

1 OUTER WING PANELS - Basic Frame-Up

☐☐ Make the two cutouts for the wing joiners in the W-2 rib and one W-4 rib. Use the W-2 rib as a guide for the W-4.



☐☐ Pin the 3/8" x 3/4" balsa main spar over the plan. Using several of the ribs as spacers, position the 1/4" sq. spar, rear spar, and trailing edge spar and pin them all in place.

☐☐ Glue all nine of the W-4 ribs in place. Be sure to position the balsa rib with the cutouts at the inboard end, so it will be next to the W-2 rib. Use a 90° triangle to make sure the ribs are square to the building board.

☐☐ Add the W-2 rib, using 5/32" plywood shear web E as a dihedral gauge. This is a critical step, because it will ultimately determine the quality of the fit between the center wing panel and the outer panel. The lite-ply W-2 rib must be straight from front to rear, and tilted 2°.

☐☐ Add the four top spars, again checking the end rib for proper dihedral before gluing. Notice the top rear spar is beveled along one edge - be sure to align it properly in the ribs.

☐☐ Glue a 3/16" x 15/16" x 36" balsa sub leading edge in place on the front of the ribs.

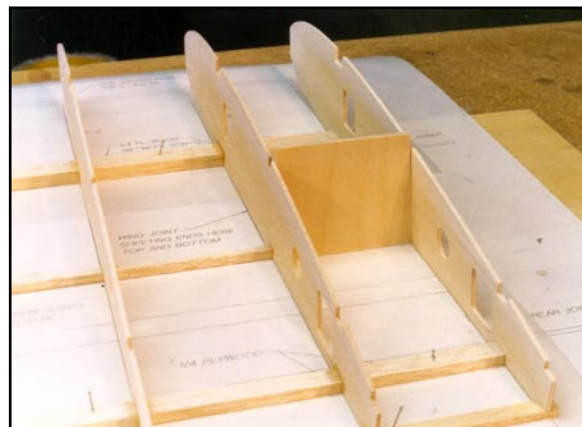
☐☐ Slide your servo lead tube into place. You will find patterns for the tubes on the plans – simply cut them out and roll them up. Some of you may prefer to substitute commercially available cardboard tubes.

☐☐ Add shear webs to the FRONT ONLY of the main spars and rear spars in all of the rib bays except for the two on the inboard end. Make it easy on yourself and trim the 3/32" x 4" balsa sheets to a width of 3-29/32". Now you can slice webs off this sheet that should fit perfectly between the ribs.

☐☐ When everything is dry, remove the wing panel from the table and go over all the joints with medium CA glue. That means every joint on both sides, if possible. I like to use just enough glue so you can see a small fillet formed between the parts. Use accelerator sparingly; it weakens the cured strength of CA.

☐☐ Trim and sand the spar stubs flush with the ribs at each end of the wing panel. I made up a long, wide sanding block (sanding surface: 6" x 18") with 80-grit paper to handle this job. This block came in handy several times during the course of this project, so take the time now to make a big sanding block or two.

☐☐ Repeat this section for the opposite outer wing panel, then set them aside.



Left Outer Wing Panel, Inboard End - Plywood W-2 rib is set at the proper dihedral angle using the 5/32" ply shear web E as a guide. The angle is 2°; move the web all along the rib to be sure it is straight along its entire length, front to back.



Left Outer Wing Panel with all spars, sub LE, and servo lead tube in place. Shear webs have yet to be added.