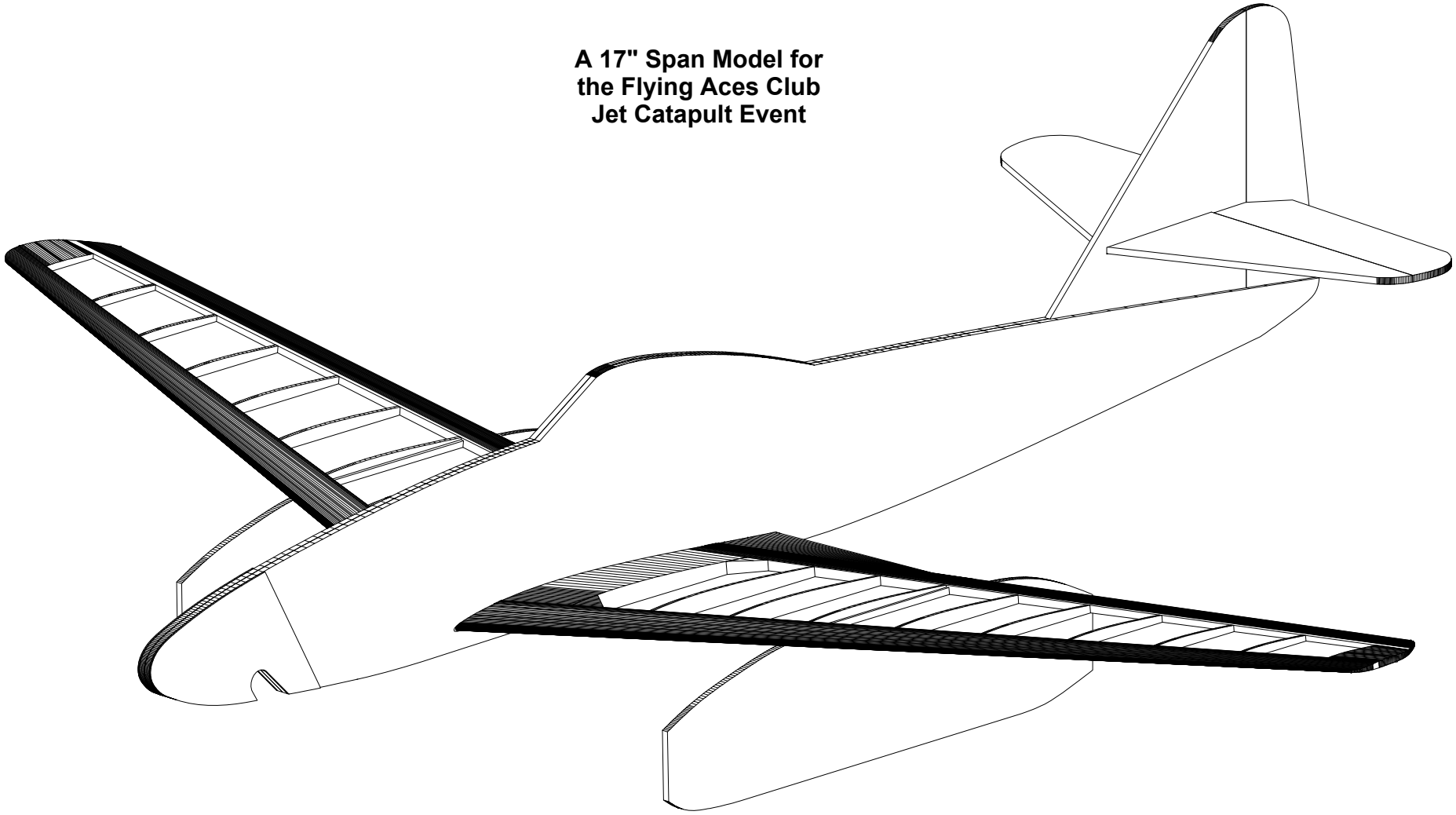
Me 262 Jet Cat

A 17" Span Model for the Flying Aces Club Jet Catapult Event



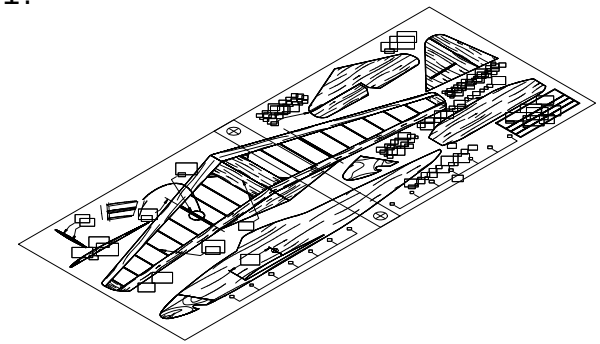
A Catapult Launched Model

ASSEMBLY GUIDE

August 2018

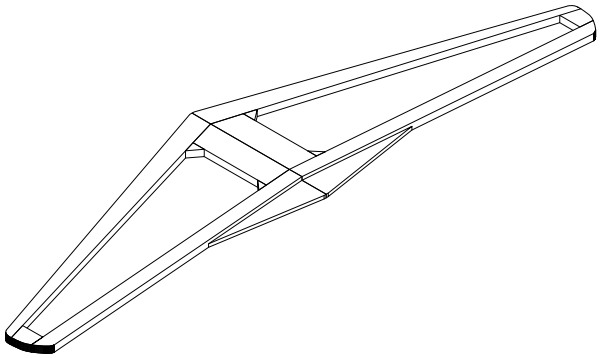
BY PAUL BRADLEY

1.



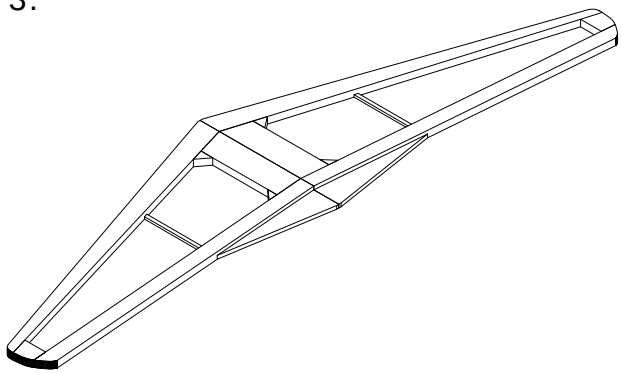
Tape the two plan pages together to form the building plan. Use the "+" marks for alignment of the pages.

