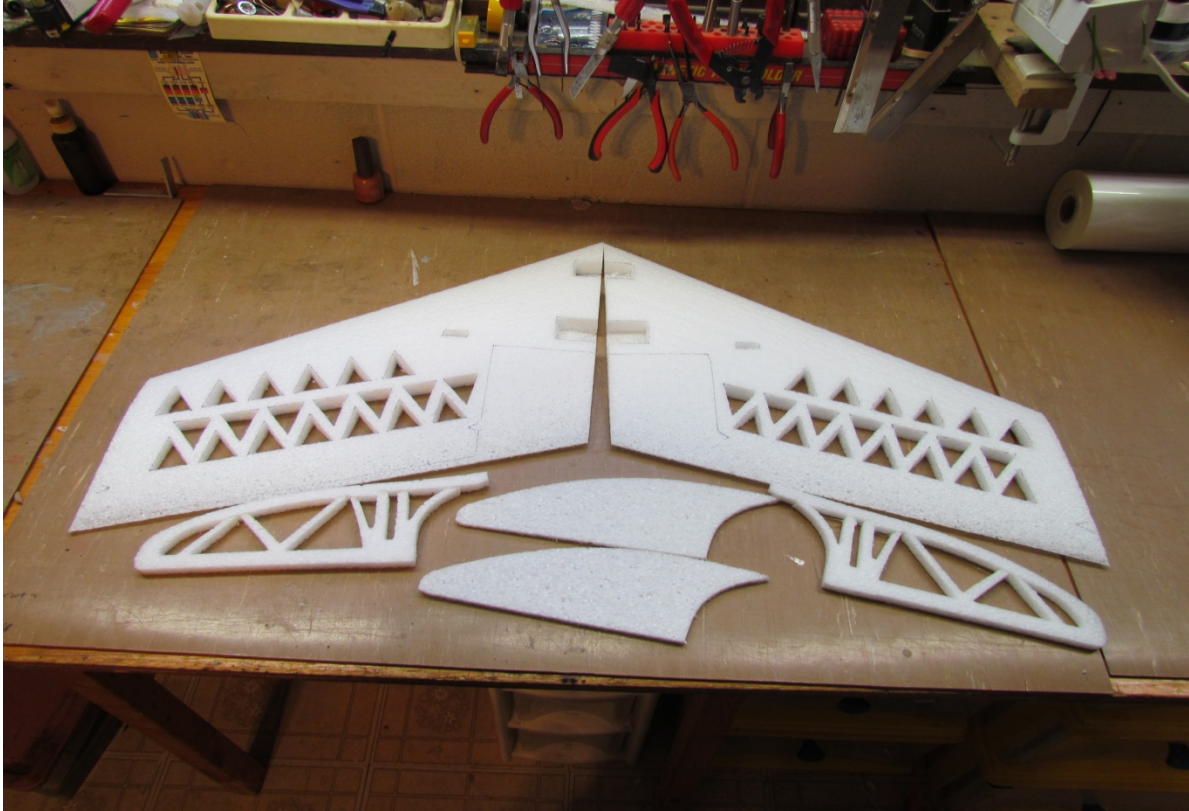
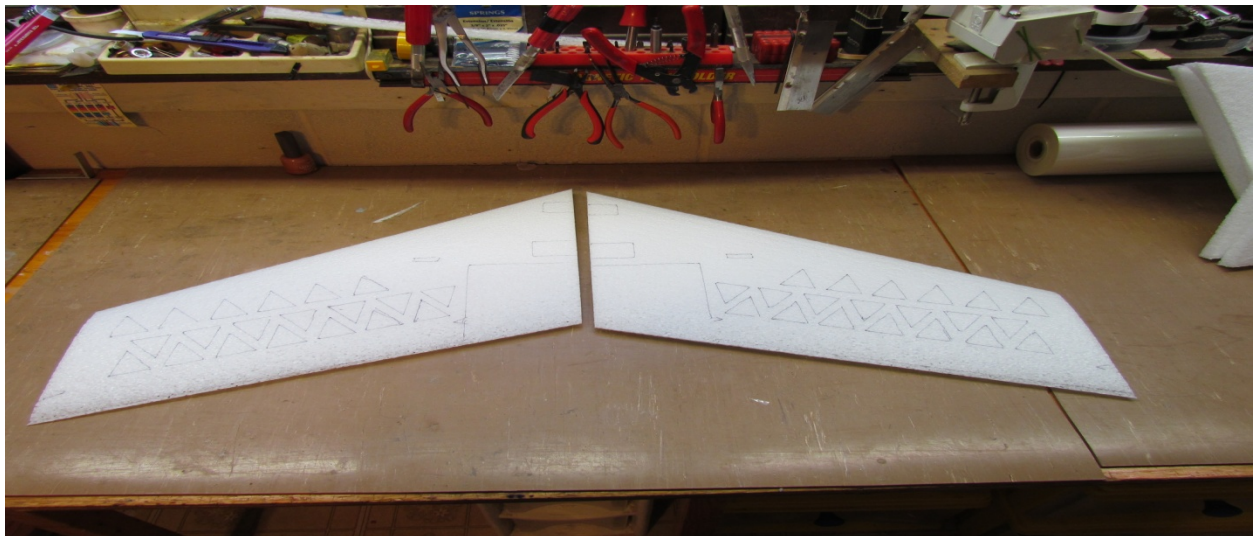


