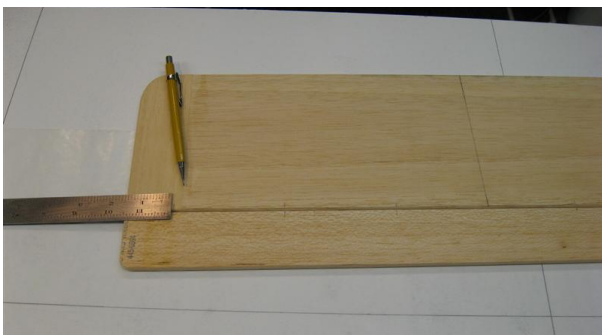
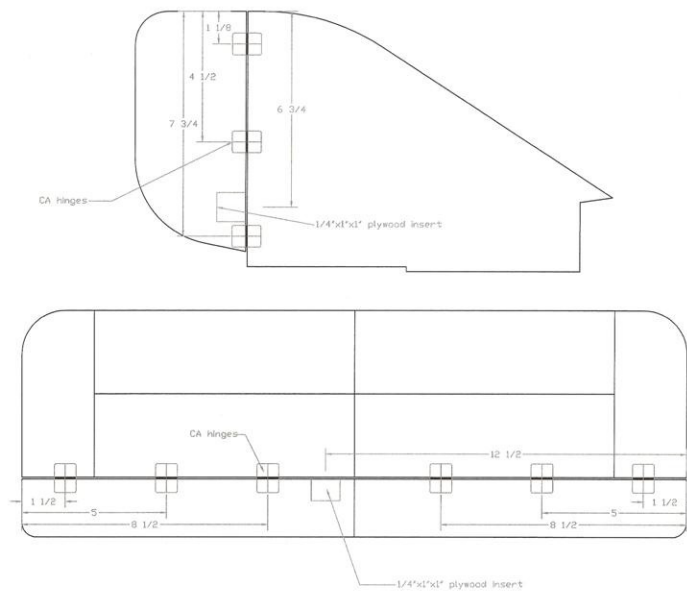


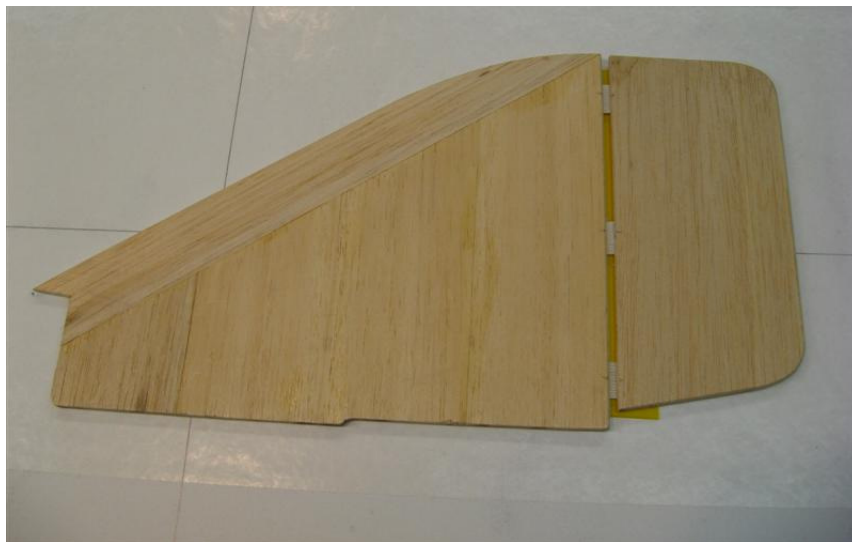
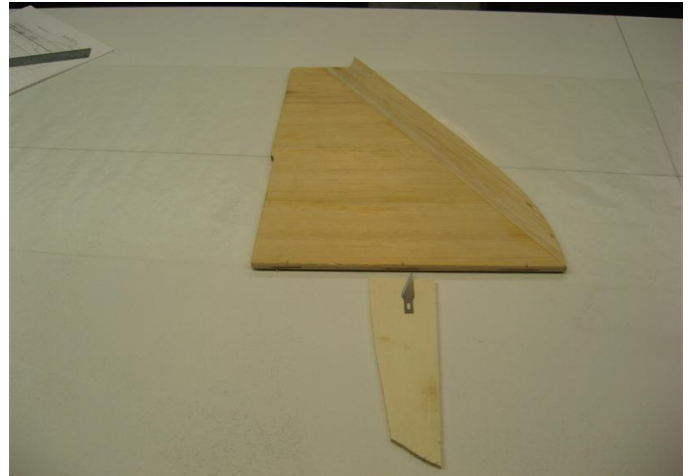
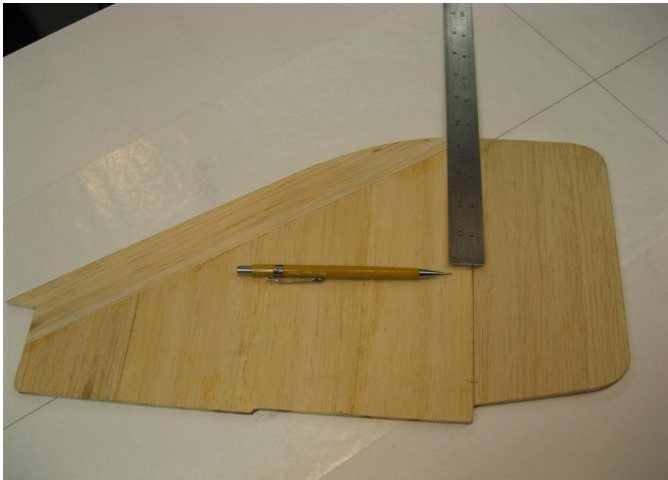
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The build process is slightly different and somewhat easier than what was described in the original write-up. Now, there are tabs and slots that will locate the fuselage formers and panels.

