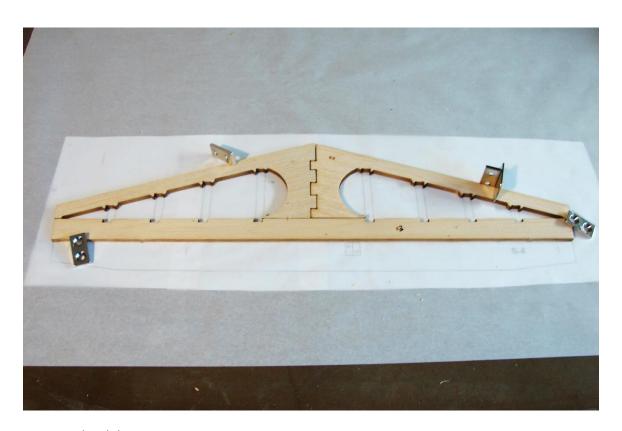
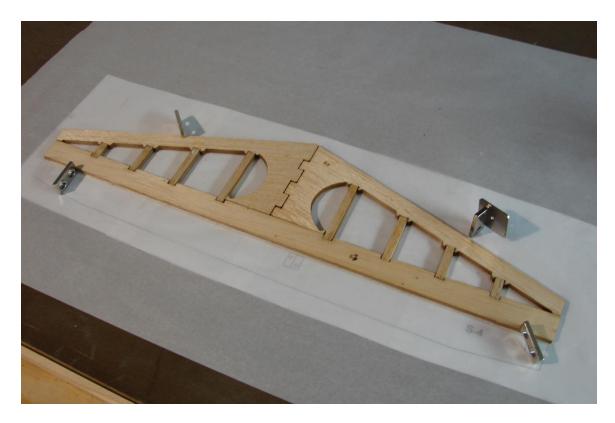
15-16th's Kit Build Photos

Note these pages are not the instructions but rather add to them. Good flights!

John



Horizontal stabilizer perimeter.



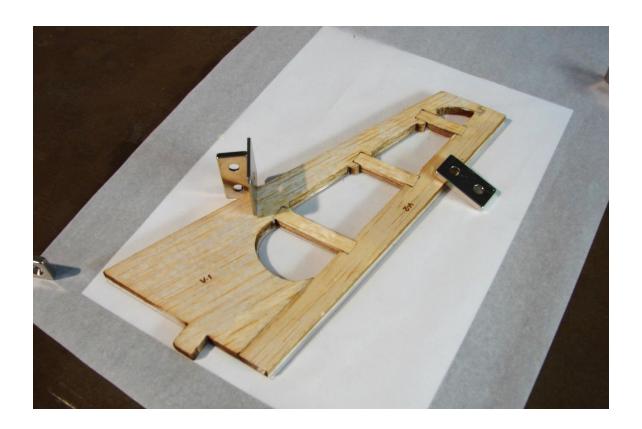
Add the ribs.



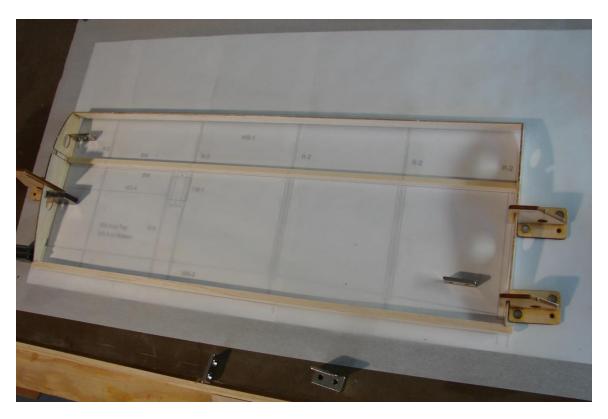
Add some Aliphatic (A) to the joint and spread with your finger, adds a lot of strength. Don't overdo it wipe off most of the glue.



Vertical Fin parts.



