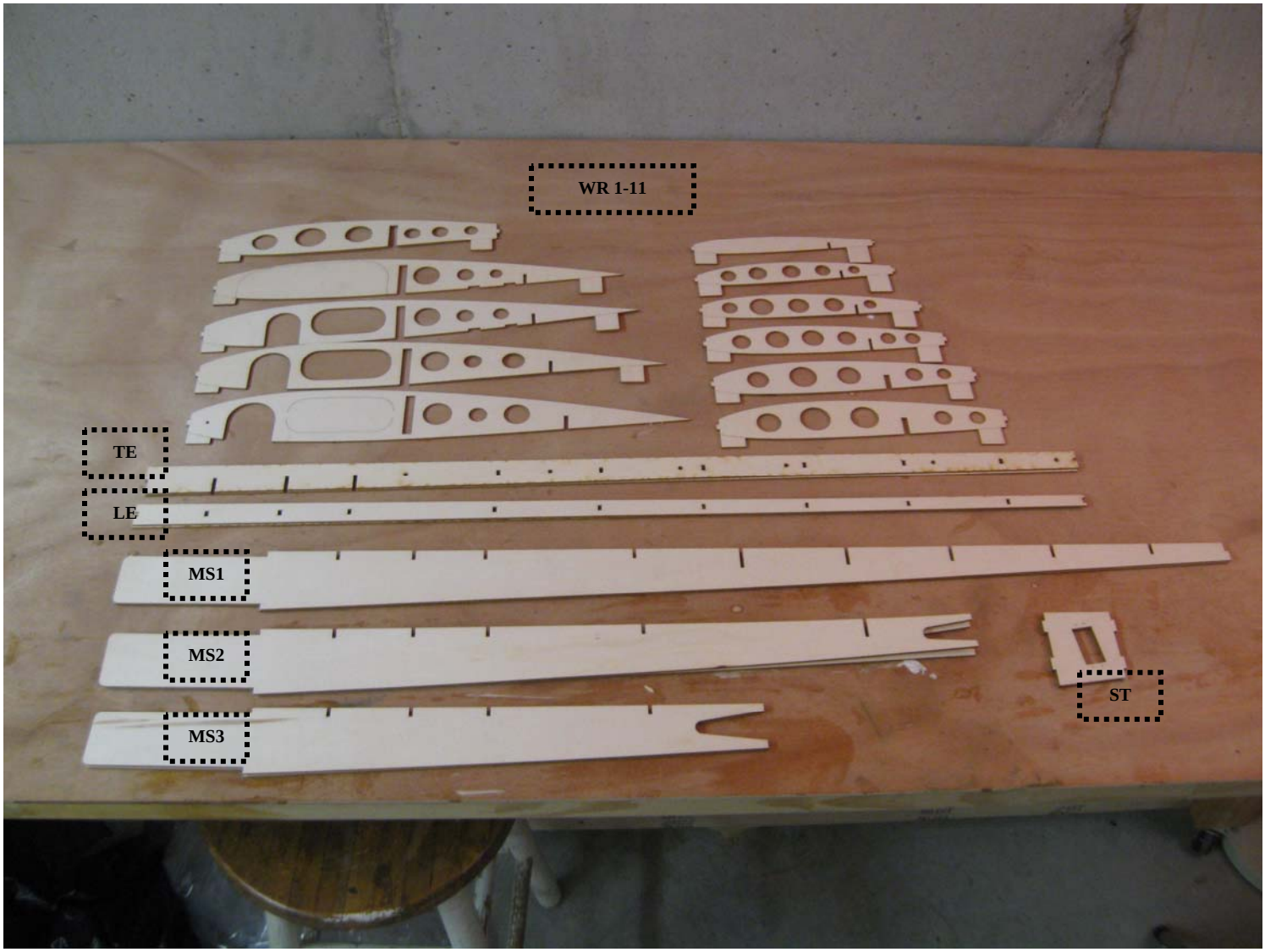
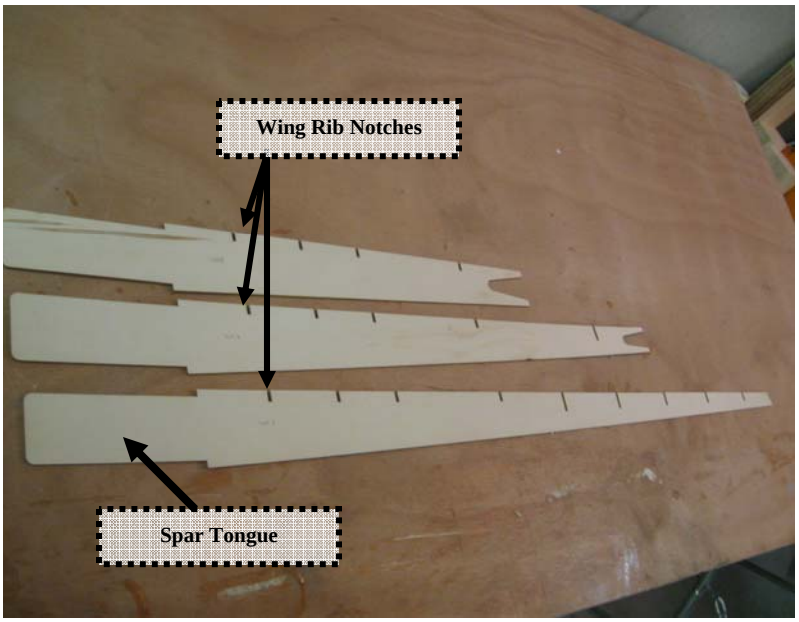
Main Wing Wood Parts