Precut “Wingola” Kit Instructions

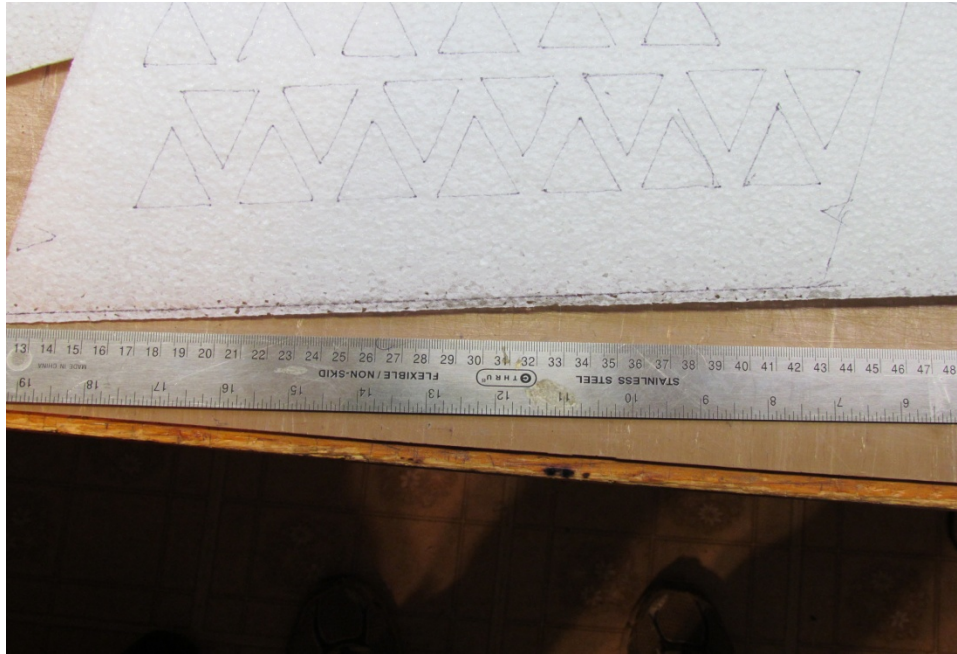
Below is the precut option. Battery compartment, Receiver and Servo Trays are cut for mini radio gear.