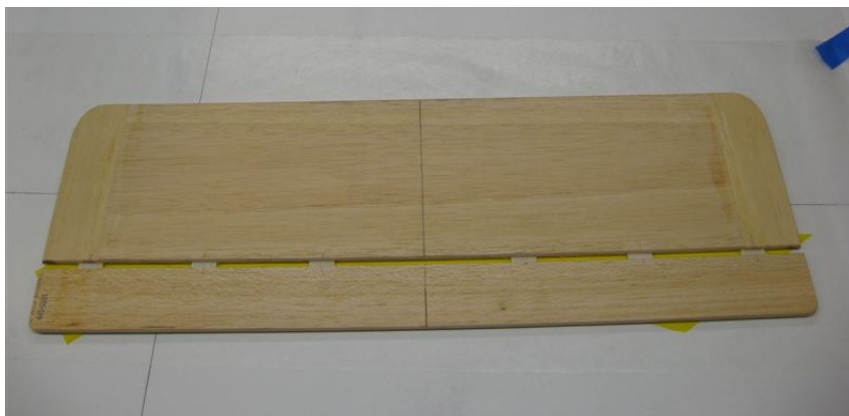
Fuselage Construction:

**The horizontal stab & elevator and the vertical fin & rudder should be prepared prior to assembly to the fuselage. Plywood inserts should be inserted in the elevator and rudder for the control horns. The CA hinge slots should also be cut in. See the sketch for locations.*

