

RCCD 2014 CLUB PROJECT

“STICK 2 IT”

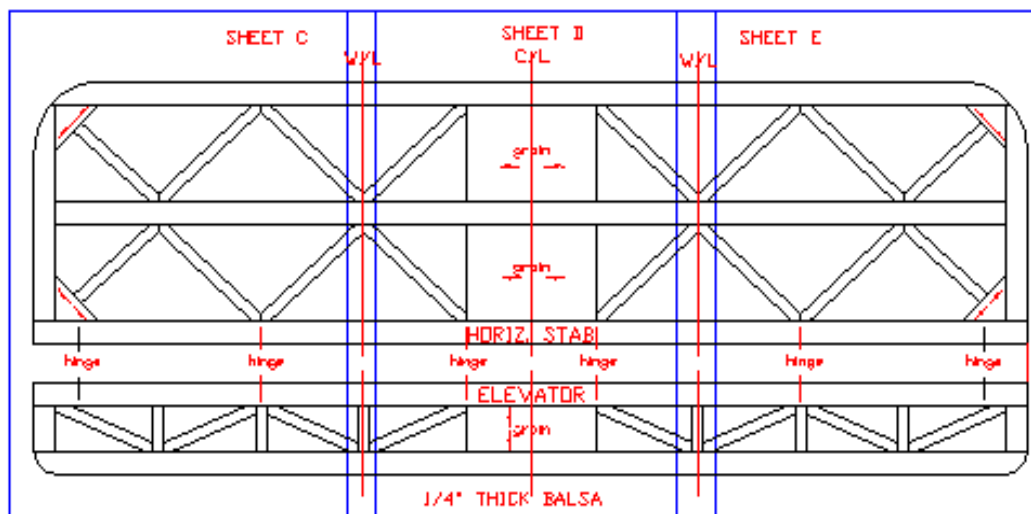
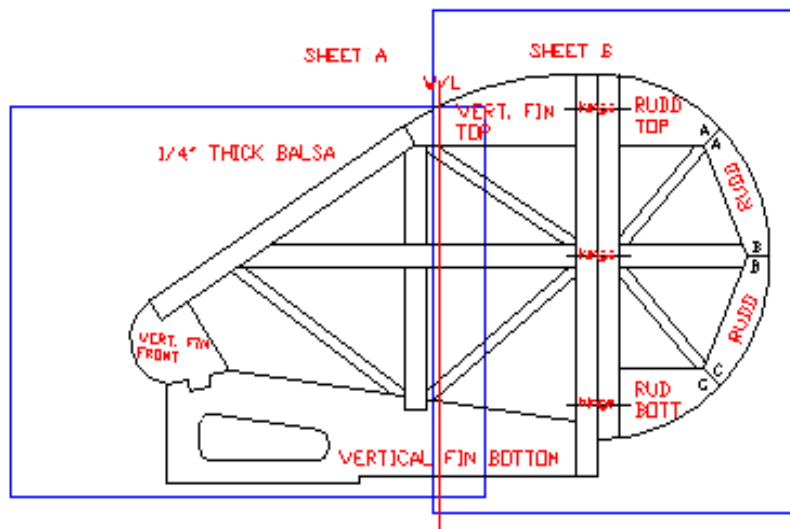
Tail Feathers (Empennage) Construction

The empennage consist of the vertical fin and rudder, the horizontal stabilizer and the elevator.

These parts should be built first.