2.



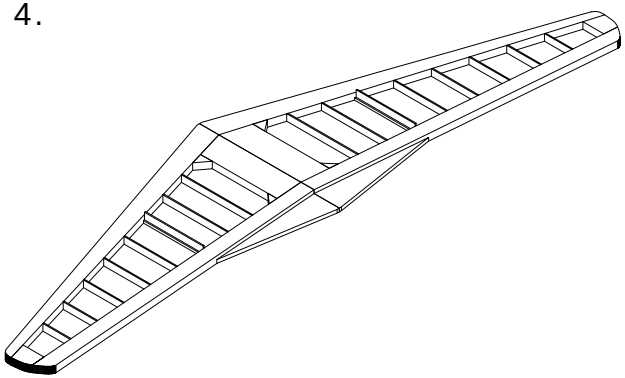
Cut the wing outline parts from 3/16" and 3/32" balsa. Glue the outline parts together using the plan. DO NOT glue the center section joint.

3.



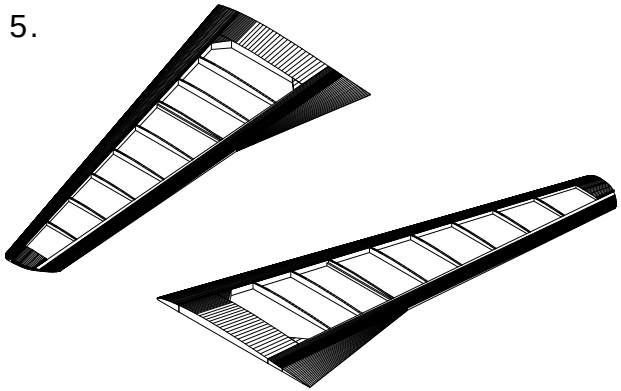
At each engine nacelle location, cut a piece of 1/16 x 1/8 strip to fit between the wing outline parts. Glue those pieces to the wing outline pieces.

4.



