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To: [Undisclosed-Recipient:](#)
Date: 6/11/2009 7:50:22 PM
Subject: 113 Sailplane Joining the wing Halves

Comet Sailplane Project

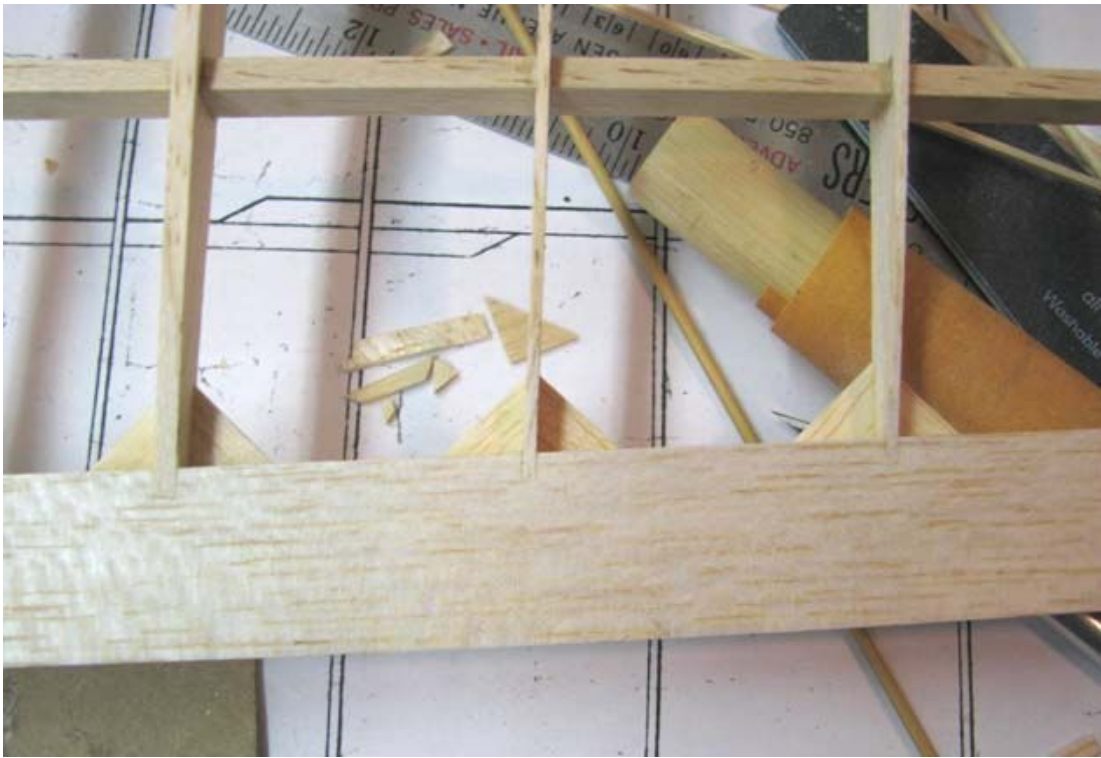
Well on Tuesday I closed Report No. 112 with the rather cavalier comment: *"I will get the wing structure permanently joined tomorrow for sure"*. It is now Thursday evening and I finally got the wing structure permanently joined this afternoon. Nothing ever goes as fast or the way you have it envisioned. I spent Wednesday and most of today finishing up all of the detailed work on the two wing halves before they were joined. For example, the ribs did not quite come up to the top of the slots cut in the trailing edge as shown below.



So I went in and glued 1/16" square balsa fairing strips extending from the slots forward up onto the ribs themselves as shown below.



These were sanded down flush with the trailing edge as shown below.