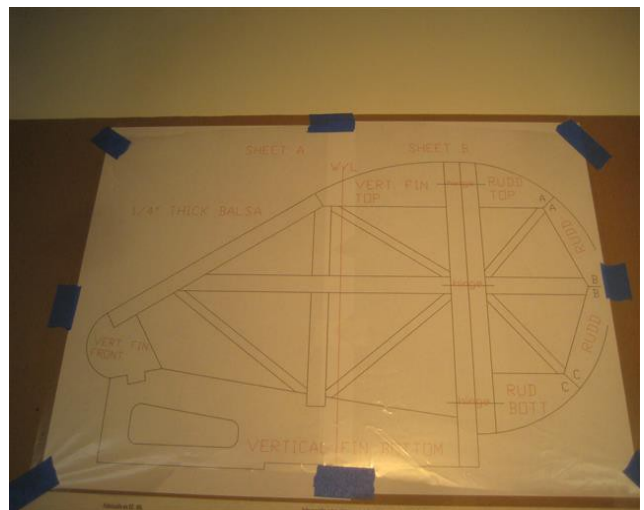
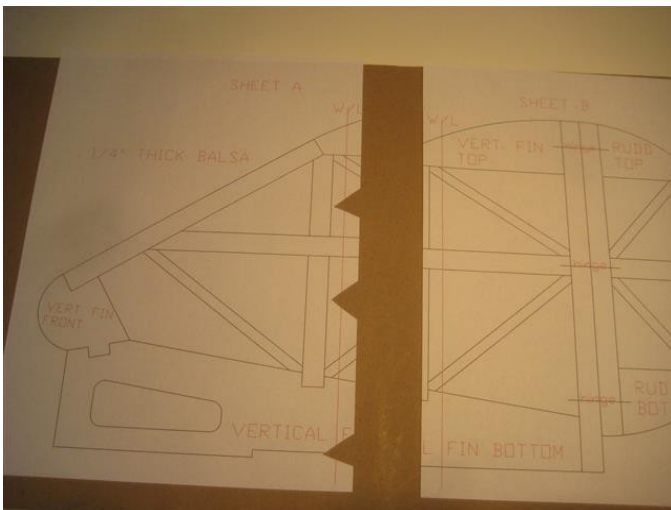
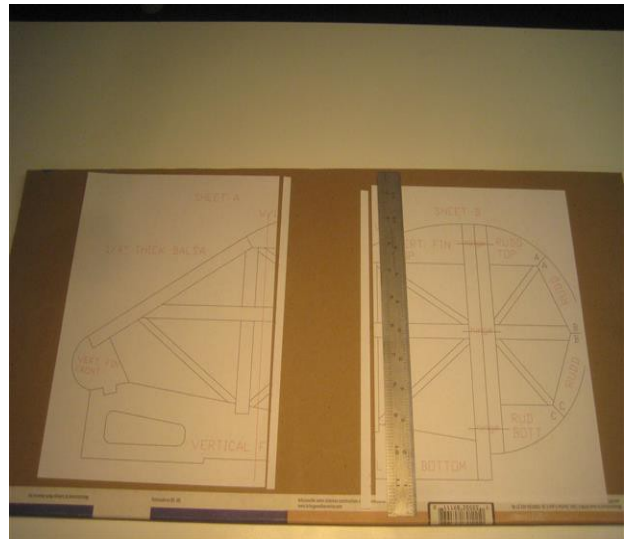
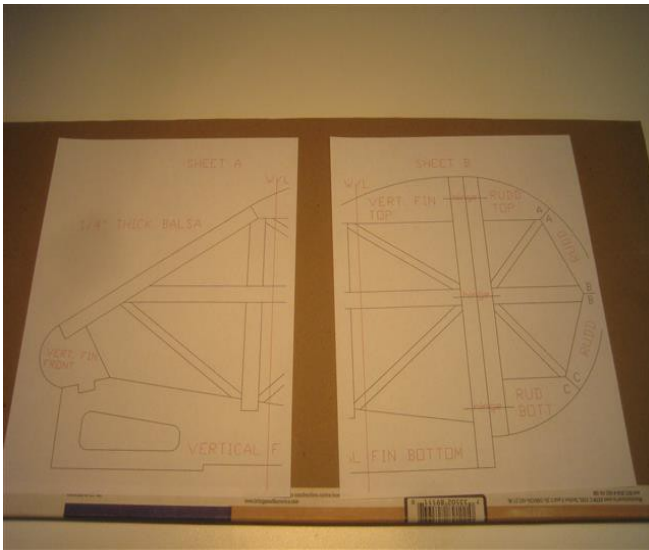
**The first step is to prepare the partial supplied drawings, by arranging them, and then joining them together to form complete drawings to build the parts on. The partial drawings should be laid flat on your work surface. They should be lined up so the printed lines on the partial drawings line up from one drawing to the adjacent drawing. Once lined up, they should be taped together and at the same time taped to the work surface to form a complete drawing of the parts. The complete drawing should be covered with a clear protective covering (wax paper or equivalent) before starting the build.*

