

How to bash an ARF or how to BARF a WACO.

Paul Fleming

This is a short photo essay on how I converted the SIG SRE into a UC-72. Mostly it was just recovering and a paint job, but that doesn’t make for a good story so here goes.



1/6 Scale Waco SRE ARF

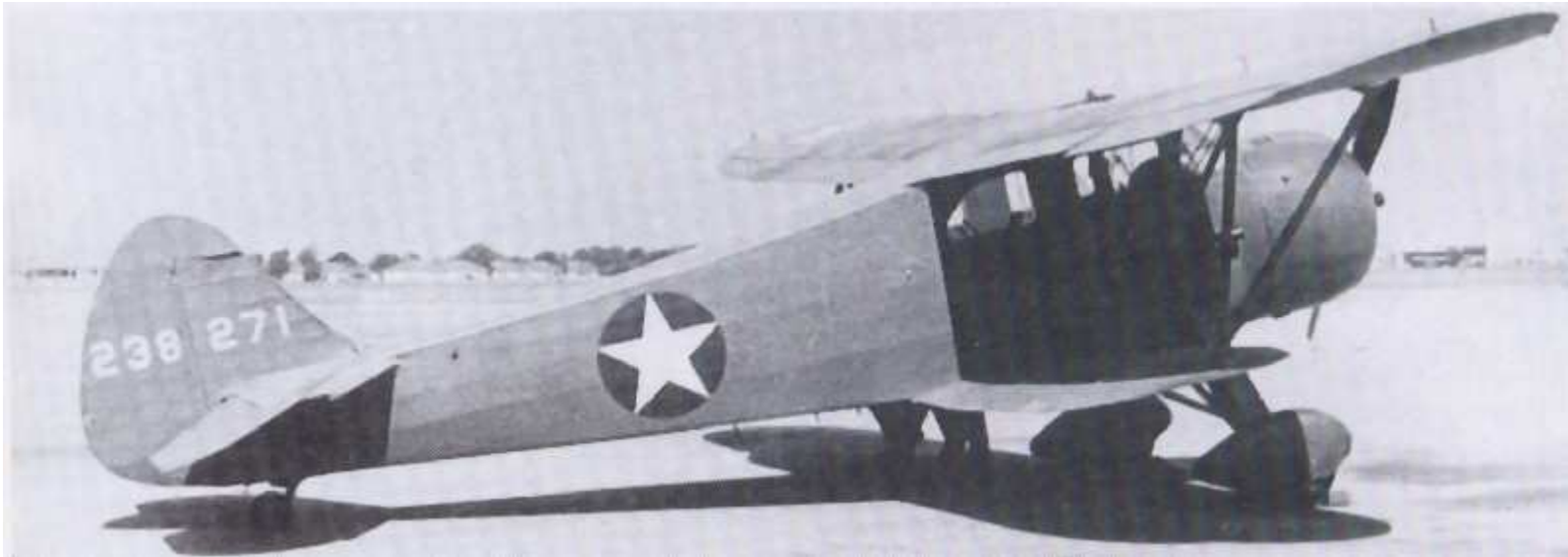


Additional Features

- Scale color scheme using quality SIG AeroKote
- Factory painted windshield
- 2-piece top wing assembly for easy transportation and storage
- 1-piece factory finished bottom wing for quicker assembly

Specifications		
Wingspan (Top):	69.5 in	1765 mm
Wing Area (Top):	756 in²	48.8 dm²
Wingspan (Bottom):	48.3 in	1227 mm
Wing Area (Bottom):	354 in²	22.8 dm²
Wing Area (Total):	1110 in²	71.6 dm²
Length:	55.2 in	1402 mm
Flying Weight:	9-1/2 - 10 lbs	4.30 - 4.53 kg
Engine Required:	.75 - .90 (12 - 15 cm³) 2-Stroke or .90 - 1.20 (15 - 20 cm³) 4-Stroke	
Radio Required:	5 Channel, 7 Servos	
Controls:	Ailerons, Flaps, Elevator, Rudder & Throttle	

While researching this plane I found that during WWII the Army impressed 28 of the SREs into service as the UC-27. The planes were used as a high speed (200mph+) transport. Eventually I found three pictures of the planes in Army colors.

