

2742

LI'L SNIP 1/2A Combat

This 1/2A combat ship was designed for Western Associated Modelers (W.A.M.) competition, in which it has held a record of 70 points since August of 1969. Construction is fast and easy. By RICH LOPEZ.

● The Li'l Snip was designed for Western Associated Modelers (W.A.M.) 1/2A Combat. The aircraft was developed with several things in mind; durability, good flying characteristics, ease of building, and limited expense. Combat has always had the reputation of being an expensive event. The Li'l Snip minimizes the expense, maximizing the flying time and pleasure.

We were prompted to design the Li'l Snip because of the fact that there are no serious 1/2A combat aircraft on the market . . . that is, aircraft designed around the powerful Cox Tee Dee .049 engine. The 1/2A combat aircraft on the market are designed for use with Baby Bee or Golden Bee engines. In W.A.M. competition, these do not stand any sort of chance. Cox Tee Dee .049's or Kirn-Kraft Tee Dee .049's are the hot tip in W.A.M.

The Li'l Snip's stability makes it a suitable aircraft for both the beginner and expert flyer. Half-A combat is the way for U-Control flyers to break into combat flying. Snip's are inexpensive to build and fly, as fuel consumption for the .049's is minimal. Cox Tee Dee .049's can be obtained from any hobby shop and custom Kirn-Kraft .049's are also available through special order.

Upon looking at a Li'l Snip, one can see that there is nothing difficult about the construction. It features a 12-rib diamond airfoil wing, a 1/4 inch square leading edge of either balsa or spruce, 1/4 x 1/8 top and bottom spars, and a planked trailing edge using 2 different sizes of wood (1/16 x 1 and 3/32 x 1).

The wings build flat on a board. We made a jig on a 1 by 4 foot fiberboard for their construction. It is simple but very effective.

Li'l Snip uses a pacifier tank fuel injection system. It works quite well and the Tee Dee's really put out the power under this system. They love to run on good quality 20 to 40% nitro fuels. We use 5 1/2 x 3 Tornado nylon props, but you should experiment to find what suits you best. These planes are flown on .012 x 35' lines using a small E-Z just handle. They carry one and one-half ounces of fuel for just under 6 min.

of flying time.

The Li'l Snip is a winner and record holder. The record was set in Concord, California on August 10, 1969 and still stands at 70 points. This is the official W.A.M. 1/2A combat record.

CONSTRUCTION

Study the plans and instructions carefully, and make sure you know how everything fits together. Then gather all the tools and materials necessary to assemble the aircraft. You will need glue, pins, longnose pliers, wire cutters, a drill and bits, sandpaper, and a good modeling knife.

1. The first step is to assemble the engine mounts. Lay the 1/16 inch plywood engine mount doubler flat on a table or workbench. Glue the engine mount filler block and the hardwood engine bearers to the plywood. Use Titebond or white glue and set aside to dry overnight. If you are in a hurry, use 5-minute epoxy. After the mounts are dry, drill a 1/4 inch hole against the front of the filler block. Carve this hole square so the leading edge may pass through. Using the engine as a template, mark the location of the mounting holes and drill them out. Sand the entire unit smooth and to shape. Optional . . . a diamond shaped hole in the plywood doubler for extra lightness.

2. Mark the rib locations on the lower spar and the 3/32 inch lower half of the trailing edge. (A flair pen works very well). Pin the 3/32 lower half of the trailing edge to a building board or a flat work bench. Glue and pin all the ribs to the lower spar and lower half of the trailing edge. Allow the glue to set up, then glue the 1/16 upper trailing edge half in place and allow to completely dry.

3. Next, assemble the bellcrank unit. Glue 2 pieces of 1/4 x 1/8 to the underside of the bellcrank platform. Drill a hole in the platform and bolt the bellcrank to it. Using longnose pliers, attach the 1/32 inch leadout wires to the bellcrank. Drill out the bellcrank so the 1/16 inch pushrod wire will pass through, and fit it in place.

4. Remove the wing from the building board. Pass the 1/4 inch leading edge through the engine mounts, then

glue and pin the assembly to the ribs of the wing. Glue a small filler block to engine mounts in front of the leading edge. Glue the pacifier pod formers in place. Glue the planking to the bottom center section of the wing. Do not plank the pacifier pod yet. Glue the wingtips in place. Then carefully slip the bellcrank unit, complete with pushrod and leadout wires, in place. Use lots of glue here. Glue the leadout eyelets to the wingtip. Glue the 1/3 oz. wingtip weight to the outboard wing. Allow everything to dry thoroughly.

5. While the wing is drying, assemble the elevator-stabilizer unit. Use cloth hinge and a liquid cement to make this assembly.

6. After everything on the wing is dry, glue the upper spar in place. Then add the wingtip supports. Glue a web between the spars behind the pacifier pod compartment. Notch the top and bottom spars alongside the pacifier pods and glue the planking extensions in place. Then glue the top center section planking in place. At this time, plank over the pacifier pod formers, top and bottom. Glue the pacifier pod supports over the planking extensions and up against the pod formers. Glue the half-fairing nacelle in place alongside the engine mounts. Bend loops in the leadout line connectors.

7. After everything is dry, sand the entire model smooth and cover as desired. Original Li'l Snips used heavy silkspan or silray-silron and buytrate dope. If you wish to use mylar covering, we would suggest making all the ribs center section size and cap-stripping them with 1/16 inch balsa. Cover the pacifier pod with silk for extra strength.

After the model is covered, glue the booms and elevator-stabilizer in place. Then cut a hole in the pod for the pacifier tank.

8. Use a small Goldberg control horn on the elevator. Mount the Tee Dee engine with a 3-48 x 3/4 aircraft bolt set. Make your pacifier tanks using 1/2A leadout eyelets, small Veco tubing, Binkie Pacifiers, and copper wire. Use a small Hi Johnson fuel filter. Your Li'l Snip is ready to fly. Have fun! ●

#2792