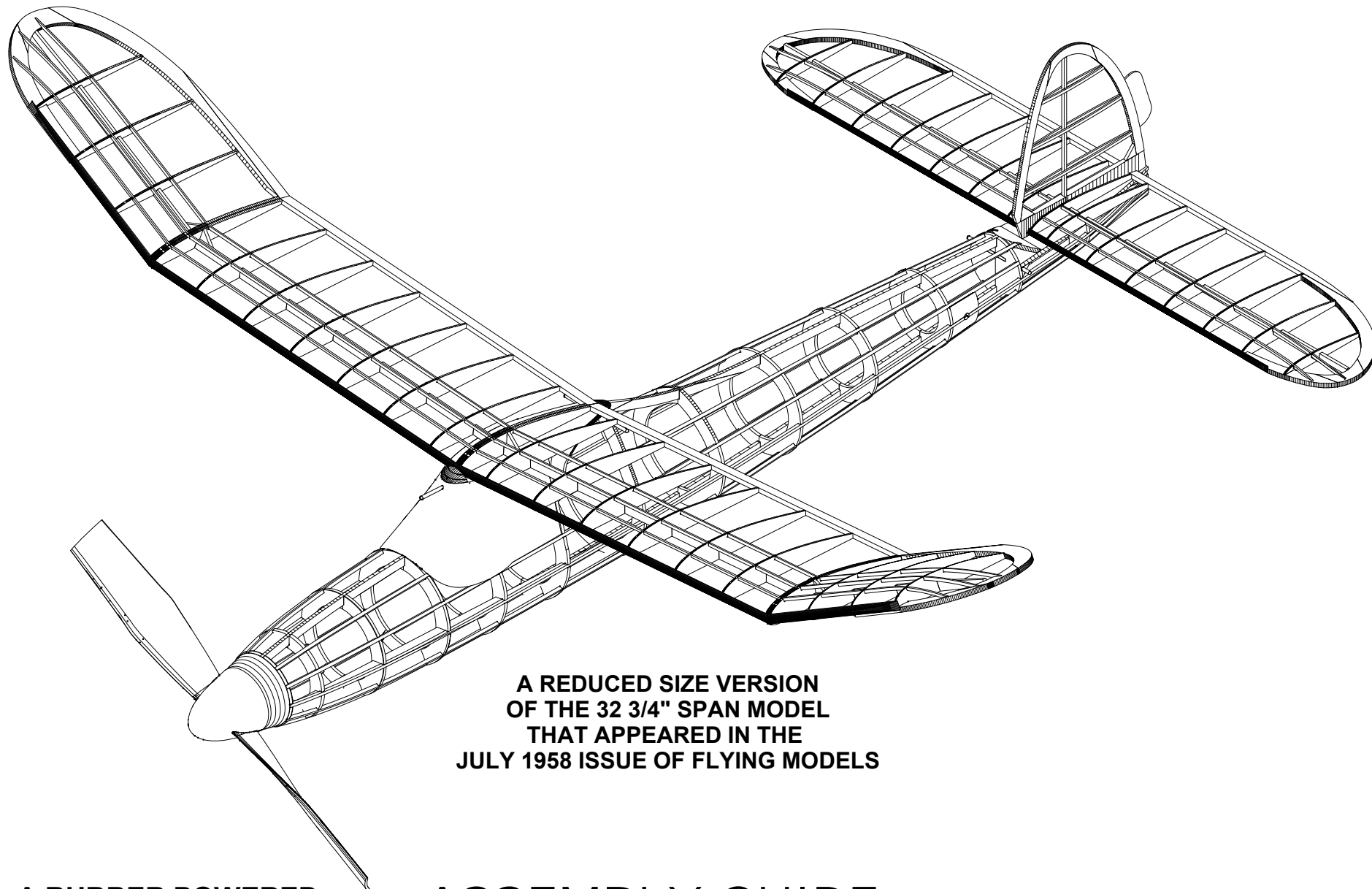


SKIPPER - 24



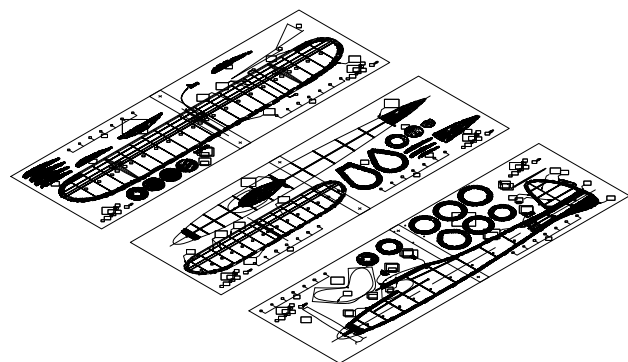
A REDUCED SIZE VERSION
OF THE 32 3/4" SPAN MODEL
THAT APPEARED IN THE
JULY 1958 ISSUE OF FLYING MODELS

A RUBBER POWERED
24" WING SPAN MODEL

ASSEMBLY GUIDE
February 2018

BY PAUL BRADLEY

1.

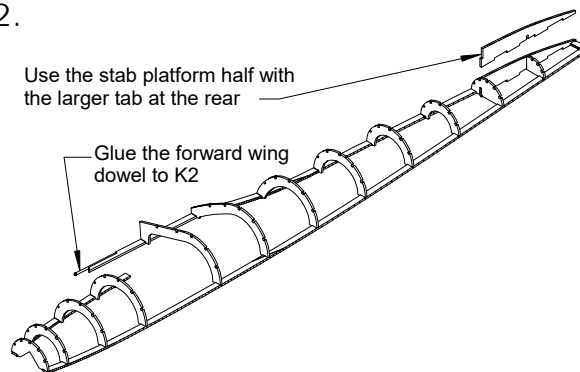


Tape the six plan pages together to form three building plan pages. Use the "+" marks for alignment of the pages.

2.

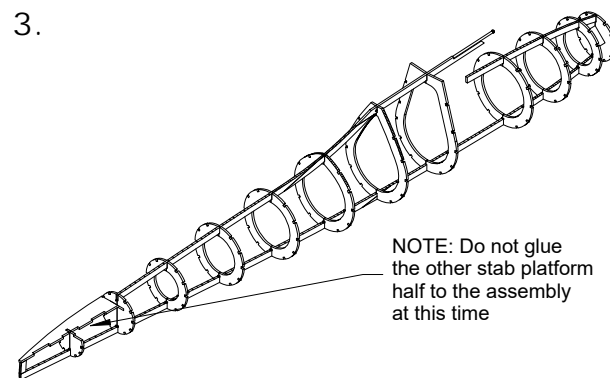
Use the stab platform half with the larger tab at the rear

Glue the forward wing dowel to K2



Pin the keel parts to the plan. Glue the keel joints as the parts are placed on the plan. Also glue the left former halves and one half of the stab platform to the keel using the plan as a location guide. Use the half of the stab platform with the wide tab at the rear as shown.

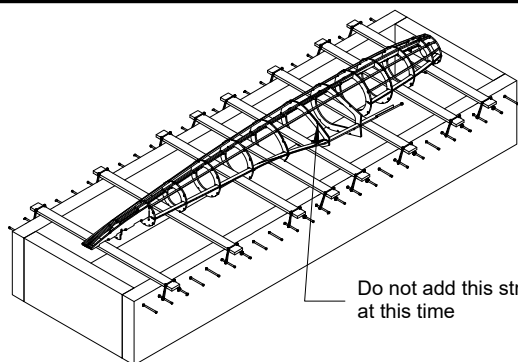
3.



NOTE: Do not glue the other stab platform half to the assembly at this time

Glue the right side of each former to the assembly. DO NOT glue the other half of the stab platform to the assembly at this time.

4.