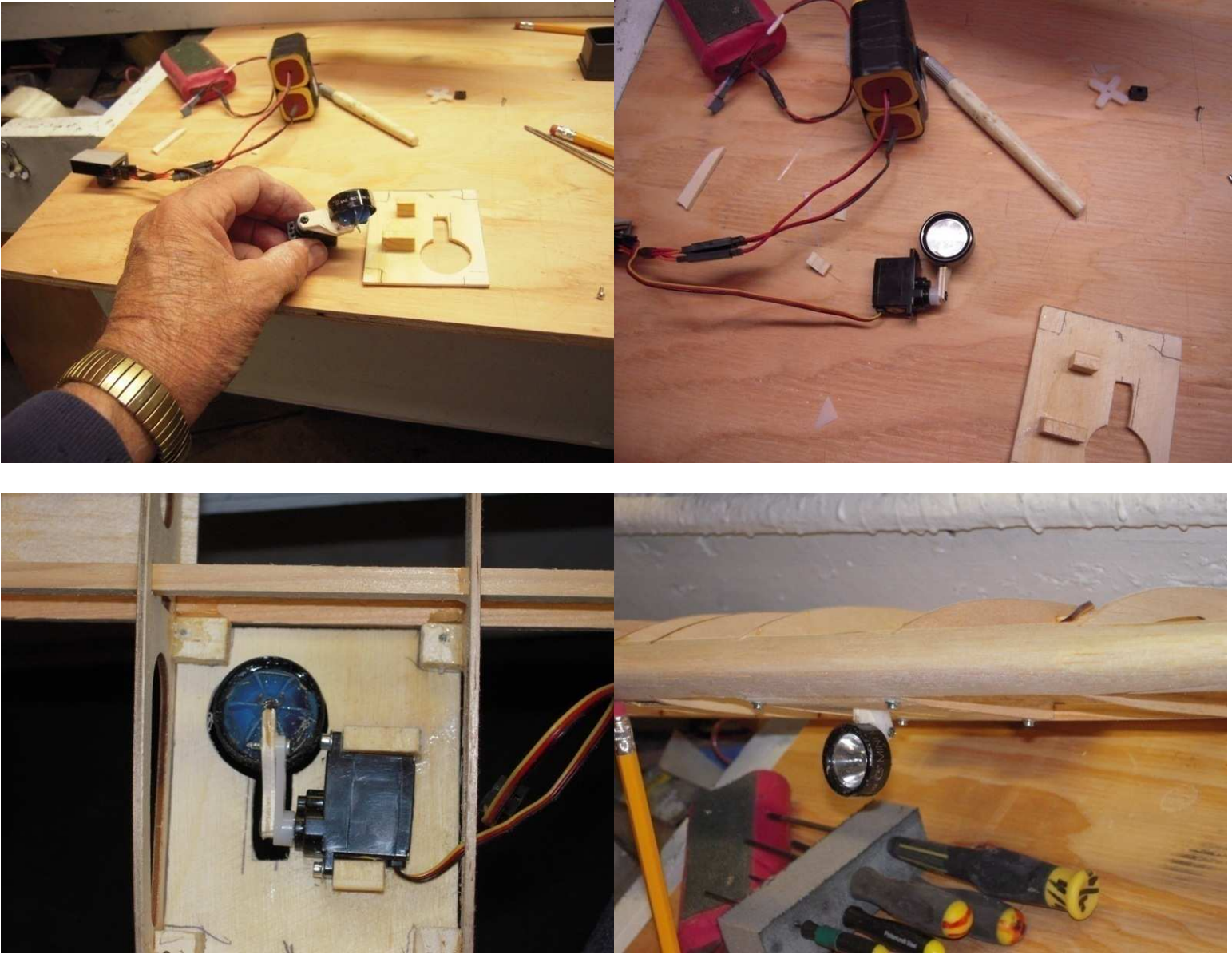


When the plane arrived it was covered in a very high grade covering. Since I intended to paint and wants a more fabric like look I decided to cover it in Solartex.. It rook about an hour to completely remove the old covering.

