

RCFOAM™

5651 Old Dixie Road, Suite 103, Forest Park, GA 30297



Paul Blymyer Signature Series

Pitts Python

SPECIFICATIONS	
Wing Span	30.75 in.
Length	29.25 in.
Prop	8/4-10/4.7 gws or other
Wing Airfoil	Flat
Weight	13 oz. -18 oz. with power package and gear
Radio	Micro Servos and Micro Receiver
Motor	Turnigy C2830-1050
Controller	25 AMP ESC
Battery	3S-30C 1050mah-1250mah
Add this Combo Kit SKU# 80-103 at www.rcfoam.com	

Notes: * This kit requires a medium to advance level of building skills to complete.

* This is a high performance airplane and is not for beginning R/C flyers.

* AMA membership is highly recommended for all R/C flyers

* Kit is supplied unpainted so you can customize to your favorite scheme.

This kit requires servos, motor, radio transmitter and receiver, battery, and a speed controller. Landing gear is included. Glue, tape and standard building tools are needed to complete this kit.

Visit www.rcfoam.com for a custom power combo kit, tools, paints, glues and all the materials and tools needed to complete and enhance your kit.

READ THIS IMPORTANT INFORMATION BELOW:

WARNING:

Please be aware that this airplane is not a toy and if assembled or used incorrectly it is capable of causing injury to people or property. **WHEN YOU FLY THIS AIRPLANE YOU ASSUME ALL RISK AND RESPONSIBILITY.**

If you have not flown this type of model before, we recommend that you get the assistance of an experienced pilot in your R/C club for your first flights. If you're not a member of a club, your local hobby shop has information about clubs in your area whose membership includes experienced pilots.

In addition to joining an R/C club, we strongly recommend you join the AMA (Academy of Model Aeronautics). AMA membership is required to fly at AMA sanctioned clubs. There are over 2,500 AMA chartered clubs across the country. Among other benefits, the AMA provides insurance to its members who fly at sanctioned sites and events. Additionally, training programs and instructors are available at AMA club sites to help you get started the right way. Contact the AMA at the address or toll-free phone number below:

Academy of Model Aeronautics
5161 E. Memorial Drive
Muncie, Indiana 47302
(765) 287-1256, Fax: (765) 289-4248
or via the internet at: <http://www.modelaircraft.org>

These are the glues mentioned in this instruction lesson.