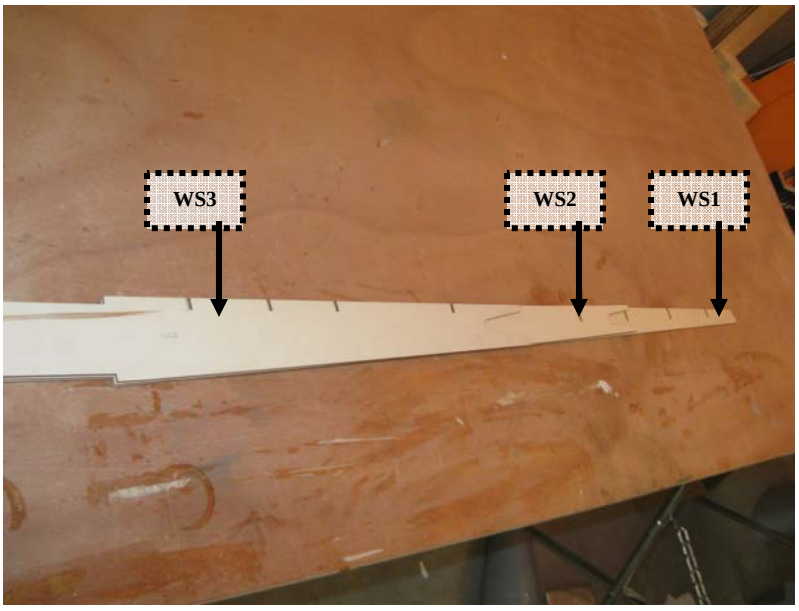
Before you start the build, gather all the required main wing components.

	QTY
o MS1 (Main Spar 1)	2
o MS2 (Main Spar 2)	2
o MS3 (Main Spar 3)	2
o ST (Servo Tray)	2
o LE (Leading Edge)	2
o TE (Trailing Edge)	2
o WR(Wing Rib 1 – 11)	2 (each)

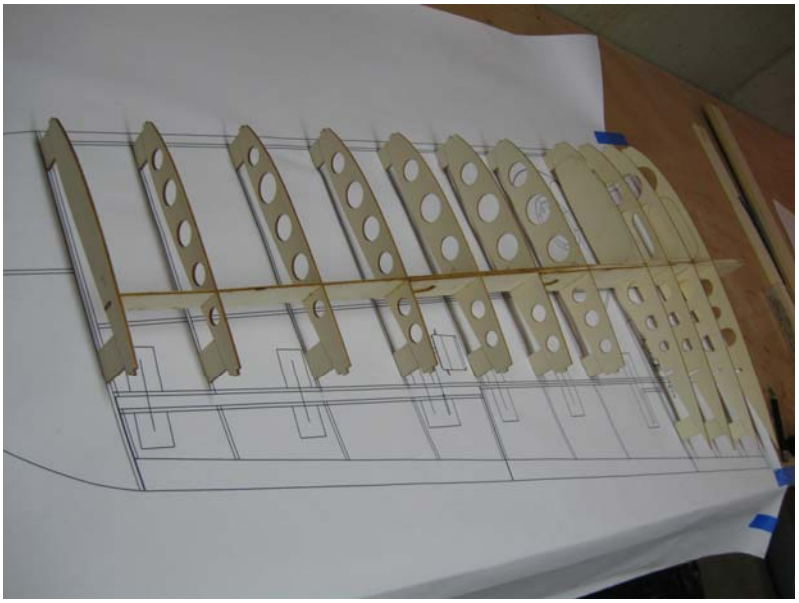


Gather your 3 main components to you wing spar. WS1, WS2, WS3. Glue from the longest wing spar to the shortest with 30 minute epoxy. Start by aligning WS1 with WS2. Once the wing rib notches line up, and the spar tongue is lined correctly, glue together. Repeat by gluing WS3 to WS2.