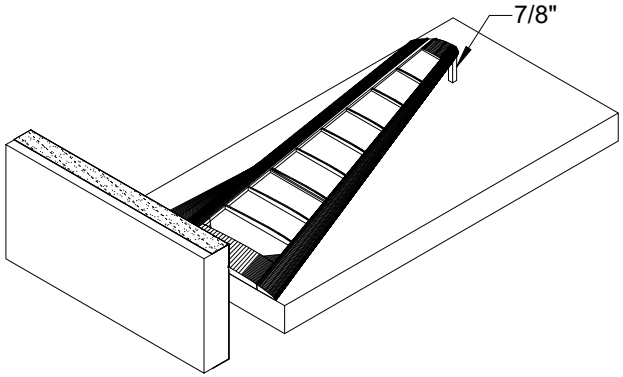
Cut some firm 1/32" balsa into several 3/16" wide strips. Using the 3/16" wide strips, cut and glue individual lengths at each rib location. At the engine nacelle rib location, the rib blank will sit on top of the 1/16" x 1/8" balsa strip.

5.



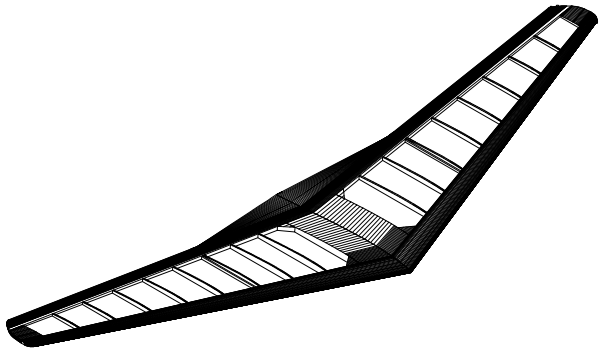
When all of the glue is dry, remove the two wing panels from the plan. Sand the wing panels to the airfoil shown in the wing root cross section shown on the plan. Taper the wing thickness toward the tips.

6.



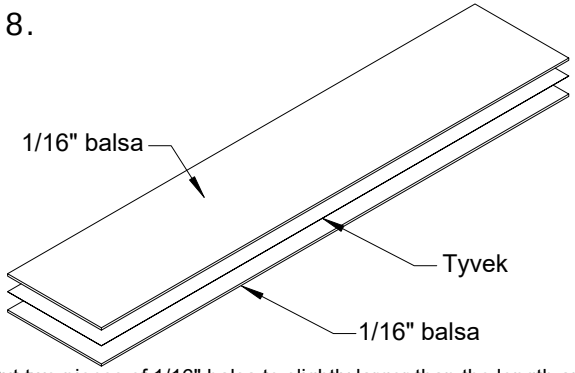
Block each wing panel up 7/8" at the tip with the root flush with the building surface. Sand the root of each panel so the wing panels can be joined in the middle with 7/8" dihedral under each wing tip.

7.



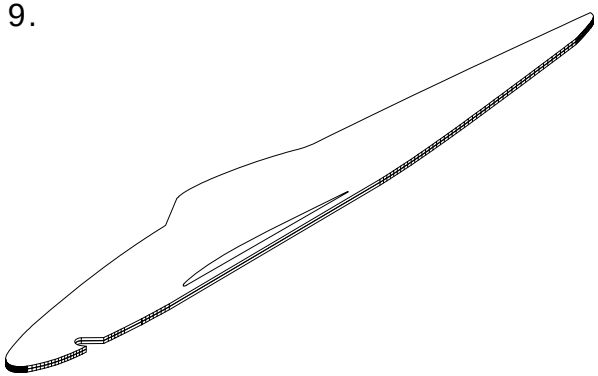
Glue the wing panels together.

8.



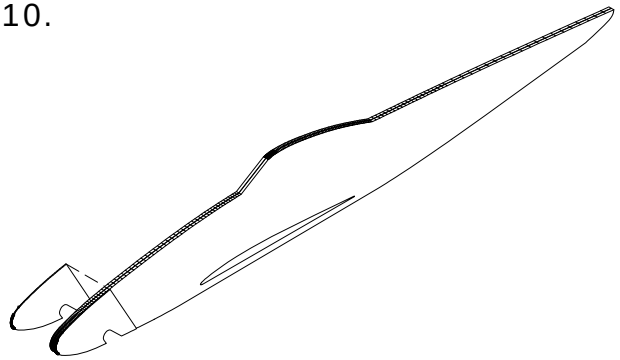
Cut two pieces of 1/16" balsa to slightly larger than the length and width of the fuselage. Also cut a piece of Tyvek to the same size. A good source of Tyvek is a U.S. Priority Mail envelope. Glue the laminations together with a glue like Titebond or a cellulose based glue like Sigment.