See sketch below

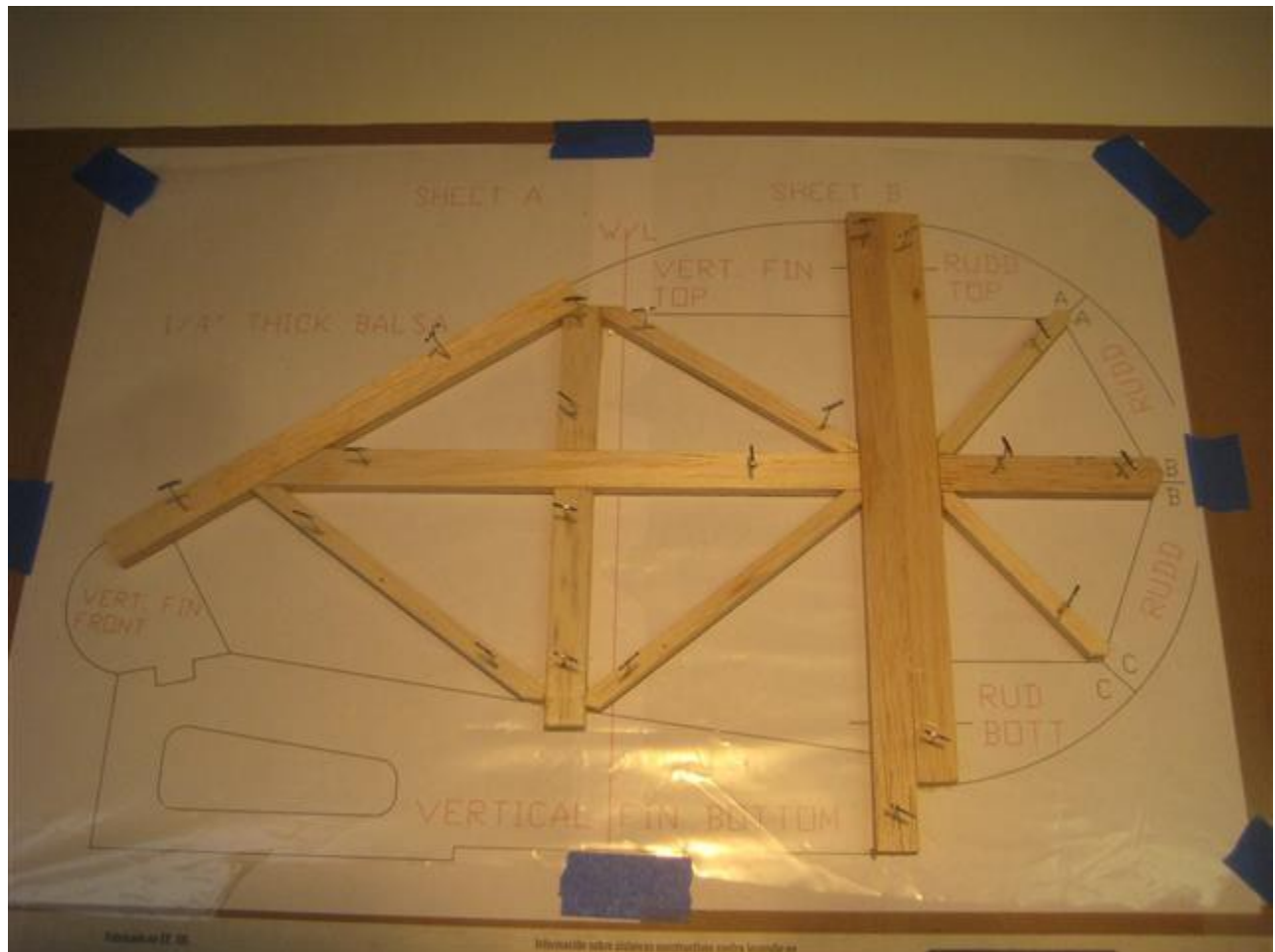


**Start with the vertical fin and the rudder construction.*

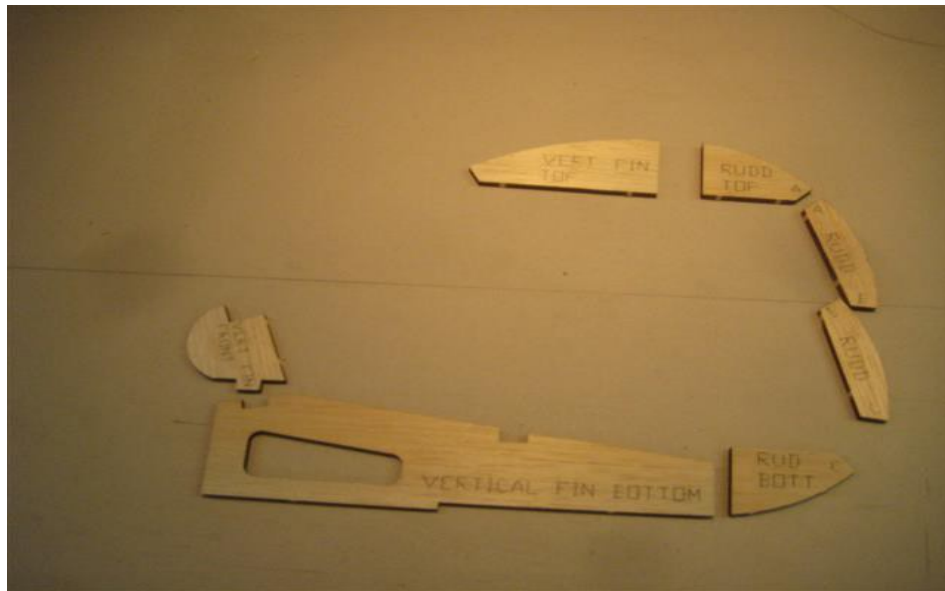
**Prepare the partial drawings and join them