*****VERY IMPORTAINT*****
Make sure you build the second wing spar as a "mirror" of the first. Check with your plans that they are glued correctly. Layer WS1,WS2, and WS3 the opposite you laid the first set.

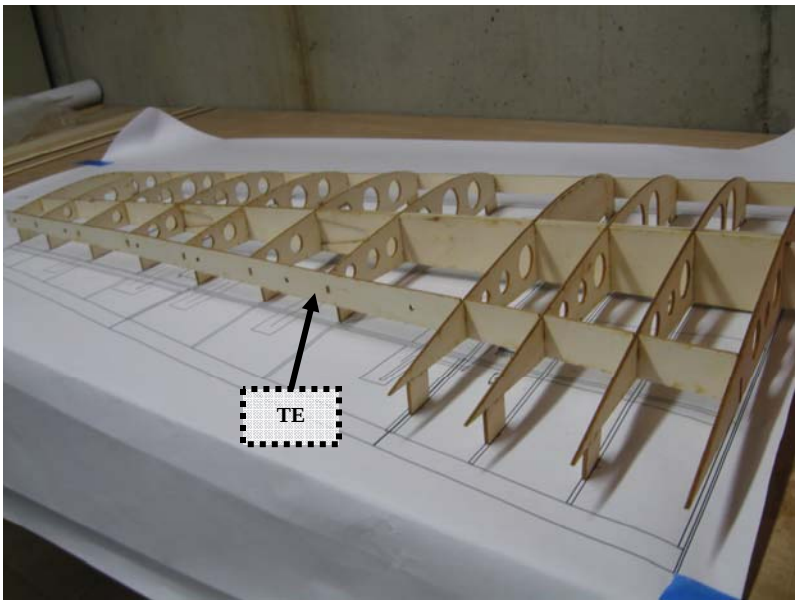


The Spar will look like this once is layered. Once you are happy with the fit glue together with 30 minute epoxy and let fully dry. Make sure you wipe off any access glue.

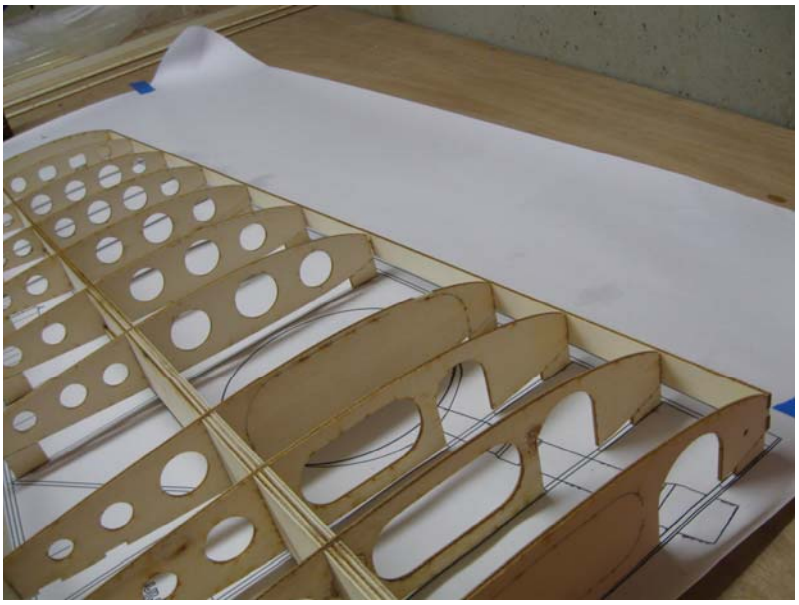


Lay 1 wing plan out and set your ribs according to the plans. Start by notching your wing ribs on the main spar starting with WR1 at the root and going to WR11 at the wing tip. Once they are in place, lay a VERY small glue tack to hold them in place. Then, lay the whole wing on top of the plans as shown. Once you are happy, fix the wing to the plans.