9.



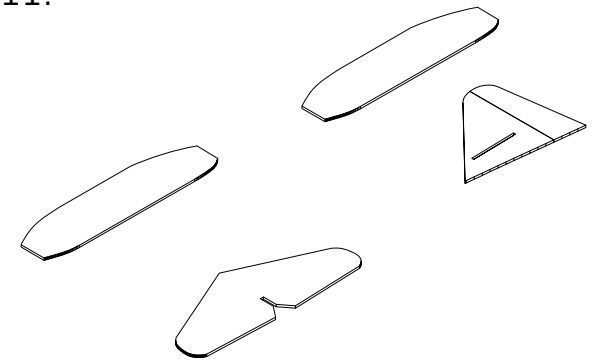
Once the glue dries in the fuselage lamination lay up, cut out the fuselage.

10.



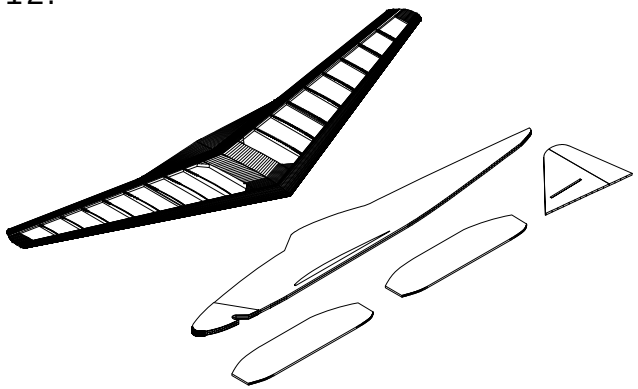
Sand the fuselage to form a cross section similar to the one shown on the plan (not shown in these illustrations). Glue the 1/64" plywood nose doublers to each side of the fuselage. Sand the doubler edges when the glue is dry.

11.



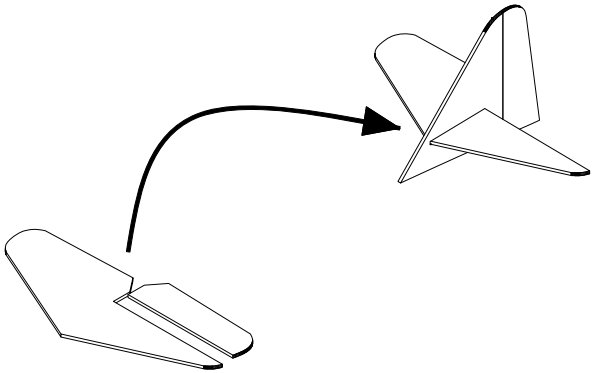
Cut out the tail surfaces from 1/16" blasa. Sand both surfaces to a symmetrical cross section (not shown in these illustrations). Also cut out the two engine nacelles from 1/16" balsa.

12.



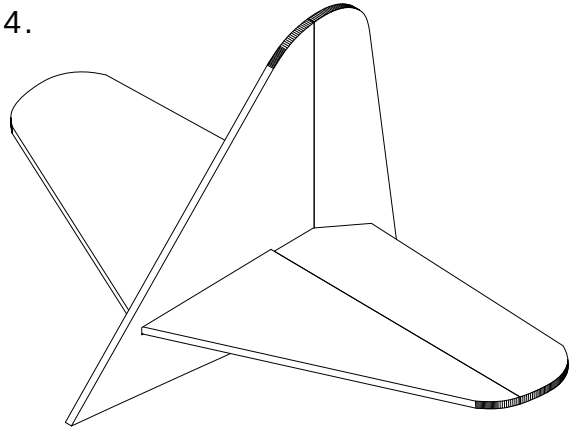
Cover the wing, fuselage, fin, and engine nacelles (not shown in these illustrations).

13.



