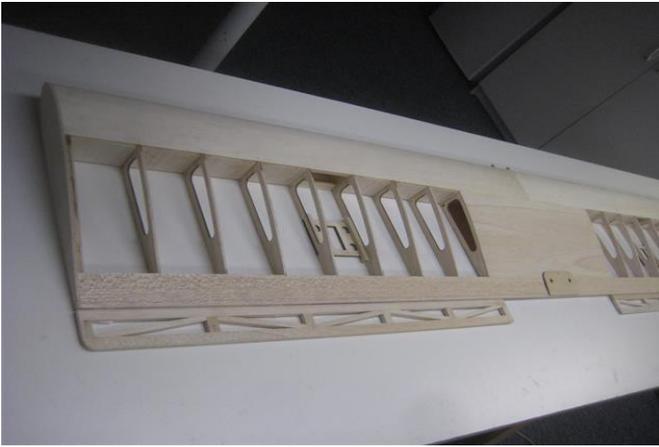


RCCD 2014 CLUB PROJECT

“STICK 2 IT”

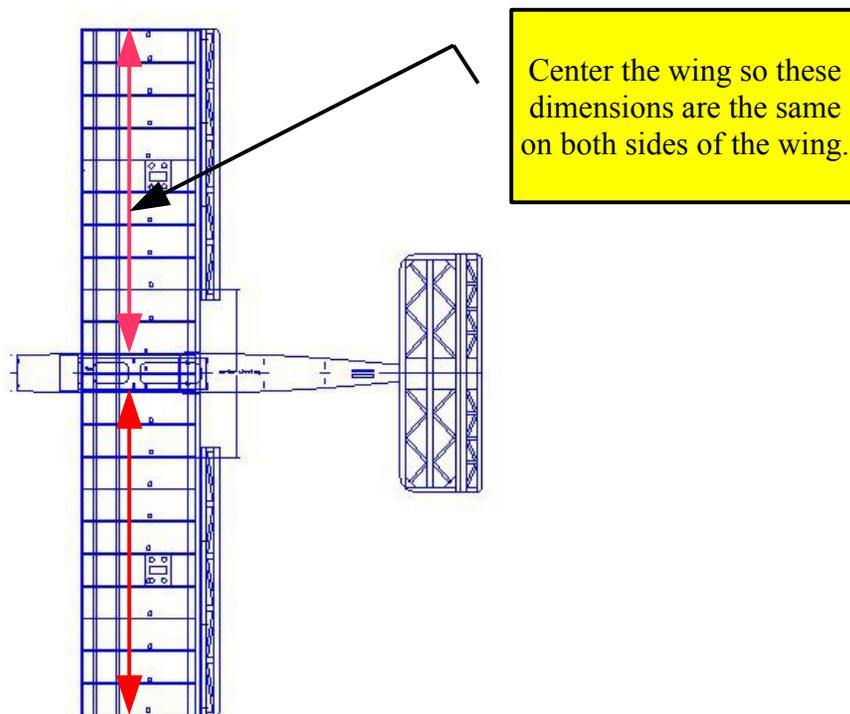
Assembling Main Wing to the Fuselage:

NOTE: Both the main wing and the fuselage should be partially complete at this point. Their construction should have been previously completed to their own set of build instructions.