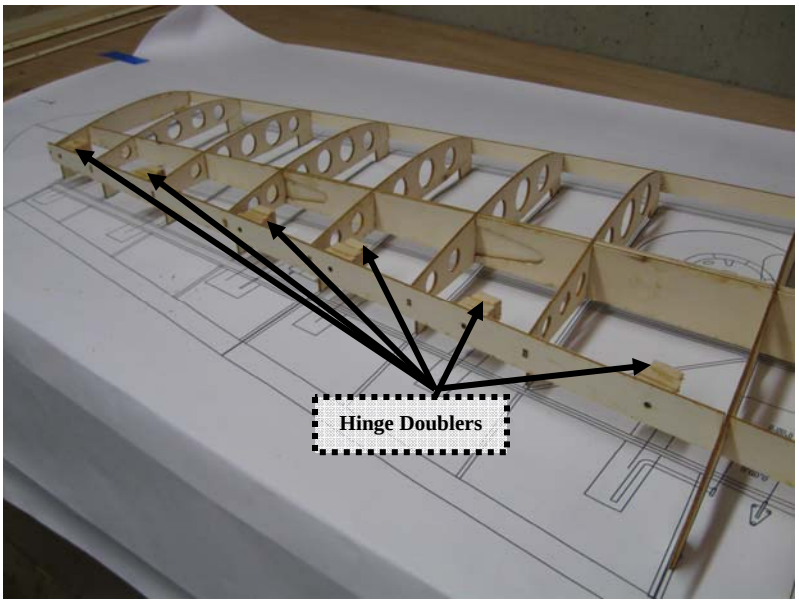
Using CA, glue the wing ribs to the spar.



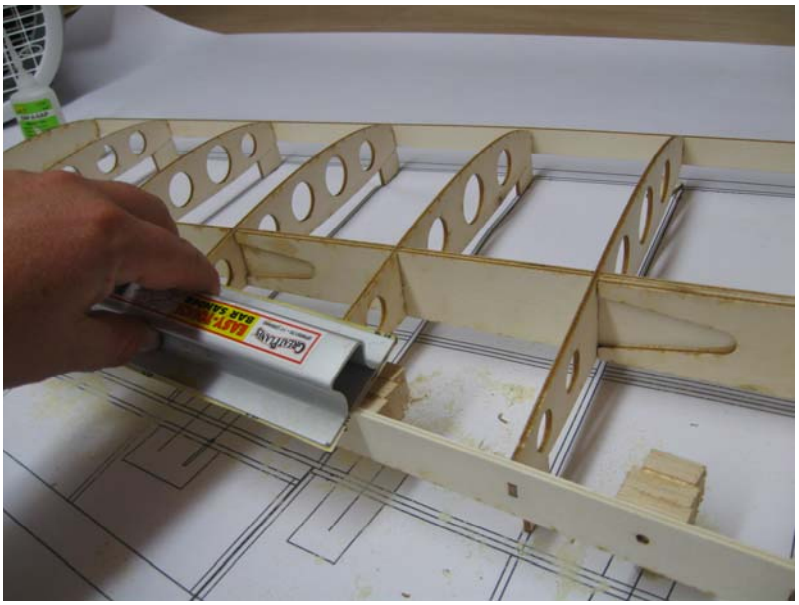
Attach TE to the trailing edge of the wing ribs. You will do this by sliding it under W1-W4 and slipping it in place under W1-W4. Once it is in place, the small holes in the TE will align with W5-W11. Once you are happy with the fit, glue into place.



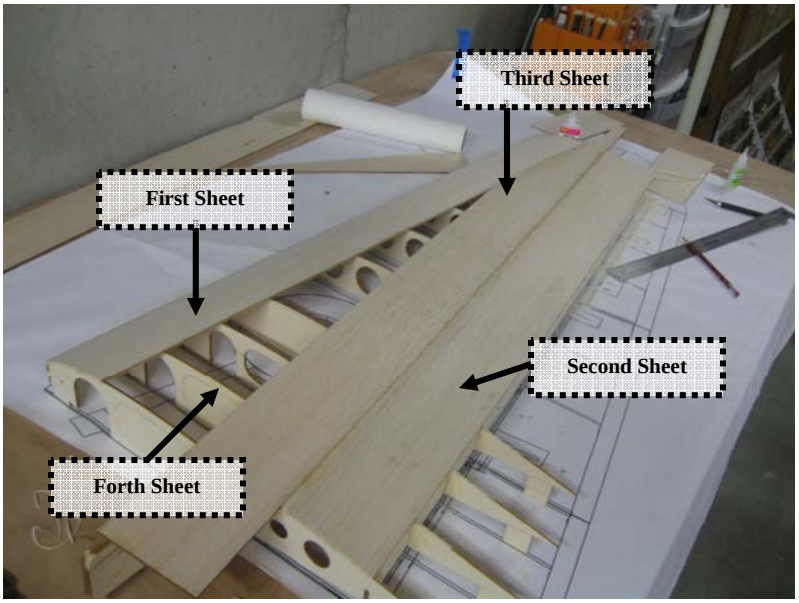
Align LE with the leading edge of W1-W11. The holes on LE will align up with notches on the front of each wing rib. Once you are happy with the fit, glue into place.



