Fancy Foam Models

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Assembly Instructions for the following models:
EzFly trainer

Recommended Electronics and motors:
Motor: Turnigy 2730-1500 or any equivalent motor

Speed control: 10 to 12 amp brushless.

Battery: 300 to 500, 3 cell lo-po, 20C rated or equivalent.

Receiver: 4 channel.

Servos: (2) HXT 500 for the tail.

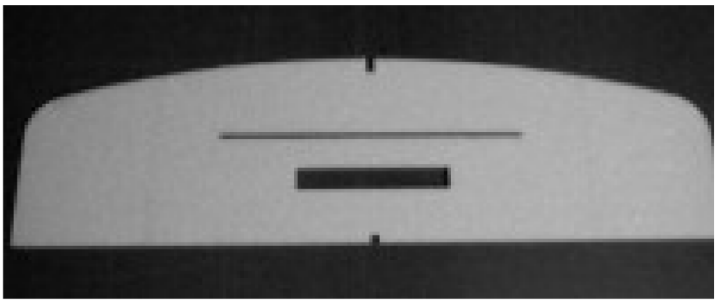
Disclaimer: Fancy Foam Models has done everything we can to caution and inform the end user regarding the use of Lithium polymer battery technology. We are in no way responsible for any damage that may be caused by these batteries. Please read, understand and follow all instructions for the charger and batteries. Failure to use this battery technology properly can result in the risk of fire. If you are not comfortable with this technology, return the batteries packs and kit to us for a refund. By building the kit and using the batteries, you accept full responsibility for the safety of these batteries.

Recommended building methods and glues:
Much of the construction of this model is done by laying the parts on a flat table. It is strongly recommended that you put wax paper down on the surface first so any excess glue doesn't soak through the foam and glue the parts to the table. For all assembly, use "Welders" contact adhesive. The hinges are also done with Welders, see our video on the web site. Hot glue can be used to attach the servos and control horns.

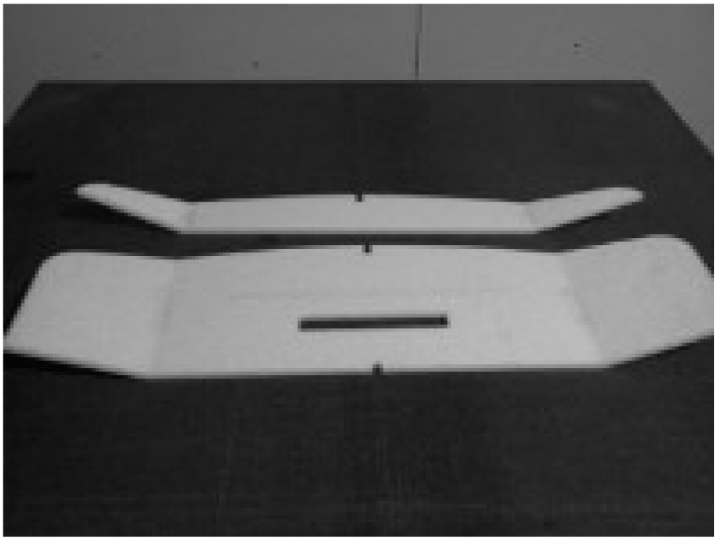
Starting out:
Look over the parts and dry fit them together to check for proper fit.

Painting:
It is easiest to paint the parts before assembly. Card stock can be used to make templates for stripes, checkers, ect... Epp does is not affected much by solvents so Krylon, Testors and airbrush paints can be used.

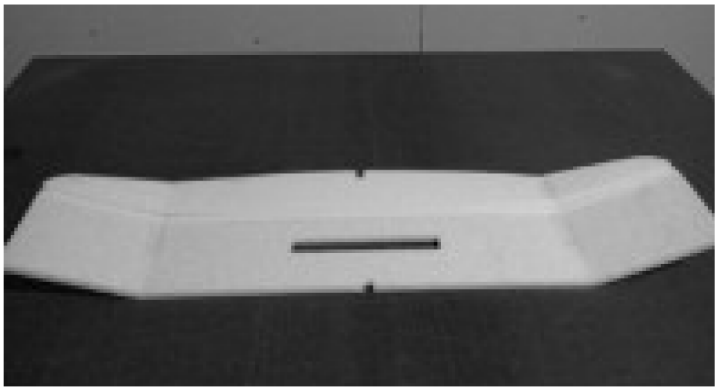
Horizontal parts assembly:
Cut the carbon tube spar to 24" long and glue into the slot in the bottom of the wing.



