

The fly Snatcher

In a model-building rut with run-of-the-mill designs? Run your peepers over this nifty 18" biplane "spindizzie" and we'll bet you'll lose no time in making her run in circles!

BY ROBERT L. BROWN and DALE IRWIN



You'll agree that two heads are better than one upon examining this job. Bob Brown and Dais Irwin outdid themselves with this Atom-powered speedster. Note resemblance to old Curtiss Hawk series.

THE hair-raising performance of the control line model you have dreamed about is to be found in this zippy little biplane powered with an Atom engine. Extremely simple in design, with its fuselage made from a balsa block and wings from sheet balsa, its performance amazes the oldest die-hard builders. With a two-foot run the model fairly catapults into the air, streaking upward on the thrust of the tiny Atom.

Control lines fifty feet long give this minute package of dynamite all the room necessary to perform its many thrilling antics. A simple model with a big performance is the ship for which a beginner is always looking. Expert or amateur, you'd better sit down and build this spiffy plane in a few evenings.

With a band saw cut the fuselage block along the line in the side view, dividing the upper and lower portions. Cut along the lines of the side and top view and carve the exterior shape. With a gouge remove the wood down to the thickness shown by the dotted lines. Leave in the bulkheadlike portion indicated near the front. Gouge out a seat for the plywood engine mount. Glue in base for the control bellcrank. Slide landing gear wires through holes in fuselage sides after they have been securely glued, and screwed with clips to the plywood backing piece. When installed, a slight trough is cut into the bulkhead portion at the front to facilitate a good gluing surface for the plywood. Small model-making pins or short brads through these parts are advisable, also. Gouge out a small trough on the under side of the fuselage to fit a penlike cell tray glued in the inverted position. The lower block which covers this tray and a small tin gas tank, has a layer of cotton installed to secure the batteries snugly. There are cutouts to clear the landing gear legs, also.

Slip the wheels on the landing gear legs, and solder washers on each side of the wheels. Attach the condenser to the front of the thick bulkhead with a strap. Screw down the engine to its plywood bearer. Don't forget to solder together, and install, a tin gas tank in the cavity partially gouged out in the main fuselage. If this is too much trouble, the conventional tiny transparent tank which comes with the engine may be used. Cut a notch in the nose to clear the timer arm. Shorten the right balsa prong at the front of the top part of the fuselage. This ends just behind the cutout for the timer arm. Glue a triangular piece of plywood to the lower side of the fuselage at the tail to serve as a brace for the tail skid, and a good gluing base for the hooks, to which are attached the stabilizer tie-down rubbers. The stabilizer and upper fuselage sections are centered at the rear with a vertical hardwood stick glued to the plywood tail piece. Glue the tailskid to this piece of plywood, also.

Cut the stabilizer from 1/16" sheet. Use a hardwood dowel for the main support of the elevators. Hinge these elevators to the stabilizer with cloth hinges. Pierce the stabilizer with two holes to accommodate the tie-down rubbers. Attach control horn of aluminum or tin to elevators.

Complete the upper fuselage section, including the pilot's head, windshield, and insignia on the rudder. The front part of the 1/16" sheet rudder is inserted in a slot in the upper fuselage to strengthen it. The rear portion of the rudder is warped to cause a right turn. This keeps the control lines taut. Attach two hook-and-eye type hooks to the rear upper fuselage; the attaching rubber goes around the fuselage to the other hook. Attach hooks to hold all removable sections in place.

Install the switch, coil, and wire leads for booster clamps. The negative lead is a short wire sticking out of the fuselage connected to the metal on the strap that secures the condenser. The positive wire comes out of the fuselage just in front of the switch. In this way, the booster plug may be eliminated for light weight. Neither was there a timer used on the original model, although one may be easily installed.

Rig up the bellcrank to the control mast with piano wire, as shown in the perspective. Tie fish line leads to the bellcrank and insert them through the holes in the fuselage side.