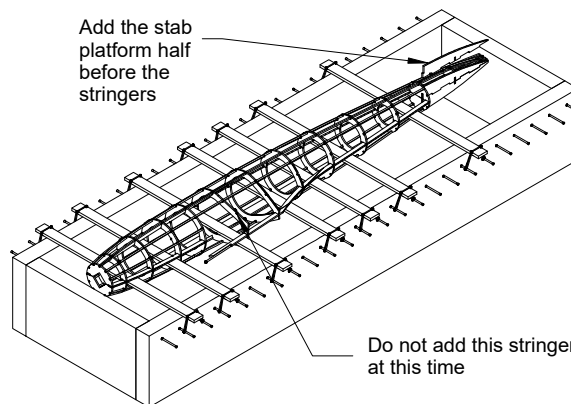


Do not add this stringer at this time

If you don't already have a fuselage assembly fixture, build one like the one shown in the sketch. The cross pieces are held in place with rubber bands. Place the fuselage on the fixture and pin the keel to the fixture cross pieces. Add the left side stringers. DO NOT add the top rear stringer at this time.

5.

Add the stab platform half before the stringers

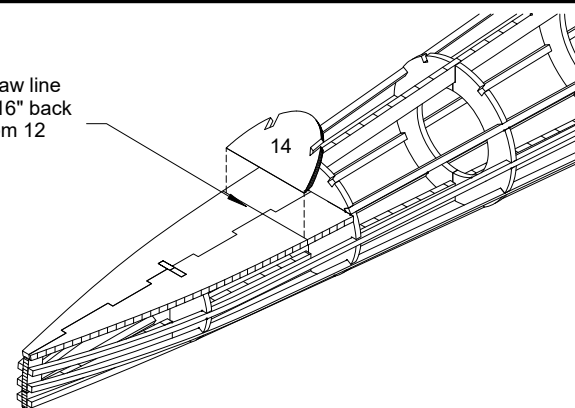


Do not add this stringer at this time

Remove the fuselage assembly from the fixture. Flip the assembly and glue the other stab platform half to the assembly. Insert the fixture cross pieces. Glue the right side stringers in place.

6.

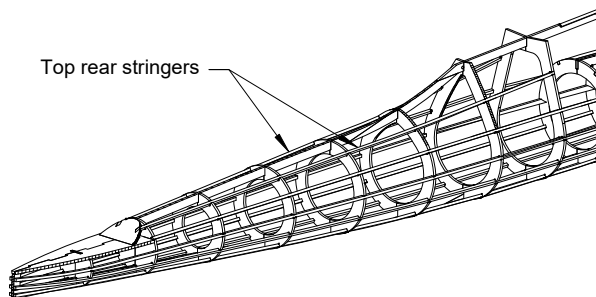
Draw line 9/16" back from 12



Draw a line 9/16" back from former 12 on the stab platform. Sand a bevel on the bottom and the front face of former 14. Glue the former to the stab platform along the line and the rear face of former 12.

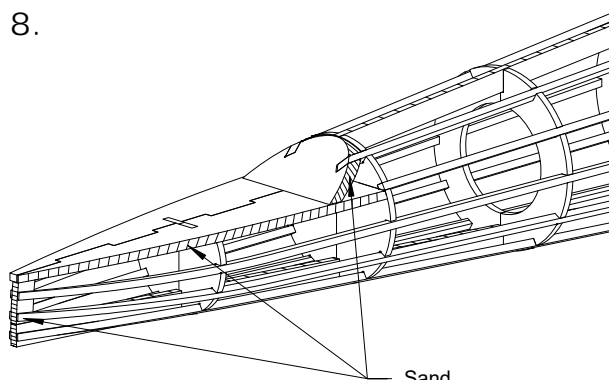
7.

Top rear stringers



Glue the top rear stringers to the assembly.

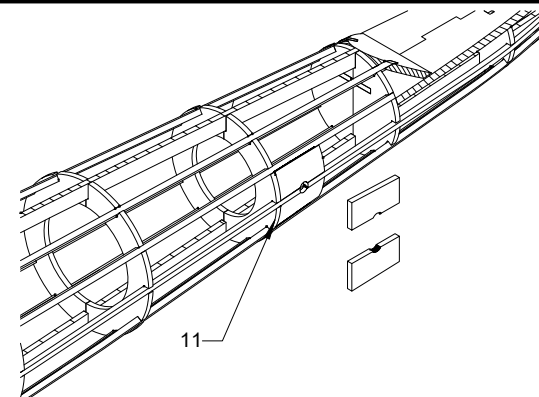
8.