You will need to make hinge doublers out of scrap wood. This will allow more "bite" for the hinges once they are in place. There are small holes that are already cut where the hinges will eventually go. Glue your hinge doublers out of scrap wood. Make sure each doubler is at least an inch and a half.



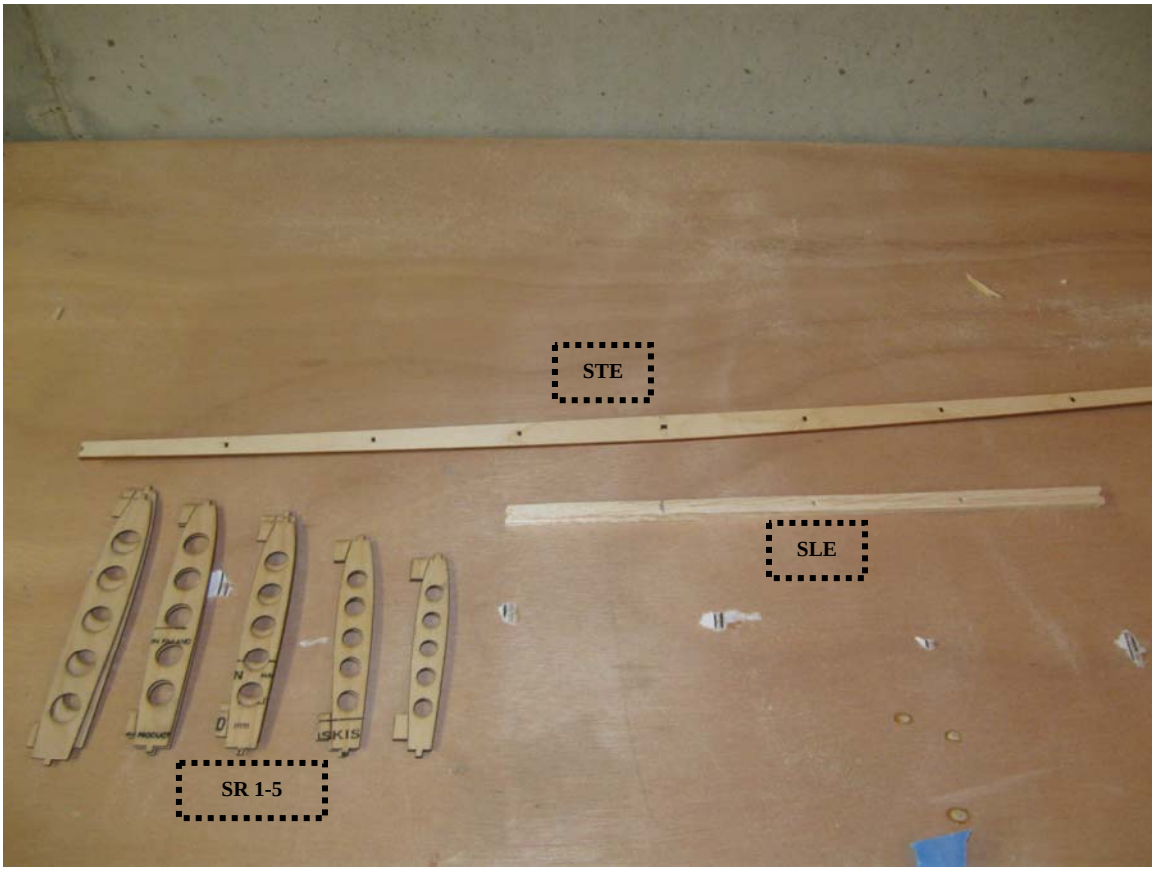
At this point, you will want to sand both TE, LE, and WS to fit the contour of your ribs.



Sheet the wing with your 1/8th wing sheeting. Start by laying one sheet on the leading edge and gluing into place. Next align a second sheet to the trailing edge and glue it into place. Glue your third sheet to the trailing edge sheet. Glue the last one in place as shown in this picture. You will have made the sheets meet at the wingtip to form triangles.

