

Rays Eurofighter DA1 Build

If any of you have ever built one of Steve aka.Jetset44s parkjets, this parts layout and build should be a snap as it is modeled after his technique.

Everything here is straight forward with a few exceptions:

Note: I've also been getting a lot of questions if people really need a full flying canard. The answer is no. You can make the surfaces stationary but you will need to increase your elevator throws to compensate for the loss of pitch authority at the nose.

I have tried it with the Canards active and not. By placing the Canards on the Flap channel, you can select it on or off with the flap switch on your TX.

In my opinion and those who have flown this model, high AOA, stall recovery, landing, and response are much better with the Canards active than without due to there location so far foward of the main wing body.

Either way, it is still a great flying ship 😊

Here are the Specs so far:

(I tested with both Hacker and Himaxx motors so both motors and ESC will be listed)

RTF or AUW weight: 20 oz.

Motor : Hacker A20-20L w/ EP9050 prop or HiMaxx 2015-4100 w/ APC 9x6

ESC: Hacker X-20 / CC TB18

Batthey: 3c 1300mah 11.1v Lipo

Equipment: 2 ea. Hitec HS-55s, 1ea GWS Pico servo, GWS 6ch RX.

Length: 42.2 in.

Wing Span: 29.65 in.

Flight controls consist of Elevons, and Full-flying canards mixed into the elevator control. A Rudder is cut but not incorporated as of yet.

I also have a Hacker A30-22S and X-30 ESC standing by. I will report on this motor at a later time.

1) Canards

- a) Use the angles given at the bottom of the layout sheet for the canard system. I used an ordinary metal close hanger and formed the angles.
- b) Cut three pieces of .157 CF tubing. 2 of them 1.45 inches and the other 2.87 inches long.
- c) Cut 2 ea. .75 in. 1/64 ply squares and drill a 3/16 hole through the center.
- d) Cut 2 ea. .25 in long 3/16 aluminum tubing pieces.
- e) Glue the ply pieces to the forward fuselage as indicated on the plan.
- f) Slip the aluminum tubing through the foam and ply and align with each side of the foam.
- g) Epoxy tubing in place. But do not get any glue in the tube itself. I like to take a piece of CF tubing and run it all the way through both sides while the tubes are drying to keep a somewhat good alignment. See Fig 1.

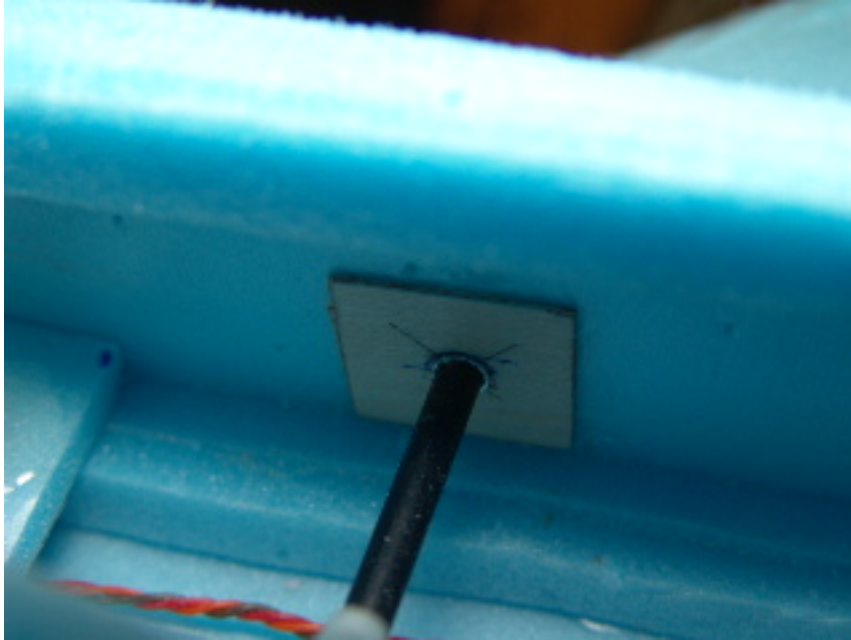


Fig. 1

- h) Bend one angle in your hanger wire while leaving the rest straight. Run the angled wire through one hole while slipping the 2.87in. Here you can either glue a external horn to the CF later or drill out a spare servo horn so it will slip over the center CF tube and Epoxy it later. Run the rest of the wire through the other side and Epoxy the center wire to the Epoxy tube. Once again be careful not to let glue make contact beyond the outer edges as you will glue your pivot points solid. See Fig. 2