together to form the complete full drawing of the vertical fin and rudder.*



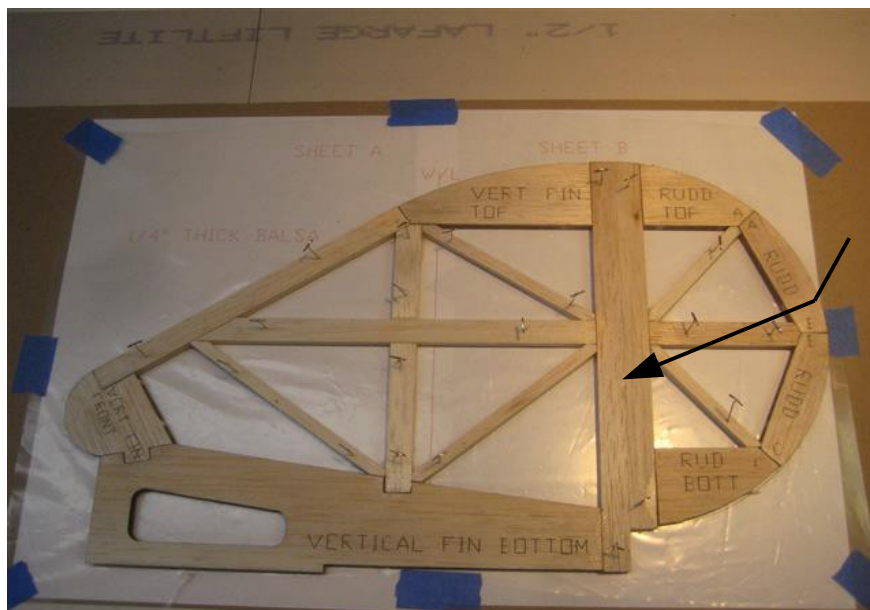
**Cut, fit and pin the supplied 1/4" thick balsa sticks using the plans for size and shape.*