Beacon Foam-Tac Adhesive
SKU 33-008



Beacon 3-in-1 Adhesive SKU 33-003



Loctite Epoxy Adhesive SKU 31-005



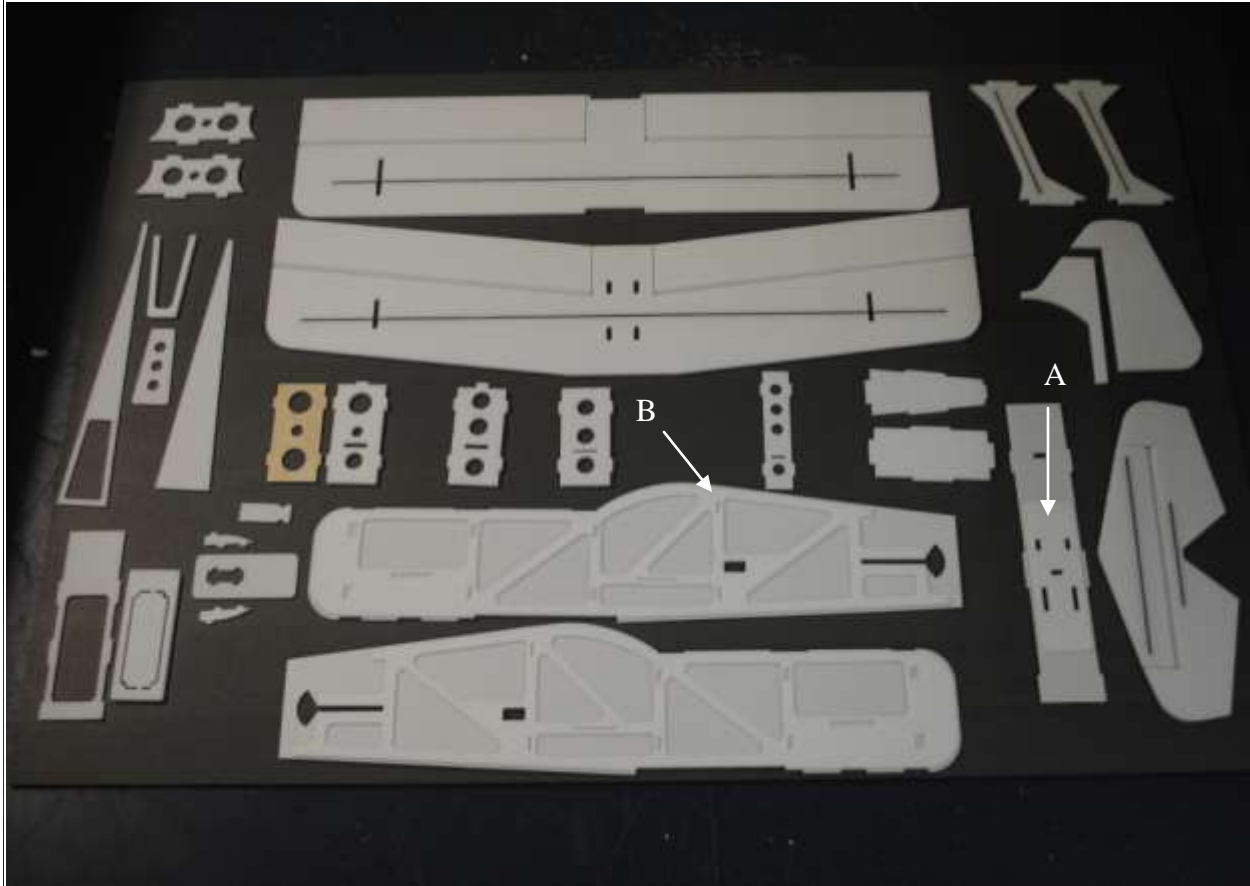
UHU POR Adhesive SKU 33-001



Loctite Epoxy Gun SKU 31-004

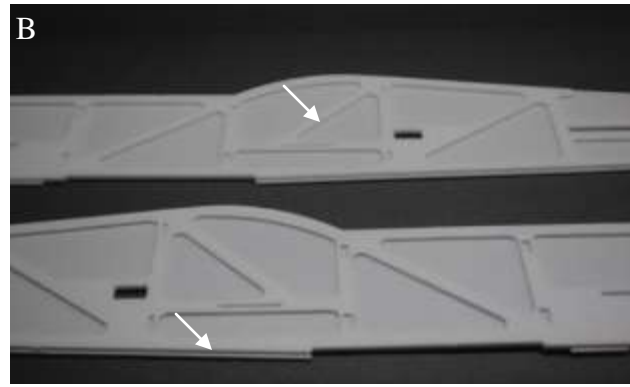
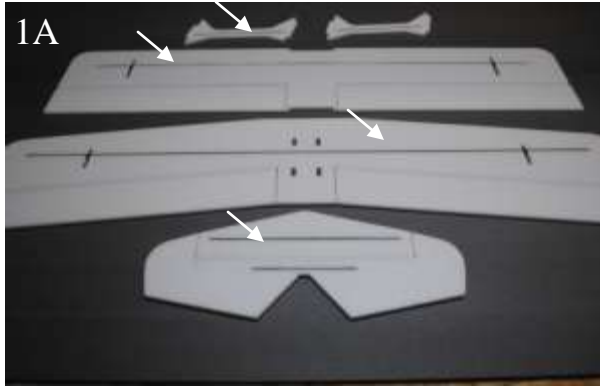


Loctite Gun Straws
SKU 31-00 or 31-007

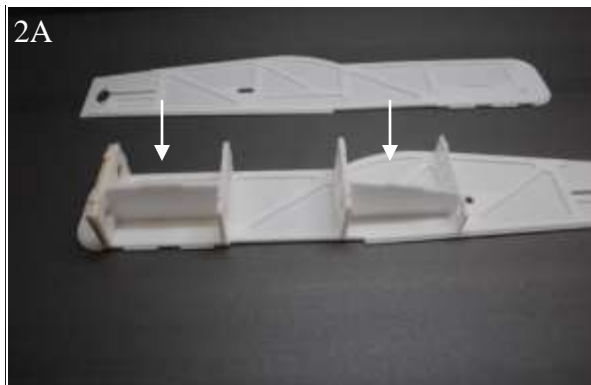


Parts included in Kit:

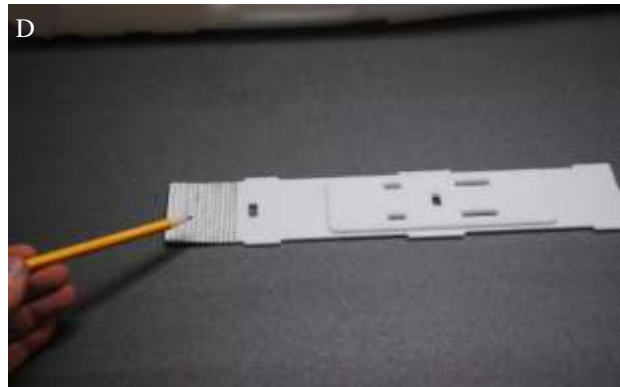
Note: The Du-Bro parts are not shown on the photo due to the size of the kit. Landing gear, wheels, hinges, plywood and carbon are all included. A. The part indicated by the arrow is actually 2 pieces, a doubler bonded to the skin. B. Same applies to the fuselage, showing the endoskeleton bonded to the fuselage.



1. A.) Start by bonding the carbon flat stock into the slots where needed. B.) Use a spray glue adhesive and line up the endoskeleton on the skin leaving a 3mm gap around the perimeter C.) Gather all the bulkheads and align them at their locations. Note: The bulkheads with 3mm slots are in the aft locations. At this time use a spray adhesive to bond the plywood motor mount to the foam bulkhead.

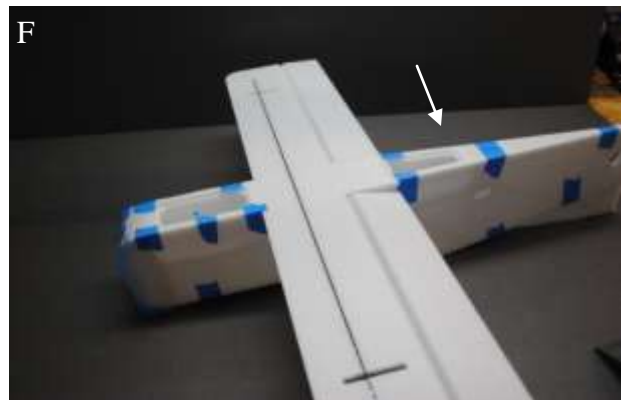
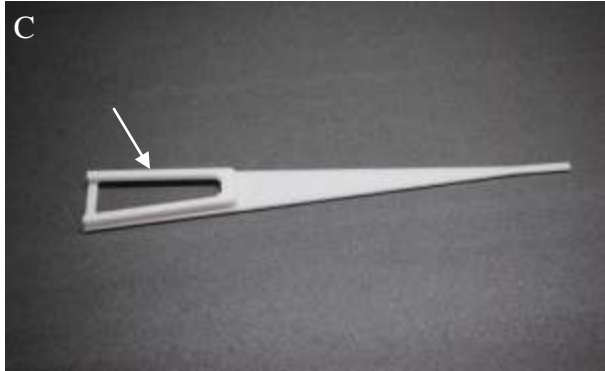
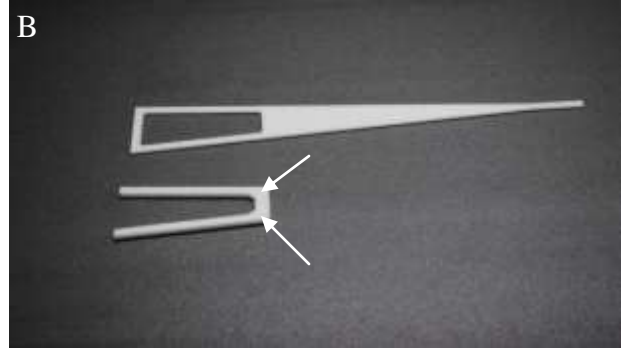


2. A.) Bond the battery and receiver shelves to the appropriate bulkheads and epoxy in the slots within the endoskeleton. B.) After the bulkheads have dried epoxy the opposite fuselage half on and let dry. Note: In this build a 5 min epoxy is used on the bulkheads.