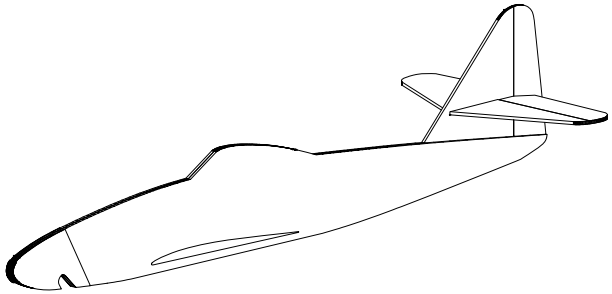
Cut one of the elevators from the stab. Use the plan as a guide. Slide the stab into the fin slot and glue it in place. Make sure it is square to the fin. Once the glue dries, glue the elevator to the stab.

14.



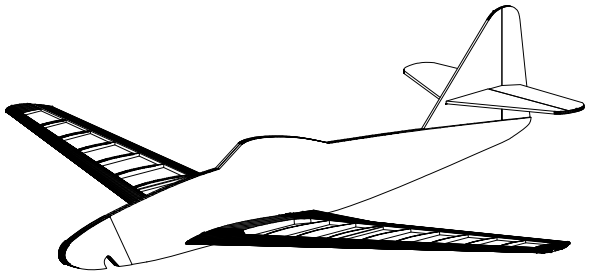
Cover the stab.

15.



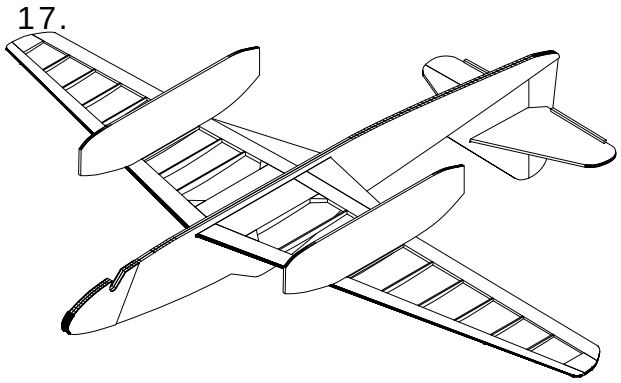
Glue the fin/stab assembly to the fuselage. Make sure the stab is square to the fuselage.

16.



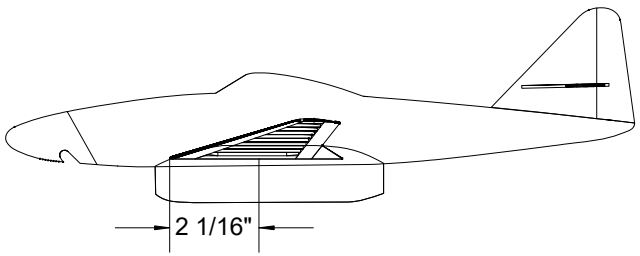
Slide the wing into the fuselage slot. Make sure the wing is square to the fuselage and glue it in place.

17.

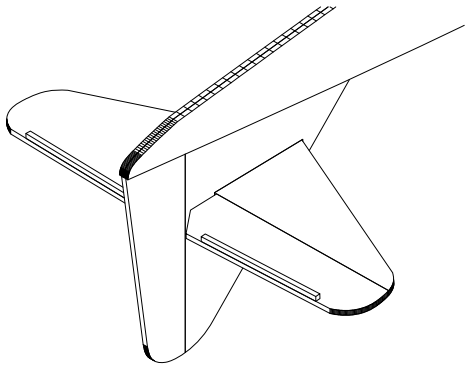


Glue the engine nacelles to the bottom of the wing centered on the 1/16" x 1/8" strips at each nacelle location. Make sure each nacelle is parallel to the fuselage.

18.

