

Hatch and Turtledeck

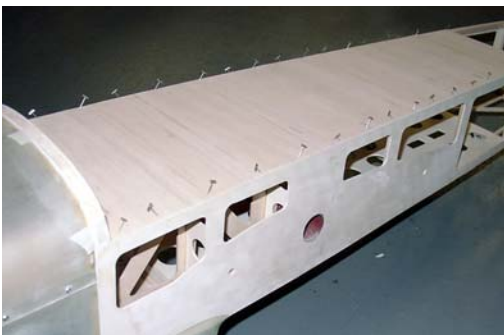
Before we separate the control surfaces from the wings and stabs, we'll finish the foam hatch and turtledeck. If you haven't already sheeted the hatch and turtledeck, now is the time to get that done.

Our cores took a bit of sanding to get the shape just right to fit the front of the fuselage before we did the sheeting. Fit them carefully here so there will be less work later on. The foam for the hatch is cored out for weight savings.

Put a front end cap of 1/8-inch balsa on the turtledeck. We use only 1/16-inch balsa for the base of the hatch. To make the base, lay four-inch sheeting sections across the fuselage to former station F6 (approximately 34-1/4 inches) and mark the outline with a pencil. Remove them from the fuselage and cut and glue them together.

We then pinned the sheet to the fuselage and sanded the sides flush to obtain a perfect fit. Remove the pins and fit the hatch.

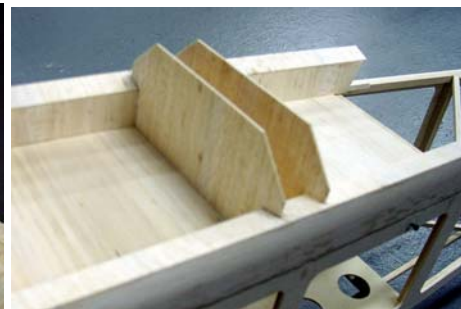
Remember to use a piece of 1/8-inch light ply at the front edge to get the proper spacing for the front hatch end cap. Use some wax paper under the hatch base and glue the hatch onto the base using the fuselage as a jig. To keep everything aligned we used short sections of 1/4-inch balsa glued to the fuselage sides and then held it all together with masking tape while the epoxy dried.



Using the plan as a guide, cut the opening for the cockpit. Erik used a large level as a cutting guide and angled it out slightly at the bottom to give the cockpit sides a tapered look.



Sheet the inside of the cockpit and build the center instrument panel with 1/16-inch balsa. The template on the plan for the instrument panel is a guideline. You'll need to fit it to your specific cockpit. Use two identical pieces for the front and back placed about an inch apart and sheet over the top. No strength is required for this piece.



For the hatch retaining bolts, we inserted four small tabs that fit just inside the fuselage along the top longerons. In the photos you can see that Erik added small doublers to the longerons but they're not necessary. See the plans for locations.

Tape the hatch in place ensuring the proper location (use a dummy sheet of 1/8-lite ply at the front for spacing), and with an ink pad, use one of the tabs for a stamp marking the location for each of the four tabs.

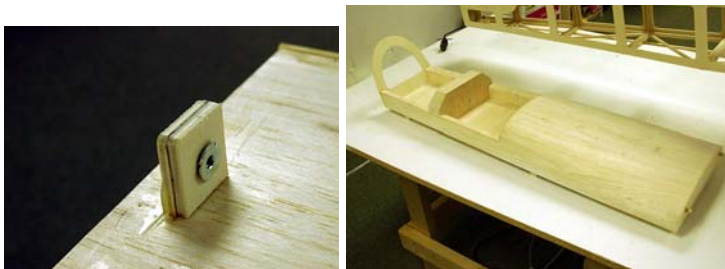


Cut the balsa away for the tab locations and slice the foam but don't remove any foam. Sharpen one end of the tab so that it can fit snugly into the slit that you made in the

foam. With the hatch taped in place, epoxy the tabs into the hatch. Be sure to protect the fuselage from excess glue with wax paper and clamp each tab while the epoxy dries to be sure of a snug fit.



When the tabs are in and the epoxy has set, double the tab to the inside with some scrap 1/8" light ply. Replace the hatch onto the fuselage and drill through both the fuselage and the hatch hold down tabs. Install a 440-blind nut in each tab.



To cut the front end cap and the rear canopy former trace the outline from the front of the hatch and the front of the turtledeck onto 1/8-inch light ply. We opened up our canopy former for weight savings leaving 1-1/8-inches spacing around the top and 1-3/4-inches at the bottom.

You can also put some conservative lightening holes in the front end-cap but we left ours solid. When you glue use the turtledeck as a guide to get the canopy former angle just right. From the front side of F1 drill the 5/16-inch dowel holes into the hatch. See the plan's page 3, former F1A for location. Again align the dowels while gluing with the hatch in place.



With the hatch in place and protected by a separator of wax paper, glue the sheeted turtledeck to the fuselage. Tape the turtledeck down and use clamps or balsa tabs to maintain alignment while the glue dries. After the glue has set, clean up the seam by block sanding it smooth with a large "T" bar.

We used the inner core scrap from the turtledeck to make a rudder fillet. Cut and sand it to follow the contour of the turtledeck. Then sheet with some leftover 1/16-inch balsa. For this piece we used spray-on contact cement. Set it aside for later.

