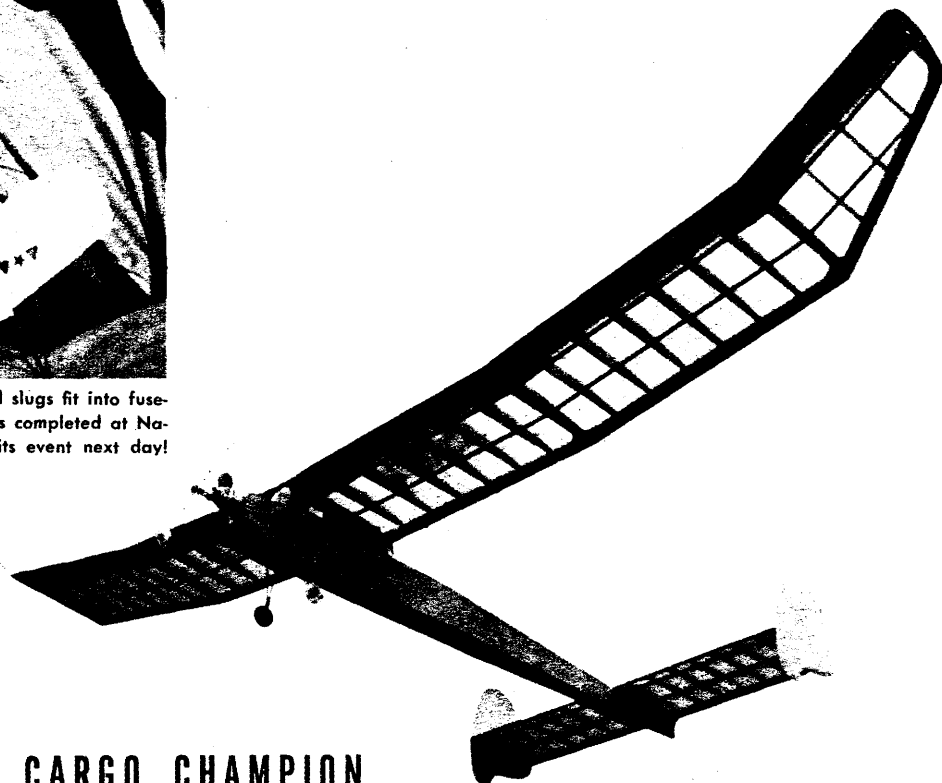


Designer Roth shows how dummy and lead slugs fit into fuselage of his Clipper Cargo model. Ship was completed at Nationals after photo was made—and won its event next day!



NATIONAL CLIPPER CARGO CHAMPION



Blueboy

This, folks, is the Half-A job that lifted an incredible 23¼ ounces to win Pan Am crown

By HAL ROTH

■ *Blueboy* was designed with three requirements in mind: a good engine, an extremely large wing, and a rearward-placed landing gear with metal wheels. When it was designed, we felt the Cargo Clipper models fully capable of lifting 30 ounces of dead weight. The 500-square-inch wing was made about equal to a small Class B gas model so the glide would be slow and the landings easy. A flat-bottomed 10% section was used in the wing to speed take-offs. The structure of the model was made as light as practicable, commensurate with good Wakefield practice.

On the first flight at the Philadelphia Nationals, *Blueboy* lifted 23¼ ounces for 42 seconds, establishing a new AMA record. On a later attempt, *Blueboy* lifted 26½ ounces for 2:40 but was dis-

qualified for a motor overrun. Gr-r-r!

The Clipper event is a real challenge because no one has flown a gas model on its wings since the days of Maxwell Bassett. Twenty-four ounces of dead weight inside a Half-A model slows it considerably. However, the weight catalyst introduces two interesting by-products: (1) no long chases and (2) the ships fly at slow speed (estimated at 10 mph) and can be tested with the engine wide open with no crash danger (assuming you start with 20 or 24 ounces of ballast).

Best of all—you may call it sentimental hogwash—all the Clipper ships must take off under their own power. The little models really work to get off the deck and it is a genuine thrill to see them lift their load and fly off.