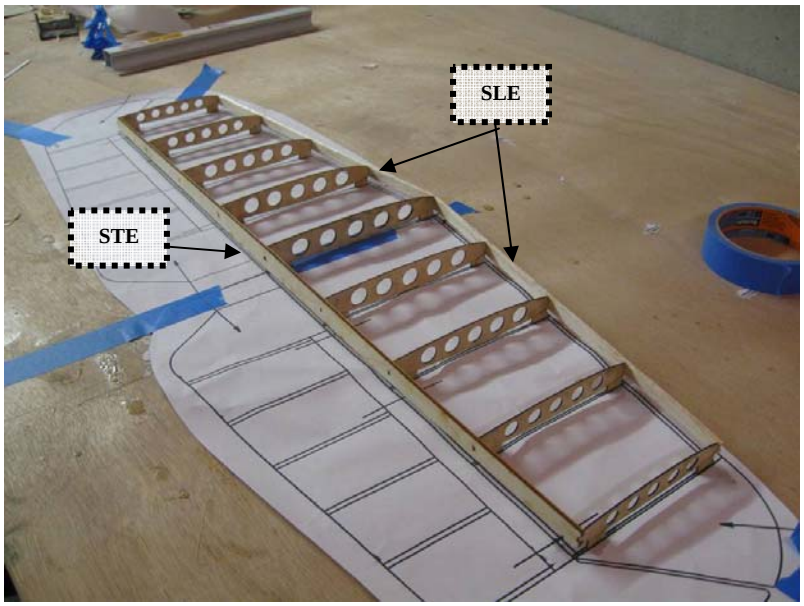
Glue sheeting to the trailing edge of W1-W4. At this point you can now pull the wing from the plans. Follow these steps exactly the same for the other wing.

Stab Parts

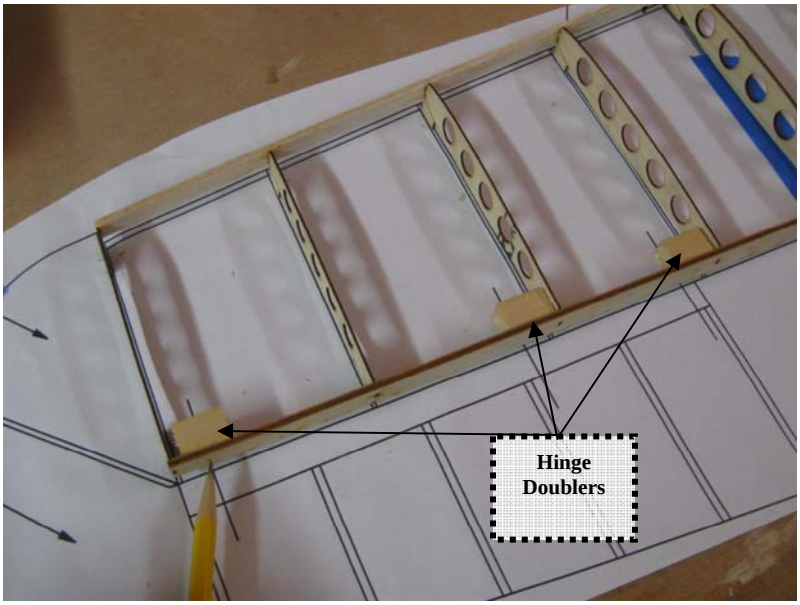


Before you start the build, gather all the required main wing components.

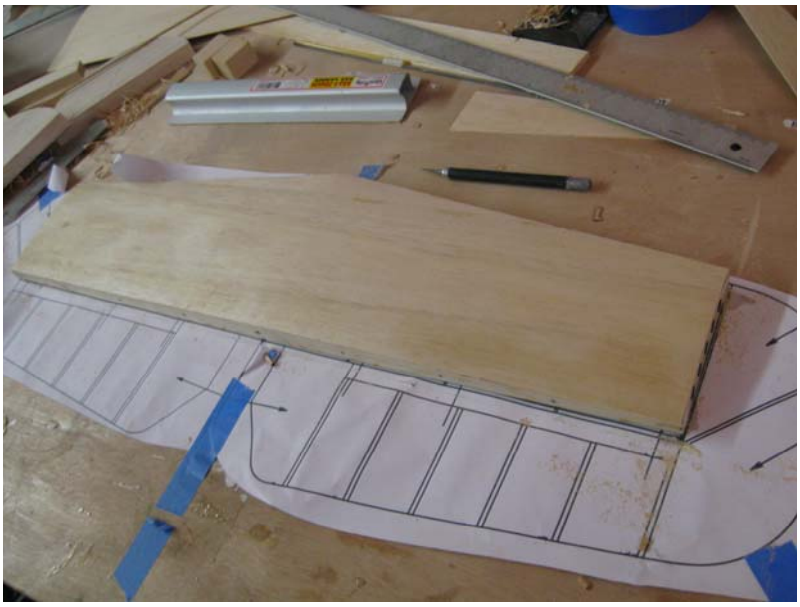
	QTY
o STE (Stab Trailing Edge)	1
o SLE (Stab Leading Edge)	2
o SR 1-5 (Stab Ribs)	2 (each)