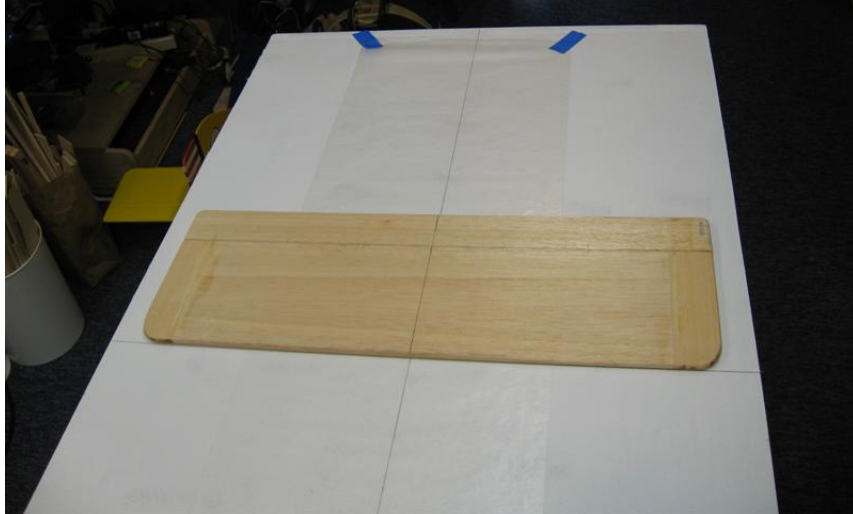




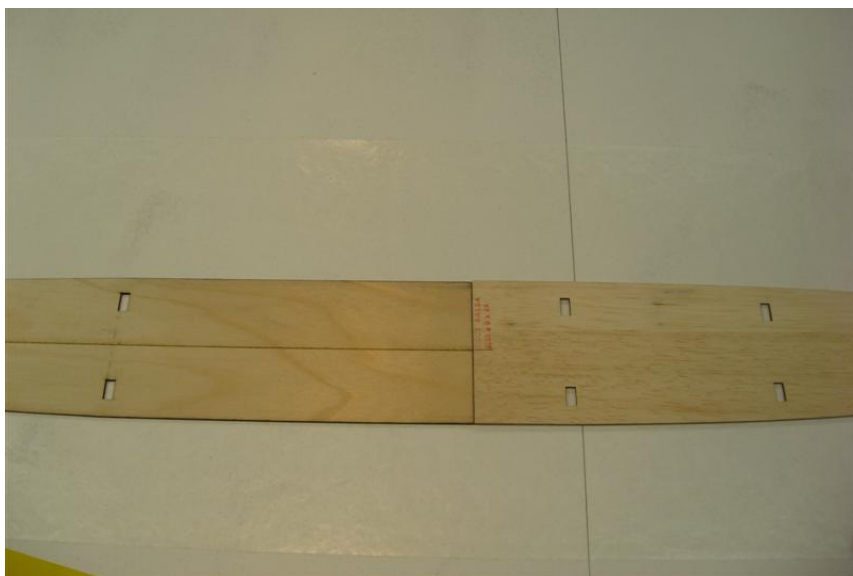
**The center line of the horizontal stabilizer should be drawn on its top surface.*



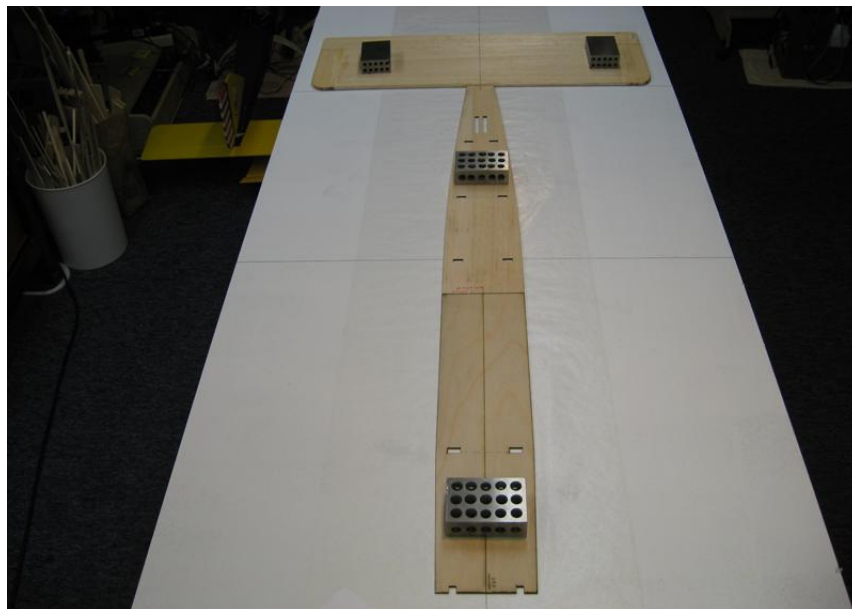
**The front edge of the stab should be lined up to the work line drawn on the work surface and the center line of the stab should be also lined up to the main center line drawn on the work surface. Keep the stab in location by pinning or blocking it to the build surface.*