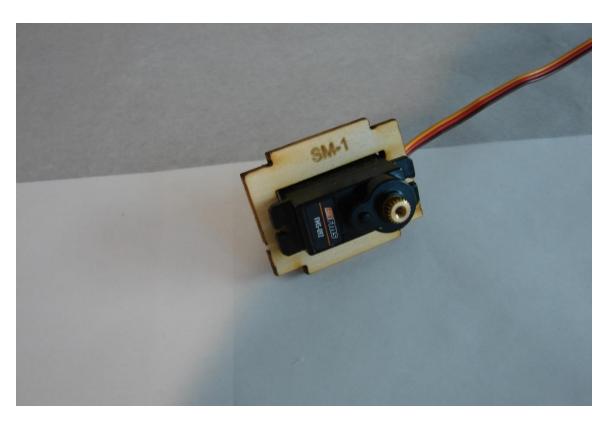
Add spacer ribs and "A" glue. Sand smooth, sand the Leading Edge round, leave the Trailing Edge square.



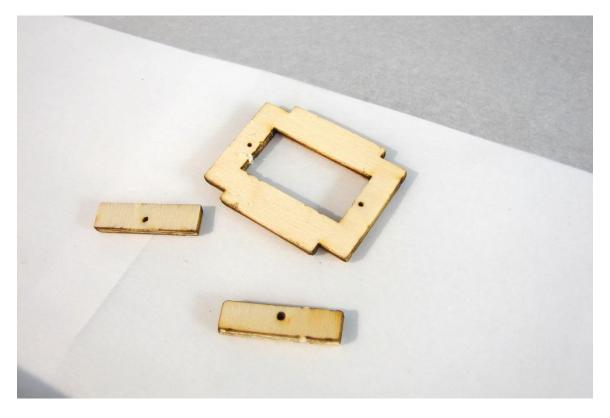
Form the wing perimeter, take your time, and match the plans.



Add the remaining ribs but not R-4 yet.



Test fit your 9 gram servo, adjust SM-1 as needed.



Servo mount parts. Glue (C) the back plates once in the wing. Adds screw hold strength.



Bottom view installed.



Looking good.



WS-1 leading edge sheeting in place.



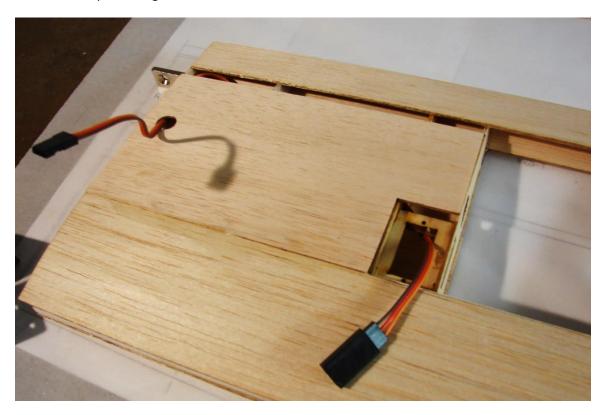
Add shear webbing both sides of the spars.



Add the rib caps top and bottom.



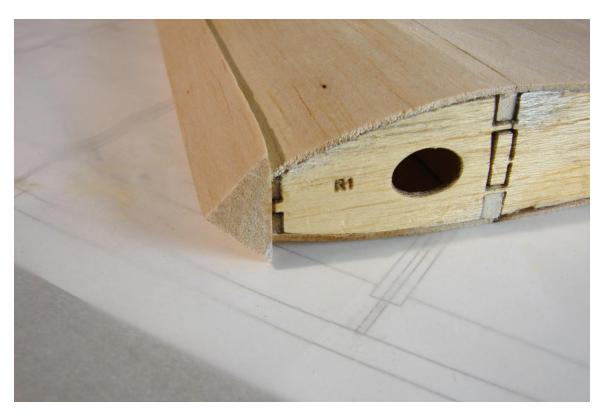
Add center top sheeting.



Loom 250mm – 12" extension into place before gluing WS-5 into place. Be careful to tuck the wire where you can retrieve it later. Hemostats are nice to grab the wire if needed.



Remove and any extra materials and sand the root, tip, leading and trailing edges square with your SB-280 block.