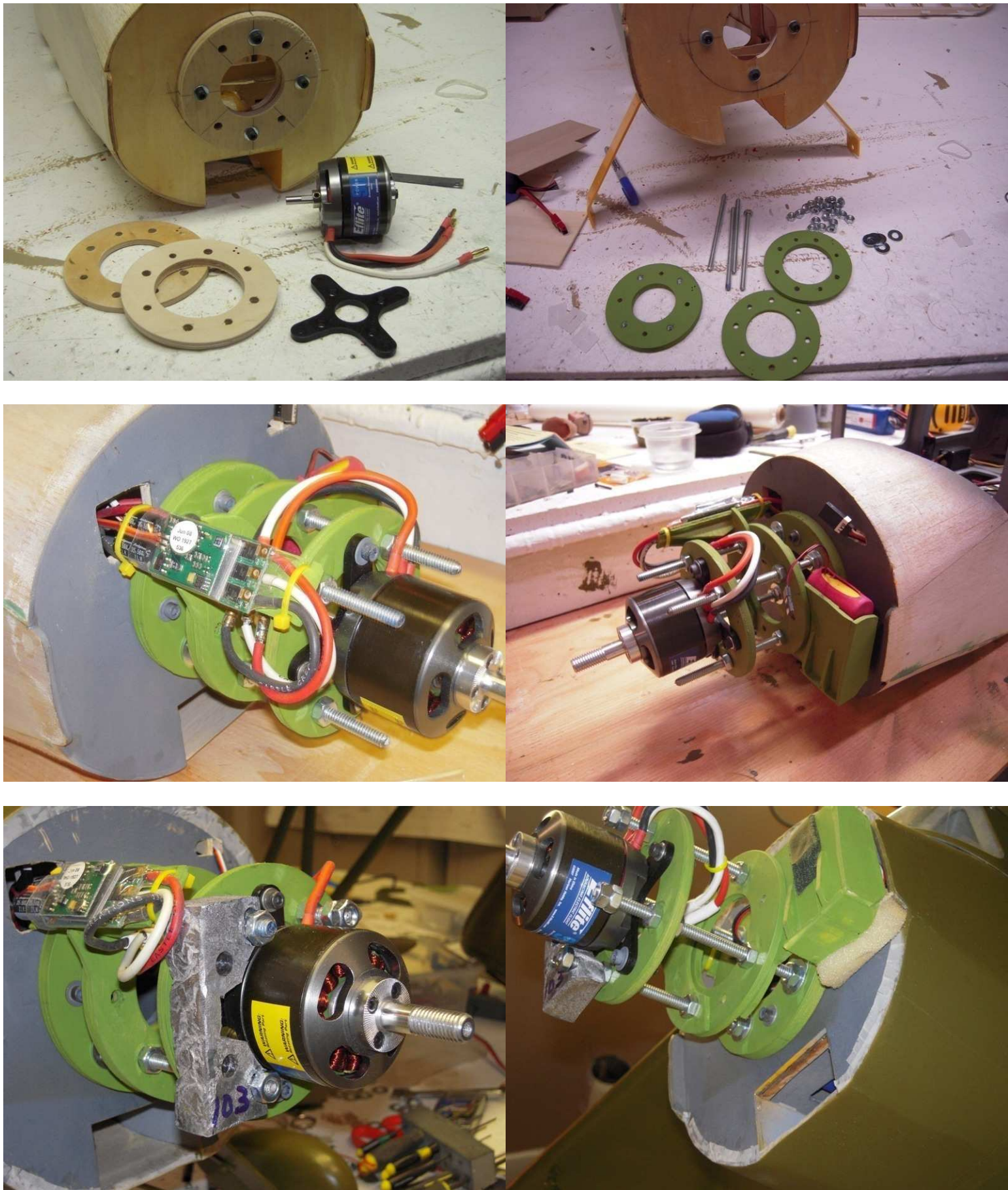


After the covering was removed I re glued every joint I could get to. Since the plane was going to be electric I had to build a new motor mount and batteries rack. I also beefed up the landing gear mounting base.