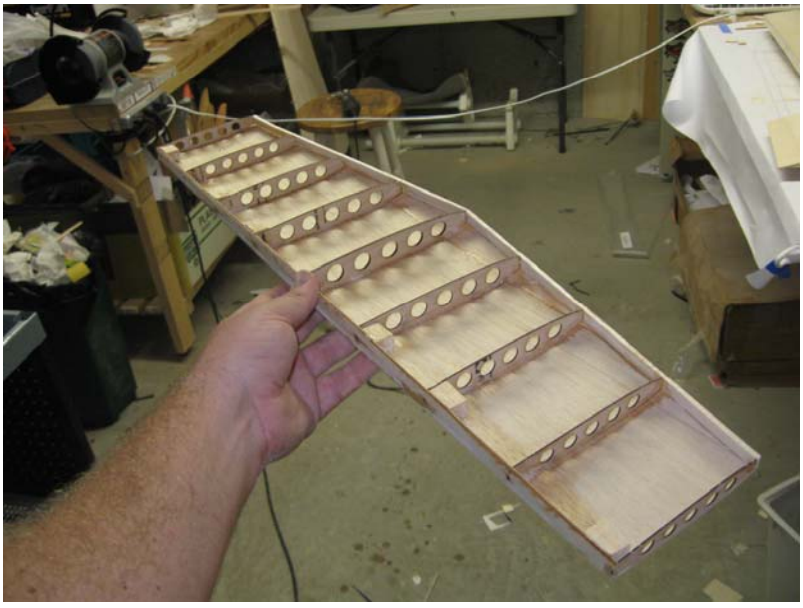
Lay SR1 – SR5 on the plans as shown. Make sure they set 90 degrees from the plans. Glue STE to the trailing ease of each SR. Notice there are small notches for each SR to fit. Glue SLE to the leading edge of SR. Again, notches are cut for ease of building



Use Scrap Wood to glue as “doublers” for your hinges. Lines are dawn on the plans that show hinge lines. Do this to both sides of your stab.



Use the 3/32 sheeting to sheet the top of your stab. Sheet from the trailing edge to the leading edge. Lightly sand flush with the leading edge. You might want to make a lip over the trailing edge out of G-10 or hard balsa.

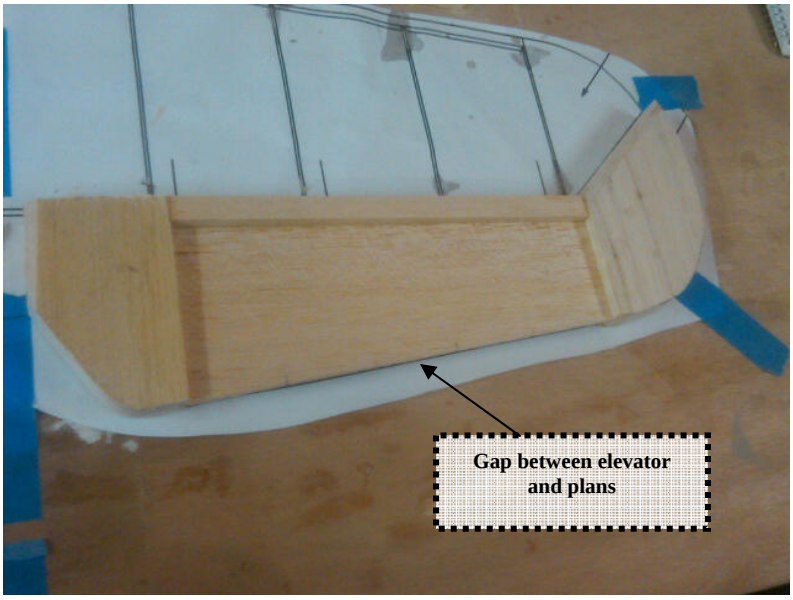


Once you are complete. Pull the stab off of the plans. Use thin CA glue to re-glue all of your joints. Then repeat sheeting on the bottom making careful you do not warp the stab.