Sand

Sand the stringers to a taper at the rear of the fuselage. Also sand the formers so their edges are flush with the stringers.

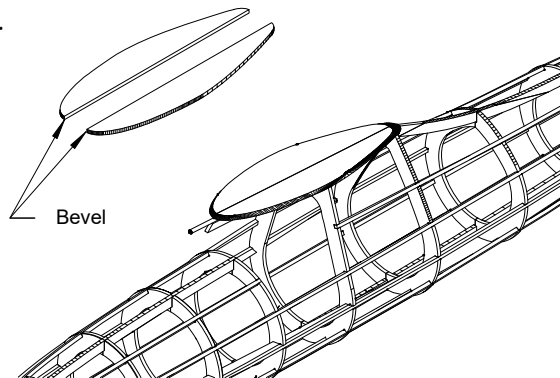
9.



11

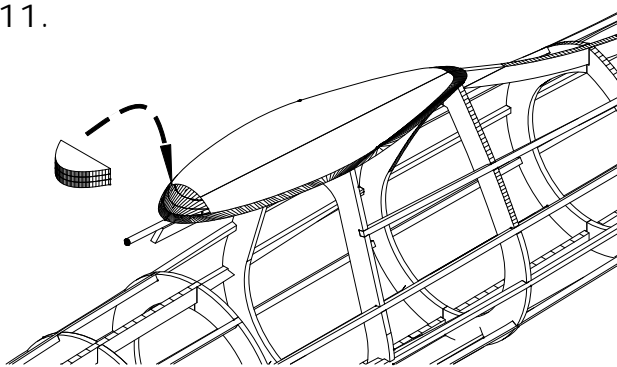
Glue the motor peg supports to the fuselage on each side as shown. After the glue is dry, use a piece of sharpened 1/8" brass tubing and drill out the motor peg holes. Use the partial holes in the motor peg supports as a guide. Sand the supports.

10.



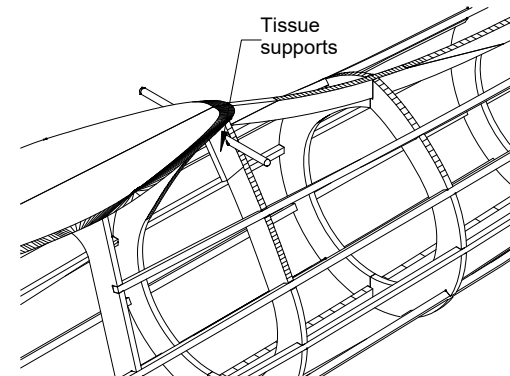
Bevel the center edges of the wing platform pieces to match the angle of the tops of formers 6 and 7. Glue the wing platform halves to formers 6,7 and K2. Sand the edges flush with the formers after the glue is dry.

11.



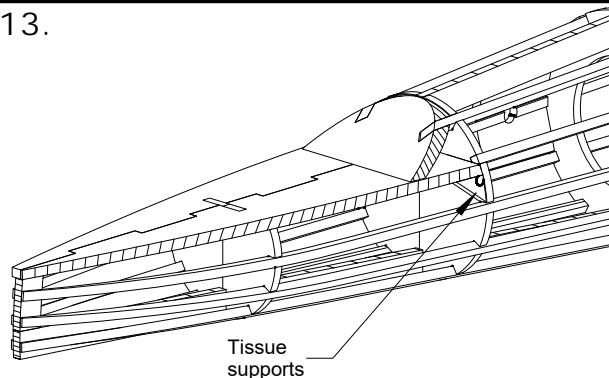
Glue the three forward wing stop laminations together. Once dry glue the forward wing stop to the wing saddle. The bottom will need to be beveled to fit the dihedral angle. Again, once the glue is dry, sand the forward wing stop to shape.

