



Use good quality glider polish for all-out endurance try—plenty push at the elbow also helps.

# whipper

by RICHARD MILLER

A double header for the hand launch glider man from one of the top men in this field. Indoors or outdoors it performs valiantly for contest-sport flier.

▶ Whipper is a double duty model. Built lightly it gives outstanding performance indoors. As a beginner's model—built a little more ruggedly—it makes an ideal sport glider. Building instructions are for the outdoor version.

Wood for the wing and tail surfaces should be about 6 to 7 pound, quarter-grained stock. The wing and stab are formed to an airfoil shape with a knife and razor plane, then sanded. The fuselage, for which straight grained, rock hard balsa is best, is formed to an oval shape. A piece of 1/16" plywood, shaped as shown, is cemented to the nose.

Several coats of dope or sanding sealer can be applied before assembly. Pre-glue all joints prior to assembly and brush several thin coats of cement over vital points when model is complete. The wing and stabilizer should be at a 0-0° setting and the inside tip of the stab should be about 3/32" higher than the outside.

## Flying

With the recommended stab tilt very little rudder offset will be necessary. This trim combination should give a very satisfactory climb and recovery coupled with a stable circle in the glide.

Launch the glider with full right bank and with the nose elevated to about 40°. To cure looping in the launch use down elevator. A little up elevator is the remedy for too straight a climb. Once the trim is set let 'er go.