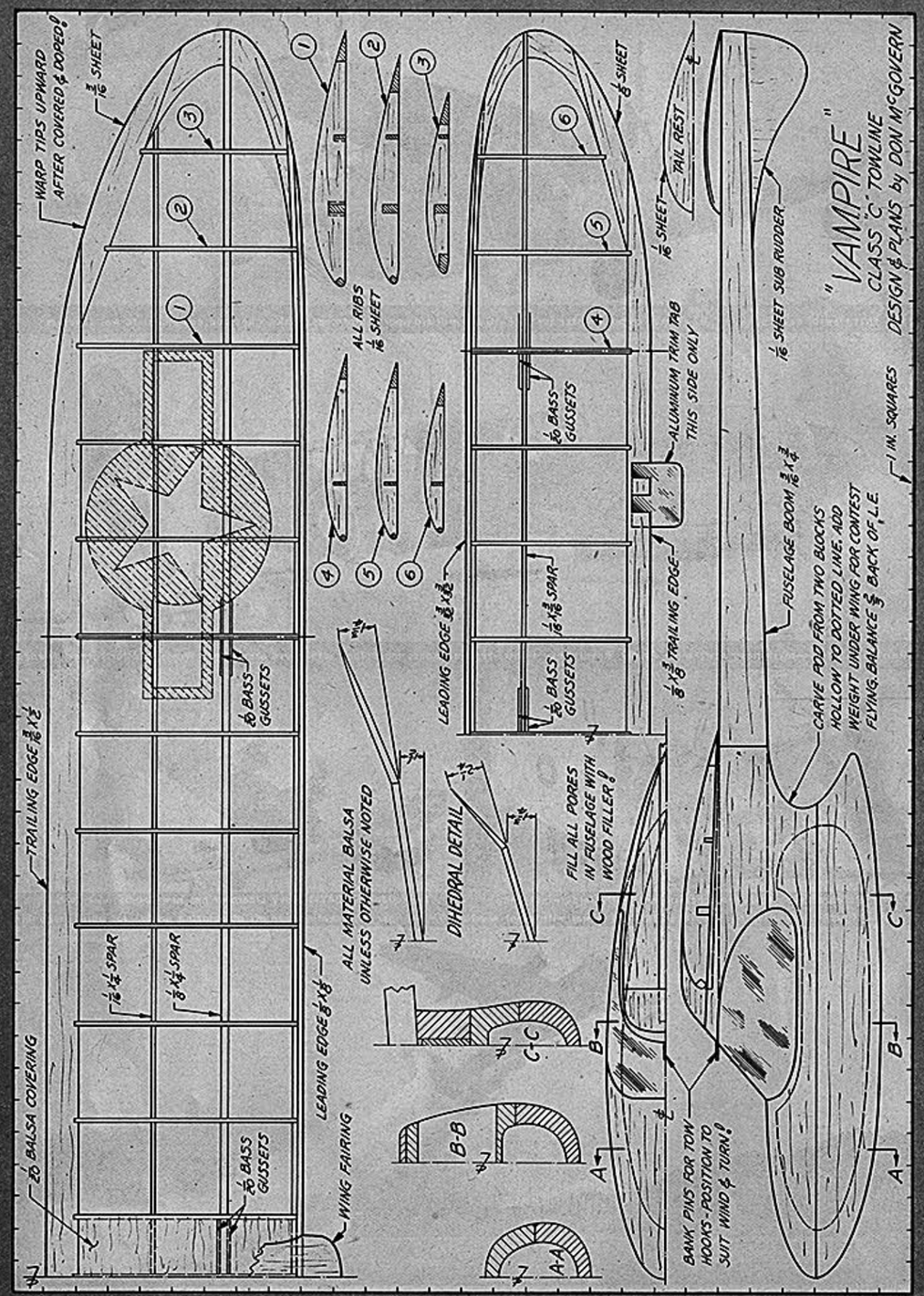

by **DON McGOVERN**

THIS month we present a high performance class "C" towline of slightly new design and appearance. While small in size it has maximum area for its class. The crossection just meets the new rules with little to spare. Drag is further reduced by the streamlined pod and boom and the elimination of the rudder. Taking everything into consideration the model is easy to make, strong, and a threat at any contest.

As for building the ship, first lay out full size plans with a pair of dividers, and enlarge ribs, crossections, etc., to correct size. With this completed open up the dried up glue and with a dull razor blade start butchering. Cut all ribs from medium stock, as the plane is underweight for contests and strength must be incorporated. Then lay the wing out in the conventional manner allowing room on the ribs for gussets and sheet balsa planking. The tip is built flat, which simplifies construction, and warps upward after doping. Likewise a 1/16" undercamber appears.

The stabilizer, featuring polyhedral, is quite similar to wing construction with the addition of the trim tab on the right side.

The fuselage is the most difficult to construct. Trim the boom to shape from rock hard stock of the dimensions shown. Add ¾" blocks on either side by the cabin for the wing rest. Cut the pod from two blocks to the outline shown in the side and top views, and temporarily glue together with a few drops around the edges. Let it dry a few minutes until firm and then carve to shape using templates to insure symmetry. Sand until smooth. Add a sub rudder and a tail rest with the desired angle to fit the tail, then complete sanding the body. At this stage, split the pod apart once more and carve the body out to the dotted line. This is not done with the intention of lightening the ship but to add weight in concentrated form where it is needed instead of in the nose. In the original ships, two to three penlight batteries were added in section F3 to tip the scales at 4½ ounces for the new rules. Place the wing and tail in position to check for balance, on rear spar, and re-cement the pod.

Before applying celluloid windshield, type out your name and address and place inside where it is protected from rain. The ship in the pictures has been returned twice to date. Insert a wing hook of 1/32 wire bent in a V shape. From a small block cut a wing fairing and glue in place.

Before finishing the ship sand every piece of framework with 10-0 sandpaper and touch up all joints with glue. Give the fuselage several coats of wood filler and sanding between coats. Dope according to your own judgment but keep maximum visibility in mind. The ship has a strong inclination toward "Model Heaven," and a sky blue color isn't an asset when you're chasing it. The originals were red and yellow. Cover the

(*Turn to page* 48)

The Vampire

(Continued from page 25)

wing and tail with silkspan if obtainable and apply three or four coats of dope, sanding lightly after each.

For flying, strap the wing and tail in place with rubber and try a few test glides. The model should glide 50 feet or so from your hand, with a slight turn in the direction best suited for the individual model. Remove any stall or diving tendencies and you are ready for the towline.

In the plans, no definite tow hook location is shown. In my opinion it is better in a model of this size to use a pin inserted in the position best suited for the warps, turn, and wind velocity. In this way the hook may readily be moved. If the model glides left, a tow hook located on the left side behind the cabin should remedy the situation.

One other point, in regard to the trim tab: difficulty is often encountered in adjusting these tails. Instead of the conventional adjustment, raising the tab causes a left turn, and vice versa. Once this obstacle is overcome the polyhedral tail gives excellent performance.