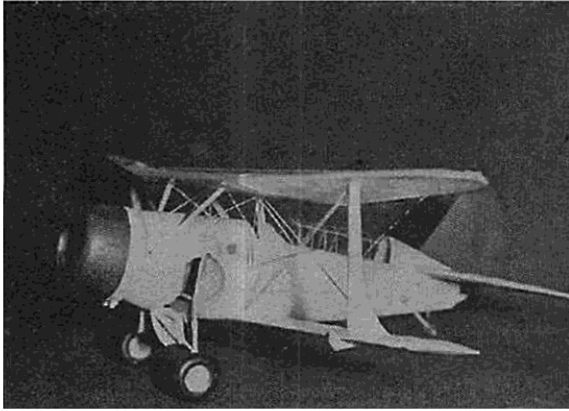
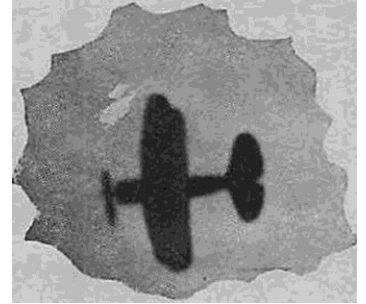


# Curtiss SBC-3 Scout-Bomber



*A flying scale model whose details and performance will satisfy the most discriminate model builders.*



By  
Alan D. Booton



**T**WO squadrons of the SBC-3s are now being built at the rate of 20 per month and will be stationed on the two new aircraft carriers, *Yorktown* and *Enterprise*, after the carrier acceptance tests have been completed.

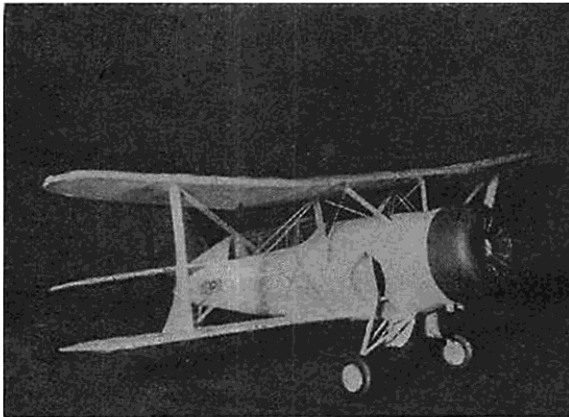
The SBC-3 has all the new features of the scout-bomber, including the auxiliary gas tank and retractable landing gear. The ship is all metal and retains the natural metal finish except for the chrome yellow top of the upper wing and the necessary squadron markings.

The model has been designed to conform to the exterior appearance, pleasing under close scrutiny and a snappy little flyer. The plans include adaptations for a true scale model.

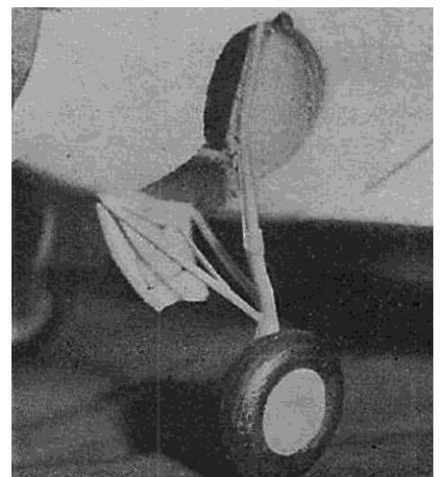
## FUSELAGE

Cement two  $1\frac{1}{8} \times 3 \times 11$ " soft balsa blocks together with several drops of cement—keeping in mind that the blocks must be separated later. Cut cardboard templates of the top and side fuselage outlines to use when scribing the lines on the block. Use the joint where the blocks were cemented together as a center line and mark off the top and bottom with the top template. If a handsaw is to be used, lightly cement the two sides back on until the side cuts are made.

Scribe template A to the front of the blank and start carving at B toward the front and then toward the back, checking each section with the respective cardboard templates. Sand the fuselage to the final shape, then dope and sand (*Turn to page 88*)



Did you know that good flying scale models have been known to fly out of sight? While the SBC-3 is not a design adapted to such phenomenal performance, it yet affords the finest flights to be had from an ultradetailed model. Words are not necessary to describe the photos; they speak for themselves. The flight shot is enlarged three diameters!



## CURTISS SBC-3

(Continued from page 46)

with fine paper until glossy. Cut the wheel wells in, but leave the small flaps intact for the present.

Separate the blocks and hollow them out, paper thin at the rear, gradually increasing the thickness to  $\frac{1}{8}$ " at A. Leave a strengthening thickness around the inclosure rim and about  $\frac{3}{32}$ " on the portion of the wheel wells that remain. Cut out the small flaps that remain under the wheel wells and set them aside to attach to the landing gear later. Fit station C with half formers, install rear hook attachment, and cement the sides back together. Then fit a partial former at B.

### COWL

Carve the cowl from a  $1\frac{9}{16} \times 2\frac{1}{8} \times 2\frac{5}{16}$ " medium block and hollow a  $1\frac{1}{2}$ " diameter hole as shown. Carve 7 bas-relief cylinders on a  $\frac{1}{4}$ " sheet disk to fit the cowl. Cut the  $\frac{3}{8}$ " hole in the center to receive the nose plug (crankcase), and cement it in the cowl  $\frac{3}{8}$ " from the front. Impress the joint and louvre markings with a pencil. Sand and dope until a high gloss is obtained.