Cut 30 wing ribs from soft 1/32" sheet. The tip ribs can be formed as the tips are built. Use light wood for the spars and leading edge sheeting. The center section has three 1/32" plywood dihedral braces. Hollow out the balsa tips on the bottom. Put gauze reinforcements at every dihedral break.

Cut six stabilizer ribs from soft 1/16" sheet and 12 ribs from 1/32" sheet. Use a square to make certain the tips are perpendicular to the center of stabilizer so the rudders will go on straight. Install gauze reinforcements at the trailing edge center. The rudders are cut from soft 1/8" sheet.

For the fuselage select a straight-grained piece of 3/32 x 3 x 36" and cut diagonally in two. The fuselage sides are cut from (Continued on page 75)

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The entire model is doped with butyrate dope and sanded well between each coat. Trim Honeybug lightly as any extra weight is a positive hindrance to overall performance. Balance it on the forward line with the nose slightly below horizon.

Flying is done in the same manner as any other ship, except that here you can let the model take off by holding neutral, and it will rise slowly until flying level, and then it can be made to respond to your command.

Experimenting with prop and clogging the intake will give higher speed and longer engine runs. This is as important as the design and workmanship and will vary on every model.

Blueboy

(Continued from page 37)

these triangles—insuring the same bend on each side. Cut out the formers and build the cargo box. Glue the fuselage shell together with the cargo box in place to be certain of an exact fit. Install 1/8" sheet doublers and gussets around the firewall. Solder the engine nuts to a sheet of 1/4" wide .012 brass on the back of the firewall. The front wing hold-down wire goes through into the fuselage proper where it is bent over 1/2" and cemented. Celluloid is cemented over the rear wing rubber holes.

Build a good landing gear in alignment for this is the model where it counts. Metal wheels are strongly recommended, since rubber wheels crimp and collapse over the long take-off run with the heavy cargo. The rear strut is held in a 1/16" plywood sandwich. The front strut is fastened to the sides of former B.

A Wasp tank is filed to fit the McCoy Diesel. A Hillcrest metal dethermalizer timer actuates a K&B Sure-Stop fuel cutoff. Experiment with low-pitch 7" diameter propellers. The exact pitch depends on the load. Ballast is in the form of lead sheets, 1/8" x 1 1/2" x 2".

Visibility isn't important in this model because the ship isn't supposed to get over 100 feet high. We used blue Jap tissue (invisible over 100 feet high). Two thin coats of dope without any castor oil are brushed on.

Flying is the easiest part. Simply put in 20 or 24 ounces of ballast and begin by firing up wide open. There is no danger of a spin because the ship flies too slowly. Be certain the model is headed exactly into the wind. Take-offs are safer than hand launching.

Mini-Mac

(Continued from page 53)

control a bit.

4. The ends of L2 must be connected as shown on the diagram. If the plate current stands at about 1 ma. and adjustment of C2 makes no change, you have undoubtedly messed up on this detail.

(Continued on page 78)

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NANCY—slick little Argentine stunt model by Rudolfo Carlstein. Takes small engines down to Infant; spans 27 inches, 13 inch fuselage pod.

HONEYBUG—by Frank Ehling, nifty Cub .14 powered medium size team racer or stunt control liner. Spans 22 inches; 19 inch fuselage.

BLUEBOY—designed and flown by Hal Roth to national Pan-Am Clippaer Cargo weight-lifting championship! Uses McCoy Diesel power; spans 72 inches, has 32 inch fuselage.

50¢ for complete group



GROUP 254A

COMBATLER—Young and Huelet's rugged, easy-to-make combat stunter introduced by George Aldrich, 1953 National stunt champion. Spans 34 inches; overall length 20 inches. Takes Fox 35. Parts can be interchanged from model to model for quick contest replacement.

BONNIE LASS—by Les McBrayer for Half-A team races. Spans 22 inches, 16 inches long. Has 82 sq. in. wing; weighs 6 oz. Uses K&B .049 Torpedo. McBrayer, a member of the famous F.A.S.T. team racing club, has produced an eye-catching winner here.

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