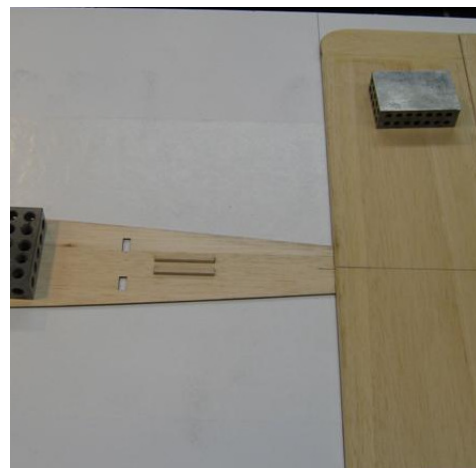
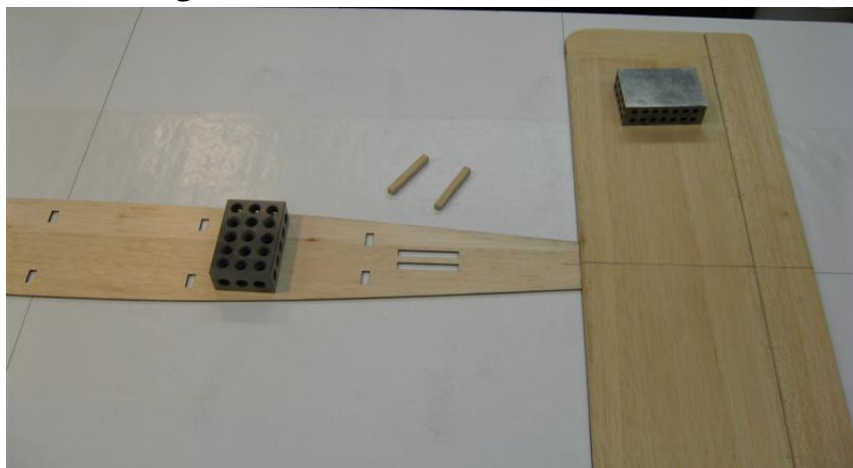
**The bottom fuselage panel assembly is made by gluing the rear edge of the 3/32" plywood front bottom fuselage panel to the front edge of the 3/32" balsa rear bottom fuselage panel, making sure the side edges line up.*



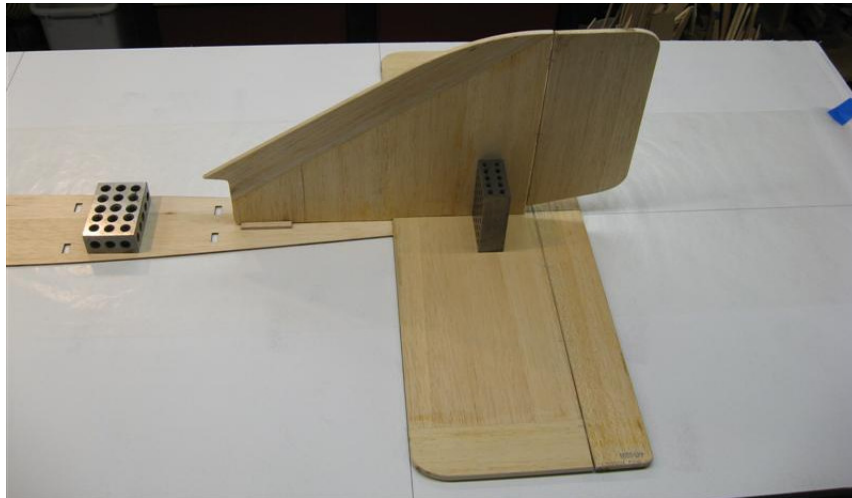
**The bottom fuselage panel assembly is positioned on the work surface by bumping up the rear edge of the bottom fuselage panel assembly to the front edge of the horizontal stab and lining up the center lines of both the stab and the bottom fuselage panel assembly. The center line on the front of the bottom fuselage panel assembly should be lined up to the main center line on the work surface. Keep the bottom fuselage panel assembly in location by gluing it to the stab and by pinning or blocking it to the build surface.*