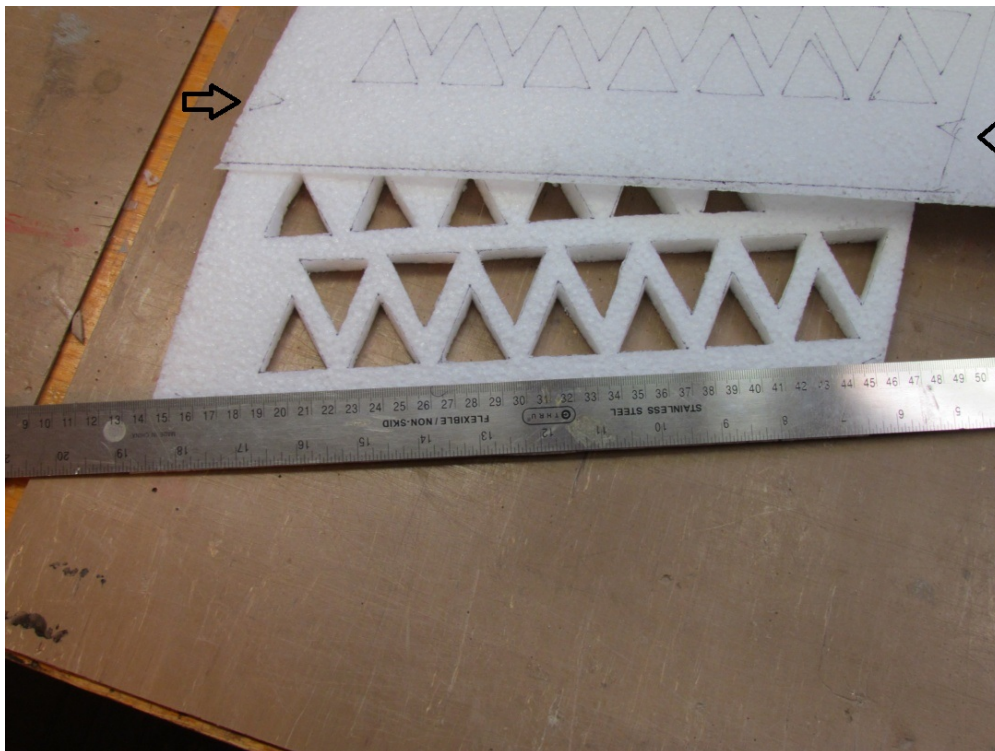
This is the uncut version. It has the placement laid out for the radio, battery, control surfaces and motor cut outs. With this option, you can customize the Wingola cores to make it either a powered ship or a glider. This will also allow for larger radio gear though that is not recommended. Lighter is better



As you can see, the core has every line marked and ready to be cut. A fresh blade in your knife is recommended. Take your time when cutting. It will be worth the wait.

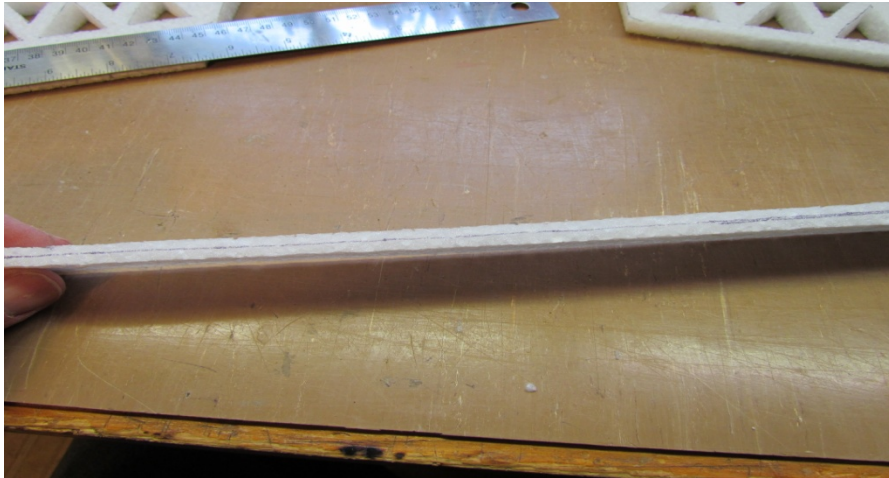


Trim off the trailing edge using a steel straight edge and a sharp knife (A box cutter with a fresh blade works great for this).