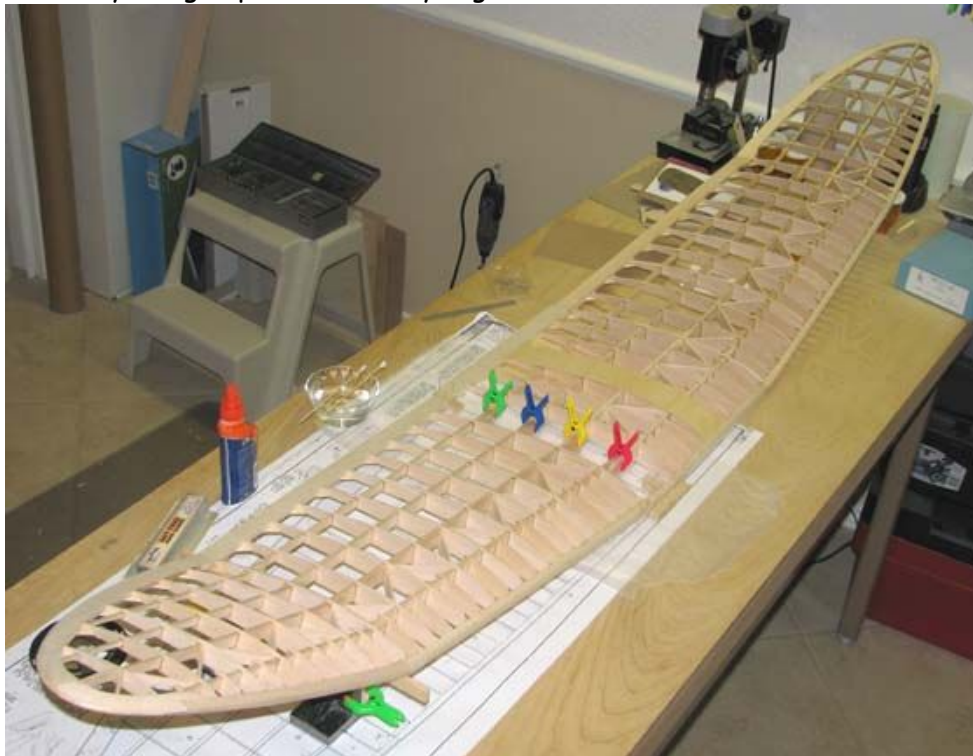
This is a side view close up showing the faired in strips.



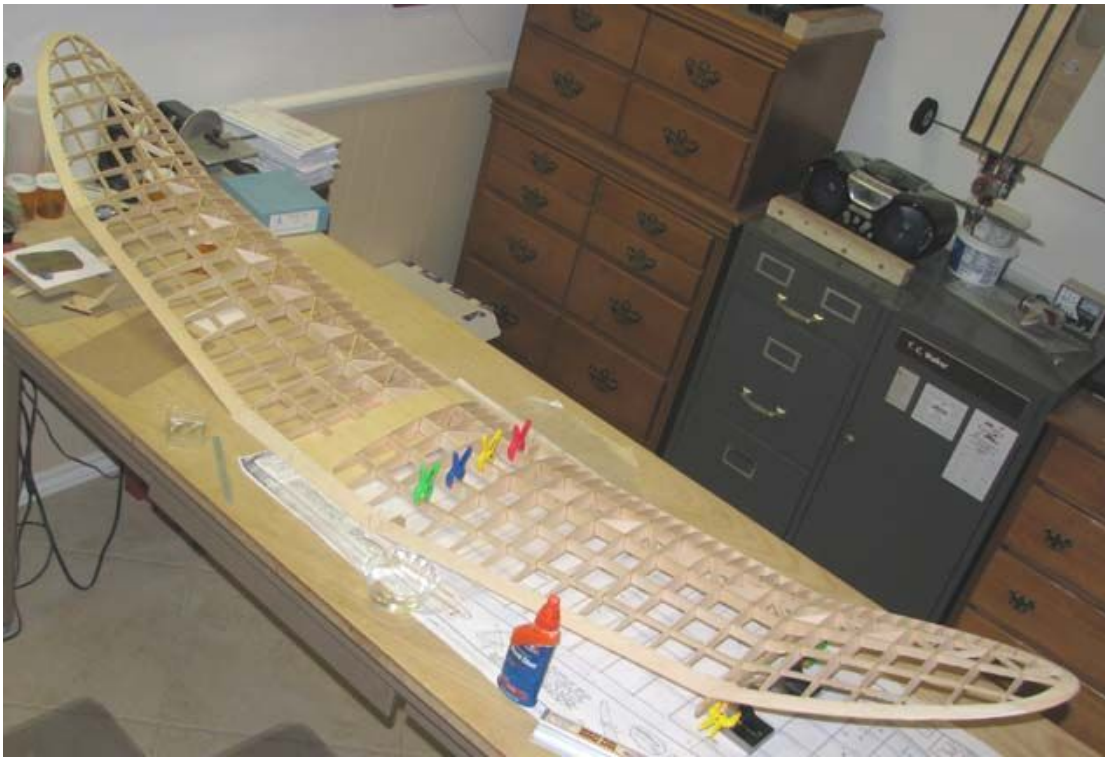
Then there was the matter of the dihedral joint. The two sub ribs had to installed on either side of the 1/8" dihedral rib. The dihedral rib was glued in place and all of the gussets and diagonals were added to finish out the joint as shown below.