12.



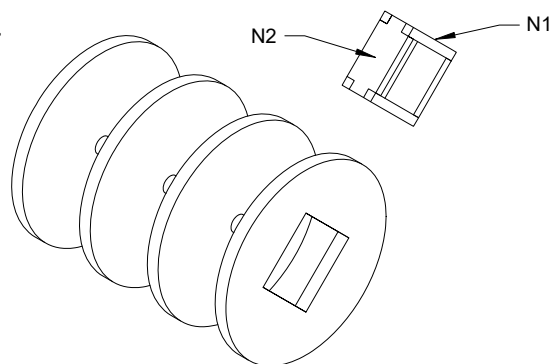
Place the 1/16" dowel rear wing hold down in the hole in K2. Glue the two wing dowel tissue supports to the structure BUT NOT THE DOWEL. Remove the dowel for installation after covering the fuselage.

13.



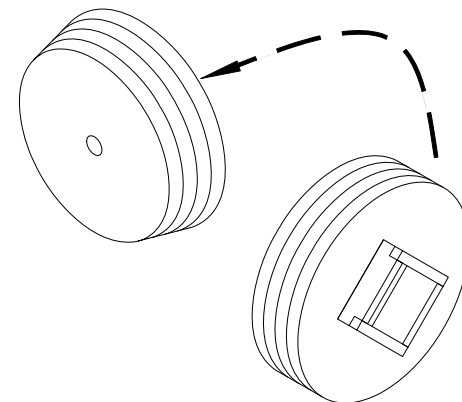
Glue the two stab DT rubber band dowel tissue supports to the bottom of the stab platform and the back of former 12 as shown. Drill 1/16" diameter holes in the upper corners of the tissue supports.

14.



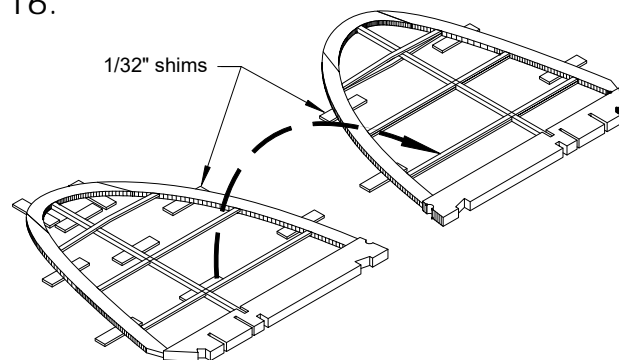
Glue the four 3/32" balsa nose block laminations together. Make sure the grain of each layer is at 90 degrees to the adjacent layer. Also glue the nose block key pieces together.

15.



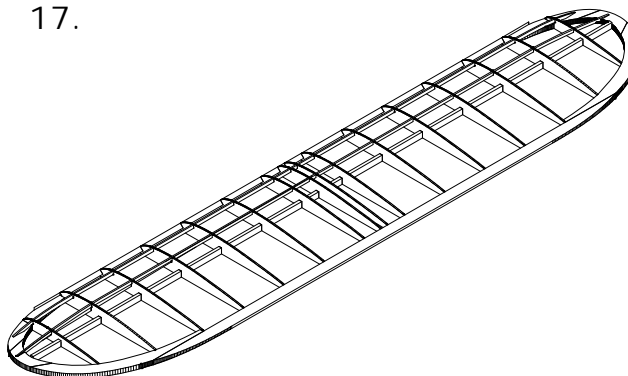
Glue the nose block key to the back of the nose block. It fits inside the square hole. Once the glue is dry, shape the nose block using the plan top and side views as a guide.

16.



