



(Continued from page 51)

model. Follow this by tearing model covering tissue into pieces, roughly $\frac{1}{2}$ " x 1". About two and a half sheets should be sufficient. Strips this size assure good coverage of the model.

Now take any small, deep dish or cup and mix about two thirds of a cup of thick wallpaper paste. (The paste may be purchased for a small sum at any paint or hardware store.) Take one of the strips of paper, coat it with the paste, and, beginning at one end of the greased model and working toward the other end, cover with the small paste-soaked strips. Be careful to lap each piece halfway over the other. In the model illustrated, ten layers of paper were used. Each layer must be carefully smoothed tight to assure adequate adhesion.

This completed, allow the model to dry for at least twenty-four hours. In damp weather allow more time. Never put the model in an oven to hasten drying; the extreme heat has a tendency to make the paper brittle.

Extreme care is necessary in removing shell from model and joining. If carelessly done, the shell is hard to handle and there is danger of warping. To remove the shell, carefully score a line at station No. 5 with a pencil. Then take a very thick-bladed knife and cut into the shell until you reach the wood beneath. Remove the two shells from the mold.

Next cut two formers of station No. 5 from scrap balsa, glue one to the front portion and the other to the rear portion of the shell. Then glue both portions together, making certain the seam is even all around.

When this is dry, cut the nose and tail ends of the shell in the same manner as mentioned above and insert tail and nose plugs. Also, cut off the top of the shell, station No. 4 to No. 6, to allow for the wing fairing.

The next step is sanding. Use a very fine grade of sandpaper and sand over once lightly; then coat with clear dope. Now sand until the model is smooth to the touch, or until the paper shows through the dope. Dope twice more with half dope and half thinner in solution. Let dry and sand again very lightly.

The spinner and seven-inch prop are now made and carefully fitted. Follow this by making the tail boom and assembly. The landing gear is made from No. 16 wire and attached to the fuselage. Coat heavily with cement to insure strength. One or one-and-a-quarter-inch stock wheels are satisfactory.

A $\frac{1}{8}$ " balsa fairing is now glued to the opening in the top of the shell and is later trimmed down to $\frac{1}{16}$ ". The fairing should be accurately cut to the shape of the wing sections so that the latter will fit snugly to the fuselage. Dowel pins $\frac{1}{16}$ " in diameter were used fore and aft to string the rubber band which secures the wing in place.

Before giving the fuselage a coat of colored dope, the model should be thoroughly tested for balance and glide. This is necessary because the model is a little tricky in these respects. Most of the wing changes can be made by careful trimming of the fairing.

When the model glides satisfactorily, wind her up (about 150 revs.) and hand-launch her. If no further adjustments are necessary, take her back for a paint job.

TIRED OF THE USUAL TYPES OF CONSTRUCTION METHODS? FOR A NEW KICK, TRY THIS NIFTY FLYING SPORTSTER FEATURING A PLASTIC FUSELAGE.

THIS model was built as an experiment to prove that the so-called "plastic" (it's actually papier mâché) type of construction could be successfully adapted to small models. My first attempts were based on a recent magazine article that recommended the use of Weldwood and cloth strips, but after several unsuccessful attempts I gave this method up as the resulting shell proved entirely too brittle. Finally, after much head scratching, I recalled the method used in making masks for puppet shows. Ordinary wallpaper paste with small pieces of model tissue gave a fuselage shell that was amply strong and flexible and, at the same time, sufficiently light to be used for flying models.

Enlarge the plans to full size by means of the grid lines shown on the border of the drawing and then carve the fuselage mold from a block of soft balsa as follows:

The first step is to carve a wooden model of stations No. 2 to No. 7, sand carefully, and coat thoroughly with vaseline. The vaseline line prevents the paper from sticking to the (Turn to page 88)

LIGHTNING BUG

By Fred Hering