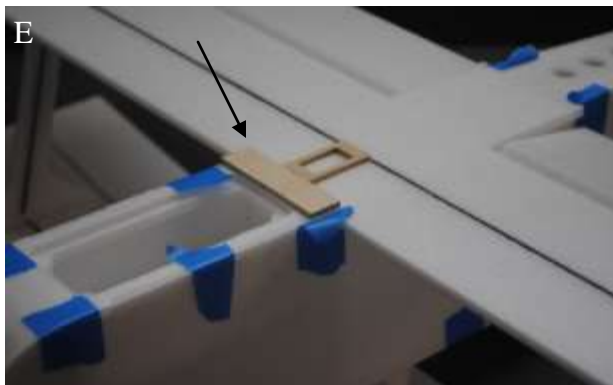
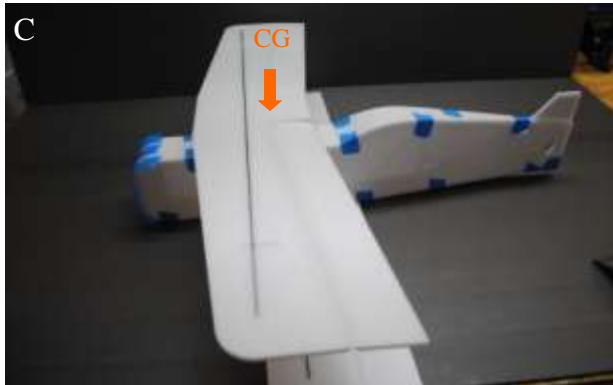
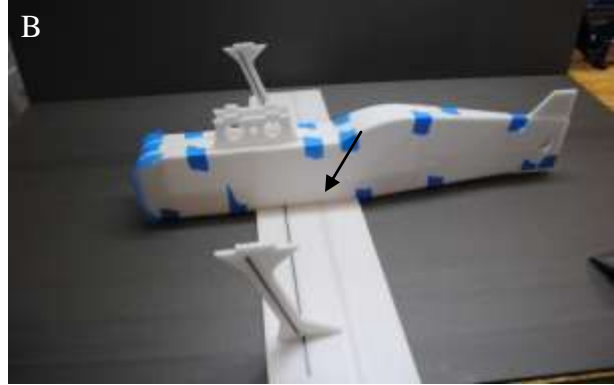
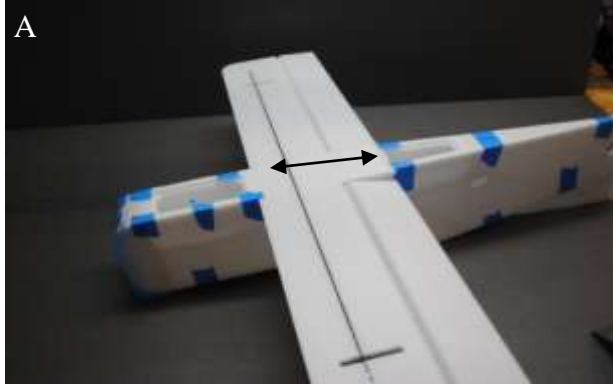


3. A.) Now would be a good time to do any additional bonding of seams inside the fuselage for added strength. B.) Next, bond the vertical tail into place as shown in the photo aligning it with the trailing edge of the fuselage. C.) Bond the center strut brace doubler to the inside of the skin leaving room to install it face down toward the inside of the fuselage. Spray glue can be used here. D.) Score the forward section of the upper skin so that it will bend around the nose. E.) Install the upper skin to the fuselage using painters' tape to hold it in place, especially at the nose section. F.) Once the skin is dry install the center wing struts or cabanes.

