



Harold Reinhart's

International Stunt Winner

Top original design in 1950 stunt circles, this plane captured the big Air Trails-Plymouth Trophy

■ This ship was not designed to be just a "hot" airplane; it was built to fly the A. M. A. flight pattern, and do smooth, not necessarily tight, maneuvers. The construction is started with a ten-rib pattern. Cut out the ribs and stack them together. Pin them and sand well; notch out the leading edge for the $\frac{1}{4}$ " square. Draw lines across the ribs 1" and 3" from the leading edge, as in Fig. 1. Pull out the pins and stack the ribs evenly as shown in Fig. 2, so that the 1" mark on outside ribs lines up with the 3" mark on the center ribs. Pin together and cut at dotted line as shown in Fig. 2 with a very fine blade on a coping saw.

Cut the spar from medium balsa. It is 1" x 36". Mark off the center and all rib locations. Cut spar halfway through and break to shallow "V" shape. Add the front halves of the center ribs and the outside ribs, then add the $\frac{1}{4}$ " square leading edge. Add the rest of the ribs, as shown in Fig. 3. Add the trailing edge ribs and the bottom half of the trailing edge. Put in the trailing edge fill-ins, sand, and add the top half of the trailing edge (Figs. 4 and 5). Cut and install the $\frac{1}{4}$ " x $\frac{1}{2}$ " center-reinforcements.

Make up the control system and slide it into place. Cut away the bottom brace to clear the bellcrank bolt and nut. Cut away the ribs so the bellcrank can swing freely. Cut away the ribs and add the extra layer of sheeting in the center. Sand the entire wing,

then add the leading edge of sheeting and center sheeting. At this point, check the wing for warps, then add the cap strips and sand the wing smooth.

Next cut the tail surfaces from medium sheet. Sand well, then add hinges and control horn. Cover area around horn with silk.

Cut out the motor mount sides and bottom plate, and cut the mount to shape as shown. Glue and screw the mounts to the plywood pieces. Line them up on the wing and glue them in place; before the glue sets, glue and screw the bottom plate in position. Be sure the motor mount assembly is straight, for this lines up the entire fuselage. Make up the tank mount and glue into place ("x" on Fig. 6).

Now make the tank as shown. The swivel joint should not wobble but move easily. Add the tank lugs, and match the tank into the motor mount. Drill a $\frac{3}{16}$ " hole in the plywood side where the vent goes through. Make sure the tank mounting is secure, then drill holes for engine. Make the tin plates and screw them to the bottom of mounts.

Remove the tank and engine and drill holes for landing gear. Bend gear to shape and bolt in place. Be sure that the bolts are flush with top of mounts. Add the wheels, then cut out the fuselage sides from medium sheet, slide them over the wing and glue to plywood.

Add former #4, then glue sides securely to the