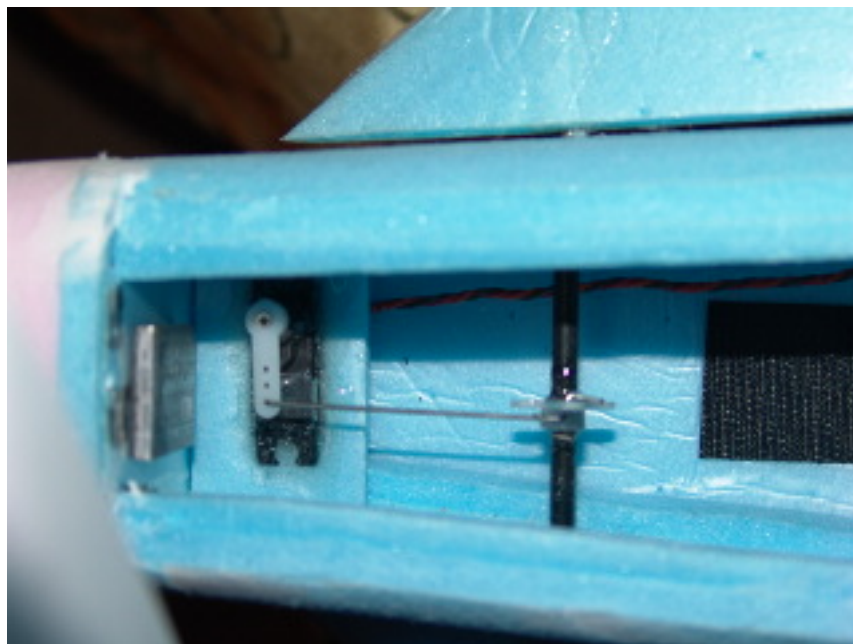


Fig 2.

- i) Now that the wire is protruding through the other side, bend it down to the proper angle to match. I took the printed angle and glued to a piece of lite ply and cut it out to use as a template. Just lay it against the side of the fuselage and adjust to match.

2) Upper Intake Vari-ramp

- a) Use a piece of 3mm Depron or 1/16 balsa sheet and cut approximately 3in. x 3.5in. and adhere it to the upper intake area before attaching the forward fuselage. Leave approx. 1.25 in. overhang past the intake pointed end. See Fig 3.



Fig 3.



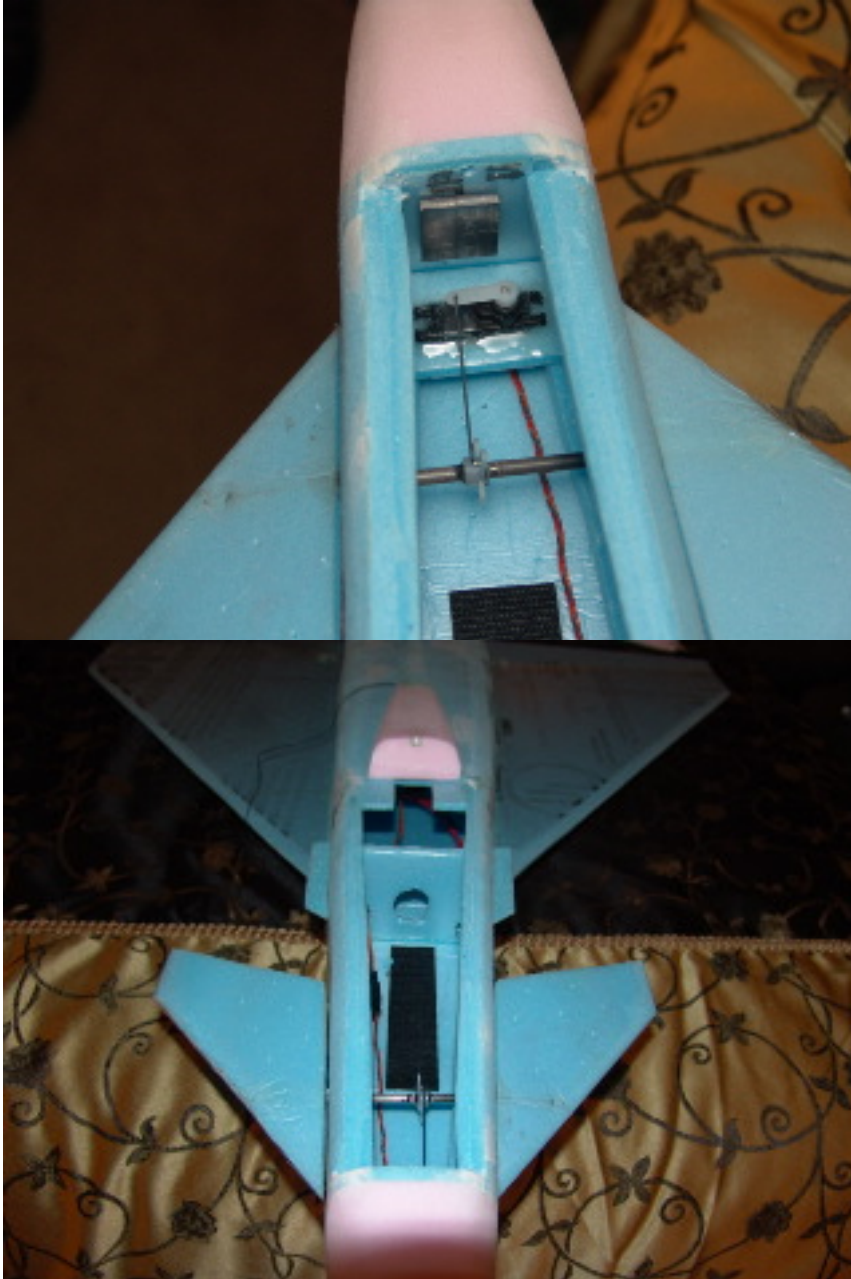
Yes that is a crack behind the forward strake ☹. I broke the nose on a bad 1st Flight with a tail heavy CG. This of course has since been rectified.