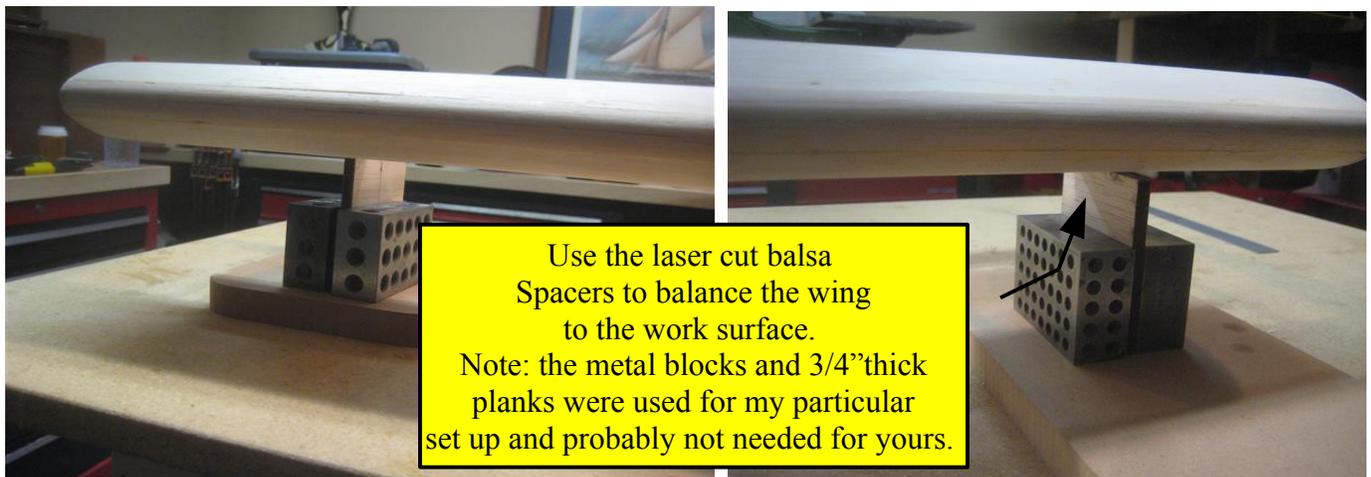


**Prepare for the assembly of the main wing to the fuselage by making sure any previously installed landing gear, hardware, or unwanted glue or debris is removed from the bottom of the fuselage. The fuselage should clean and placed with the bottom of the fuselage and the horizontal stabilizer and elevator flat on the work surface.*

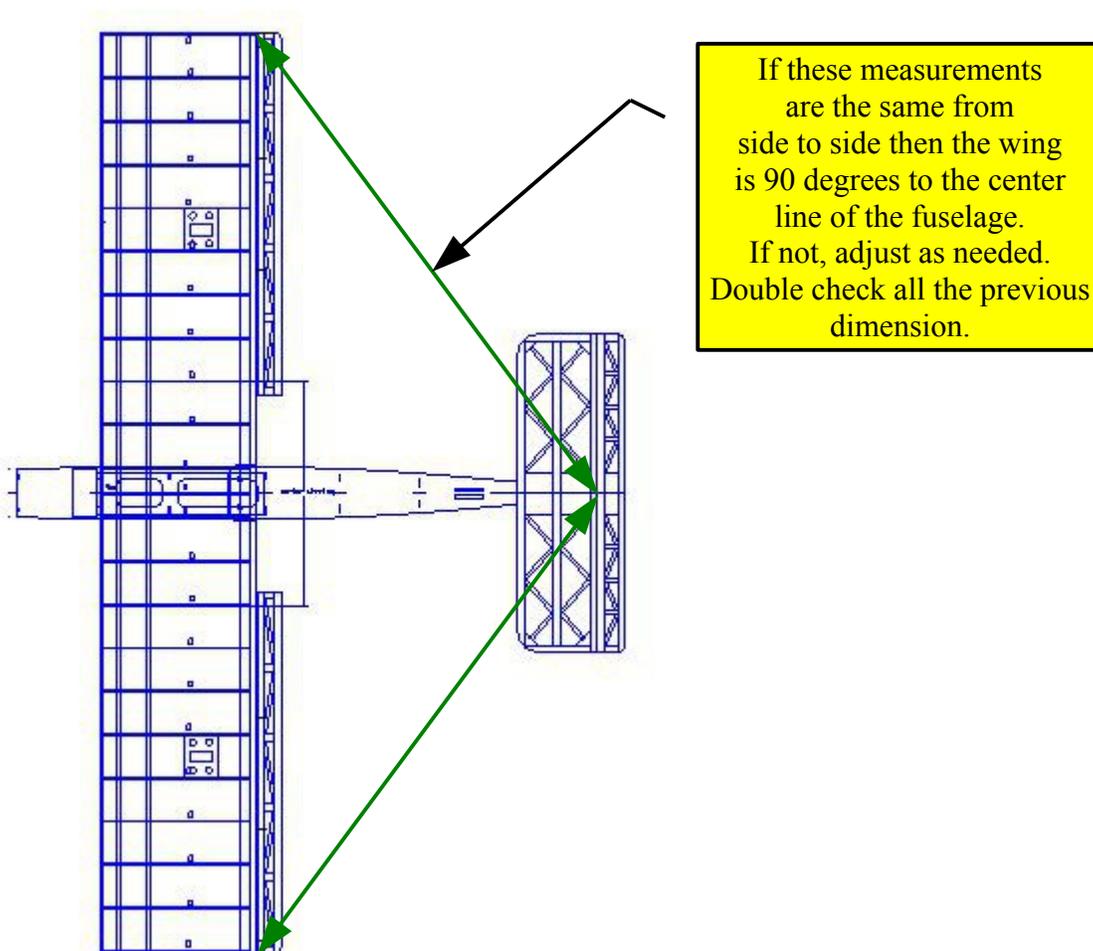
**At this point, center the main wing on the fuselage by measuring from the fuselage sides to the wing tips. These measurements should be the same length on both sides of the fuselage. Adjust as needed by moving the wing so the distances are the same on both sides. When satisfied with the centering, pencil mark a light line on the bottom of the wing surface along both sides of the fuselage as a positioning reference while trial fitting the wing in the saddle of the fuselage.*



