

It's rakish, bizarre and it's weird. To top it off, it's an easy-to-adjust and simple-to-build model that takes off like a scared cat. All you need do is crank the prop and it's ready to fly.

● The last time we built a rubber-powered model, Lassie was a pup. "Diamond Slim" is actually the outgrowth of Radio-Control stagnation. We had been spending so much time working on sketches of R/C ideas, that nothing seemed to fit. The yen for something simple, easy to build and inexpensive resulted in the model presented here. With a few refinements, and a little engineering, Slim evolved as a well-streamlined, easy to adjust, fly-for-fun model.

FUSELAGE: Mark the fuselage side pattern on to the fuselage side material as shown on the plan. Cut four sides and all the fuselage formers from 1/16" sheet balsa. Formers 2 and 5 can be cut from 1/16" plywood if a more substantial landing gear mount is desired. Next form the landing gear from 1/16" steel wire and mount the pieces as shown. Be sure to include the 1/8" square reinforcements and, cement generously.

Start the actual fuselage construction by cementing bulkheads 3 and 4 to two opposite fuselage braces, rear landing gear, and other places where notches occur have been omitted for clarity. Only the bulkhead-alignment notches

are shown. You should have no trouble locating and cutting the remaining notches as you build.

After bulkheads 3 and 4 are in place add 1 and 7. Even though the bulkhead notches will tend to keep the alignment problem at a minimum, constant checking will make for a better model. When the four pieces mentioned above are in place, insert the remaining bulkheads. Fit the other two sides of the fuselage by fitting and trimming to shape, if necessary. When satisfied with the fit, cement them in place. Check alignment again and finish the fuselage by carving the nose and tail blocks and bending the necessary wire fittings. The prop shaft is bent to fit the particular prop you use. We suggest a "Store bought" plastic.

WING: Layout a full-size wing pattern by using the reference line on the full-size plate. Simply line up the root and tip portions of the wing making sure that you have 8 3/4" between the root rib (R-1) and the tip plate. All ribs are 2 3/4" apart. If 4" stock is used, disregard the splice line. Cut the ribs from 1/16" stock and cement them in place on the underside of the wing. Be

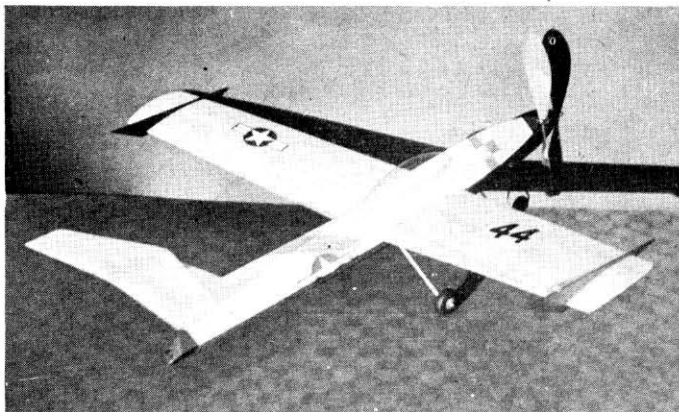
sure to make a left and a right-hand wing panel.

STABILIZER AND FIN: Cut the required pieces from 1/16" sheet. Sand all parts to a slight symmetrical section and cement the stabilizer to the fin at this time.

ASSEMBLY: Line the wing up with the fuselage at the location shown on the plan. Notch the fuselage carefully to receive the wing. Cement the wing to the fuselage only when you are satisfied with the alignment. Next, notch the rear of the fuselage for the fin and cement it in place. When the fin is aligned, add the dorsal fin. A cement gusset along all the main joints will add greatly to the strength of the model. Three coats of thinned clear dope can be applied if desired.

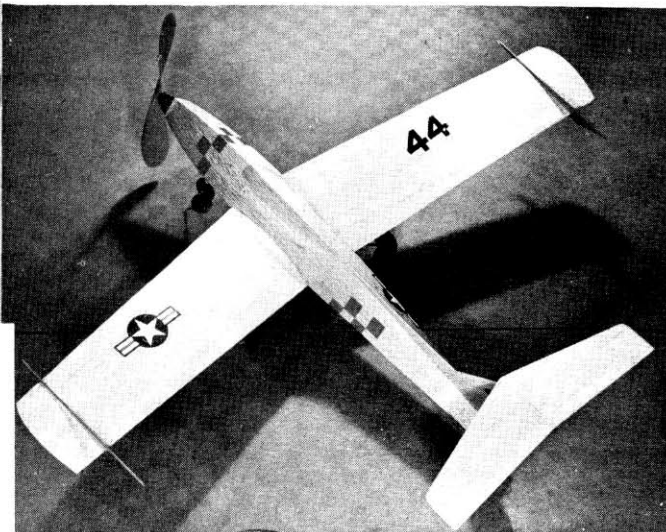
The tip plates are slipped in place but are not cemented. They help to increase the efficiency of the wing and aid in trimming the model. About all that remains are the installation of the wheels, the fitting of the bubble canopy atop the fuselage, and making the motor from 6 strands of 1/8" T-56 rubber.

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This is not the prototype of a new secret jet. The prop is for real and is used to fly the model. Note that it's made of plastic for simplicity.

Now here's a smart looking top view! No geodesic construction, no fancy covering, no pop-up tail, no folding prop, it's just a plain ol' model.



DIAMOND SLIM

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FLYING: Balance the model at the point shown on the plan and add clay to the nose or tail if necessary. Test glide the model over high grass. The glide should be fairly fast but flat. Power adjustments are the next step. Start out with about 3° down thrust and no side thrust. Put no more than a hundred turns in the motor while testing. Too steep a climb will show a need for more down-thrust. The original model turned slightly to the left under power.

After these preliminaries have been dispensed with, and you feel real brave, pack in about three to three hundred and fifty turns, set her down on a hard smooth surface, and step back! The ship is not designed for a dethermalizer so be careful when and where you fly.

BILL OF MATERIALS

(Balsa unless otherwise specified)

3—1/16" x 3" x 36" (medium) Fuselage, wings,
fin, ribs, stabilizer,
dorsal fin, tip plates

1/16" and 1/32" steel wire; 7" Kaysun, or similar prop; 8' of 1/8" flat T-56, or similar rubber; 2 Veco wheels, 1" diameter; 1 Veco wheel, 7/8" diameter; bubble canopy; thrust washer; clear and colored dope; thinner; sandpaper; 2 scrap blocks.

BOATS AND PLANES

flying models

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