**Cut and glue two 1/4"x1/4" x 2" balsa Fin locating blocks in the two slots laser cut in the bottom fuselage panel assembly (near the rear of the bottom fuselage panel and spaced 1/4" apart concentric to the centerline of the fuselage).*

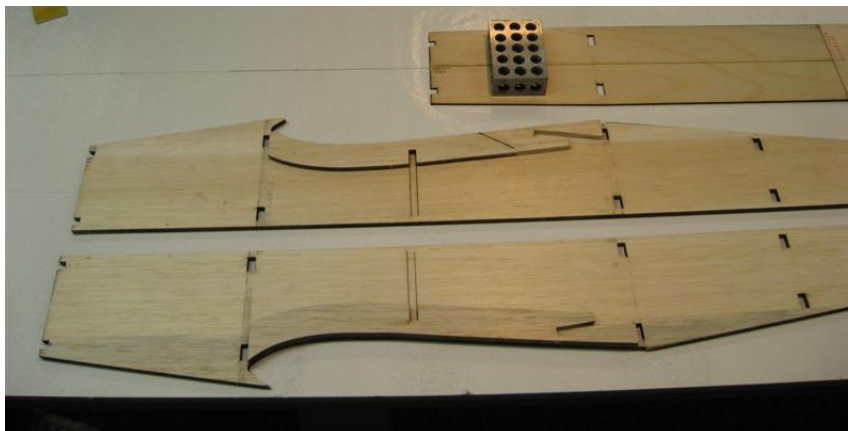


**Fit and position the vertical fin on the center line of the horizontal stabilizer and between the two balsa locating blocks glued in the slots of the bottom fuselage panel assembly. Glue the vertical fin in position, making sure the fin is perfectly 90 degrees to the horizontal stabilizer. Block in place while glue dries.*

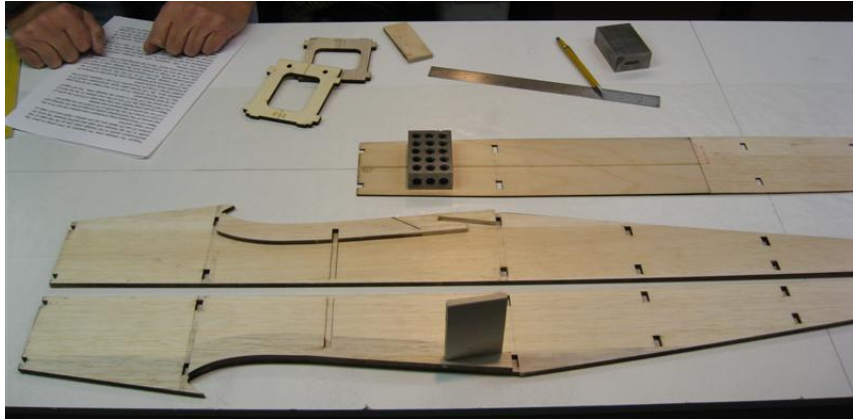


**NOTE: The fuselage formers now have locating tabs that will position them in the proper location on the bottom panel and both side panels. The bottom panel and the side panels will have slots to accept the former tabs. This locating method will also add strength to the plane.*

**Prepare the fuselage sides for assembly by first gluing in place the Reinforcement Saddle to the fuselage sides. Line up the top edge of the saddle to the top fuselage side edge and position between the slots for formers F2 and F4. Make sure you are making a Right and Left hand or mirror image condition.*