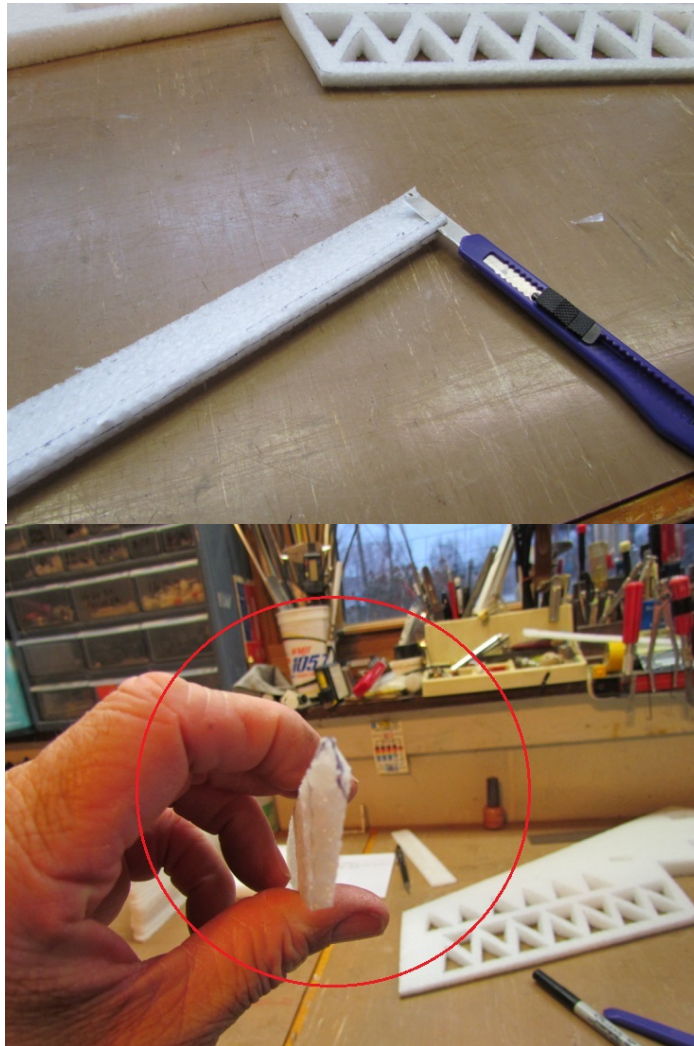


Next cut the control surface from the foam core using the arrows on core as a guide.

Draw a center line along the leading edge of the control surface to help cut the bevel



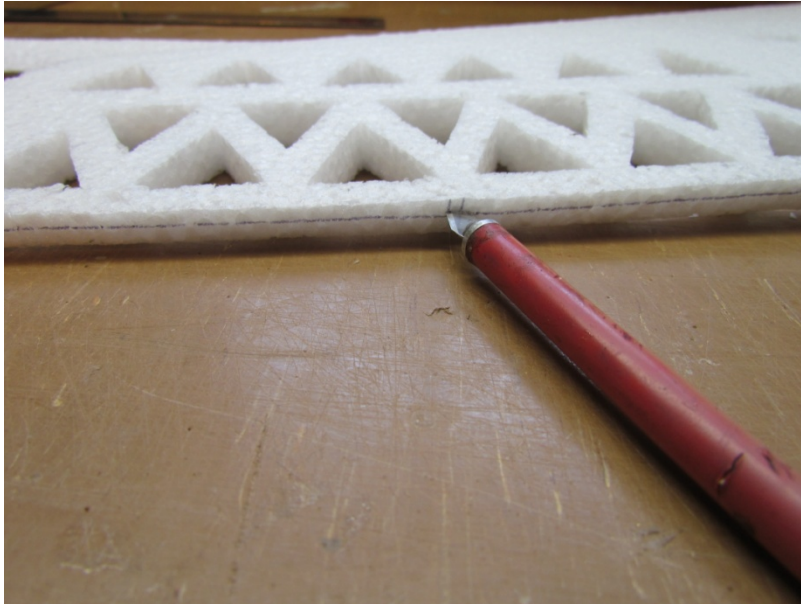
Carefully trim the leading edge top and bottom to create the bevel as shown below.