Glue (C) the ¾" Triangular stock to the leading edge, centered.



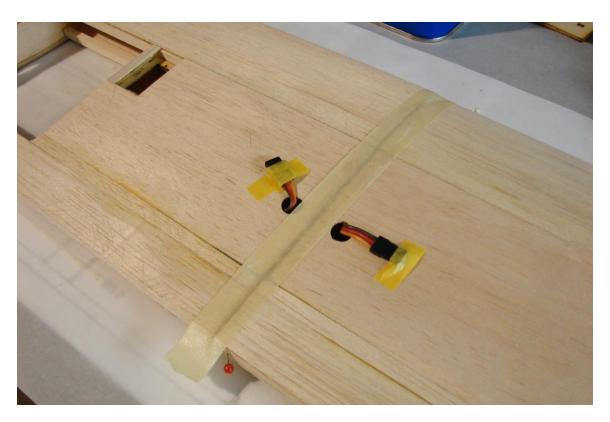
Use a #26 Excel Whittling blade for initial shape. Match the top and bottom camber. Sand the leading edge to the final shape with your trusty SB-280 block. Don't leave "pointy" for best stall characteristics we want a nice round leading edge. There is a diagram on the plans to help guide you.



Trim open the slot between the spars. Glue the 2 DJ-1's together and test fit, sand as needed.



Slide the wing panels together. Use H-1 to hold the wing %" dihedral at one tip.



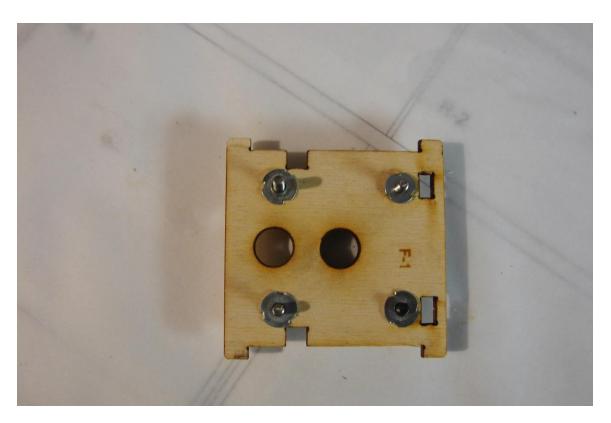
Glue (X) the two panels together, put a full coat on the joiner and parts. Tape the bottom and pin the panels to keep the glue in place while drying.



Flip over and prop the tip using "H-1" to hold the $\frac{1}{2}$ " dihedral while drying.



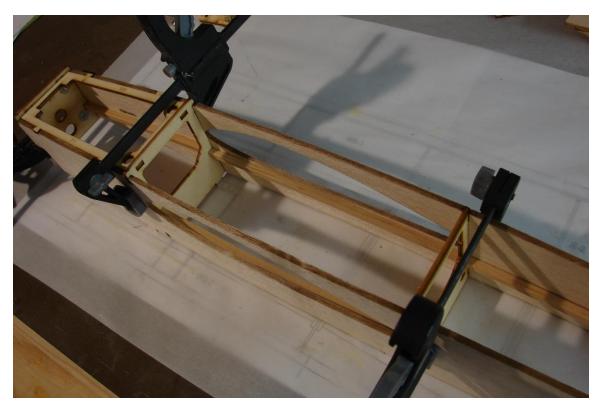
Penny glued to the rib for lateral balance.



Sink the 4-40 blind nuts in now, easier before gluing.

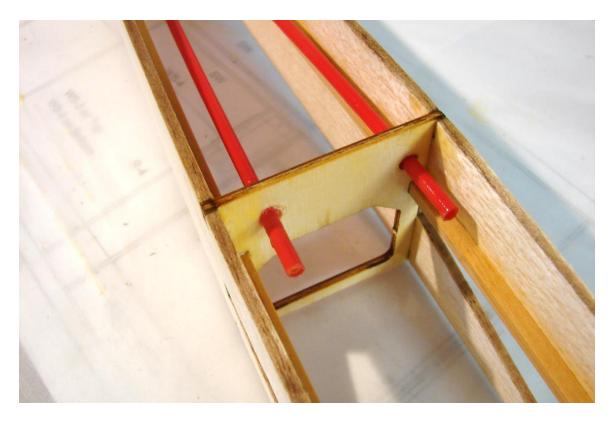


Clothes pin at the rear, clamps over each bulkhead area.

