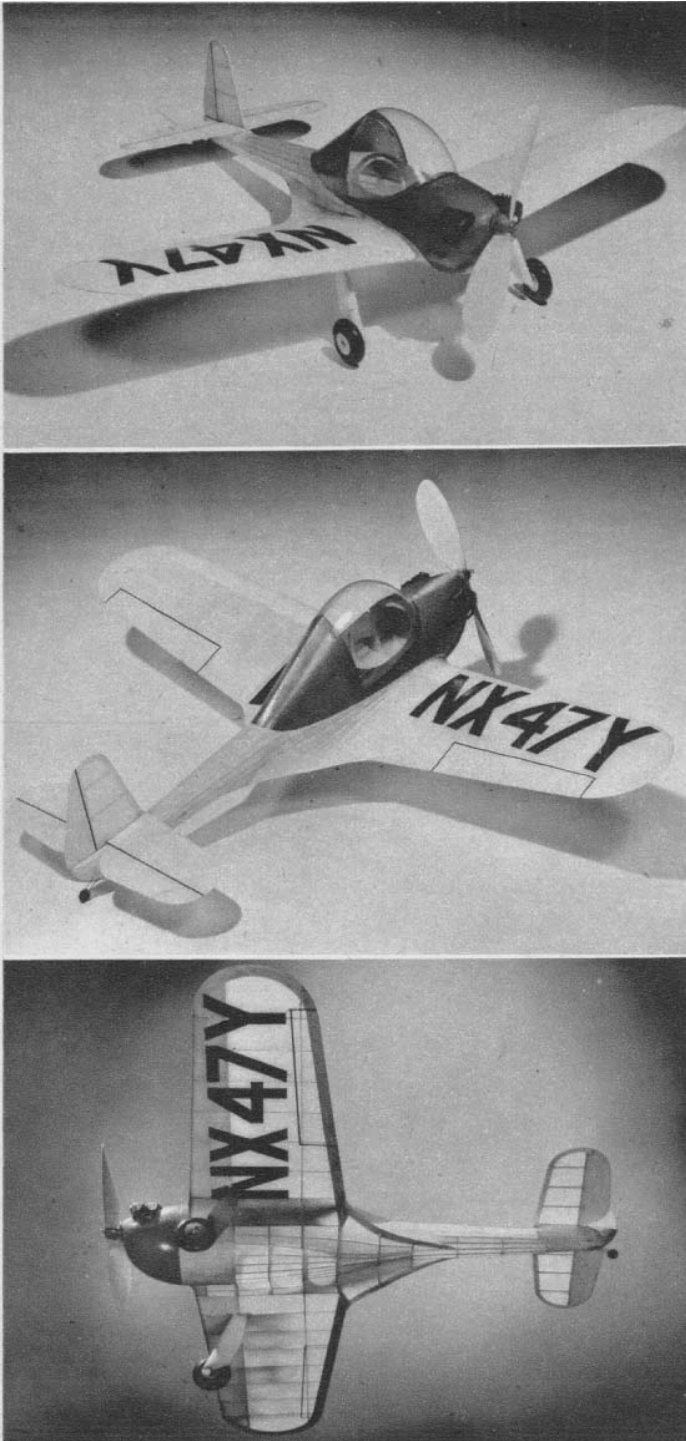


PIPER SKYCYCLE

BY B.SCHOENFELD

HERE'S A FLYING SCALE MODEL
WITH PERSONALITY, FLYABILITY,
AND PLENTY OF CLEAN LINES



Construction details of the finished craft are shown clearly in front, rear, and bottom views. Note beautiful job on the transparent canopy. Very stable model.

IN the postwar personal plane race, one of the most promising experimental designs for the individual pilot has been the Piper "Skycycle." The Piper Aircraft Company, the old standby of the lightplane enthusiast, has tried to fulfill the desire of the returning military pilot for something that has personality, low cost, a fair speed, and decent maneuverability.

The individual businessman's needs have also been adequately considered in this design project. Small, 20-ft. wing span, low power—40-55 hp—, a cruising speed of a good 100 mph and a 500-mile range all combine to make this airplane a big little package of flying, for under \$1,000.

Use of the word "cute" to describe this plane is perhaps less objectionable than usual. A lot of personality in full-scale makes for excellent adaptability to a flying-scale model.

Construction of the model is comparatively simple, because it follows conventional practice. Probably every model builder has his own method of tackling the job; however, following the procedure outlined here will greatly facilitate the building. Very little need be said so far as the sizes of material are concerned, for the drawings are quite self-explanatory.

In order to secure proper alignment of parts, the wing is joined to the fuselage before the fuselage is completely finished. For this reason, it is most advantageous to build the wing first and have it ready for assembly. This is a simple operation; just lay the spars and trailing edge over the drawings in their indicated positions and cement the ribs in place. Since the leading edge is on a 45° angle instead of being flat, it is best to add it after the ribs have been cemented in position. The one-sixteenth-square spars can now be put in place on top of the ribs. When thoroughly dry, remove the wing panel from the board and cover the leading edge with sheet balsa as indicated on the drawings.

The fuselage can now be made by laying the top and bottom keels in position over the drawing and cementing the bulkhead halves in place. Cut the side keels from 1/16" sheet and mark the position of the bulkheads on them, then cement one on the side of the fuselage and remove this half from board when dry. Finish the other side of the fuselage in the same fashion. At this point, join the wings to the fuselage and plank the front and cockpit fuselage sections as indicated. Now add the wing fillets and stringers. The rear section of the cockpit cover can be added by erecting the former and backbone, and covering with sheet balsa.

The molding of the celluloid cockpit cover requires some delicate handling because it is an unusually deep draw to be made in the "kitchen sink shop" most every model builder has to work in. First carve a balsa block to the shape of the transparent section of the cockpit cover, coating the block with several coats of clear dope. Use either celluloid or Plexiglas of one sixteenth thickness, immerse in hot oil and allow it to become soft and pliable. Then draw it around the block; the whole operation should be done in the hot oil. When removed and allowed to cool, the plastic will retain the shape of the form.

The nose block is carved from a solid block of balsa, hollowed out and cemented to the fuselage. Use a removable nose plug assembly to allow for winding the model and for any final adjustments that may have to be made in the thrust line.

The tail assembly may be built directly over the plans, which give full details for their construction. Construct the landing gear according to the drawings. The only thing that need be said about the latter is that plenty of cement should be used to secure the wire parts. The engine details may be taken directly from the drawings.

Adjusting and flying of the model should be handled in the conventional manner. The rugged construction of the Skycycle eliminates the possibility of damage during test hops, and assures satisfactory realistic "scale" performance,