**Organize the vertical fin and rudder laser cut parts.*



**Fit and position the laser cut parts on the drawing and to the finished 1/4" balsa sticks.*

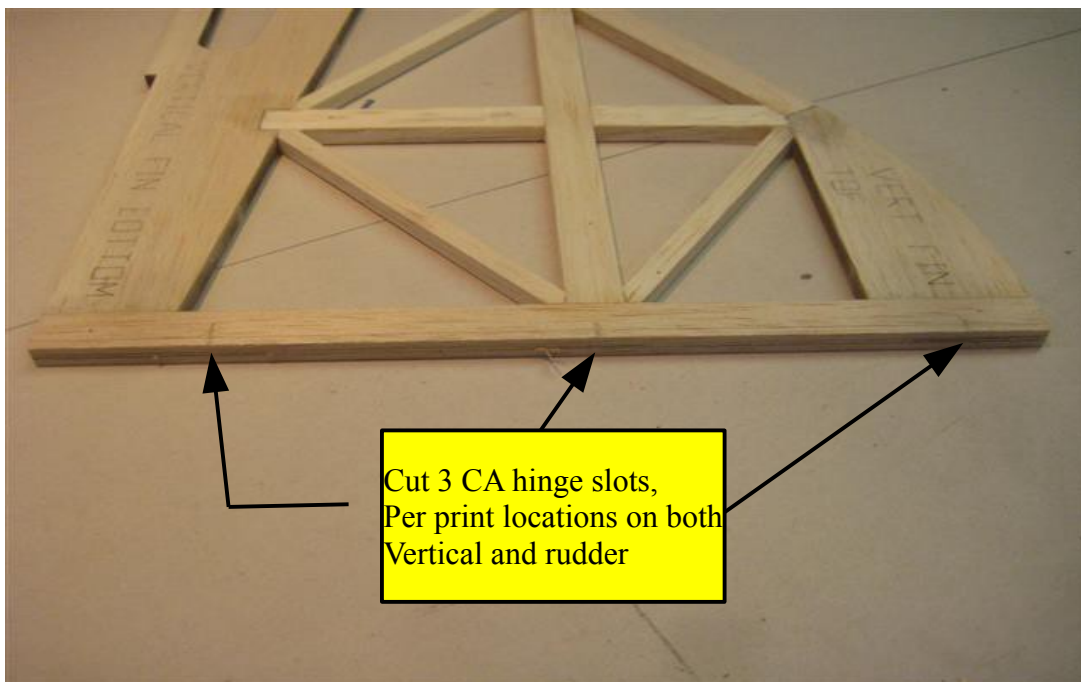


Do not glue this joint,
Leave it loose

**Glue all the part together. NOTE: DO NOT GLUE the leading edge of rudder to the trailing edge of the vertical fin.*

**Mark the CA hinge locations on the vertical fin and rudder.*

**Remove the assembled vertical fin and rudder from the plans and cut in the hinge slots.*

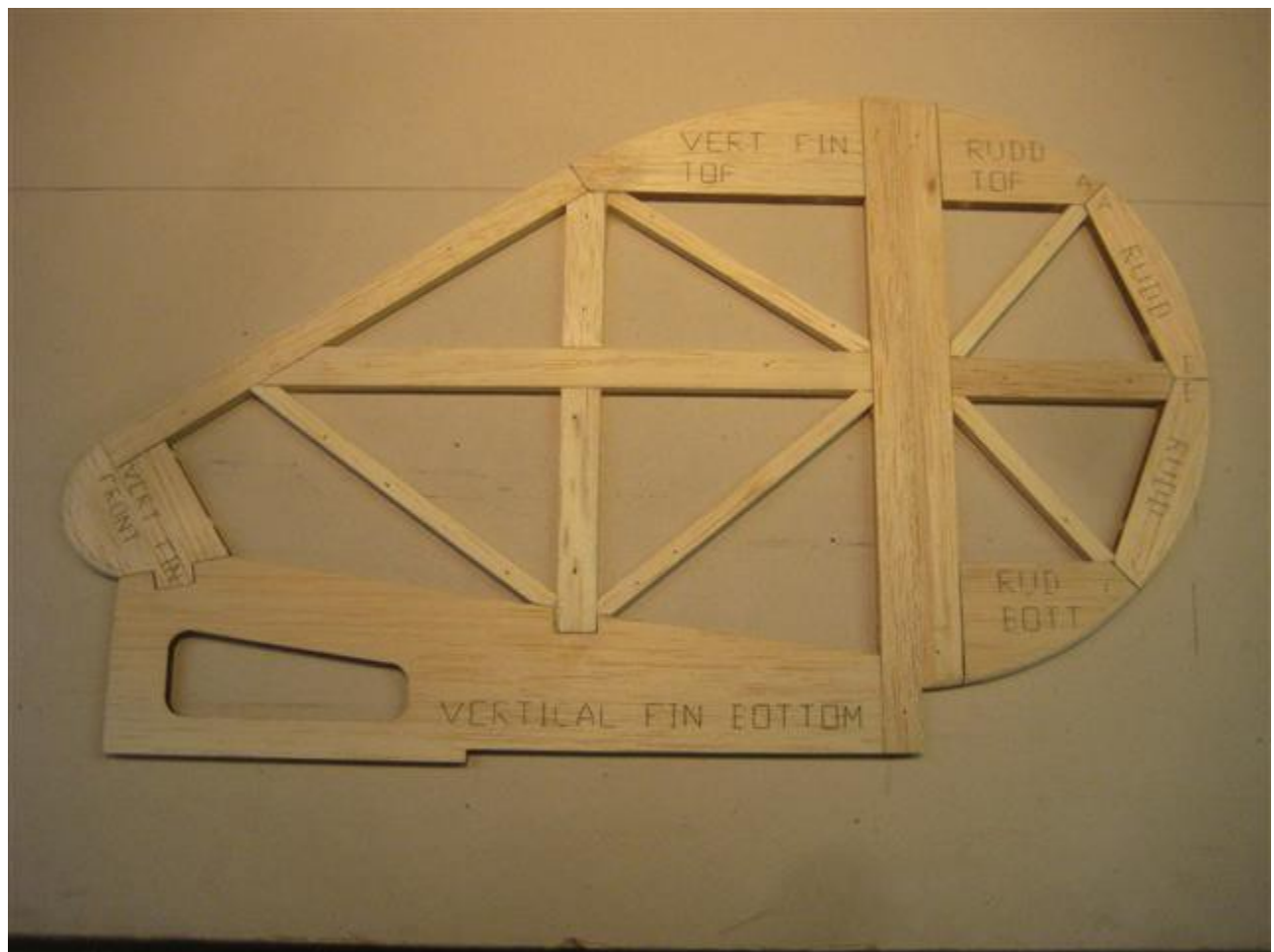