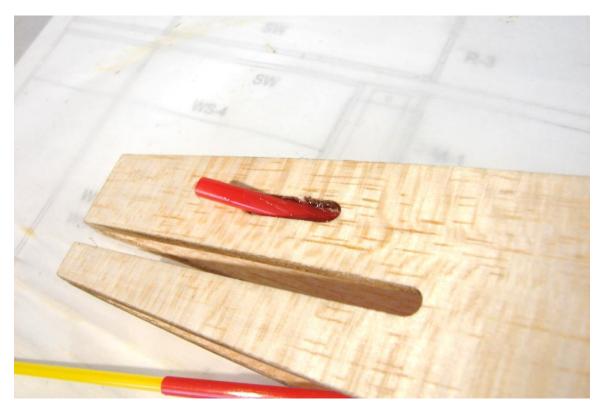




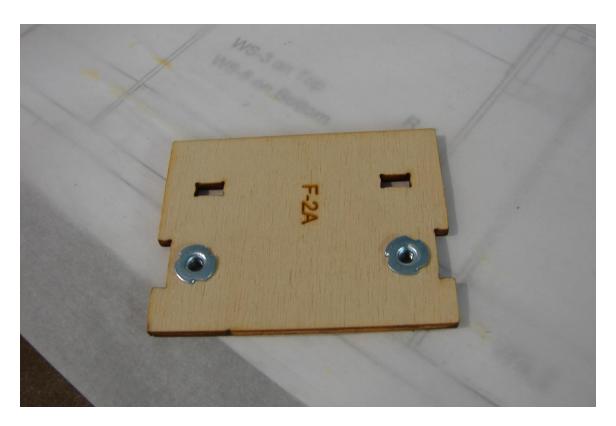
F-1A in position. Make sure "TOP" is visible or F-1A is in wrong.



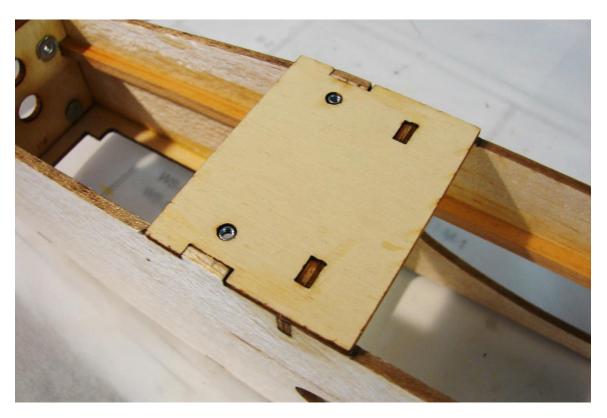
Pushrod tubes should extend about ¾" from F-3.



 $\mbox{\rm Glue}(\mbox{\rm C})$ the pushrod tube exit well. We will trim off later.



Push 4-40 blind nuts into F2-A.



Glue (C) F-2A into place



Glue (C) F-1A into place.



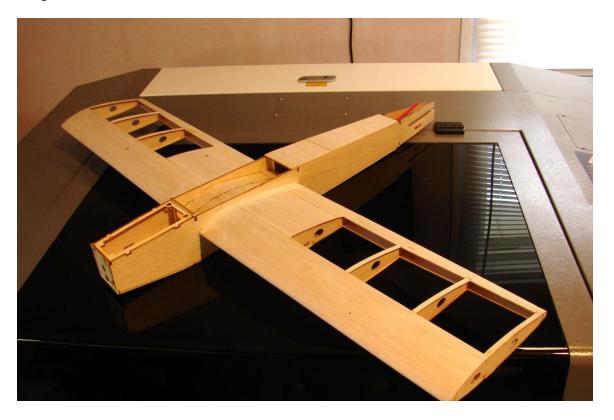
Glue (C) H-4 to the bottom lite ply hatch.