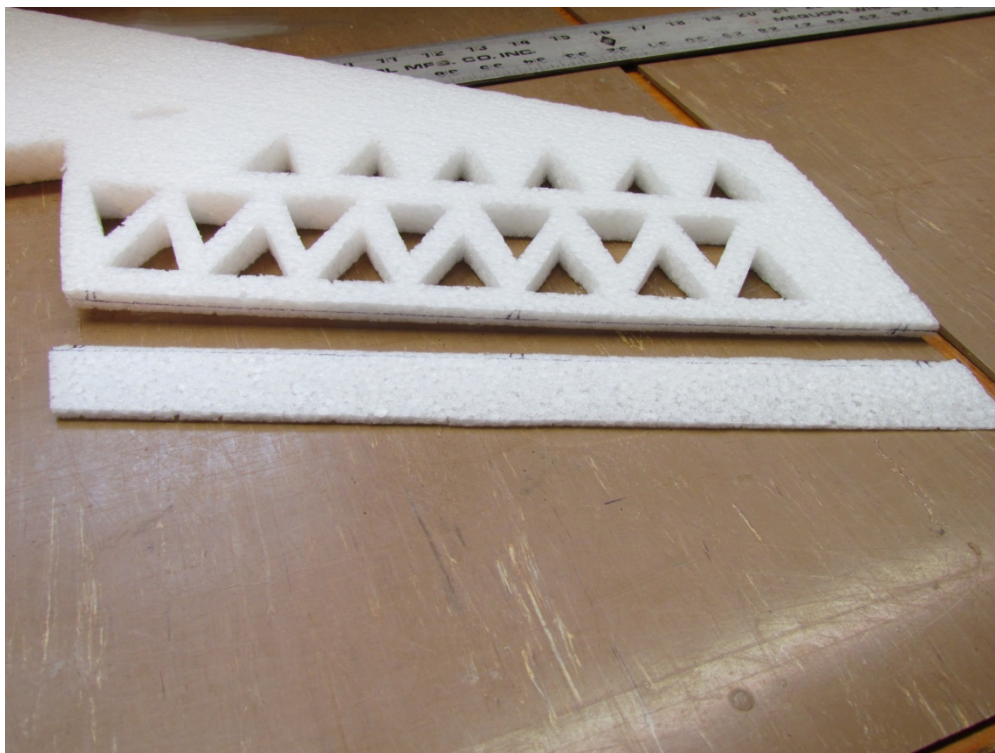
Cut six pieces of easy hinge material $\frac{1}{2}$ " long $\frac{1}{8}$ " wide.
They are used to hold control surfaces in place while applying the laminate material.