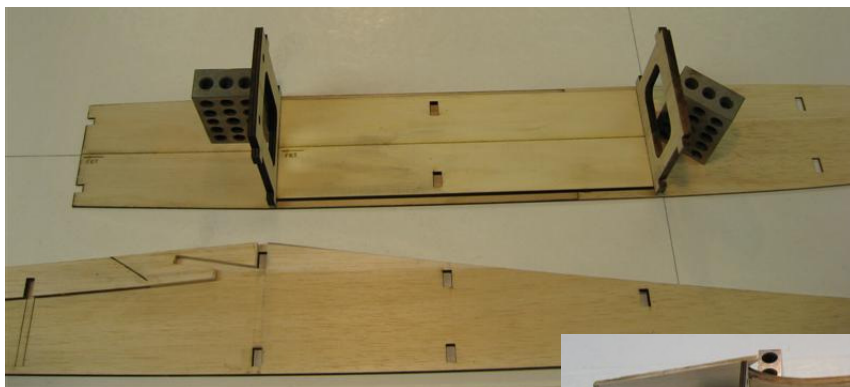


**Make a $\frac{1}{4}$ " thick plywood wing attachment cross member that will fit in the rear groove of the reinforcement saddle and span across the fuselage just in front of former F4. Use the width of F4 (3.490") for the length and 2 1/2" for the width of the plywood cross member.*



**Make a second cross member this time from balsa 1/2"x1/4"x the width of F4 (3.490") and glue the 1/2" face of the cross member to the top back of F4 and bevel the 1/4" face to match the fuselage sides. This will support the top back fuselage panel.*

**Dry fit and Position formers F2 and F4 in their respective bottom panel assembly slots. The 1/4" bottom panel inside reinforcement should fit in between former F2 and F4.*



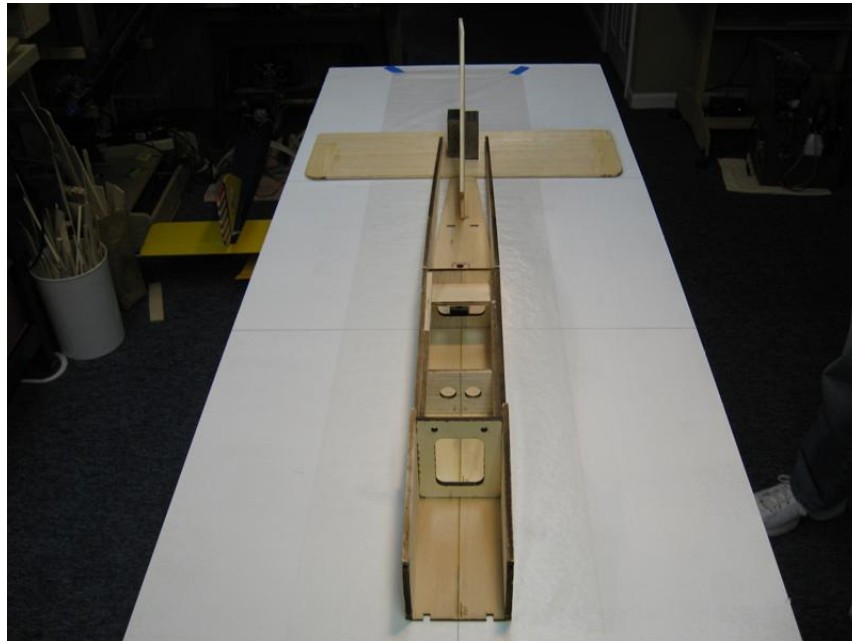
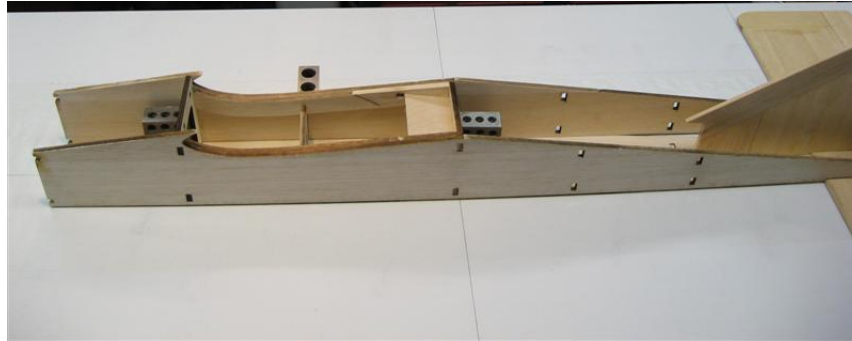
**Now position F3 in the 2 assembly slots in the bottom panel inside reinforcement.*



