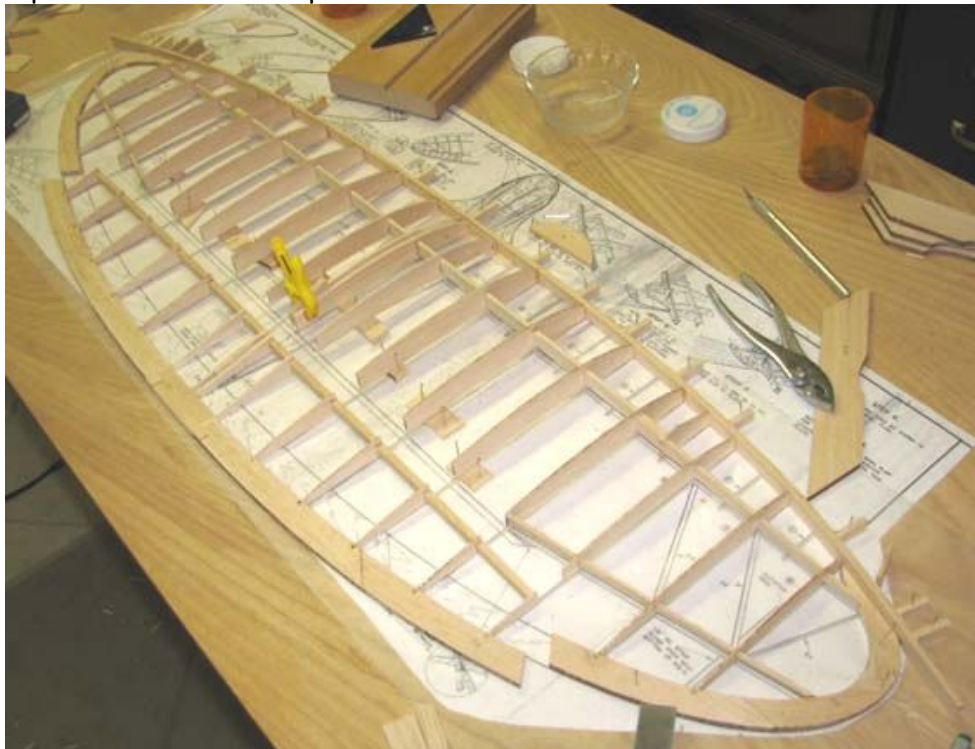


From: ["Tandy C. Walker" <tandyw@flash.net>](mailto:tandyw@flash.net)  
To: ["Walker, Tandy C." <tandyw@flash.net>](mailto:tandyw@flash.net)  
Date: 12/31/2008 4:09:43 PM  
Subject: 24 Sailplane Elevator Construction and Hinging

I have spent an incredible amount of time this past two weeks working on the elevator halves of the Comet Sailplane and I am not through yet. However, tomorrow Sue has us scheduled to take down the Christmas tree, lights and all of our decorations and put them away up in the attic for one more year. Friday and Saturday we will give our home a complete and thorough "deep" cleaning! :O< Then on January the 5th, I will have cataract surgery on my right eye followed by surgery on the left eye on January 29th.