Glue (C) bottom "BS" sheeting in place. Don't glue F-2A or B yet. I like to use CA on the fuse sides and Aliphatic between the pieces.



Using thinned epoxy glue (X) the wing into place. Glue (C) SM-2 into place ahead of the servo wire holes. Then trim out the inside sheeting. This gives us a bay for the servo bottoms to pass and keeps things neat.



Getting there! The bird at rest on the laser from whence it came.



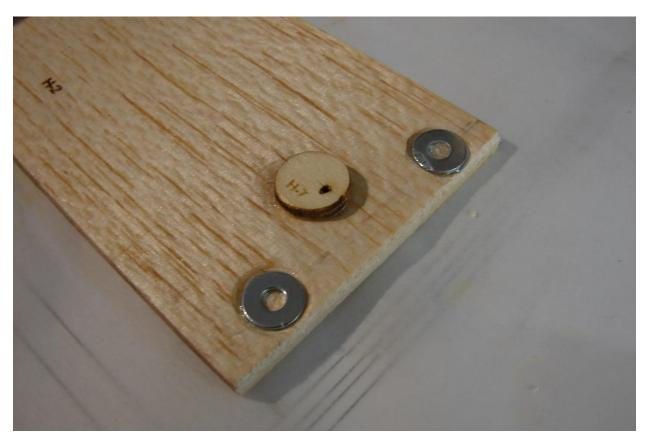
Use your servo to determine the Bass rail spacing. The glue (C) the rails.



Put tape under F-1A and glue (C) the magnets in place.

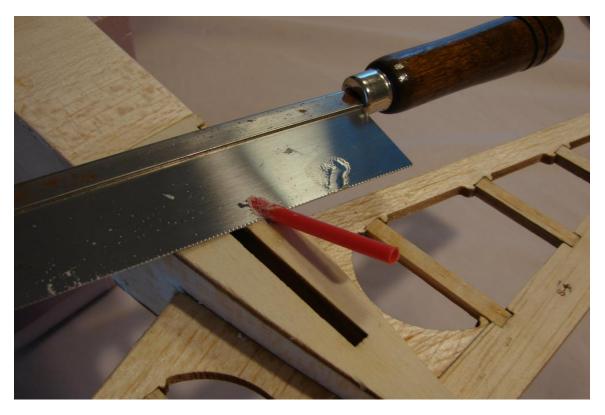


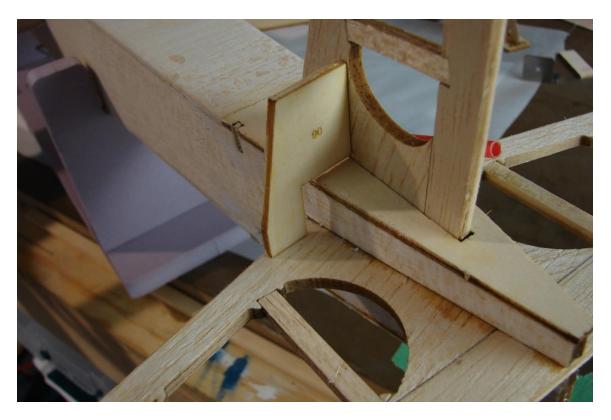
Mark the underside of the hatch where the #6 washers need to go.



Glue H-7 disk to the bottom of the hatch. Line up the hatch hole. #6 washers glued (C) in place.

Glue (C) F-4A & B into place. Glue (X) the Horizontal stabilizer into place. When dry cut off flush the extra pushrod tubing.





Glue (X) the vertical fin into place. 90 degree tool helps keep things "Square" while drying.