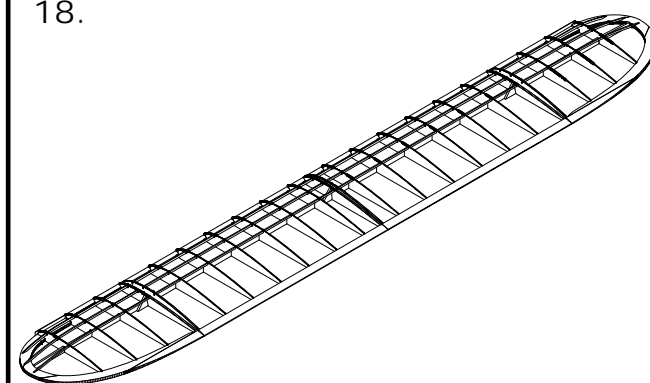
Build the fin. You will need to shim the LE, tip, TE, and spar with 1/32" balsa. Once the top layer of 1/16"x1/32" balsa cross pieces are dry, flip the fin and glue the opposite side cross pieces to the assembly. Sand the fin to match the shape of the cross pieces.

17.



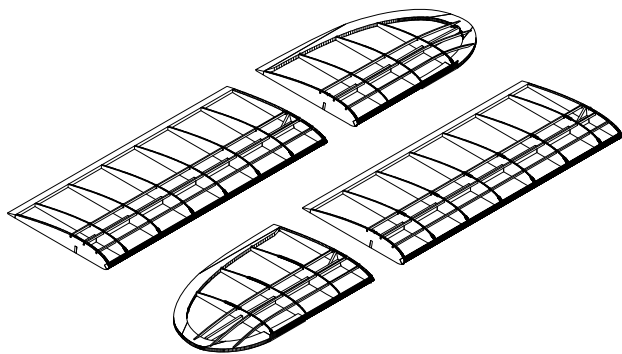
Build the stab and sand the LE and tips to shape when the glue is dry.

18.



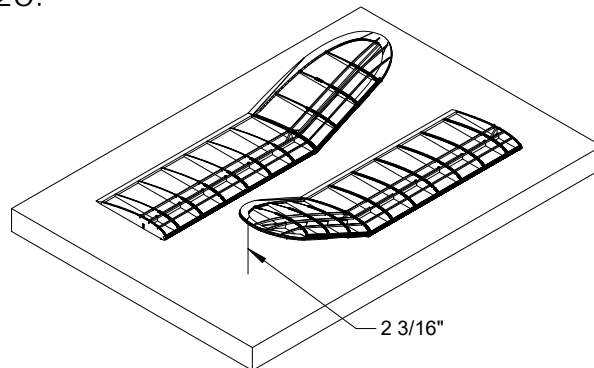
Build the four wing panels over the plan.

19.



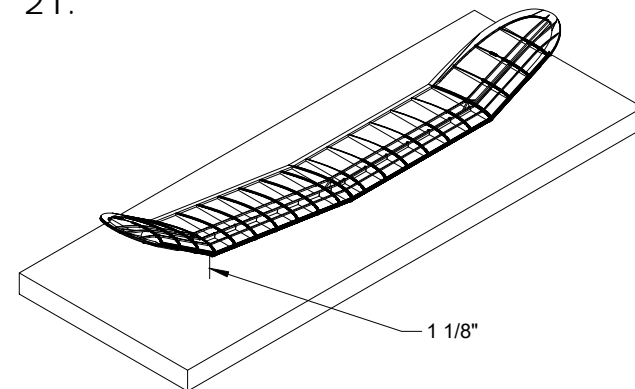
Remove the wing panels from the plan when the glue is dry. Shape the LE, TE, and tips.

20.



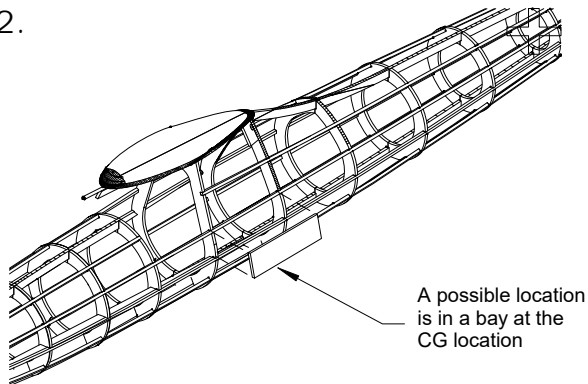
Glue the wing tip panels to their respective main panels. There should be $2 \frac{3}{16}$ " under each tip when the main panels are flat on the building surface.