RCFOAM

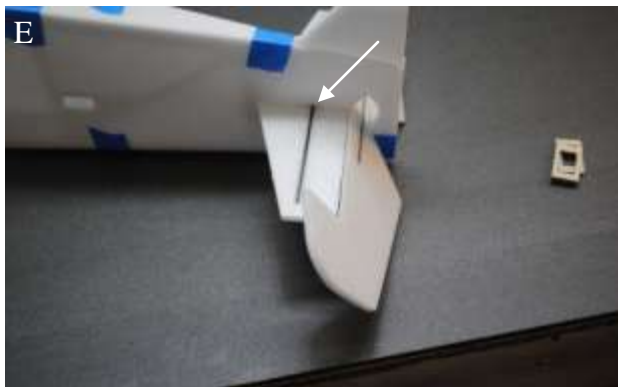
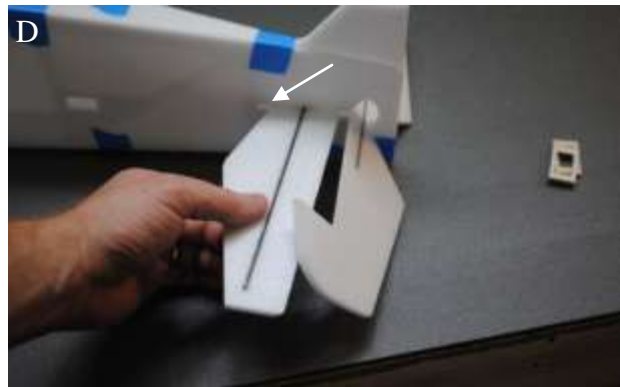
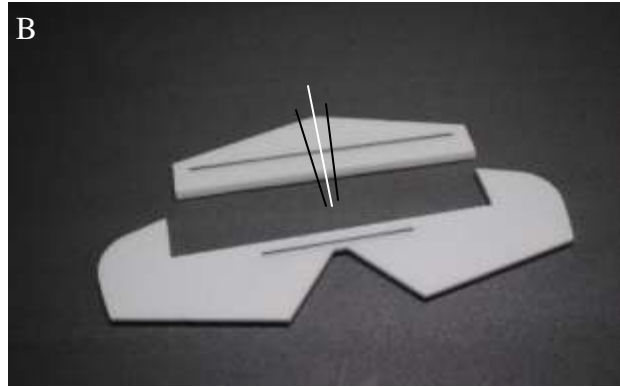


4.A.) Next bond the upper aft skin into place as shown. B, C.) Prepare the lower skins which is where the receiver will be located. Bond two earth magnets will into the recesses in the aft corners. The hatch itself will get small washers bonded to it. D.) Bond four magnets to the forward skin hatch. (Note: the forward skin also needs to be creased to make the bend around the nose of the fuselage). E.) Install the forward skin to the fuselage. The magnets are not installed on these photos. F.) In this photo the wing is just shown for fit while the aft skin is inserted into place.