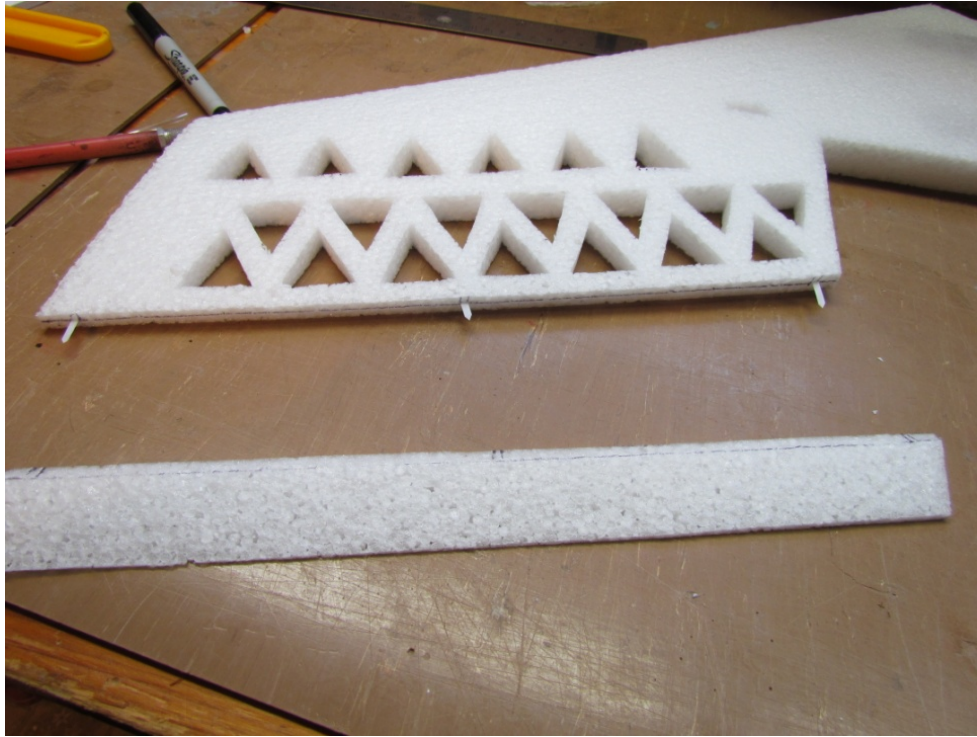
Make shallow slots for them in the wing core ends and middle. Be sure to place these slots in between the triangle cut outs as shown.



Now cut matching slots in each control surface paying close attention to the alignment.



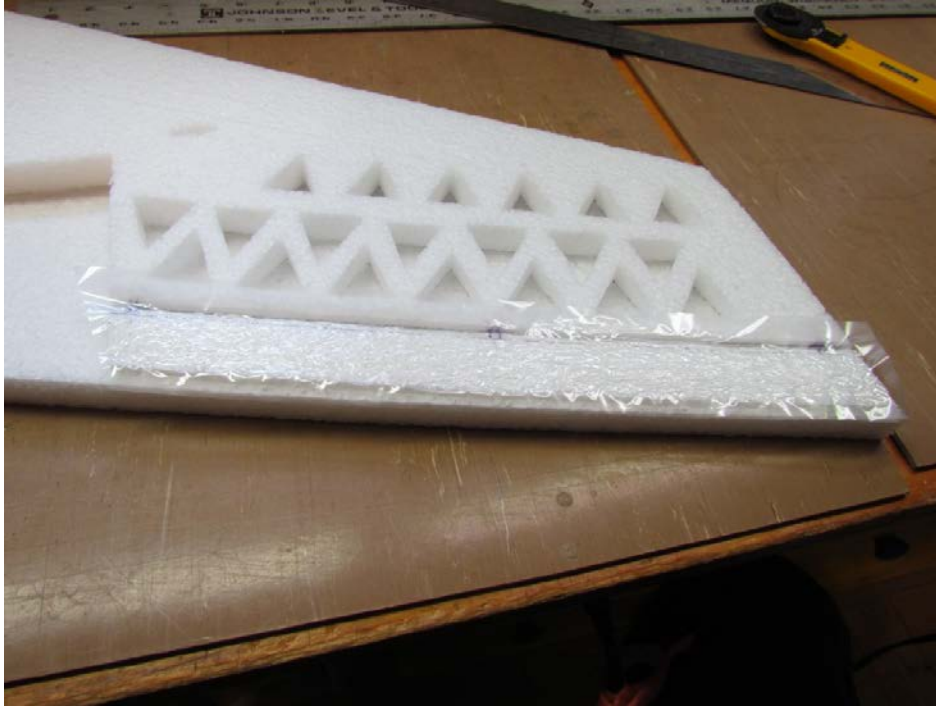
Insert the hinge pieces in the slots, attach the control surfaces and then apply glue to the seam. Leave a 1/8" gap between the control surface and the wing. This may seem large but you will iron the laminate into the gap to create a hinge that spans the complete trailing edge of the wing.



