F3P-Fatboy, Beta & Disney (NG & Mylar version)

Building Instructions

The Depron parts for the Fatboy, Beta or Disney are very fragile until the model is fully assembled. Take care when handling the parts.

Choice of glue:

Recently we only use this so called ‘Phatic’ glue:

https://deluxematerials.co.uk/products/super-phatic



This should be available from several sources.

This glue is very thin so it will run into small slots. Also around 50% of the volume will evaporate making it much lighter then CA. Also the glue joint is not as hard as CA making it a better suited to the soft Depron.

Disadvantage is that the glue turns a light color of brown when used too much and when the plane is getting older. Also it takes up to 20 minutes to settle, so building moves slower. The advantages outweigh these disadvantages in my opinion.

Building order

The list below is the quick overview of the steps to take to build your plane. But please also use your own insights, study pictures and ask around if specific steps are unclear.

For the first steps, leave the parts in the large sheet, taking care that these are not deformed while gluing.

1. Beta/FB: If you want to spend time on a good airbrush job, cut the V-grooves into the depron to give room for the Carbon to be glued in.
2. Glue the carbon strip (1.5x0.13mm) in the slots.
3. Glue the carbon rod/tube. (Fatboy, Beta)
4. (Airbrush) use doubled sided tape to glue the depron from the open areas too cardboard. Keep in mind that the Carbon-strip / Tubes side is the side where the mylar will be glued on later.

The parts can now be cut free

Continue :

5. Measure and glue the motor mount tubes
6. Cut the 45degree angle on Ailerons, Elevator and Rudder.
7. Use (blenderm) tape to attach ailerons to the wing.
8. Use (blenderm) tape to attach elevator to tail. Take care to allang the slots for the pull-pull horns.
9. Cover the model with mylar. Please test the spray glue to be Depron save on a piece of scrap depron.
   - Wing + Ailerons,
   - Tail + Elevator,
   - Fuselage-Top,
   - Fuselage-Bottom,
   - Rudder, SFG en ailerons supports.
10. Time to paint, use airbrush and multiple thing layers
11. Join Wing and tail section and place 'mylar-down' on flat surface.
12. Prepare RC : cut Servo's wires and join to Rx to fit positions of the servos in the plane
13. Glue fuselage bottom, take care the fuselage is straight on 90degrees
14. Glue Aileron and Elevator bracing, 0.7mm carbon.
15. Glue Landing gear (25cm, 1.5mm carbon)
16. Glue Wing 'V' 1mm carbon
17. Glue Fuselage bracing 0.7mm carbon.
18. Glue in Aileron and Elevator servo. Tape the rudder servo to the bottom, this will be moved in place later.
19. Glue Ailerons arms and join to servo using 1mm carbon

The model should now be save to be placed on the landing gear

20. Glue elevator pull-pull horns
21. Connect Elevator to servo with wires.

22. Glue fuselage top-side. And brace to wing with 1mm carbon. Tail with 0.7
23. Tape Rudder to tail.
24. Move Rudder servo in position and glue.
25. Glue Rudder pull-pull horns.
26. Connect rudder to servo with wires.

27. Mount motor
28. Check balance point (CG) adjust LiPo position to balance plane horizontal
29. Mount ESC close to LiPo lengthen wires to motor and RX if needed.

General building tips

1. Gluing of carbon strip.

For the Mylar planes (Disney, Beta and Fatboy) the slots for the strip are already cut in the depron. All the slots that are cut only halve deep (not visible on the other side) needs to get these strips. Also, the mylar will be glued on the same side where the carbon-strip is glued.

You can make the strips by cutting the 3mm x 0.13mm strip lengthwise in halve. This is relative easy due to the carbon strings guiding your knife. You will end up with strips of 1.5x 0.13.

Take care the strips are flush with the top of the depron, if needed you can use a sharp knife to make a slot slightly deeper.