**Bevel the leading edge of the rudder and trailing edge of the vertical fin creating clearances for the side to side movement of the rudder.*

**Re-assemble the vertical fin and rudder with the CA hinges (DRY) in place.*

**Sand the periphery of the assembled parts to form a continuous edge, then sand a radius along the show edge of the assembly.*

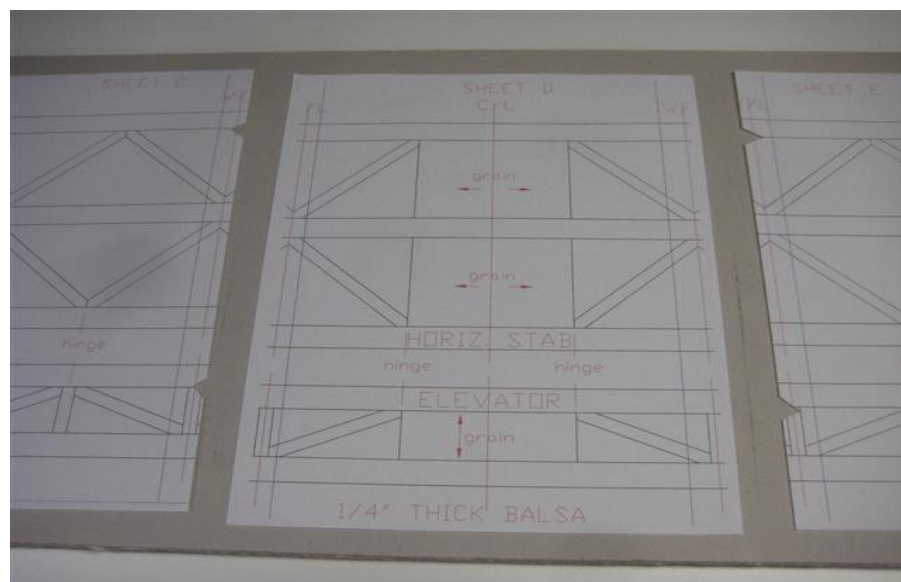
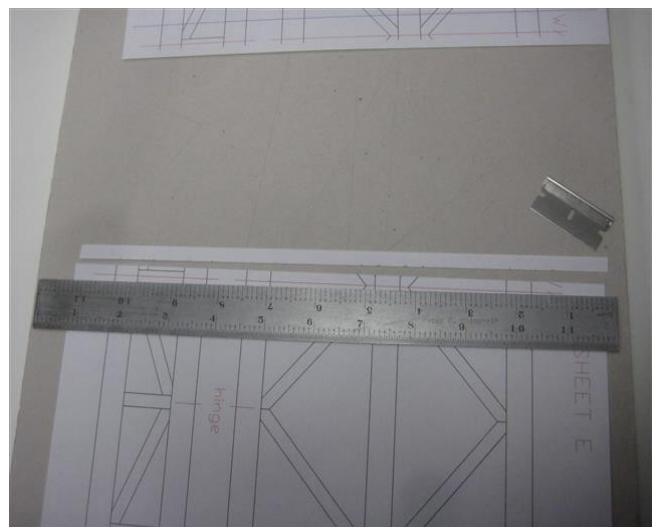
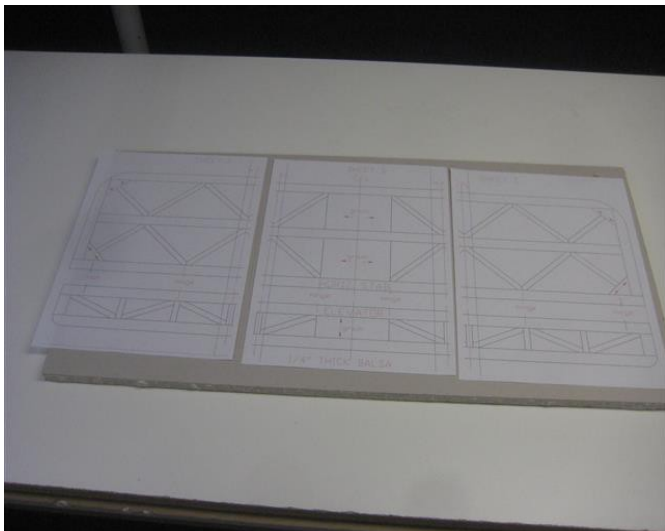
**Sand the main surfaces of both vertical fin and rudder while they are assembled.*