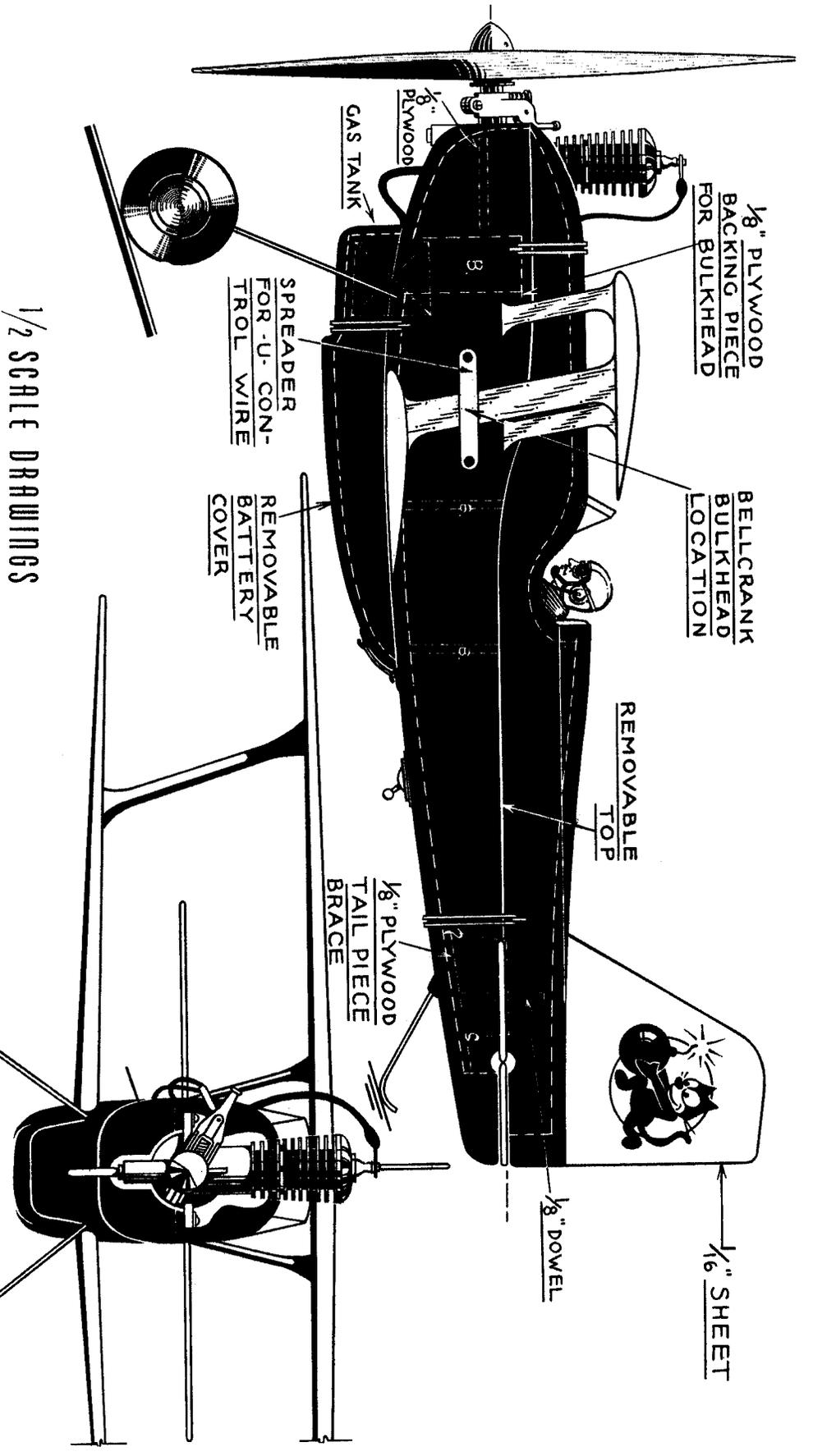
The wings are of very simple construction. Cut bottom sheets for top and bottom wings of 1/32" sheet. Lay these flat and glue to them the 1/16" ribs. Glue and pin these in place until dry. Attach the top sheets in the same manner, being careful to join the sheets properly at the leading and trailing edges. Press the sheets firmly together at the tips and glue. Finish wings by sanding joints. Cover the lower wings with tissue; notice the lightening cutouts in the lower wings. Glue the wings solidly to the fuselage and center section struts.

Glue the control lines spreader piece to the left outer strut and pass the control lines through the two holes. Cut the fish lines to the proper length, tie them to the control handle, and you're ready to try a test flight.

Warm up the engine, using an 8" Atom propeller, and have someone hold the model till you can get the control lines taut -- then, let her go. Always climb and maneuver with the wind; dive, into the wind. Adjust the rudder to get enough pull on the lines.

This model is packed with hours of fun and thrills. Its similarity to a large plane always appeals to the grandstand. Let's see you have one at that next meet.

Scanned From December 1942
Air Trails



1/2 SCALE DRAWINGS