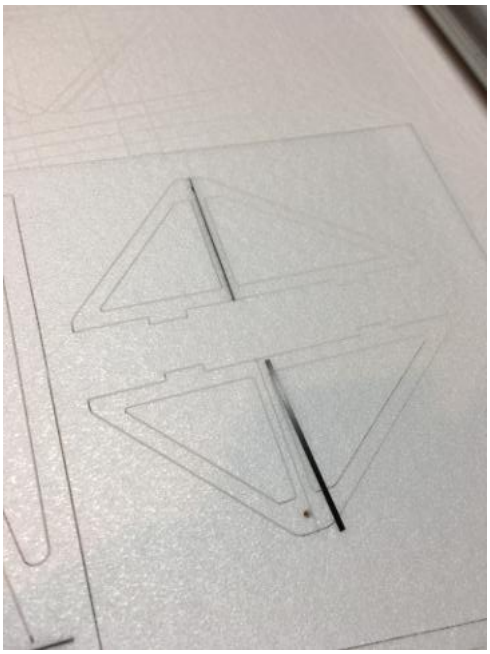
Use the Pathic glue for the carbon strips. Remove all left over glue with tissues and place the parts flat and let these dry.

For the Beta and Fatboy also the carbon tunes that cross the open areas needs to be glued in.

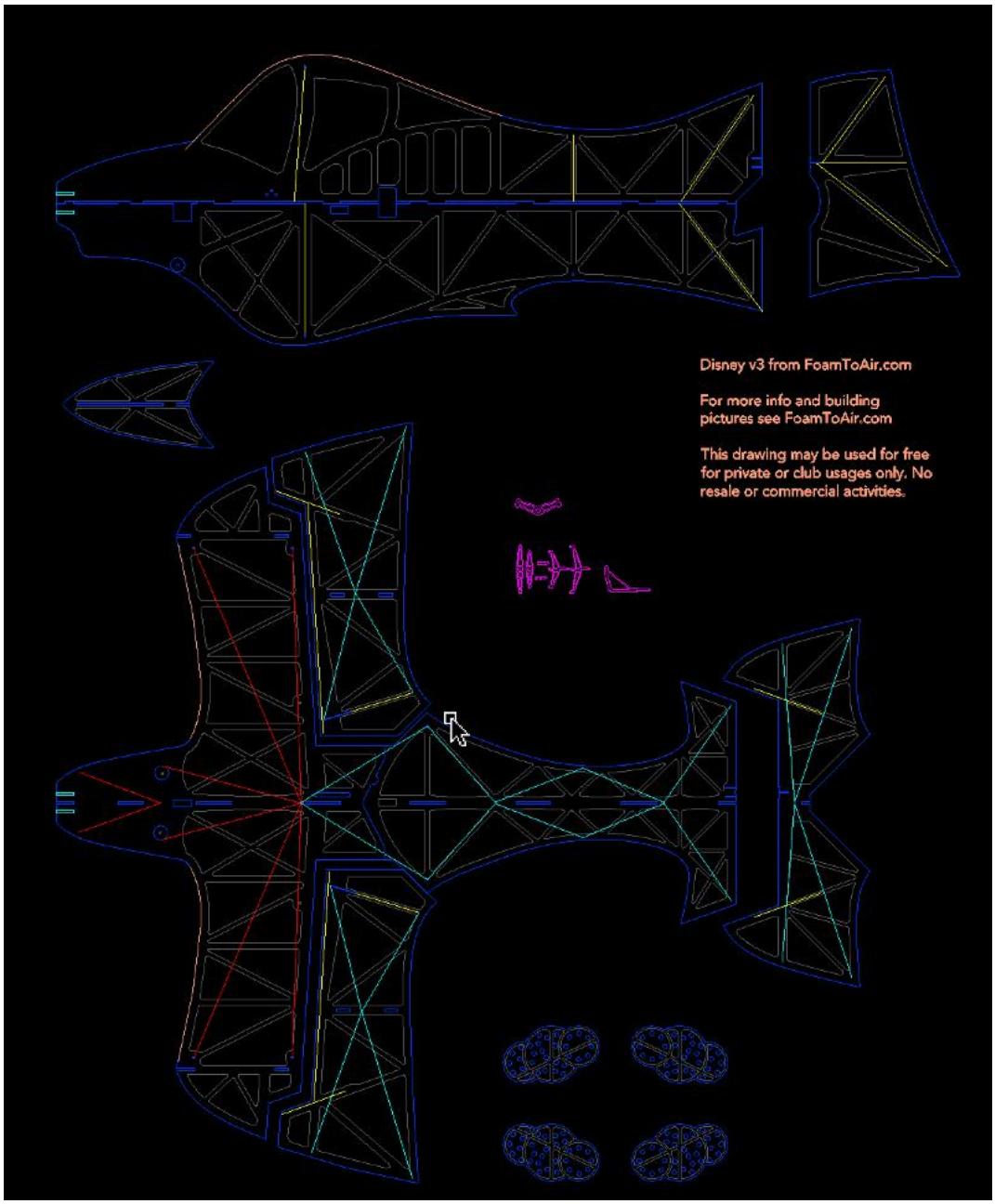
It is recommended to gut a V-groove in the depron that will be removed later. So that the carbon does not get glued to these parts. This will also help with airbrushing later. See also later in this description.