21.



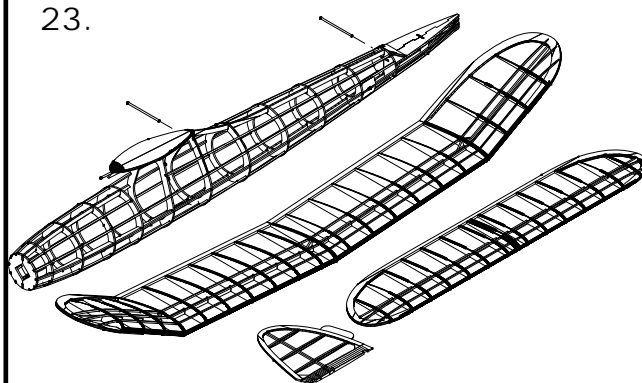
Glue the main wing panels together. There should be $1 \frac{1}{8}$ " under the tip dihedral break when the opposite main panel is flat on the building surface.

22.



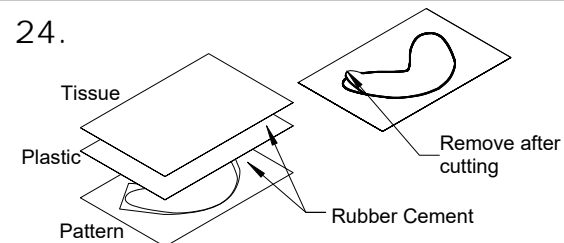
If a mechanical timer will be used for the DT, determine where you want the timer to be placed and prepare a suitable mount. Using $1/16$ " balsa planks between the fuselage stringers works well.

23.



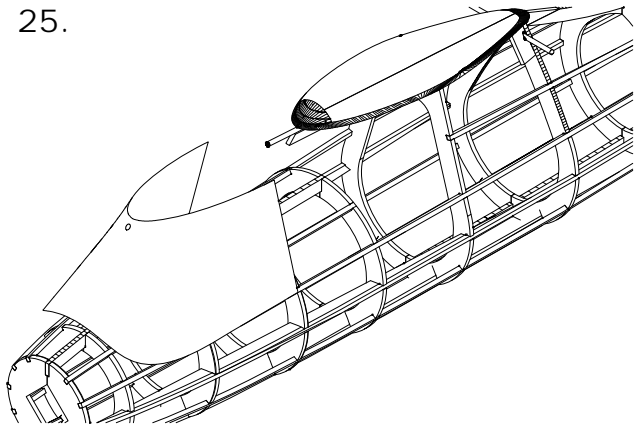
Cover the wings, tail surfaces, and fuselage with tissue. Also glue in the rear wing hold down dowel and the stab DT dowel. This illustration and subsequent illustrations will not show the tissue covering.

24.



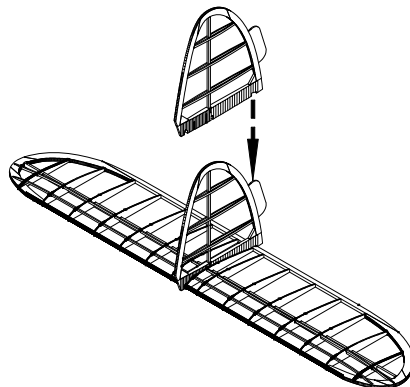
A good way to add the tissue trim to the windshield is to glue a piece of tissue to the plastic that will be used for the windshield. Use rubber cement. Again using rubber cement, glue the windshield pattern to the back side of the windshield plastic. Apply a coat of clear dope to the tissue side. The rubber cement will protect the plastic. Using a fresh blade, cut the tissue along the tissue trim line. Cut just the tissue, not the plastic. Carefully peel up the waste tissue. Now cut the windshield outline. Once the outline has been cut, peel off the pattern from the back of the windshield. Any rubber cement residue can be rubbed off.

25.