NOTE: The stab will feel very flimsy, but once the bottom is sheeted, it is rock hard.

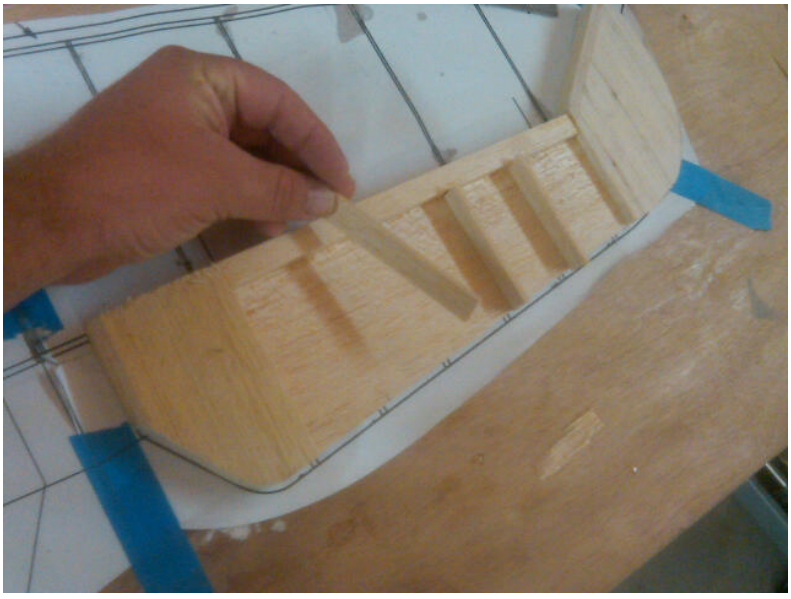
Use the extra balsa stringer that is in your stab bag to glue to the leading edge of your stab.

Sand the leading edge round. At this point you are ready to start building your elevators.



Find both root and tip elevator blocks (You might need to cut or sand to a rough shape).

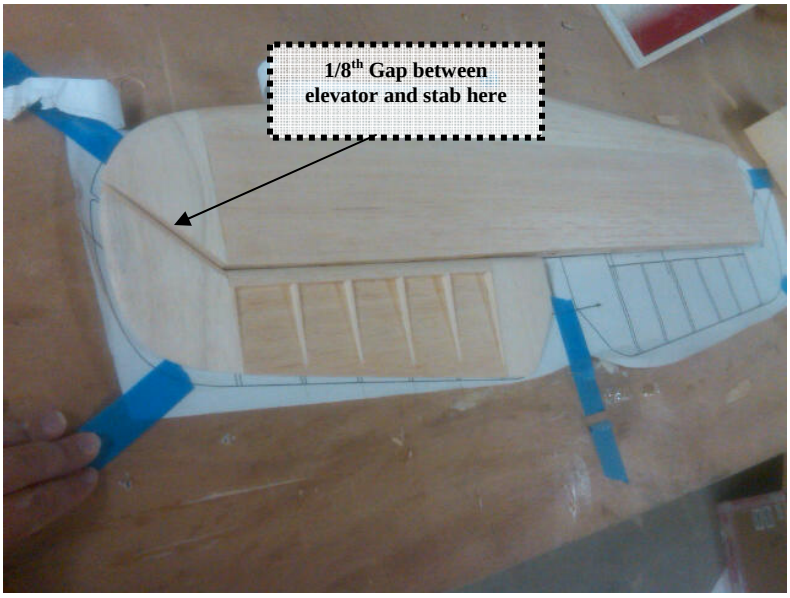
Find your Elevator Leading edge and center section sheeting. Glue the center section sheeting down the middle of the leading edge block and glue your root and tip elevator blocks. If done right, there should be a gap at the trailing edge when you lay the elevator on the plans.



Cut your elevator ribs out of scrap 1/8th sheeting. They can be cut as rectangles at first. Use the plans as your guides. Do this on the top and bottom.

Sand the leading elevator leading edge and your wing ribs as shown. You want it to fit the contour of the elevator.

NOTE: Root and Tip blocks were removed for visualization.



At this point you will glue the Stab Tip to the Stab. Sand to shape and check they fit. As you are sanding make sure the tip of the elevator and stab don't it and there is about a 1/8th inch gab between.

Repeat the same for the other elevator. Use the plans as an outline for correct shape.