Cut the carbon strip



Glue into the slots



yellow/orange: Strip 1.5 x 013
RED: TuBe 1mm
light blue: Tube 0.7mm

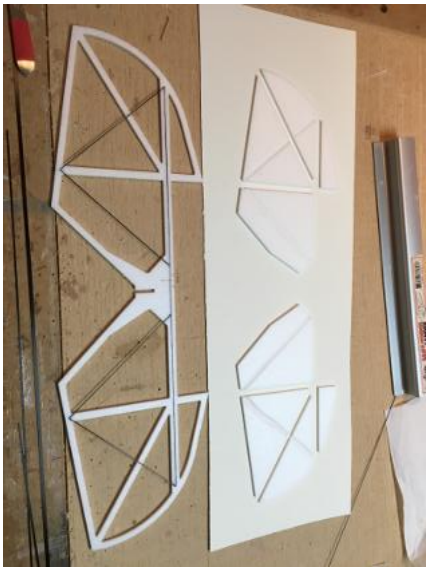
Be aware that red and light blue are from horizontal to vertical parts. Please study the pictures om the website



cut V-groove to give room for carbon tube



glue the carbon rod



double sided tape to glue the 'parts to remove' too cardboard. Then cut the parts free.

Prepare for Airbrush.

The mylar planes make the Airbrush task a bit more challenging due to the fact that masking is more difficult. The mylar will sack under the mask.

A solution can be to re-use the parts that are removed to support the mylar while painting.

Do the following steps BEFORE applying the mylar

I do it like this:

1) Take care you have some sheets of thin cardboard and double sided tape.

2) Cut the parts free on the outline, leave the inner-pieces of depron in place.
3) Study the depron to understand which parts are removed later.
4) Put some double sided tape (or some drops of pathic glue) on these parts ON THE OTHER SIDE OF WHERE THE CARBON IS GLUED.

   Then place the parts on the cardboard and let dry.
5) Now you can cut the internal parts free

6) You can now cover the parts with mylar and on the moment you want to airbrush you can place the parts back on the cardboard, the mylar is now supported

Covering with mylar

Most important is to use the correct glue. Good result have been made with the 3M spray-glue ‘permanent’ . If this is not available, other glues will work also. But please test if the spray-glue does not eat the depron.

Prepare the mylar

Best result will be get with wrinkled mylar. Cut a piece of mylar that is large enough for the part(s) to cover.
Then take the mylar, and press it to a ball. Then unfold again and redo this two more time.

Now take a flat piece of cardboard and unfold the mylar again, use small pieces of tape to stretch the mylar just a little without having any real folds in it.

Spray-glue
Do not spray the glue directly on the Depron. Best is to lay the Depron flat on some old newspapers and spray horizontal over the Depron. The glue will fall-down on the depron.
Two coats should be more than sufficient, but please take care all Depron surfaces that will get in contact with the mylar are covered.

Now drop the depron carefully on the prepared mylar, you only have one change here.

Use a little pressure on all the depron to press the mylar against the depron.

Let this dry for some hours.

Cutting the mylar
Use a very sharp new blade and trace carefully around the outline of the parts until these are free. Do not pull on the mylar but use the knife is some cuts are not trough in one go.

From here on, building the plane is just like a normal Depron plane.