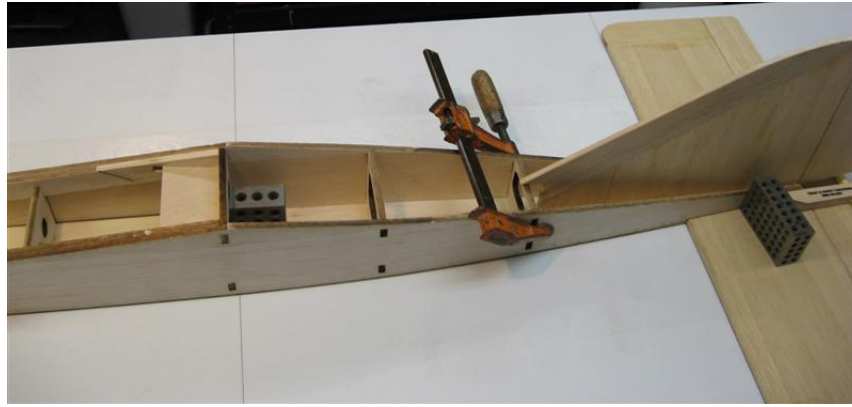
**Dry fit and position both fuselage sides using the side tabs of Formers F2 and F4, and allowing former F3 to fit into the vertical slots of the reinforcement saddle. The 1/4" plywood wing attachment cross member will also have to be fitting in between both the fuselage sides in front of former F4 and into the reinforcement saddle. Keep in mind, I did mention frustration and dirty words.*



**This is the starting point of the assembly of the whole fuselage. When you are fully acquainted with this assembly sequence, then disassemble the dry fit and start the gluing process. Glue in only the parts mentioned above. Make sure you don't glue the fuselage sides to the fuselage bottom rearward of F4 and in front of F2. Keep your gluing confined between F2 and F4.*

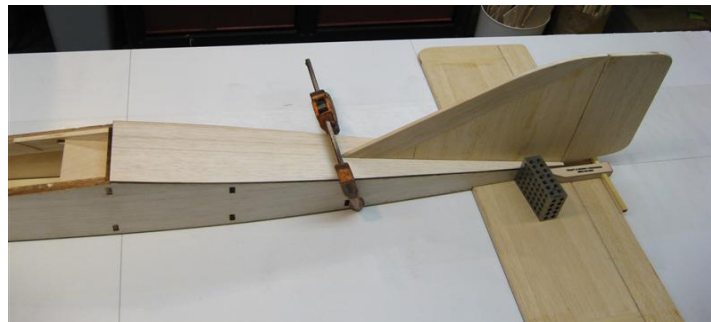


**When the above assembly is complete and the glue dries, continue to dry assemble the rear components of the fuselage by squeezing together the fuselage sides till they touch the vertical fin.*