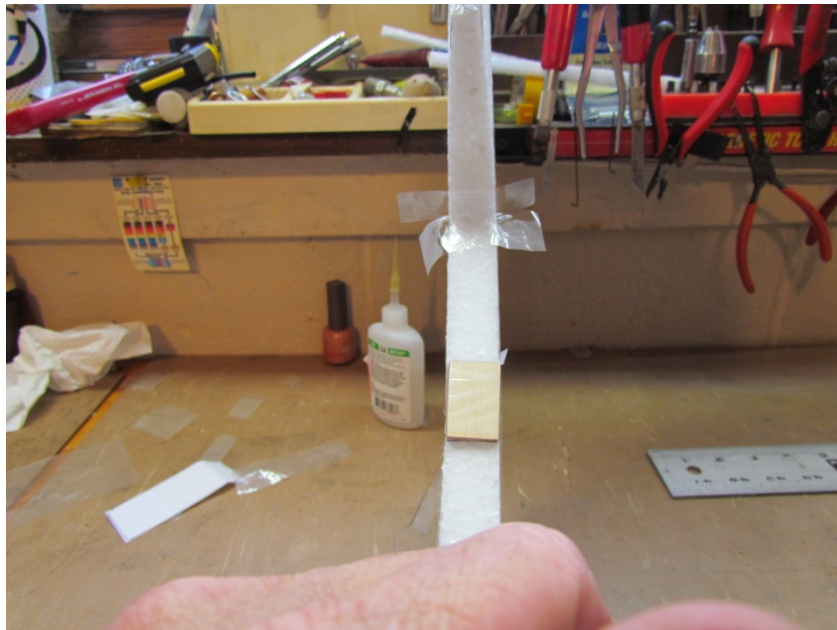
It should look like this.



Once the control surfaces are attached, carefully apply the laminate to the elevons.



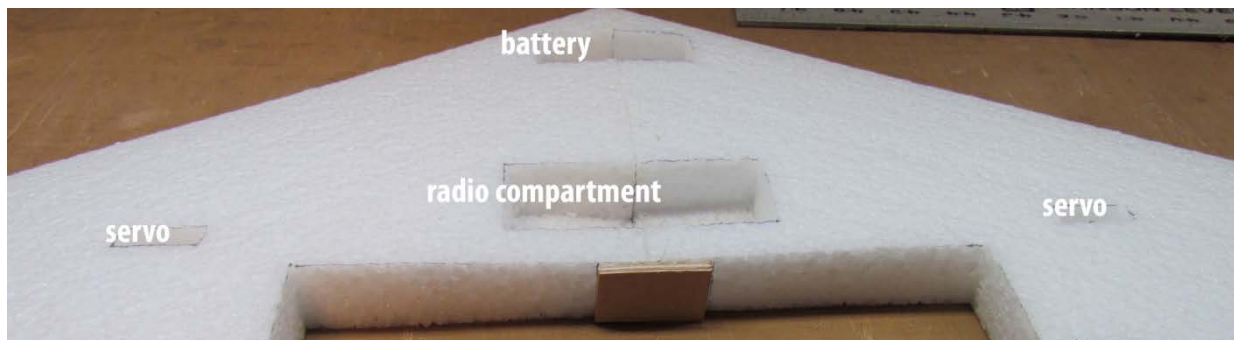
Lay the wing in the shucks to keep the control surfaces straight while you iron on the laminate lay on with about a 1/4" overlapping into the cutouts. The overlap will be taken up when the laminate is ironed into the hinge line. Use the tip of your iron to seal the seam.



Cut thin strips of laminate and cover the corner. Then glue the motor mount in the center of the motor cutout as shown. Be sure the mount is centered within its opening.



