

2 CENTER WING PANEL - Basic Frame-Up

❑ The center wing panel is about 57" span, so all of the balsa spars will have to be spliced. My general rule of thumb on splices is to make them diagonal (no butt joints!) with a length that is at least four times their width. For example, the rear spar is 1/2"-wide, so the length of the splice should be at least 2". Start construction by making all your balsa spar splices in the rear spars (remember, the top one is beveled), 1/4" sq. spars, trailing edge spars, sub leading edge, and leading edge cap. As you build, make an effort to stagger the splices throughout the structure so they aren't all lined up with each other

❑ Finish the wing-joiner cutouts in two lite-ply W-2 ribs.

❑ The hardwood main wing spar is too hard to pin; I used screws on each side of the spar at several places. Fasten the main spar over the plan, then pin the bottom balsa spars in place using several ribs for proper placement.

❑ Glue the five W-1 ribs and four W-3 ribs in place.

❑ Add the flap servo lead tube on each side.

❑ Glue the remaining W-4s and W-2s in place. The W-2 ribs at each end of the center wing panel must be 90° to the table. Use the 1/16" ply web F as a temporary tool to make sure the W-2 ribs are straight from front to rear.

❑ Glue the four top spars in place. Watch those W-2s!

❑ Add the sub LE to the front of the ribs.

❑ Add the aileron servo lead tubes on each side.

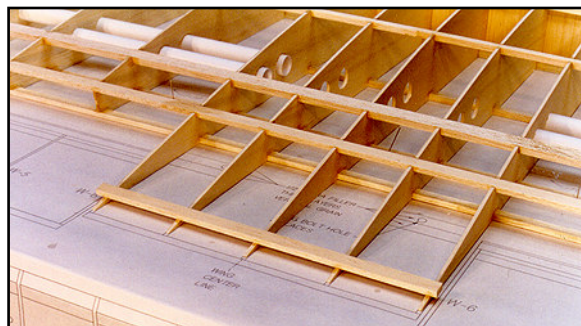
❑ Glue shear webs to the FRONT ONLY of the main wing spars, except for the outer rib bays on each end. You will need to remove some of the screws holding the bottom main spar to the table.

❑ Add a temporary sheet of 3/32" balsa to the loose ends of the W-1 ribs to hold them in alignment.

❑ Remove the panel, re-glue all the joints with medium CA, sand off the spar stubs, and set it aside. **-SFK**



Center Wing Panel - Notice the screws holding the bottom main spar to the table. The front screw needs to be removed before the shear web can be added. Note the grain of every shear web must be vertical!



W-1 Wing Ribs - I used a scrap stick to hold the ends of the W-1 ribs, but found out later it would have been smarter to use a sheet of 3/32" balsa, maybe one or two inches wide. Use only a few spots of glue so it can be removed later. Also notice in the photo the position of the aileron and flap servo lead tubes. I moved the aileron tubes forward in the production models to make room for the large flap servos used in the prototype.