Since the Waco has no operating features except the control surfaces I decided to build in a retractable landing light. When the flaps are deployed the light also comes down out if the wing. When the flaps hit full down the light comes on.

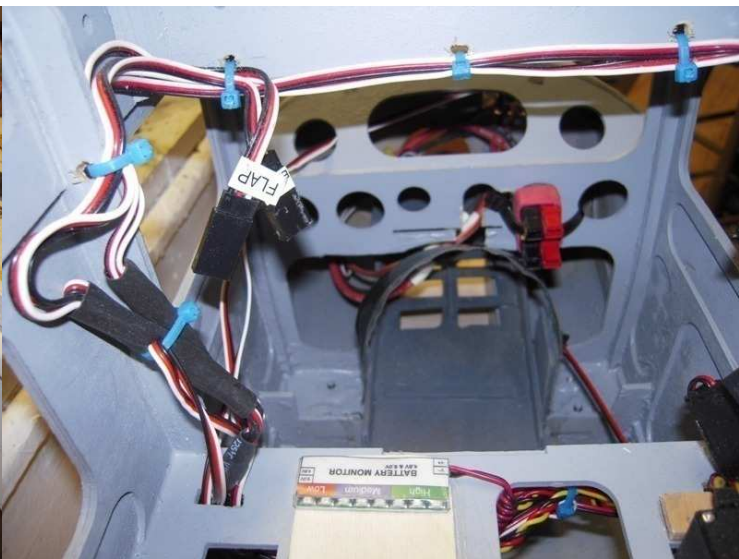
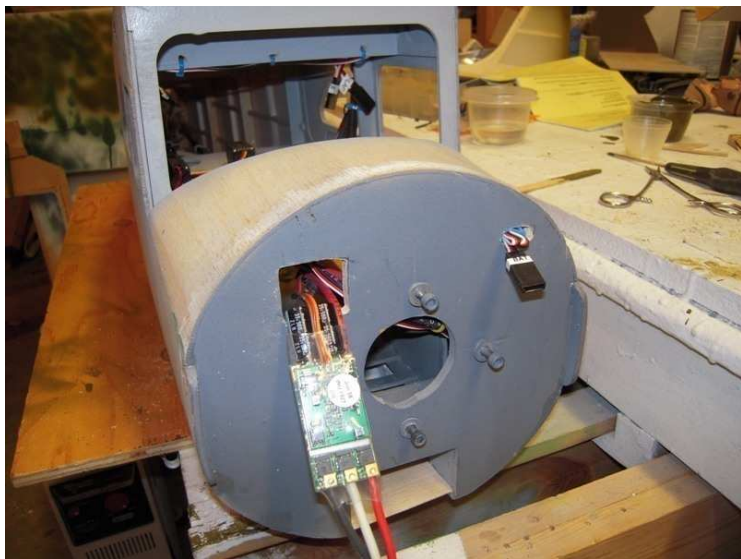
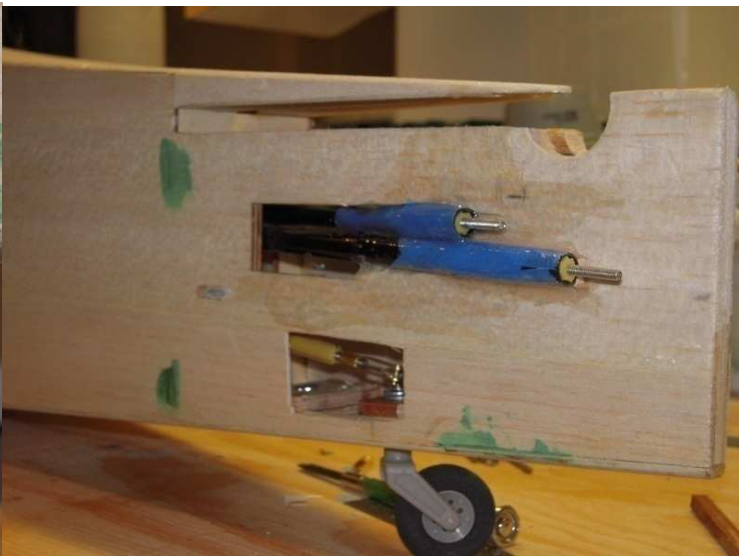


