CORSAIR "F4 U/C"

Great flying profile stunter for .40 engines. More and more scale is appearing in stunt circles. Profile is the easy way to get there.

This profile stunter should be called the DuVall Corsair. Why? If Dennis DuVall hadn't been so persistant with me it would never have been built.

The C/L model clubs here in Indianapolis are much like others around the country . . . they lean strongly toward profile models. These ships cost little to build, take a heck of a beating, and are a ball to fly, while transposing a raw beginner into a pilot.

In some areas of club activity, the competition gets tough even without the members knowing it. Some thrive on which plane is faster, others on whose plane is finished the best, while still others feel like a king if their ship will out-perform the competition in stunt pattern. The latter is the category that Dennis DuVall falls into. Dennis has about 4 months of flying the entire pattern under his belt and decided competition stunt was his bag. Well, there are many good stunt model kits and plans on the market now, so that was no problem; but he wanted something out of the ordinary for profile stunt. On one of his frequent visits to my balsa butchery palace we were discussing the many avenues of design and the varied aircraft that would fit the bill. I had to open my mouth and tell him the Corsair has always been a favorite of mine and that I had a plan I had drawn five years ago and never built.

That did it. Nothing would stop him until I drew a profile of the ship; same size as the full scale ship, but with a profile body. His wife, "Buns," was a little perturbed 'cause we worked into the wee hours. The kids were fussy and she had to work the next day, but undaunted by his wife's threats of his having to sleep in the car, he insisted I complete this project. When I would say, "I'll finish this in the morning," Dennis would give me one of his hurt puppy looks, and we'd continue putting a line here and there, explaining as we went.

After Dennis had the Corsair finished and ready to fly, I told him I should have the honor of its first flight. Much to my surprise he said OK. The ship

grooved well and turned quickly but needed a few trim changes. After the changes were made the ship flew a good stunt pattern . . . but something was still lacking . . . The right prop . . . We finally settled on a Top Flite 11 x 6 Power Prop. This seems to have settled the McCoy 40 down to a steady run and now the Corsair turns in a very good constant pattern. And believe me the ship is a real eye catcher at the flying fields whenever and wherever it appears. So, if you're one of those guys who wants that little something extra in a profile, read on.

CONSTRUCTION

To begin this profile jewel, go to your nearest hobby dealer and buy the lightest and straightest wood he has. Now that you're back home in your little kingdom, cut the fuselage from medium 1/2-inch balsa. Cut the upper part of the fuselage (cockpit) from the scrap that is left, but don't glue it into place yet as you use the top for alignment of the wing. Install motor mounts.

Next, cut the body doublers from 1/16-inch plywood, along with the openings for the leading edge and bellcrank. Glue doublers into place on each side of the fuselage.

Now cut the wing spars from 1/4-inch balsa, making the outboard 1-inch shorter. Lay out the 1/16-inch ply doublers and glue them on the wing spar, making one complete spar. Cut the two wing angle formers from 1/4-inch balsa and the two tip formers from 1/8-inch balsa. Turn the fuselage upside-down on a flat surface and slide the spar into place. Slide the angle formers into position along with the tip formers. Slip the 1/4 x 1/2-inch leading and trailing edges into position and pin. Align all this stuff and glue everything down . . . Not to the bench, dummy!

Now sandwich between the templates enough pieces of 3/32-inch sheet balsa for the ribs. Only do enough for the ribs from the angle to the tip. The rest of the ribs in the center section are all the same size. The ribs that mount next to the fuselage are cut from 1/4 inch balsa.

At this time, cut out the area for the bellcrank and floor, and install them. The fun comes when you install the pushrods to the two flap horns that are cut so they will fit. The pushrod on the right goes directly to the flap horn that is anchored in the fuselage by the spring that comes with it. The left pushrod has to bend in such a fashion that it can be wrapped with copper wire and soldered to the right pushrod and still connect with the left and flaphorn. Confused? Well, think about it a minute and you will see it's not really that bad.

Before final hook up of the pushrods to the flap horns, install the two 1/4-inch ribs on each side of the fuselage. Install the rest of the ribs, leaving the two next-to-the-fuse ribs out, in order to install the leadouts. Install the 1/8-inch plywood landing gear floors, splitting one rib to do so. Now bend the 1/8-inch landing gears and install them, using J-bolts. Trim the tip formers and angle formers to the outline of the ribs adjoining them, and plank the entire wing with 1/16-inch light contest balsa. While this is drying, cut the stab, elevators and rudder from 1/4-inch balsa. Plane and sand them to shape, join the rudder halves, and hinge the elevators, installing the control horn at this time. Cut the false ailerons from 1/4 inch balsa stock and sand them to shape.

Shape the wing tips and glue them onto the wings. Hinge and install the flaps. Align and install the false ailerons, aligning them with the flaps. Install the stab and elevators now, along with the pushrod. Glue the top section of the body into place, also the rudder. Now cut the false cowling pieces from 1/4 inch balsa and glue them into place. After this mess has dried, final shape all parts of the ship with coarse and fine grained sandpaper.

Because of the shorter outboard wing, the model will probably not balance around the centerline. Add weight inside the hollow wing tip until ship balances then glue firmly in place.

While on the subject of flight trimming, be sure to install one washer under the front end of each motor mount flange for right thrust.

Cover the whole model with SGM silkspan. The entire model was painted in Navy blue, trimmed in white and black. There are many variations of colors the ship could be painted, so check your color photo files and be our guest.

Good luck and happy flying.

By JACK SHEEKS