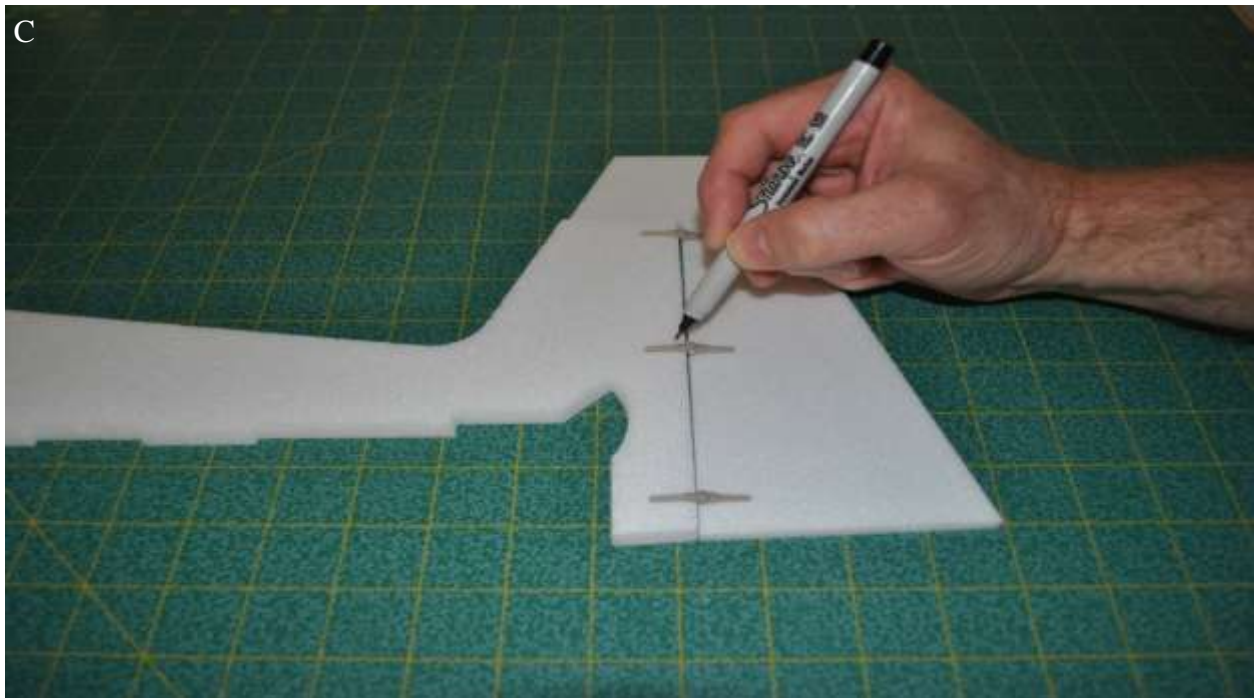


NOTE: Before installing the wings and tail you need to apply hinge tape on the surfaces for reinforcement.

5.A.) Double-check the fit of the bottom wing before bonding into place. Once the fit is satisfied, bond it into place ensuring the V-cut hinge is face down toward the bottom of the plane. B.) Flip the airplane over and run a bead of epoxy along the wing root on both sides. Next install and bond the main wing struts into place. C.) For installation of the upper main wing, remember the V-cut hinge should be face down, toward the bottom of the plane. (NOTE: The CG location or center of gravity for flying the plane is dead center on the hinge line of the upper wing. D,E.) This plywood piece mounts on the bottom of the fuselage aft of the forward hatch. This is where the landing gear will mount. Also note the location of the aileron servo mount. These will both bond here.



6.A.B.) Separate the hinge line on the tail installation because the tail has to be installed in separate pieces. C.) With the V-cut face down, slide the elevator into the cut-out centering it to the back. D.) Make a center line mark on the stabilizer as shown in photo (B) then measure the leading cut-out at the fuse here making marks on the tail so it will bond correctly. E.) Once the tail is centered, bond it into place with epoxy and let dry. F.) When the tail is dry tape the elevator into place by using the Blendederm tape sold at RCFOAM. (NOTE: Install hinge tape on all the hinges preferably on both sides.) Notice in this picture the servo frames off to the right side. They are bonded to the servo cut-outs on the outside of the fuselage for reinforcement.



7A.) Shown here is the installation of the rudder. Double bevel the hinge point on the rudder as well as the trailing edge of the vertical on the fuselage. B.) Next determine where the hinges can be equally spaced without interfering with the elevator. Mark the holes and with a toothpick make holes in the foam to push the hinges into. Epoxy is the best bond for pin hinges. If a little marvel mystery oil is applied to the pin area, the epoxy will not stick.

C.) Here is a picture of the Edge 540's tail section. It has the same pins and is installed the same way.



8A.) This is the rear hatch for the receiver area. Get a piece of 3mm scrap depron and make a tab to hold the one end in place when the magnets hold the other end. On the opposite end of the hatch, epoxy tiny washers to grab the magnets when the hatch is installed. The tab will lip under the skin aft of the lower wing. B.) This is the washer location. C.) This is the forward hatch for the battery compartment. On this hatch is a cooling scoop which is provided for 3 reasons, helps cool the battery and ESC, appearance, and it provides a grab handle because there will be a washer bonded in each corner due to the fact of the earth magnets in all 4 corners of the hatch opening. D,E,F) Follow the assembly process by using epoxy or foam safe CA.

In these next few pages are photos of the prototype airplane. There are many more improvements on the kits that you will see. The biggest differences are the landing gear and the center struts. The landing gear that is in the kit is one piece and will require holes to be drilled for screwing the gear to the lower plywood.



