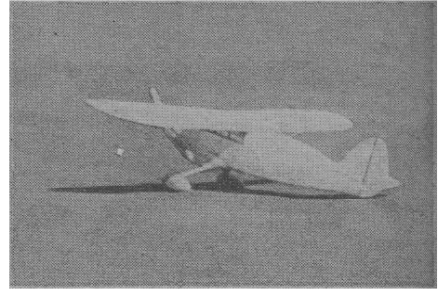
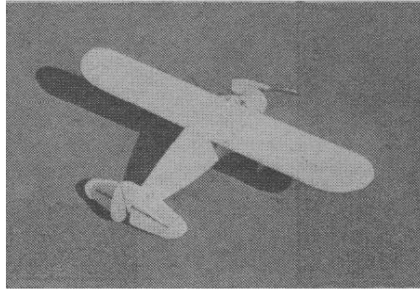
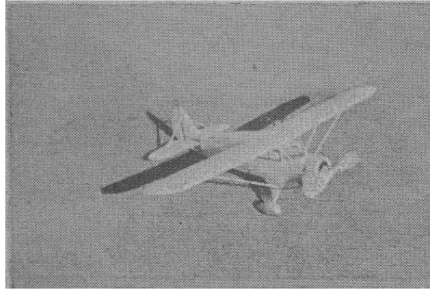


Here's the Stinson Reliant!



One of the finest commercial ships on the market today is our model this month—the Stinson Reliant. Use the plans presented here, and you'll have a fine 26-inch flying scale model of this popular modern ship.

THIS month FLYING ACES presents plans for a flying replica model of the Stinson Reliant, one of the finest commercial ships on the market today. Although this ship has been on the market for only a short time, it has already captured the fancy of most model builders, and it is for this reason that we publish full-size plans to build a 26-inch flying model.

The Stinson Reliant is powered with a Lycoming motor, developing 215 H.P. The ship is the latest word in commercial designing, and affords the maximum comfort with its latest developments.

PERFORMANCE

Rate of climb.....750 feet per minute
 Service ceiling.....14,500 feet
 Cruising speed.....115 M.P.H.
 High speed.....135 M.P.H.

SPECIFICATIONS

Span.....43 feet 3 1/8 inches
 Length overall.....27 feet
 Height overall.....8 feet 5 1/2 inches
 Gas capacity.....50 gallons
 Gross weight.....3160 lbs.

FUSELAGE

THE fuselage of the Reliant is constructed in the manner used in any flat-sided body. First, construct two sides, using the shaded portion of the side view as a jig. The next step is to glue all the cross braces in their place, as shown. The cross brace on Former 5 does not form right angles with the side brace, but is placed farther back, so that the trailing edge of the wing rests up against it. The diagonals are 1/32" x 1/16".

I want to call special attention to the construction of the rear of the body. The horizontal brace which you see is deflected about one degree off the horizontal, in order to give the stabilizer a negative angle. However, if the model builder wishes, he may make the stabilizer adjustable by attaching it to the brace at one point only—the end of horizontal brace. In this case, the stabilizer may be raised by placing small pieces of balsa wood under the leading edge.

After the complete frame is assembled, the Formers are cut out of 1/16" sheet as shown, and glued in place. Glue Formers 2, 3, and 4 to the body, using the front rectangular part of the frame as two stringers. Former 1 is glued to Former 2 so that the cowl is able to slide on. The front window frame is not constructed until

By Avrum Zier

the wing has been glued in place. Please note that Brace 8 is separated by a complete former, with a slot cut out to hold the motor stick. Next come the wings.

WINGS

THE wings are constructed entirely of balsa. The wing tip is cut from three pieces that have their grains running in opposite directions to the shape of the tip. It is then glued to the wing and sanded to a taper leading into the trailing edge.

The wings are placed on the body so that they form an angle of incidence of one degree, and a dihedral of one degree. The stringers from Former 5 are projected to meet the top of the wing after the wing has been set properly. The frame is then covered, thus making the wing appear as if it were filleted into the body. The struts are glued to the frame and not to the covering, as I have so often seen. If the strut is glued to the paper, they are apt to break away from the plane.

TAIL SURFACES

THE tail surfaces are constructed with a double camber, and contain a balsa spar, which passes through the center, as shown. The stabilizer is constructed in one piece. It is placed on the body by cutting away part of the rear post of the body, and inserted so that it rests upon the horizontal brace, as explained.

The rudder is built in the same way as the stabilizer, and must be placed on after the stabilizer. To counteract the torque, the rudder should be twisted, or placed off center.

LANDING GEAR

THE landing gear is made entirely of balsa and consists of three pieces. The part entering the body is a fillet, and should be made to fit the curve of the body at that point. Should the fillet not fit neatly into the body, the builder should cover the seam with paper.

The pants may be made in one or two pieces, as shown. In both cases, they should be hollowed out to the maximum. A one-inch wheel is inserted to revolve freely.

After the model has been completed, the builder should glide the model to determine if the model is properly balanced. If the model tends to nose over, place a weight in the tail. If the model stalls, place the weight in the nose.

Well, fellows, go to it, and lots of luck. If you are in doubt over any part, I will gladly help you out if you send me a self-addressed, stamped envelope stating your trouble. Happy landings until next month!