**Set the assembly aside.*

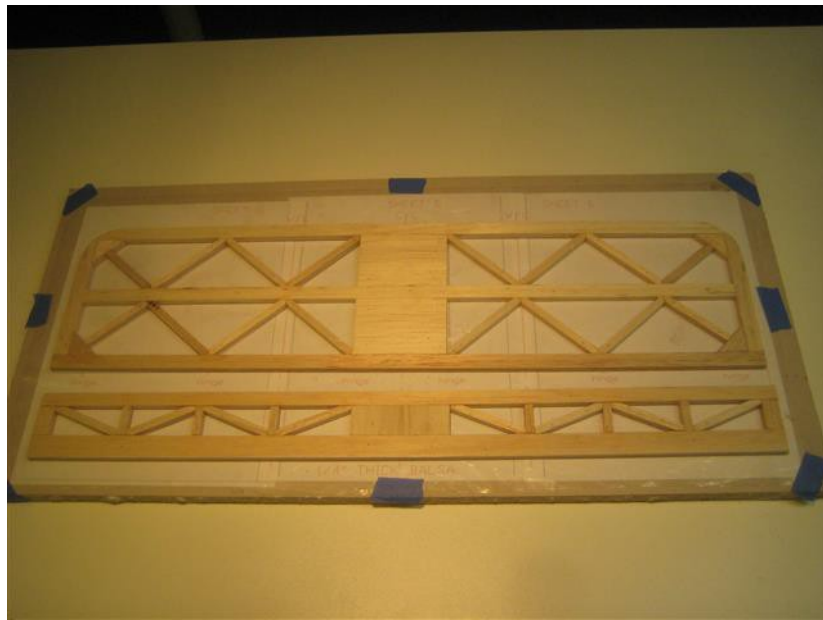
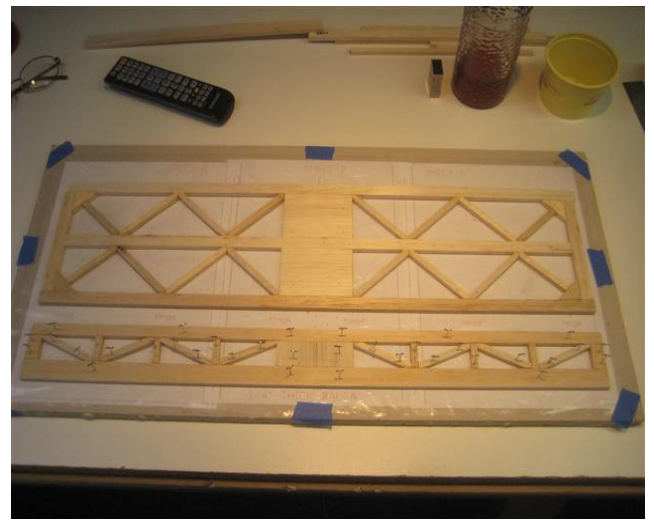
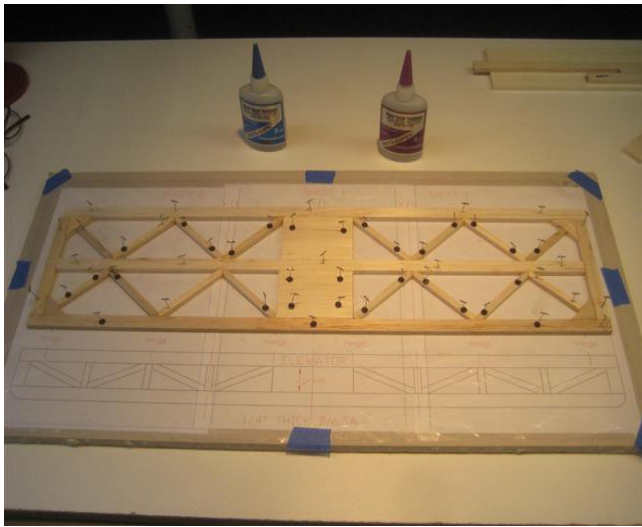
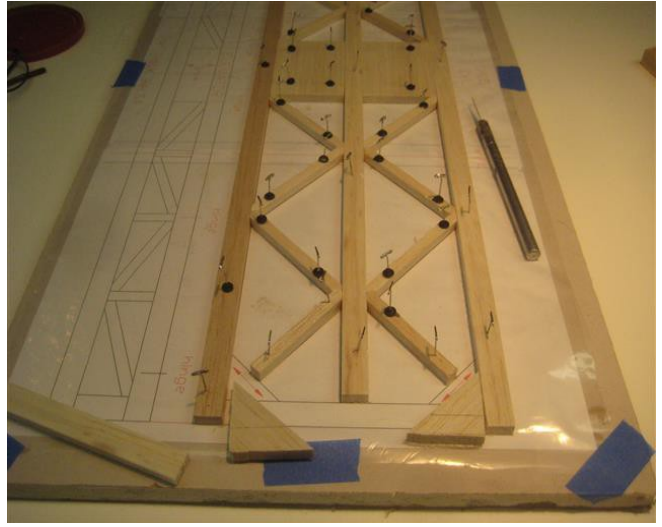
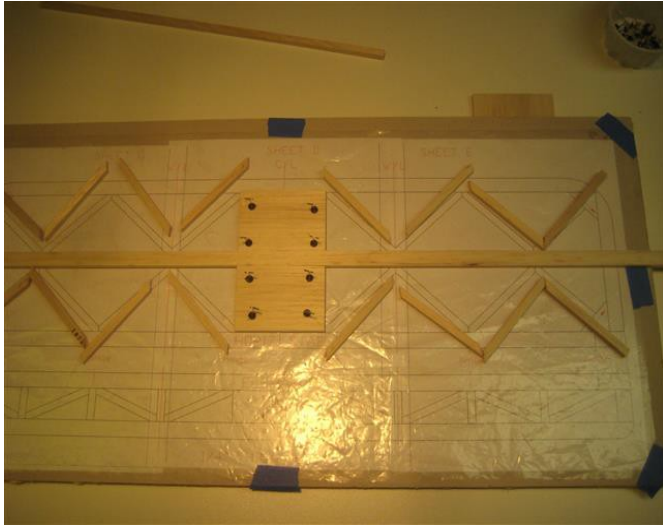
**The horizontal stabilizer and elevator are the next two parts to construct.*

**Prepare the partial drawings and join them together to form the complete full drawing of the horizontal stabilizer and elevator .*





Both the horizontal stabilizer and elevator are constructed on the plans using just the supplied 1/4" thick balsa sticks cut to size, pinned and glued. There are no laser cut parts used on these parts. Use the plans as shown for the width and length of the 1/4" thick balsa sticks.



**Transfer the center line of the horizontal stabilizer from the drawing onto the top surface of the stabilizer.*

**When the horizontal stabilizer and elevator are constructed, mark the location of the six CA hinges and cut in the slots in the trailing edge of the horizontal stabilizer and the leading edge of the elevator.*

**Bevel the trailing edge of the horizontal stabilizer and the leading edge of the elevator to form clearance for the up and down movement of the elevator.*

**Install the CA hinges dry then sand the top and bottom surfaces of both horizontal stabilizer and elevator flat and smooth.*

**Round over the periphery of the exposed edges of the horizontal stabilizer and elevator.*

**Set the assembly aside.*

The fuselage is the next item to build.

See:

Fuselage Construction