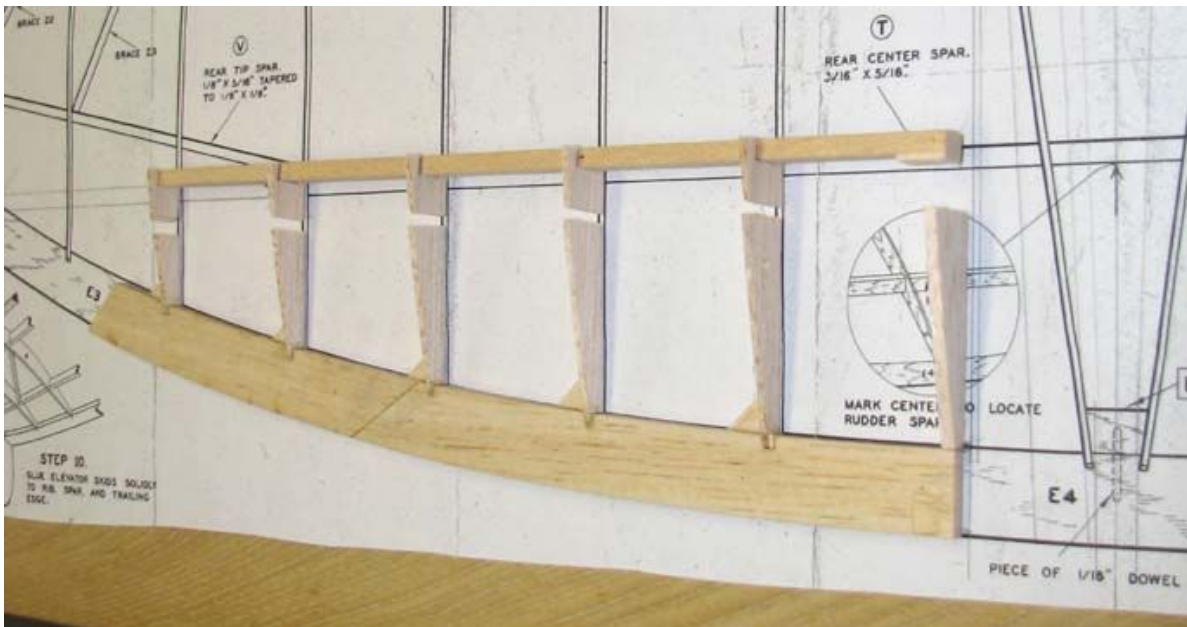
So this afternoon I have to get the model room cleaned up and the Sailplane stab put away for a while. I did want to update you guys on my stab/elevator work in progress. Remember back on the December 11th in Report No. 17, I separated the elevator portion of the stab as shown below.



After cutting the elevator portion in half, I was left with an elevator half as shown below.



Accounting for the widths of the stab and elevator spars as well as width of the hinges, I cut off the leading edges of all of the elevator ribs as shown below.



Next I installed a new 1/4" elevator leading edge as shown below.



Once the gap of root rib was established, I glued in the root rib as shown below.



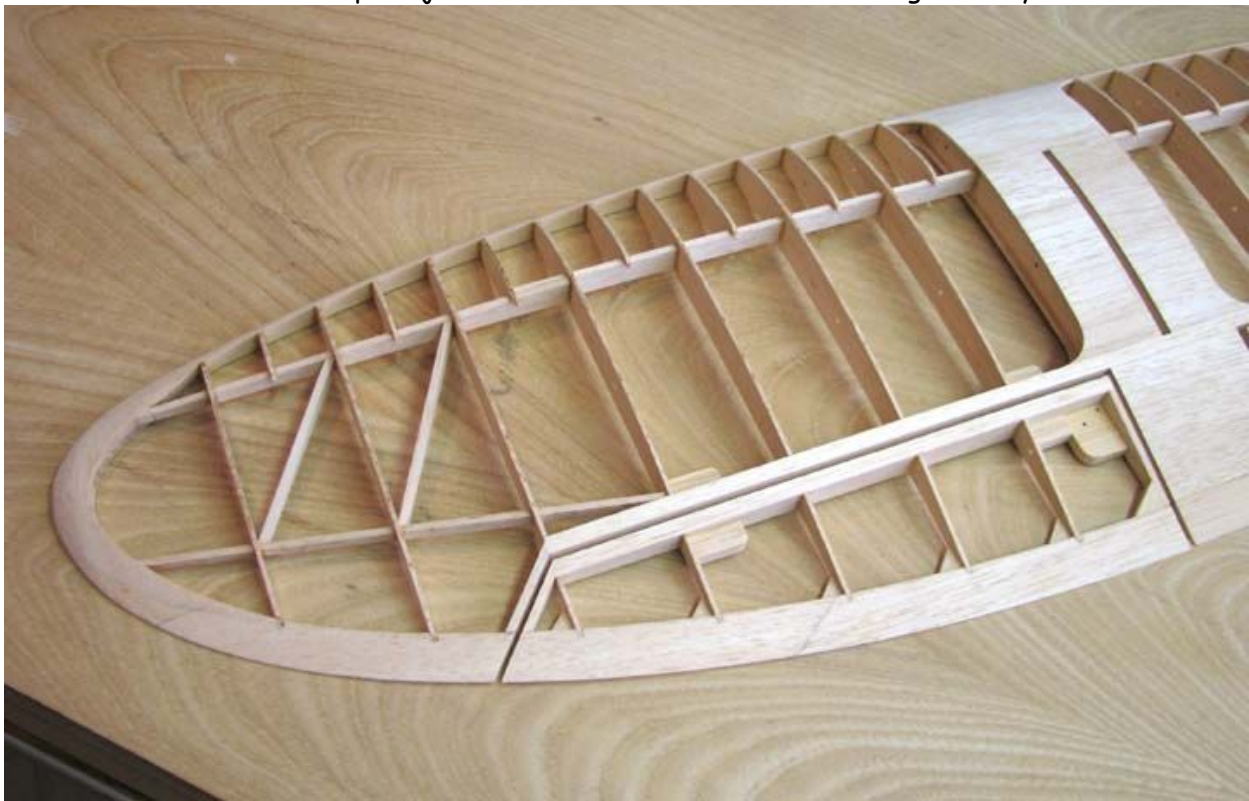
Next I installed the Klett hinges in the stab and elevator halves. The hinges on left side of the stab trailing edge are shown below along with .031" hinge piano wire.