### WINGS

Assemble the wing parts on the drawings with waxed paper between. Line all the parts up with pins before cementing. Leave the ailerons until the top wing has set and then cut through the ribs and fit the spars while the wing is still fastened down. Leave extensions of the leading and trailing edges on the lower wing frames to be fitted to the fuselage.

### TAIL SURFACES

The vertical and horizontal tail frames are assembled of plain blank stock described on the drawing. The rear of each rib piece is notched to center the trailing edge and the leading edge is blocked up to center.

### PROPELLERS

Bevel three  $\frac{7}{8} \times 1\frac{1}{4} \times 3$ " as shown and prime the bevels with a coat of cement. When partly dry, cement them together to form the three-blade blank. From there, blank, carve, sand and polish, and balance in the conventional manner. Attach to nose plug with shaft

and washers. The scale prop may be made in a similar manner.

### LANDING GEAR

On the left side of the center line of the front view, a workable scale landing-gear assembly is shown. The parts shown are of aluminum (tubing and sheet). Though the working arrangement is shown, an operating mechanism must be devised by the individual builder. The shock absorber must compress to allow retraction, so it is suggested that a spring be inclosed to hold it down.

On the right side of the center line a rolled-paper, incased-wire landing gear is shown. The simple wire parts are bound and cemented together and then wrapped with paper to appear as scale.

Make the tail wheel fork of sheet aluminum and fasten it to the fuselage with a pin through the aluminum tubing and sheet balsa bracket.

### COMPLETING THE MODEL

The celluloid on the inclosure is supported at the front by a #8 m.w. or bamboo arch. The separations are narrow paper strips applied with thin dope.

To mount the top wing, cut a support template from  $\frac{1}{8}$ " sheet to fit the space between the fuselage and wing on the drawing. Pin this support to the fuselage and the top wing to the support. Fit the center-section struts and cement them to the fuselage only. When dry, remove the wing and start covering all surfaces. The tail surface must be trimmed and sanded to a streamline shape. Cover the vertical with red tissue and the remainder of the frames with aluminum or white tissue, except for the top of the top wing, which is yellow. Cut the tissue away from the wood where the struts attach and cement the top wing onto the C. S. struts. Cut the wing struts from  $\frac{3}{32}$ " sheet. When the top wing has set, attach the lower wings and struts with pins and when they are properly lined, add the cement. Cut a  $\frac{1}{8}$ " slot in the top of the fuselage at the rear for the horizontal tail spar to rest in, cement it in place, then the vertical tail. Fillet the tail assembly to the fuselage with narrow strips of tissue. Cement the cowl on and then spray the tissue covering with water. When dry, apply one coat of thinned dope.

The rigging wires are best simulated with fine bamboo strips. They are

more easily installed than thread and are not apt to tear out other parts of the model on impact. Add the tip lights, wing light, deck hook, and other details. Then dope the model with aluminum dope, except for the parts designated otherwise. A suggested formula for flying-model dope is to mix  $\frac{1}{4}$  part dope to  $\frac{1}{2}$  part clear lacquer to  $\frac{1}{4}$  part acetone and mix enough powder to make the proper consistency of liquid. Use red lacquer thinned with  $\frac{1}{4}$  thinned dope to coat the vertical tail, band on fuselage, and portion of cowl. Paint the tires and motor black and add natural bamboo pushrods.

Clasp the special "S" hook to two loops (4 strands) of  $\frac{1}{8}$ " flat rubber, with 1" of slack. Hold the model nose up and dangle the hook end of the motor down into the rear of the fuselage until the hook engages with the rear-hook attachment.

### FLYING

Make the initial glides and flights in tall grass until the proper adjustments have been made, or gradually increase the number of motor turns in successive r.o.g. flights. The original model weighs but  $1\frac{1}{4}$  oz. and flies several hundred feet consistently.

### MATERIAL LIST

#### Blocks

- |  |  |
|--|--|
| 2 $1\frac{1}{8} \times 3 \times 11$ "          | 1 $1\frac{9}{16} \times 2\frac{1}{8} \times 2\frac{5}{16}$ " |
| 3 $\frac{7}{8} \times 1\frac{1}{4} \times 3$ " |  |

#### Sheet

- |                                       |                                      |
|---------------------------------------|--------------------------------------|
| 2 $\frac{1}{2} \times 2 \times 18$ "  | 1 $\frac{3}{32} \times 2 \times 4$ " |
| 1 $\frac{1}{16} \times 2 \times 18$ " | 1 $\frac{1}{4} \times 2 \times 2$ "  |

#### Strips

- |   |   |
|---|---|
| 1 $\frac{1}{16}$ sq.x8"                         | 1 $\frac{1}{8} \times \frac{3}{16} \times 18$ " |
| 1 $\frac{1}{16} \times \frac{1}{8} \times 18$ " | 1 $\frac{1}{8}$ sq.x10"                         |
| 2 $\frac{3}{32}$ sq.x18"                        |   |

#### Miscellaneous

- 1 oz. cement
- 1 oz. clear dope
- $\frac{1}{2}$  oz. thinner
- 1 dram aluminum powder
- 1 sheet aluminum tissue
- $\frac{1}{2}$  sheet red tissue
- $\frac{1}{2}$  sheet yellow tissue
- 4 U. S. insignia ( $1\frac{3}{4}$ "
- 2 strips bamboo
- 2 ft. #12 music wire
- 2 drams red lacquer
- $2 \times \frac{1}{16}$ " aluminum tube
- $3 \times 4$ " sheet celluloid
- 6  $\frac{1}{8}$ " washers

**NEXT MONTH**

**A PICTORIAL SCOOP!**

**WATCH FOR IT**