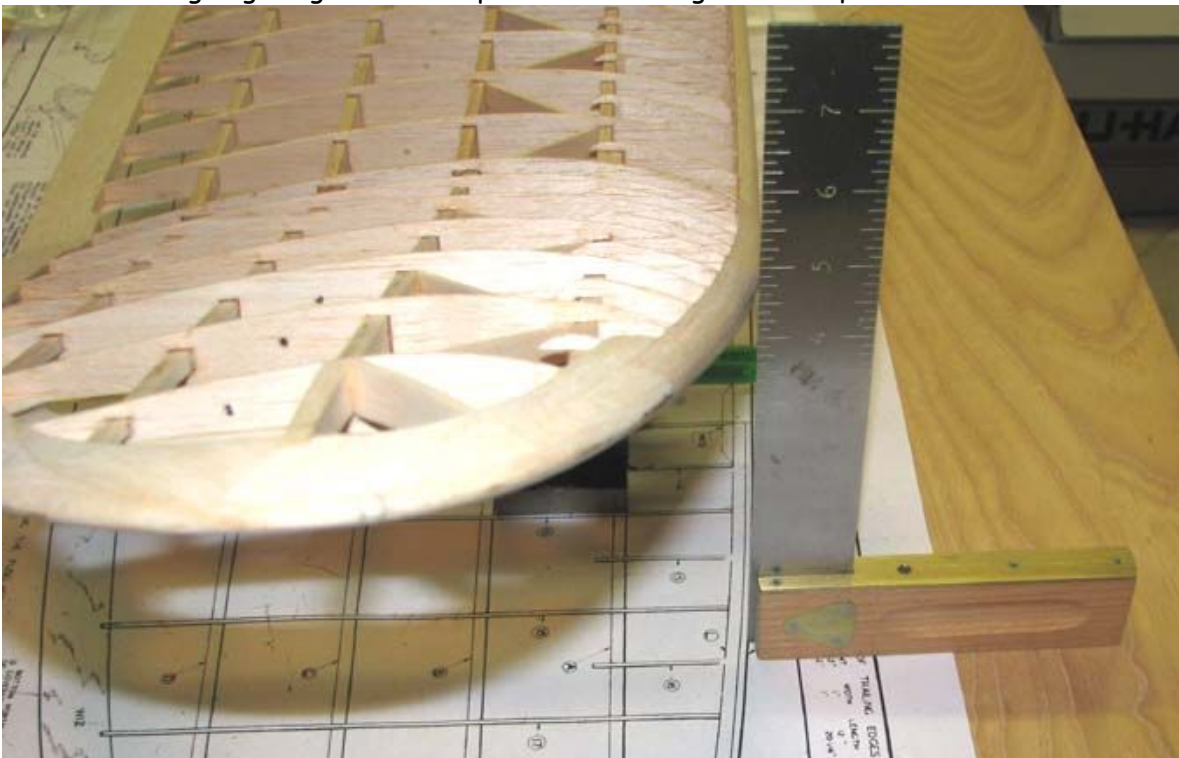
Finally around 4:30 p.m. this afternoon I pinned down, jugged up, and glued the leading and trailing edges of the right half of the wing to the left half of the center section. Aliphatic glue was forced into the end grains of the leading and trailing edge pieces to insure a good structural bond. Then glue was added to the ends and the right half of the wing was pinned in place as shown below from the front of the wing. The four spars were clamped just to hold every thing in place, but not yet glued.



This is another view of the jig set up from the rear of the wing.



This shows a leading edge alignment check with the plan using a carpenter's square. Notice that the vertical projection of the leading edge aligns with the plan down the edge of the square.



Tomorrow, glue will be worked down in between the second spar overlap and clamped to let dry. Then the dihedral joint will be strong enough to take up and the other three spars will be glued and clamped.....Tandy