**Trial fit the main wing on the wing saddle area of the fuselage. The wing will probably require some minor touch up to the bottom wing sheeting and the front leading edge or possibly minor touch up to the saddle area of the fuselage. Carefully remove any high spots off the bottom sheeting and leading edge radius by carefully and lightly sanding only the the high spots to bring the fit close to the saddle with no gaps in the fit. A little sanding in this center area greatly affects the distance between the work surface and the bottom of the wing from side to side. When sanding, make sure you are taking off only the high spots while constantly checking the distance from the work surface to the bottom of the wing at the out board wing tips. There are two laser cut balsa wood loose (3-5/32") spacers that will aid in adjusting the distance from the bottom of the wing to the work surface during the trial fitting and final lining up of the wing. Keep in mind, do not remove too much material or you can also change the 0 degree angle of attack of the wing.*

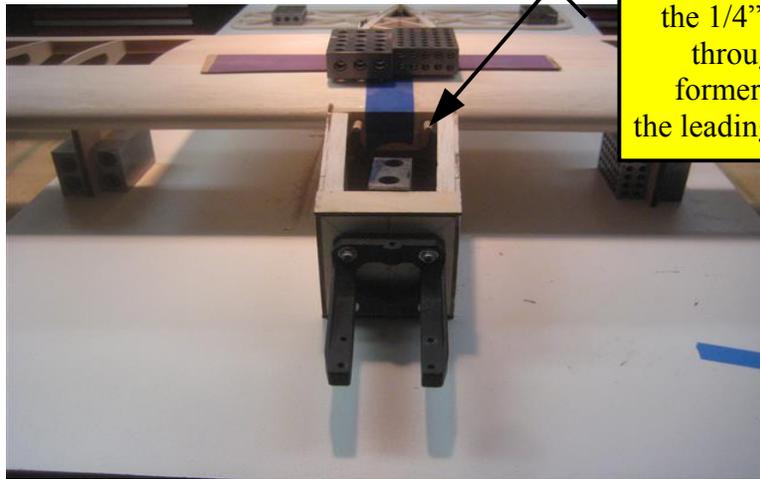


**When you have the wing seated close to fitting in the saddle, balanced from the table to the bottom of the wing the same distance on both sides, and the distance from the fuselage to the wing tip is the same on both sides of the wing, the last condition of the wing set up, is to make sure the wing is set 90 degrees to the center line of the fuselage. Measure from the trailing edge of the wing tip to the center of the trailing edge of the vertical fin on both sides of the plane. These two dimensions should also be the same. Adjust as needed See drawing below.*