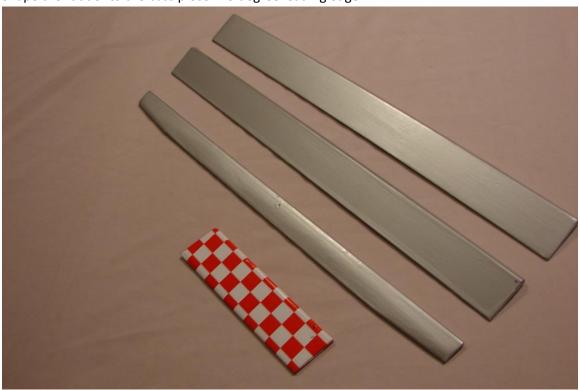
Take your WB-140 block and sand a 45 degree bevel on the leading edge of the aileron.



Glue 1/16" Bass on the center trailing edge of the elevator and rudder.



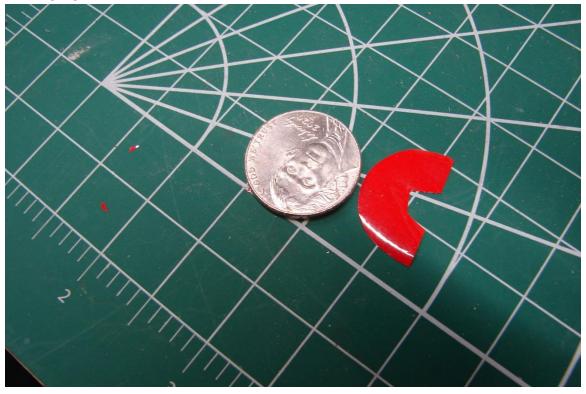
Shape the rudder to the bass piece. 45 degree leading edge.



Cover the flippers.



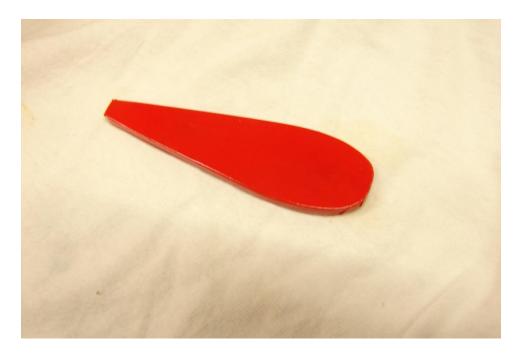
I cover a $\frac{1}{4}$ x $\frac{3}{8}$ " piece of appropriate color covering at all the 90 degree unions to make piecing the covering together later easier.



I use a nickel to make round transition pieces for the wing stab etc



I covered the tail first. Don't worry about perfect covering, get it all on then we will go back and make it nice.



Cover SP-1.



I worked forward with 1 piece fuselage covering per side overlapping the rear initial covering.



The wing and hatches were next.



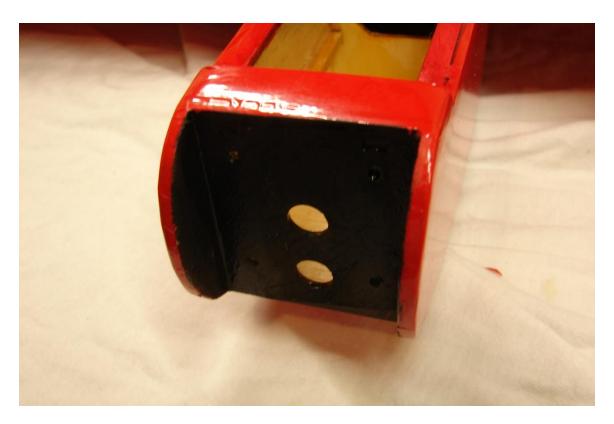
Cut the supplied CA hinges in half. Bevel the edges.



Hinge the surfaces. 2 – Rudder, 3 – Ailerons, 3 – Elevator.