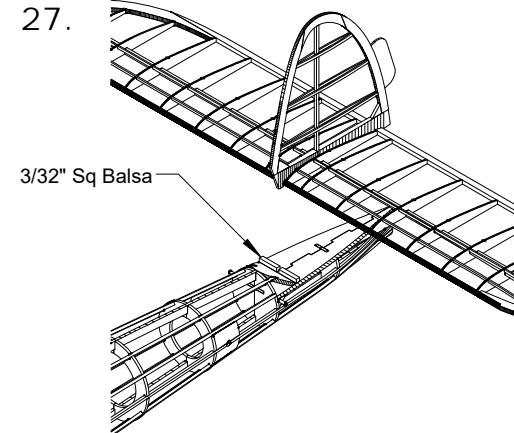
Glue the windshield to the fuselage as shown.

26.



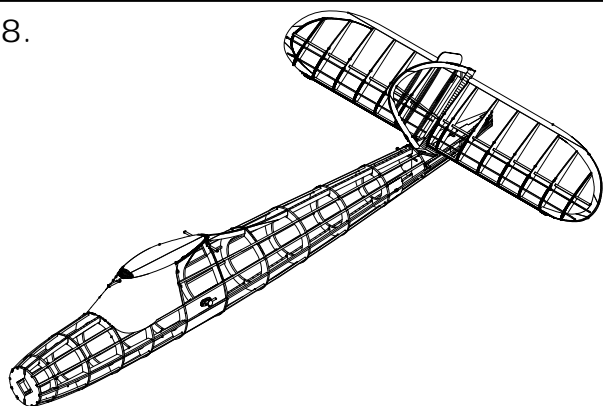
Remove the tissue from the top surface of the stab between the two center ribs. Glue the fin in the opening making sure it is seated fully to the bottom of the stab. Make sure the fin is square to the stab.

27.



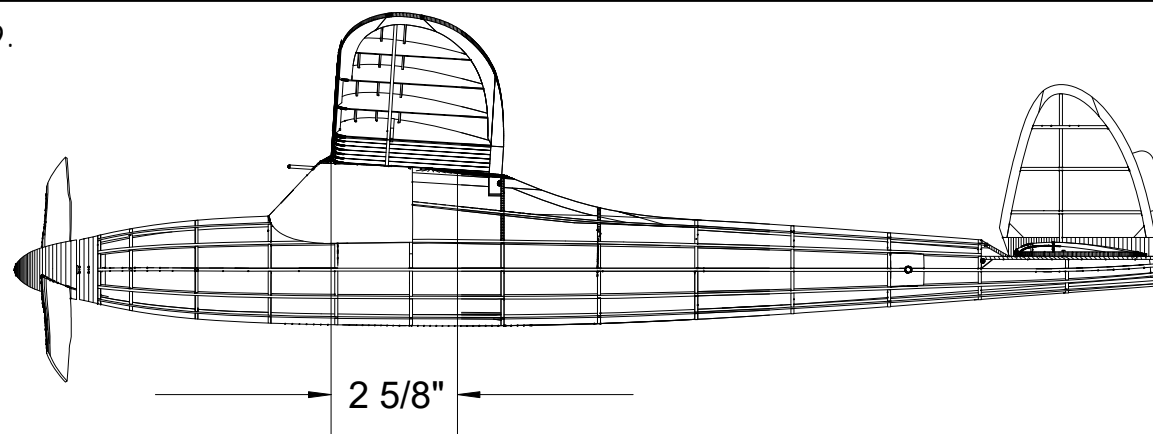
Glue a piece of $3/32$ " balsa to the stab platform to serve as a pivot for the stab. Leave a gap for the fin leading edge.

28.



If a mechanical DT timer is being used, install the DT line and line guides and line stop. Glue the guides to a stringer along the route of the DT line. The DT rubber band is routed from the DT dowel around the notch in the bottom of the fin.

29.



A suggested starting CG location is $2 \frac{5}{8}$ " behind the wing LE. The model is intended to glide left. Some stab tilt is suggested to establish the left hand glide circle. Raise the left stab tip about $\frac{1}{4}$ ".