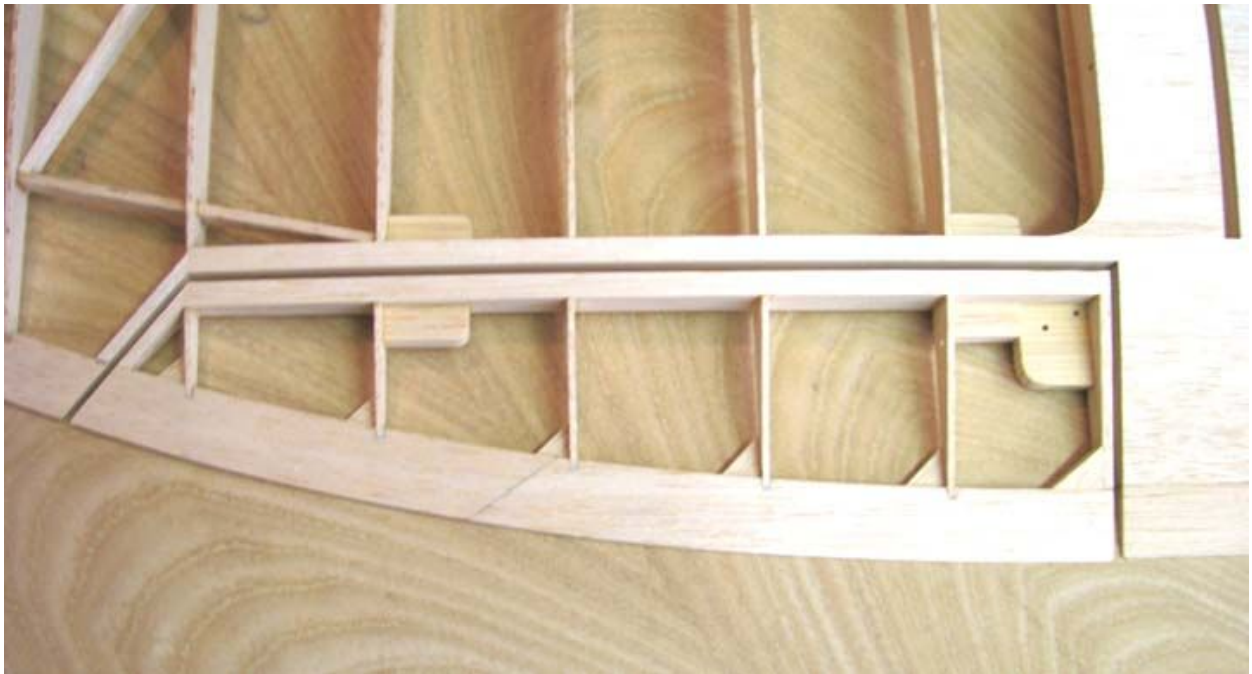
I went through a very frustrating and extremely difficult time getting each of the elevator halves properly aligned with the cut outs in the stab. I will just leave it at that because I am not sure I even have the ability to describe what all I had to go through to accomplish this task. However, the bottom line is shown in the picture below with the elevator halves installed and hinged in the stab cut outs.