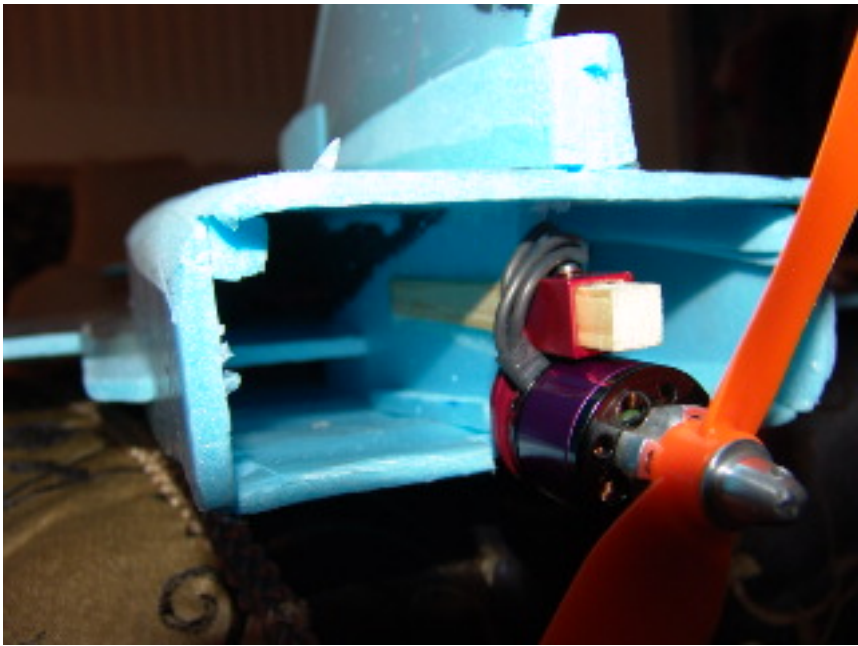
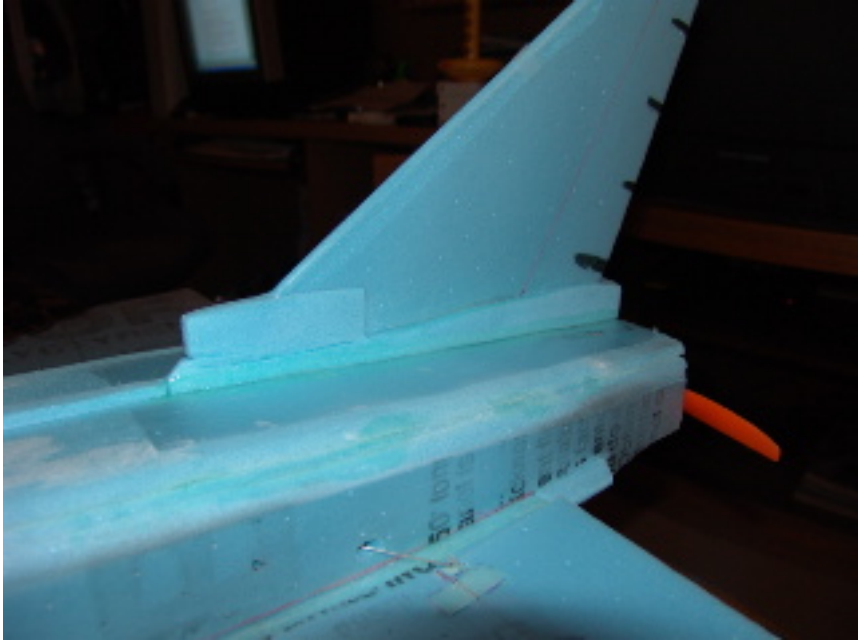
3) Forward Fuselage