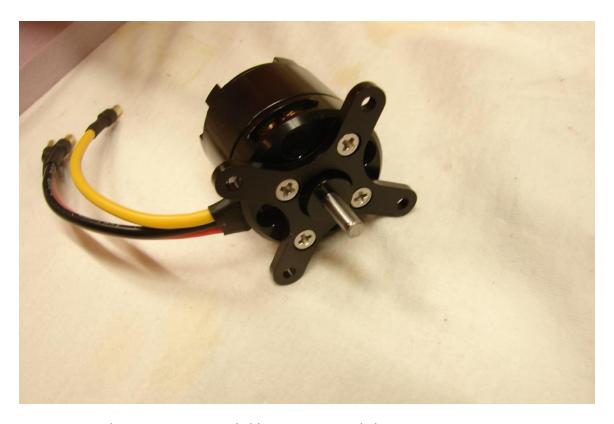
I used Tamiya Acrylic red to coat the inside of the aileron bay, adds a nice touch.



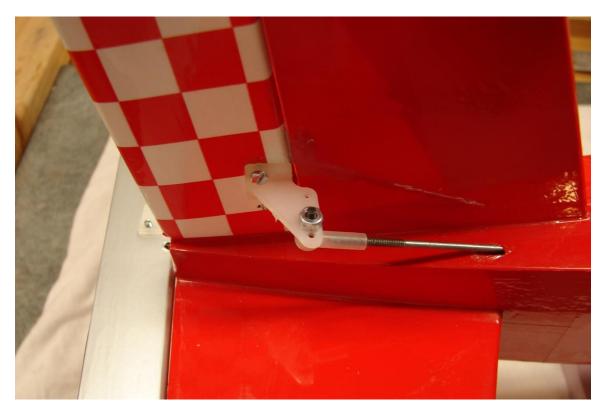
Tamiya black paint the firewall area.



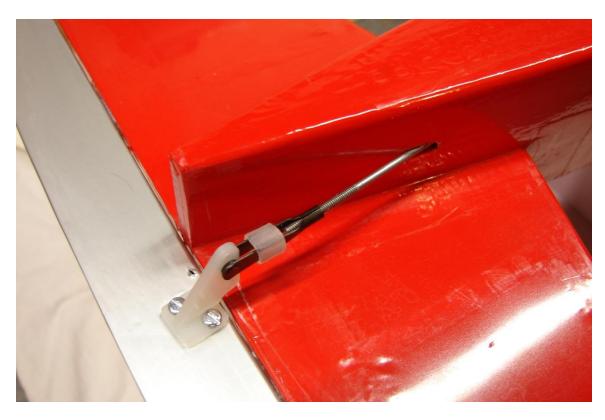
Aileron linkage path to determine the horn location.



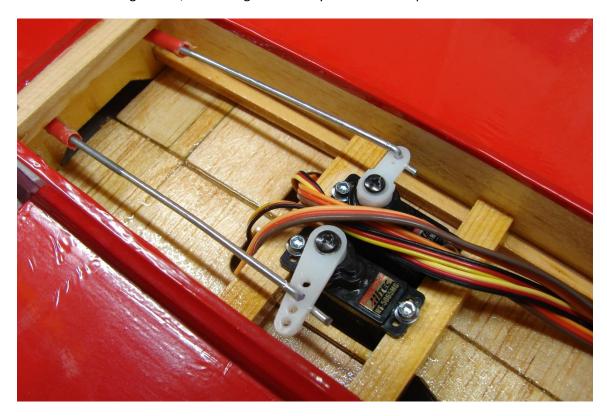
X mount onto the X2814 motor. Little blue Loctite a good idea.



Control horn rudder ball link detail, ball on the bottom of the horn.



Elevator horn linkage detail, don't' forget the safety fuel line clevis piece.



Rudder, elevator linkage detail.



Aileron horn, servo linkage detail.



Esc Velcro to the floor, connector faces rearward, "S" bend on the ESC wires.



To help with the models balance, mount receiver with Velcro behind the servos. Use a bread twist to bundle the wires



Mount the axles and wheels to the gear.