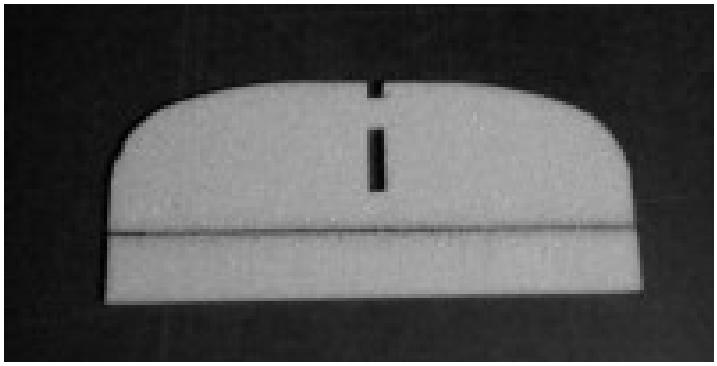
One at a time put a bead of glue (hot glue is fine) in the dihedral slots of the two wing panels. Bent the wing tip up to close the gap at the top of the slot and secure until the glue drys. The tips should be about 2.5" high when done.



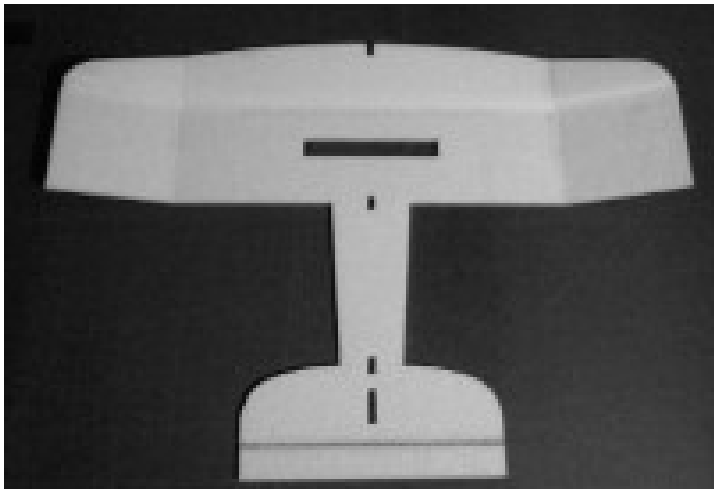
Glue the wing doubler to the top of the main wing with the leading edges flush.



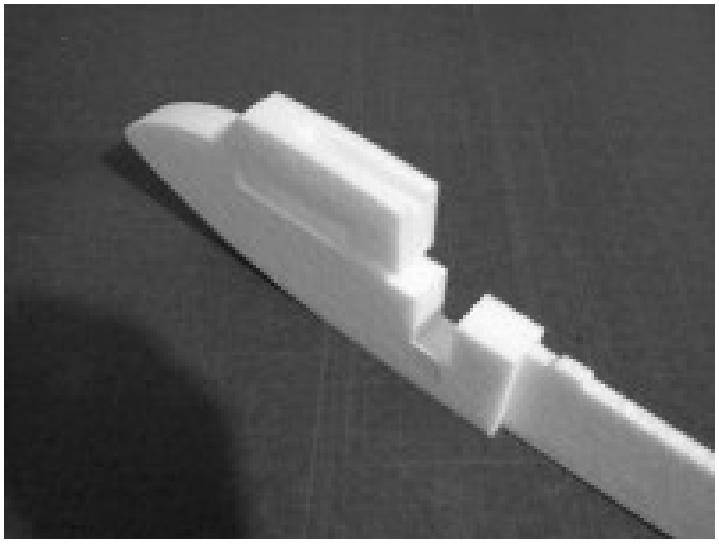
Hinge the Elevator to the Horizontal stabilizer with Welders glue. You can find a hinging video on my web site.



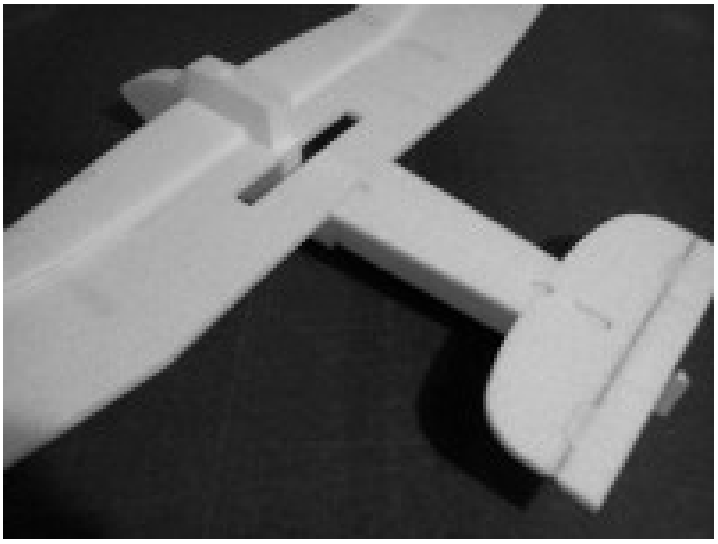
Glue together the horizontal pieces; wing, rear fuselage and horizontal tail. Note: The wing spar goes on the bottom and the elevator hinge goes on top.