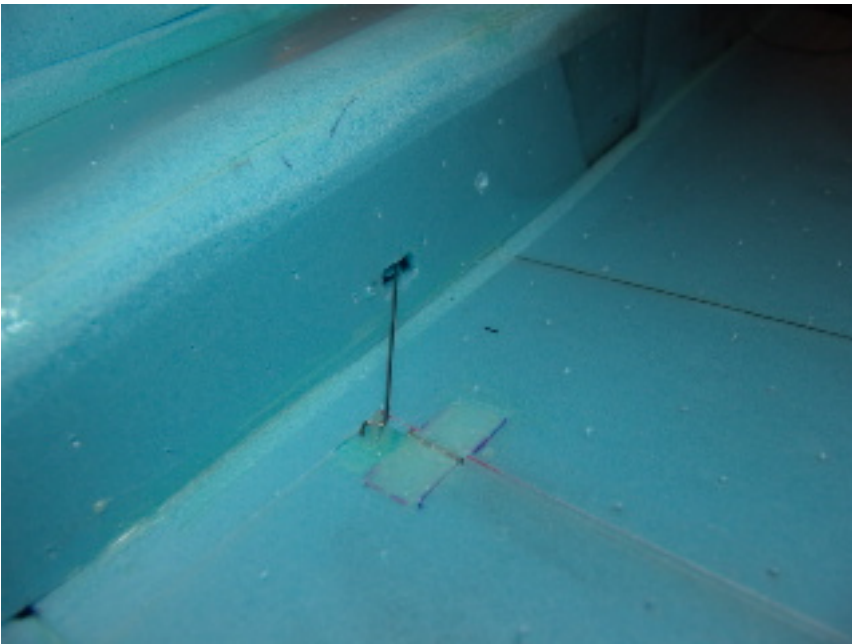
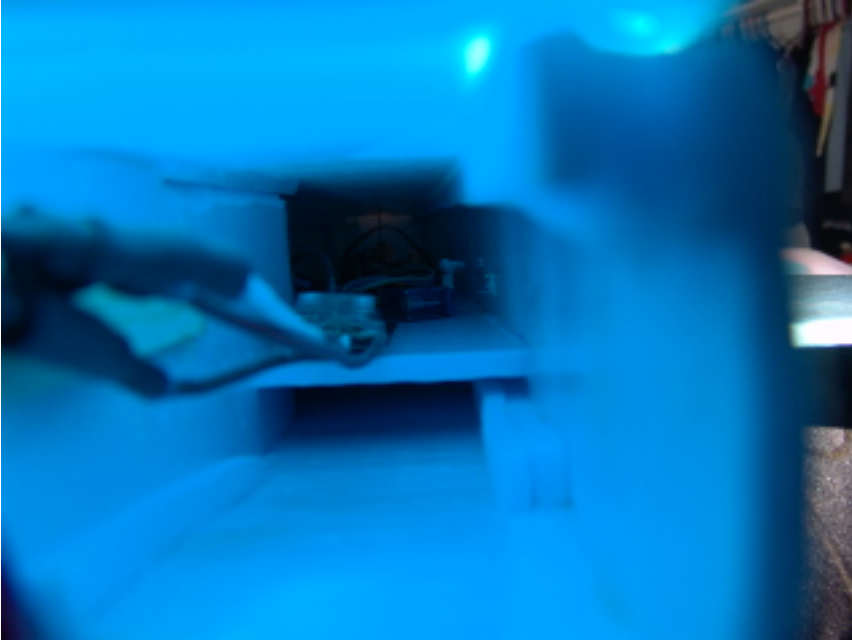
- a) Shape and round the lower half of the forward fuselage area before attaching as there will be no room to shape after it is attached.

- 4) The Turtle deck can either be pieced together or cut from solid foam as there is nothing under it.

Here are some miscellaneous pictures that will end up in the final build guide.







More drawings, pics and tech data to come.

Thanks,

Ray