This shows the left side of the stab. The stab tip and the left side of the leading and trailing edges have been contoured and sanded to shape. I just haven't had the time to do the right side yet.



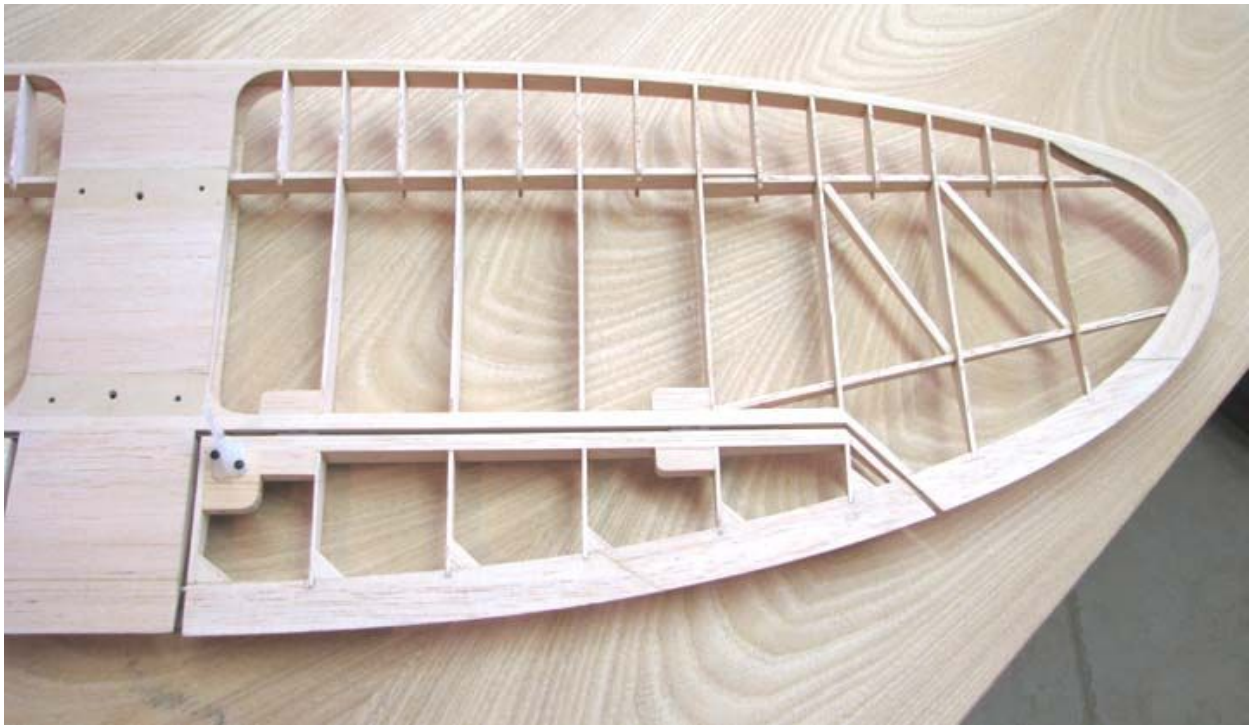
This is a close up attempting to show the gapped interface of the left elevator half in the stab cut out.



This picture of the bottom of the stab was taken to show the elevator's control horn that is mounted on a spruce block that also contains a brass tube for 1/16" piano wire elevator connector to slide into.



This last picture shows the entire bottom of the left side of the stab.



So at this point, I will have to discontinue work on the Sailplane because of all of the up and coming events.....Tandy