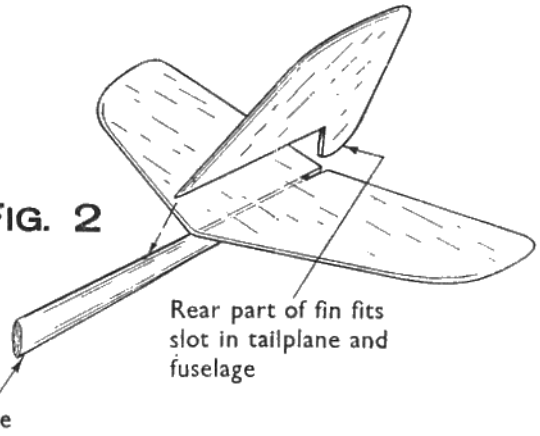
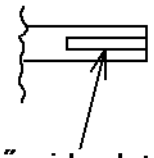


FIG. 2

CAT. No. 717GK.

Fillet under wing roots was obeche (see plan)

Fuselage 3/16″ obeche



Frog Wasp Glider
Full size parts

Wings 1/8″ balsa

Tailplane 1/16″ balsa

Fin 1/16″ balsa

CONSTRUCTION.

Note :—Use quick-drying balsa-cement to assemble this model.

Fuselage.

This is cut to side view outline, and requires shaping to the sections shown on the drawing. (Figs. 1 and 4). Roughly shape with a sharp knife or chisel, and finish off with sandpaper. A good smooth surface should be obtained.

Tailplane and Fin.

These parts are cut to outline shape and require sanding so that all blunt edges are rounded off. To assemble the tail unit to the fuselage, interlock the tongue on the fin with the slots in the tailplane and fuselage, coating all adjoining faces with cement (See Fig. 2). Make sure the tailplane lies flat on the fuselage, and is at right angles to it. The fin must be cemented vertically and at right angles to the tailplane, as shown in Front view.

When all joints are set, build up a fillet of cement on the top surface of the tailplane where it joins the fin, and on the undersurface where it joins the fuselage.

Wings.

First shape the wing halves to the section shown in Figure 3. Leave the trailing edges thicker at the roots to give a greater surface for the joint between the wings and the fuselage. The under-surface of the wings should be quite flat except where rounded off at the leading edge. The wing roots should now be bevelled (Fig. 4) so that when they are joined together the wings conform to the dihedral angle. Now cement the two halves together, keeping one side flat, and raising the opposite tip 3in. Leave the completed wing to dry thoroughly and then clean up the joints with sandpaper. Sand off the point of the "V" joint, to make a good fit with the fuselage. To strengthen the joint, with the fuselage, fillets of wood are supplied cut in section to the dihedral angle as shown in Fig. 4. Round off the ends before fitting these.

Next assemble the wings to the fuselage. Coat the wing root, inside surfaces of the fillets and the fuselage at the wing attachment point with cement, and allow to dry. Coat these surfaces once more, using plenty of cement, and place the wing and fillets in position on the fuselage. Make quite sure that:—The wing is sitting quite flat on the top of the fuselage. The front view is exactly as shown on the drawing, with the dihedral angle equal on both sides and "square" with the tail unit.

After the cement has properly dried, sand down the joints, fit the tow-hook, and the construction of the model is now complete.

The performance and strength of this model can be further enhanced by the application of two or three coats of clear dope or lacquer. After each coat has dried thoroughly, lightly sandpaper the model all over.

FLYING.

Hold the glider straight and level, and launch fairly fast into the wind. A correct glide will be a straight flight of about 20 yards. If the model climbs, loses flying speed and dives, make a slot in the nose (See Side View for position) and fill it with a rolled up strip of lead cut from the cement tube. Repeat the test glides, gradually increasing the nose weight, until the straight level glide is obtained. When properly adjusted the model may be catapulted into the air by means of an elastic band held in one hand, and the model hooked on to it and stretched out. Release the model banked over, and slightly to one side of the wind and it should climb steeply and turn off into a wide circling flight.

If the model turns steeply to the left and dives into the ground, the trailing edge at the tip of the left wing should be bent down very slightly. Conversly, bend down the trailing edge of the right wing if the model turns too steeply to the right. All adjustments should be made in this way, and the tailplane and fin left absolutely straight. When properly trimmed this model is capable of flights of up to a quarter of a mile.

Designed and made in England by
INTERNATIONAL MODEL AIRCRAFT LTD., MERTON, LONDON S.W.19.

Printed in England