Lower fuselage to horizontal – Assembly:
Glue the fuselage doublers to the sides of the main fuselage.



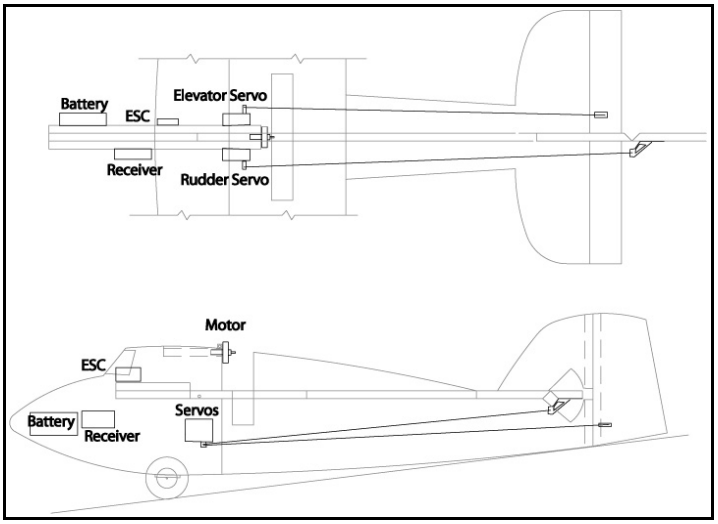
Slide the fuselage onto the wing and align the tabs into the pockets and check that the fit is good. Glue the fuselage in place making sure it is square.



Final assembly:

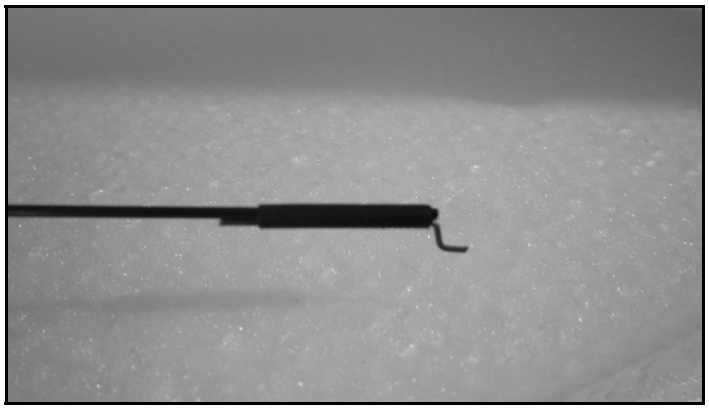
Glue the aft upper fuselage and vertical stabilizer in place.

Glue the stick motor mount in the slot in the top of the fuselage and install the motor onto the motor mount. Velcro the speed control to the right side and the receiver to the left side of the fuselage.
Glue the servos slightly below and in front of the propeller slot.



Use an exacto knife to slot the control horn locations in the elevator and rudder. Glue the horns in place.

With all the surfaces set to zero, measure the distance between servo arm holes and control horn holes. Cut a piece of 1.5mm carbon rod for each push rod to the measured lengths. Cut a 1.5" long piece of 1/32" wire and make a z-bend on one end. Slide a pushrod guide onto the tail pushrods before installing both ends. Slide a 1" length of heat shrink over each end of the carbon rod and then slide in a z-bend wire. Shrink the heat shrink tubing with a heat gun or flame. The z-bend wire is not glued in position yet and can be moved for final adjustments.



Remove the servo arm and assemble the pushrods to the servo arm and control horns. With the servo centered reattach the servo horn. Make any final adjustments to the z-bend location. Use regular (not foam safe) thin CA to secure the z-bends to the push rods by placing a drop at each end of the heat shrink tubing. If you get some CA on the servo or control horn this is ok and moving the controls will allow the z-bend to break loose.

Note: This push rod setup will act to save your servos. In the event of an impact the glue holding the z-bend to the push rod will likely give before the servo gears. If the z-bends start to slide in the heat shrink a drop of CA will secure them again.

The battery will probably need to go far forward on the nose to get the CG in the correct
position.
Program your radio and adjust push rods for +/- 1/4" elevator and +/- 1/2" rudder.

Flight set-up:

Use Velcro on the battery and airframe to secure the battery to the right of the fuselage in a location that gives the model proper balance. Adjust the battery location back and forth to suit your flying style. Use your computer radio to set the final sub-trims, exponential and dual rates. Double check the control directions before your first flight. Good pilots experiment with various battery locations until the CG feels just right.

Set up your controls for +/- 1/2" on the elevator and +/- 1" on the rudder.

The final airplane weight should be between 6.0 and 7.5 oz.

Center of Gravity:

Is 3.5" behind the leading edge of the wing.

We hope you enjoy your airplane.
Thank You,
Mike & Niki Bailey
Fancy Foam Models