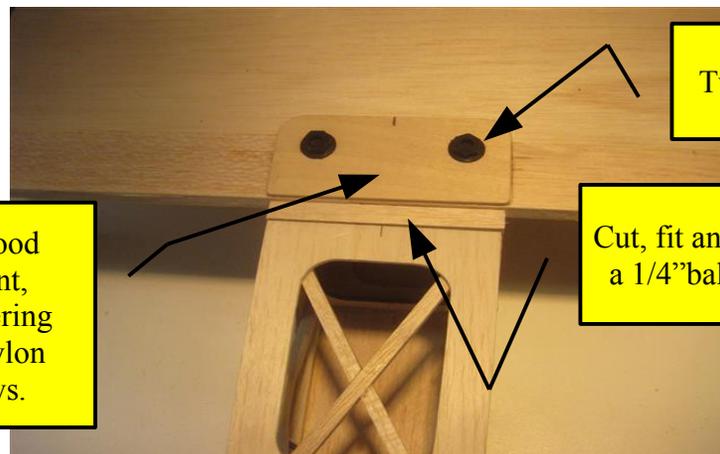
**When satisfied with all the dimensions and fit of the wing to the saddle, temporarily pin and tape the wing to the fuselage to keep it firmly in place.*

**Using the laser cut holes in Former # 2 as a guide, drill two 1/4" dia holes through the leading edge of the wing. Insert two 1/4" dia wood dowels by 1-1/4" long into the drilled holes. When the wing is removed from the fuselage glue the two wood dowels in the leading edge of the wing.*



Wood dowels placed in the 1/4" dia holes drilled through the holes in former #2 and through the leading edge of the wing.

**Using the laser cut holes in the previously installed plywood top wing reinforcement as a locating and centering guide, drill two mounting holes 90 degrees to the top surface of the wing for the two 1/4-20 nylon wing mounting screws. Use the proper size drills for the clearance holes through the wing and the proper size drills for the holes in the wing attachment panel depending on whether you drill and tap the holes or you use 1/4-20 "T" nuts.*



