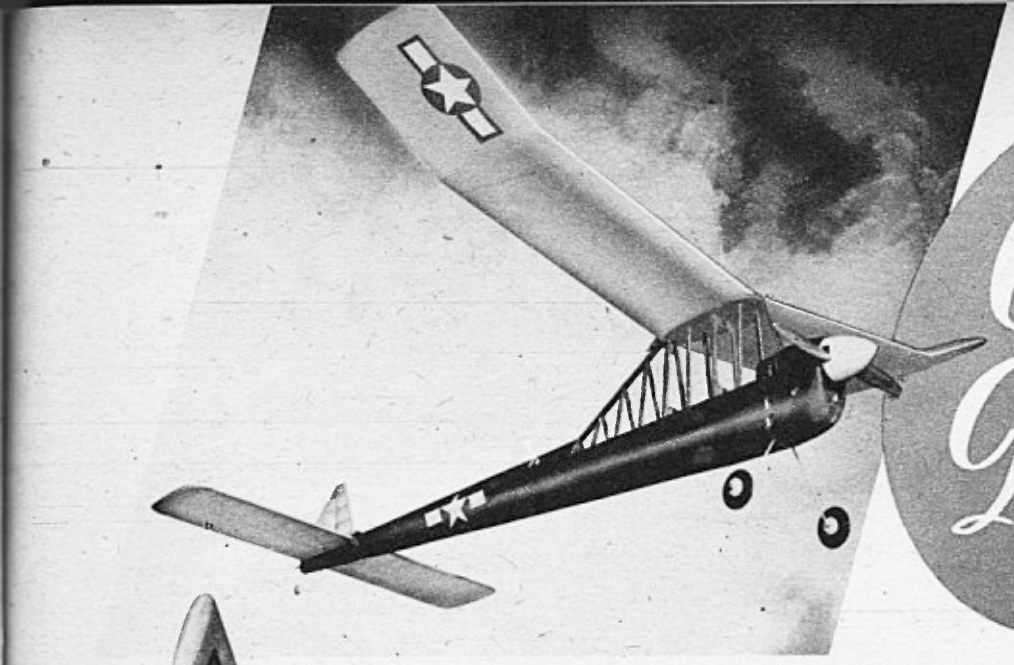

# Cabin Pylon

**LIKE TO FLY FREE-FLIGHT JOBS THAT FOLLOW FULL SIZE AIRCRAFT LINES? HERE'S ONE TO PLEASE THE "REALISTS"**

**BY ALVIN ANDRIGHETTI**

THE Cabin Pylon is, as the name suggests, a pylon model with a built-in cabin. The model follows the general lines of Army observation planes. But despite its scale look, it is simple to construct and very rugged.

Study the plans carefully. Make full size drawings of the wing, wing spars, stab, fin, and top view of the fuselage. When drawing the full size spar layout, note that the bottom of the rear spar is 3/32" above the bottom of the main spar.

After cutting out all parts, join formers F-1, F-2, F-3, F-4 together and drill four holes for the firewall and cowl mounting bolts. After this has been done, cement F-3 and F-4 together. Lock 1/8" x 1" bolts in place and bind landing gear to F-4.

The bottom half of the fuselage is made first. Construct the crutch of 1/8" sq. hard balsa. Now spot-cement the crutch in place on the work bench so that formers F-3 and F-4 will just hang over the edge of the work bench when cemented in position. Working from front to rear, cement the remaining bottom formers in place taking care that they are at right angles to the crutch. Next cement keel F-30 in place.

Sheeting of the fuselage will require a large number of pins and slow-drying cement or glue. Select two sheets of 1/16" x 2" medium balsa and trim the edge that joins the crutch for a good fit. Next apply slow-drying cement to the full length of the crutch and to all the formers. Place the sheet balsa in place and pin all formers about an 1/8" up from the crutch; then start at the last former and work forward, pinning the sheet firmly to all formers and the crutch, using only as many pins as necessary.

After the cement has dried, take a straight edge and a knife and, using pins pushed through from the inside to mark former tips, cut the excess sheeting from the end of the fuselage. After applying the 1/16" x 2" sheet to the other side in the safe way outlined above, plank in the rest of the bottom half of the fuselage with 1/16" x 1/2" and 1/16" x 1/4" strips *(Turn to page 80)*

FEELING LAZY? HATE TO SCALE UP PLANS? FULL SIZE PLANS AVAILABLE FROM AIR TRAILS

# CABIN PYLON

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using regular cement. Now cement the 1/8" x 1/4" capstrip in place from F-6 to F-14 and trim. Before removing fuselage from work bench, cut tail block to side view, attach tail wheel, cement in position and trim when cement has dried.

Remove fuselage from work bench and cement formers in place. Cement 1/16" sheet to formers and trim off the excess sheeting with a straight edge and knife. Cement sheeting to the other side, trim and then cement capstrip in place. Next cement a sheet of 1/16" sheet in place for the stabilizer base and trim to fuselage outline when dry.

Cut formers F-516, F-618, and F-720 (in one piece from 1/16" plywood) to the same shape as the top and bottom formers, less the 1/8" sq. cross pieces. Cement balsa formers F-16, F-18, and F-20 to the plywood formers and then cement the plywood formers to the bottom formers and fuselage.

Cement wing platforms F-28 and F-29 together before cementing to fuselage. Next remove all 1/8" sq. cross pieces from the cabin. Now cement the remaining 1/8" x 1/4" formers in place. Insert 1/8" dowels. Fit cowling before covering cabin with celluloid.

In constructing the cowl, first cut out all blocks and 3" sheet to correct size and check for squareness. Hollow out bottom block before joining. Cement and attach with wood screws former F-1 to cowling blocks. Carve to shape before cutting out nose air intake with a coping saw. The top cowl is carved from one piece and hollowed out to a thickness of 1/4". Attach top cowl to bottom cowl with cloth hinges and dress snaps, after cutting holes for timer arm and needle valve.

Cut 1/4" x 3/8" holes in former F-2, to take motor mounts, in correct position for motor used. Cement hard 1/4" sheet balsa gussets in place and then cement 1/8" plywood ignition track to motor mount. Drill ignition and timer string holes in firewall. Note: booster and timer string are passed through the cowl side vent.

Construct front and rear spars of wing. Note that the center ribs are 1/8" sheet, flat bottomed and trimmed top and bottom for 1/16" sheet covering. On all wing sections the rear spar must be blocked up 3/32" and the front of the trailing edge 1/16". Start by making the center section, and next the two inside sections. Cement ribs one at a time to spars and trailing edge. Leading edge is cemented in place after all ribs of one section are in place. It is best to carve trailing edge before constructing wing or stabilizer. The wing tip is best made by cementing the 1/8" tip rib to it and carving before cementing the whole unit to the wing.

Pin leading edge, spar and trailing edge of stabilizer in place and cement ribs in position.

When completed, fin and rudder are cemented to stabilizer. Attach rudder to fin with cloth hinges.

The entire model is covered with dyed Silkspan and given six coats of clear dope. Control outlines can be inked in for a scale look.

The model should balance under the rear spar. Wait for a good day and have a little patience when you test-fly the Cabin Pylon. Before using power, test model until a smooth flat glide is attained. If it appears to stall severely, place a bit of 1/16" sheet balsa under the trailing edge of the wing, increasing the thickness of this piece until the glide is level. If the ship dives, place pieces under the leading edge of the wing. When testing with power use a long motor run with low power. If it acts right under low power, keep increasing the power until the model is on full power with short motor runs.