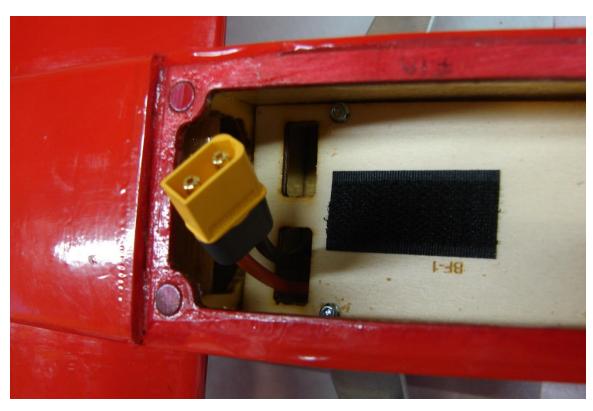
Install the SIG aluminum gear with the 4-40 button heads.



Glue the rear skid and SP-1 to the fuselage.



The APC 8x6 prop needs the adapter ring for a perfect fit on the PPK-3 setup. Ream the ring slightly with your hobby knife to get the propeller assembly to slide into place.

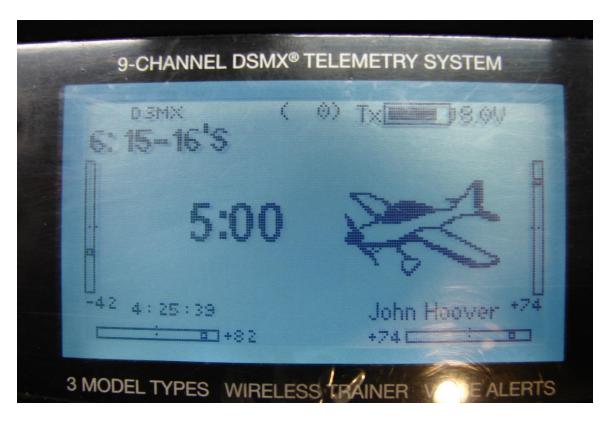


Install the BF-1 floor into place with the $\#2 \times 5/16$ " servo screws. Don't over tighten and strip it, just nice and snug. A piece of Velcro holds the battery.

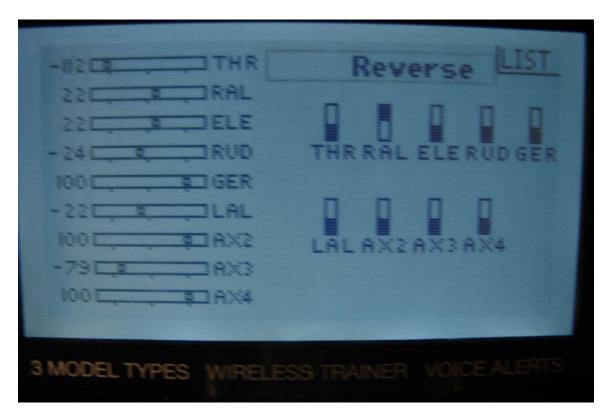


1300 3S lipo in place. Install to the rear of the compartment for balance and to avoid the motor shaft area. 1 Lb. 10 oz without Lipo with this prototype.



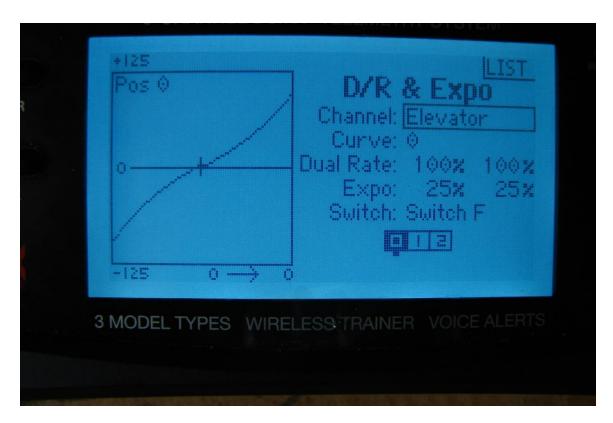


Name the model.



THR 3 -112% RAL 22% ELE 22% RUD 22% GER 100% Down: 50%
AX2 - 100% - 112 AX3 - 79%

She fly's well without the elevator flap mix but I feel it adds even more control and low speed handling. Nice for flair and low speed inverted passes you can push the nose up slightly and she is on rails.



Aileron – 0 =





















Thanks for following along on my build. Good flights!

John