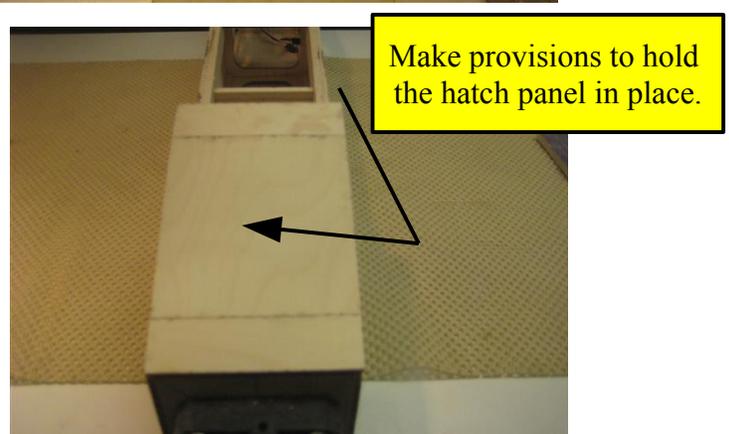
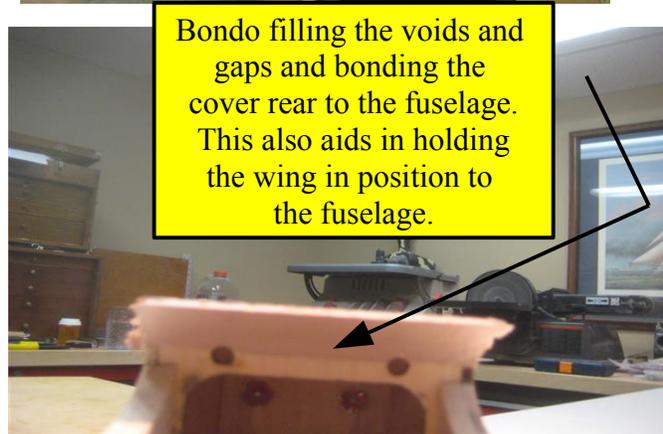
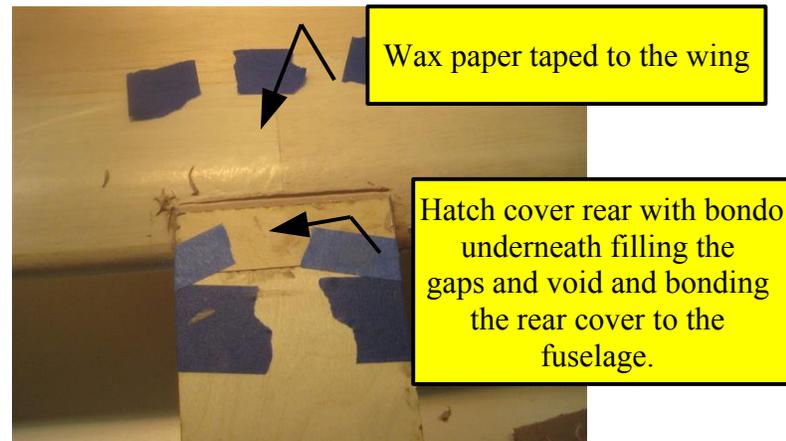
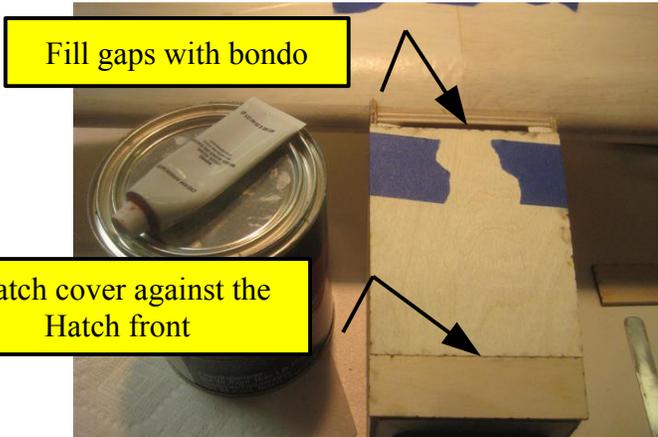
Two 1/4-20 nylon screws.

Use the laser cut plywood top wing reinforcement, as a locating and centering guide for the 1/4-20 nylon wing mounting screws.

Cut, fit and glue in place, a 1/4" balsa filler block

**Cut, fit and glue in place a 1/4" thick balsa filler block between the rear edge of the main wing and the fuselage top rear panel. See the previous photo.*

**Install the fuel tank hatch cover and rear hatch. Start by wrapping the center area of the main wing (about 6" wide) with wax paper and taping it tight to the wing surface. Then install the main wing back on the fuselage. Position the hatch cover against the previously installed hatch cover front, then place the rear hatch cover against the rear of the hatch cover and on the front portion of the main wing. There are gaps below the hatch cover rear. Using "bondo" or equivalent, neatly and without over filling, fill the voids and gaps between the bottom of the hatch cover rear and the top of the main wing surface. Clean off the excess bondo before it hardens. After the bondo hardens, remove the main wing. The wax paper should release the wing from the fuselage. Clean up the area by sanding and fairing in the bondo and hatch cover rear. See the photos below.*



**Sand the edges of the hatch covers flush to the fuselage sides. Make provision to hold the hatch cover in place with either screws or magnets.*

** The basic construction of the plane is complete.*

Go to the "final assembly and finalizing the plane" instructions.