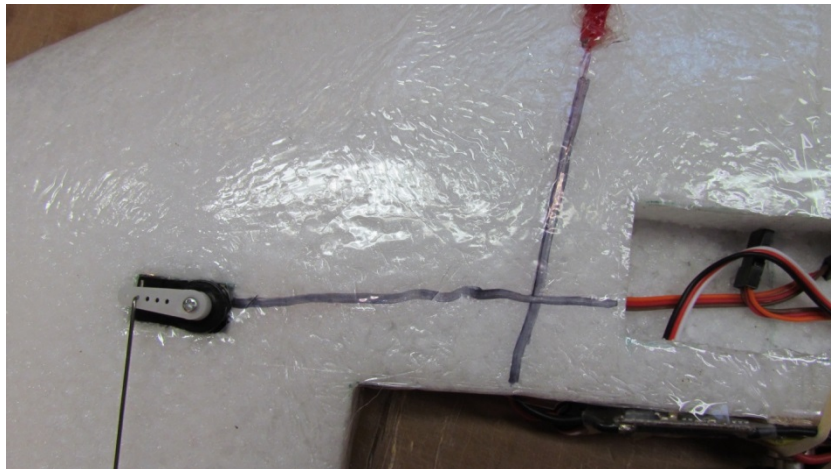
Next glue the 5 mil stress reinforcement paper at the location top and bottom as shown.



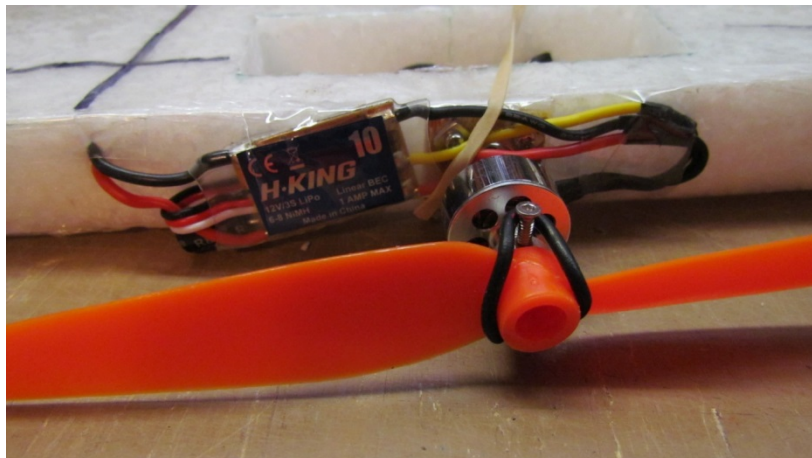
Ok you are almost there. Cut and trim the laminate to cover the plane. Start with the bottom first, at the trailing edge (in the gap between the elevon and the wing) overlapping the leading edge about 1.5" to form the leading edge. You can double cover the control surface if you would like by cutting the laminate large enough to go over the elevon. Make sure there is enough laminate to go into the hinge gap. Repeat the process on the top again overlapping about 1.5" at the trailing edge.



Now add your servos. Route wires into radio compartment. A thin cut into the foam works well here and then hot glue the slice to seal it up. I use a stiff piece of card stock to smooth or scrape any excess glue off the wing surface while the glue is still hot.



Install your esc-motor combo. We use strapping tape to mount the esc next to the motor routing the wires into the receiver bay. (Leave the battery connector outside the bay).



Install your receiver being sure all wires are connected properly. Put the receiver bay cover in place and close it up. Strapping Tape works well for this.

The battery is held in by pressure but you can add a piece of clear tape if you so desire. Be sure to tape down the lead to the ESC.

Install your push rods and control horns as shown.



The battery is held in by pressure but you can add a piece of clear tape if you so desire. Be sure to tape down the lead to the ESC.

Install the winglets on the ends of the wing. I like to get thin Velcro strips and hot glue them to the wing tips. Hooks on the wing tips and loops on the winglets. They can then be easily replaced if they get damaged. You can even make added sets and decorate them to suit your mood.

Balance the plane at the marked spots (this shouldn't need much added weight to balance)

Install your prop, check your control surfaces and, well go fly!

Here are a couple of planes that have been painted but of course the choice is yours.



Enjoy