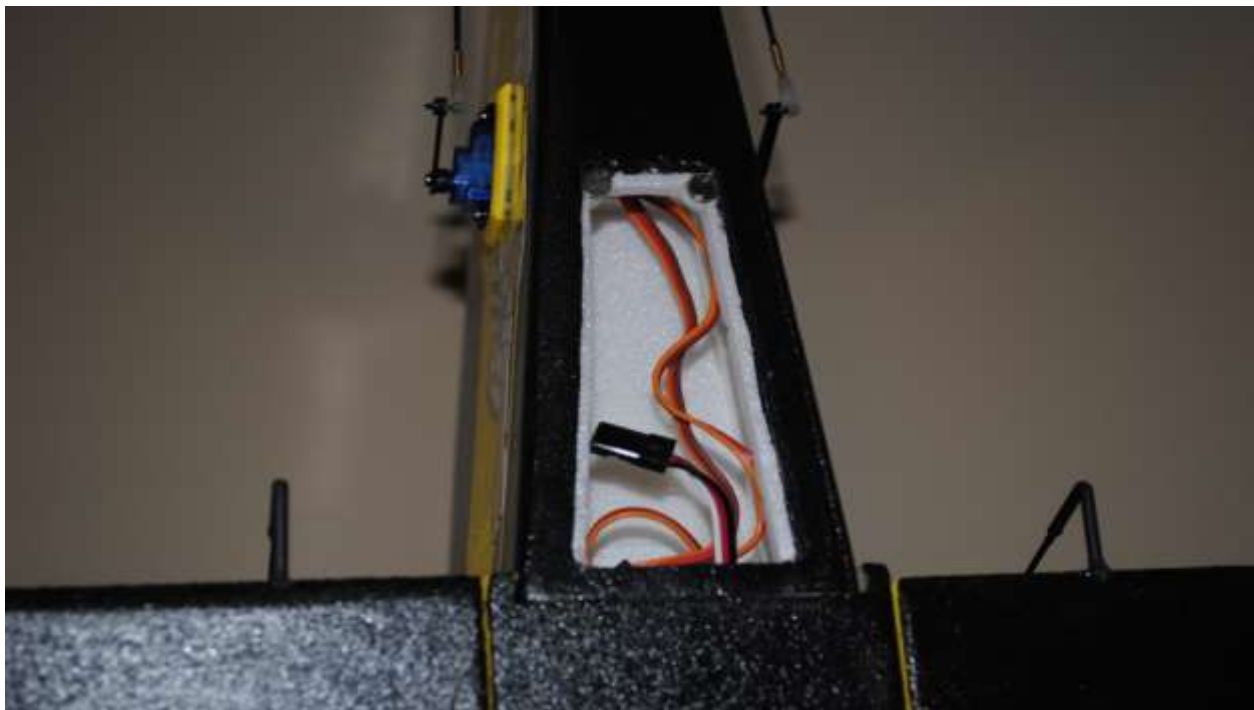


This photo shows the location of the control horns and the aileron servo. The aileron servo is a 9g servo and has the Du-Bro extended (white) arm on it. In this photo carbon rods with ball links were used.





These photos show the battery and receiver locations. The speed controller is located in the battery compartment off to one side. This is why it is critical to install the forward scoop in the hatch for cooling. The cooling air travels in the scoop and out the vent holes in the receiver hatch.





These photos illustrate the aileron tie struts. The carbon is included in the kit to fabricate these. Clip off four 1.5" pieces and install them in the trailing edges evenly with about half hanging out. Next tape the ailerons in place faired. Now cut a vertical piece to line up with the upper and lower pieces on the ailerons. Then install 2 layers of heat shrink to complete your plane. For added security place a drop of epoxy around each end of the heat shrink.





Hopefully you'll enjoy the airplane. The combo kit for this airplane will also be offered by RCFoam. Jim Wagoner with Jtech has created a build thread at RCGroups on this kit in addition to a flight video indicating all the deflection settings. Generally, set the deflections at 60% to start with and then fine tune them. They seem to work well at this setting. As far as the flight characteristics go, it flies like a bi-plane. It has a lot of drag but a lot of lift, due to the extreme wing area. It lifts off quickly and with the throttle retarded it sinks quickly, just like a bi-plane. It's a very quick airplane.

Enjoy
Paul Blymyer

If you have any questions on the building of the kit please feel free to contact RC Foam. A combo kit for this particular kit can also be purchased, which will give you everything you need to fly except the receiver and transmitter.



RC Foam, LLC
5651 Old Dixie Rd., Suite 103
Forest Park, GA., 30297
PH: (404) 363-6680 Fax: (888) 373-4390
orders@rcfoam.com