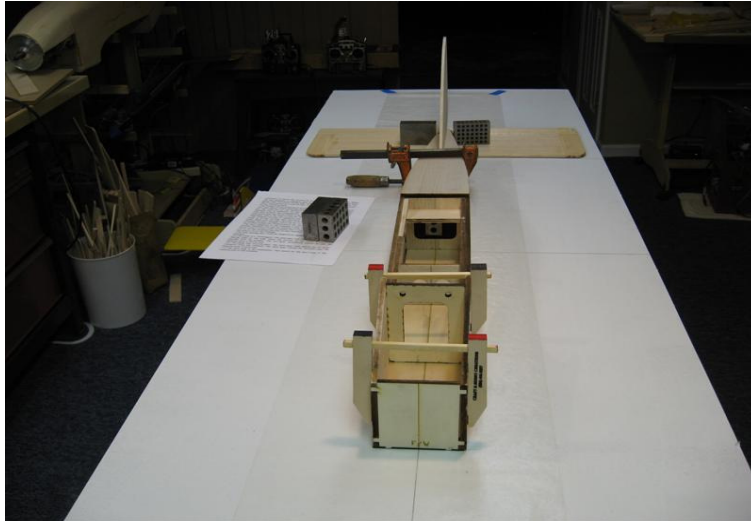
**Make sure the tabs in formers F 5 and F6 are in the slots in the fuselage sides and the fuselage bottom. The rear inside edge of the fuselage sides should be dubbed or chamfered to match the vertical fin to provide a larger glue surface.*

When the dry assembly is complete, glue all the components in place. DO NOT GLUE THE TOP BACK FUSELAGE PANEL IN PLACE at this time.

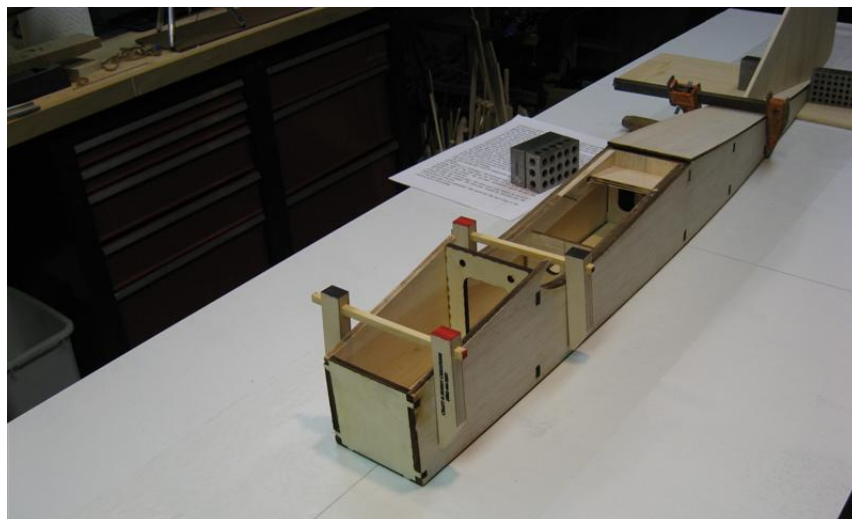


**You can slip it into position as a trial fit only. It is left loose, to access the assembly of the control system.*

**The firewall can be prepared to accept the motor mount of your choice at this time. Motor mount mounting holes can be drilled and "t" nuts installed per the direction of the manufacturer. The firewall is located to the fuselage with no allowance for any motor thrust compensation. The plane flies well without any compensation. If the plane is configured to have a nose wheel and the motor mount is not to be used for the bracket for the nose gear, now is the time to drill for the brackets that you elect to use.*



**The firewall (if prep is complete) can be fit and glued (epoxy) in place lining up all the locating tabs and slots in the fuselage bottom and both sides. Make sure you glue the joint in between the fuselage sides and the fuselage bottom. Triangle stock can be cut and glued in place to reinforce all corners behind the firewall and in the fuel tank area.*



**The basic assembly of the fuselage is now complete. The fuselage and tail feather assembly can now be removed from the build surface. There is a hatch cover, a front cover extension and a rear cover extension left to be cut to fit the forward portion of the fuselage in front of the wing, once the wing is fit to the fuselage.*

**The main landing gear could be temporarily installed to the bottom of the fuselage.*

**If the plane is a "tail dragger" the main gear axle should be even with the leading edge of the wing, when the bottom of the plane is positioned parallel with the ground. The tail gear installation should be per the manufacturer's instruction.*

**If the plane has tricycle gear, the main gear axle should be 12 3/16" rearward from the firewall. The nose gear should be installed per the manufacturer's direction.*

** If the main wing is not assembled, that would be the next step in the construction of the airplane.*