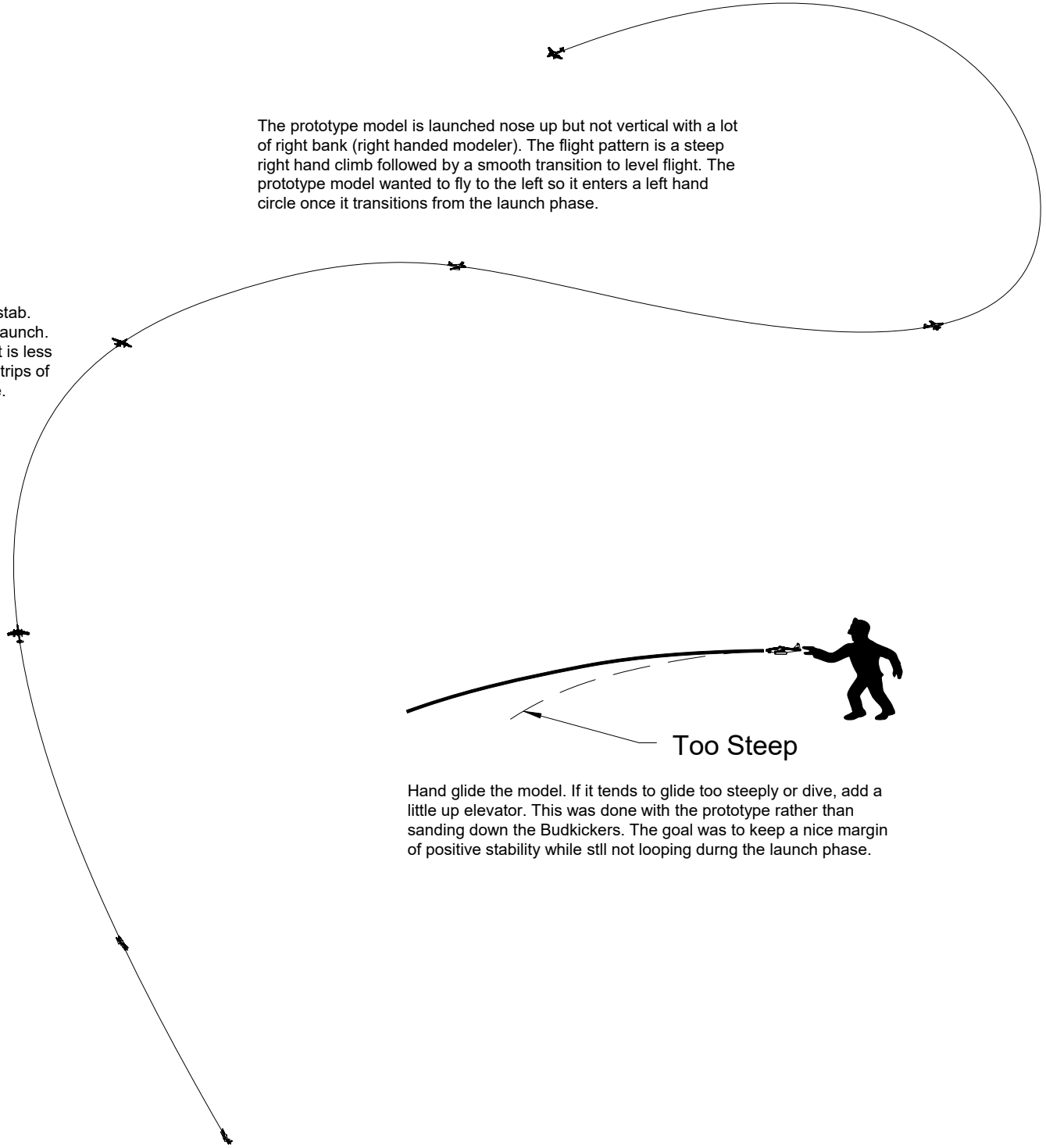


Add ballast to the nose to achieve the CG location shown on the plan.



The prototype model was set up with "Budkickers" on the stab. These are Gurney flaps to help control looping during the launch. This set up allows for a more positive incidence set up that is less prone to diving in if the launch is not perfect. Simply glue strips of 1/16" square balsa to the bottom of each stab trailing edge.

The prototype model is launched nose up but not vertical with a lot of right bank (right handed modeler). The flight pattern is a steep right hand climb followed by a smooth transition to level flight. The prototype model wanted to fly to the left so it enters a left hand circle once it transitions from the launch phase.



Hand glide the model. If it tends to glide too steeply or dive, add a little up elevator. This was done with the prototype rather than sanding down the Budkickers. The goal was to keep a nice margin of positive stability while stll not looping durng the launch phase.