Since the airplane was going to be electric I had to build a new motor mount and battery tray. I chose the E-flight Power 90 with a plan to fly it on 5 or 6S. Using a 16x8 prop.

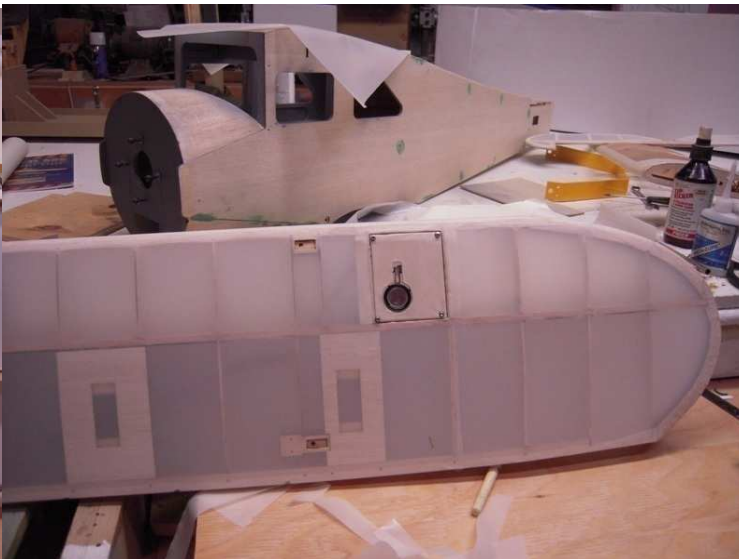
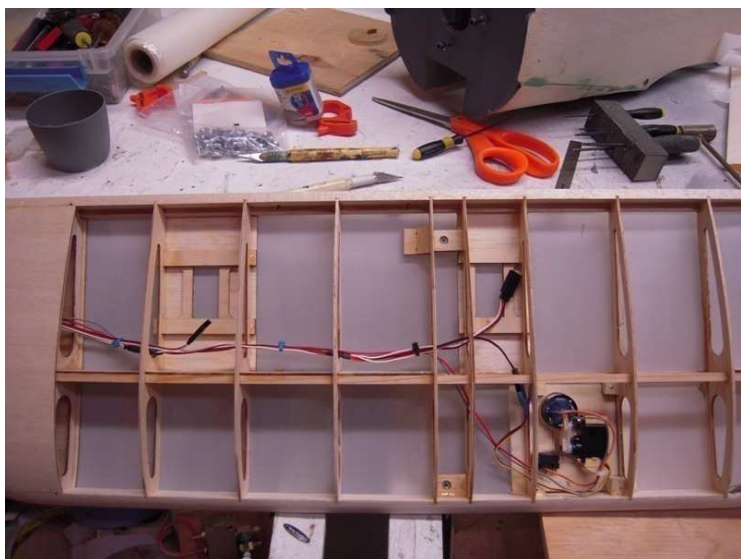


Later as you can see it took 10.3 ounces of lead to balance for flight. On the bottom of the firewall there was a pocket built into the airframe as a place to hide a muffler, kind of a neat feature. I turned it into an air scoop to cool the flight batteries. Just to get the weight as far forward as I could I put the radio battery on the firewall. Probably not one of my better ideas. Now I either have to bring the airplane into the house to charge it or remove the cowling and prop to change it.. Something to fix on the next overhaul.

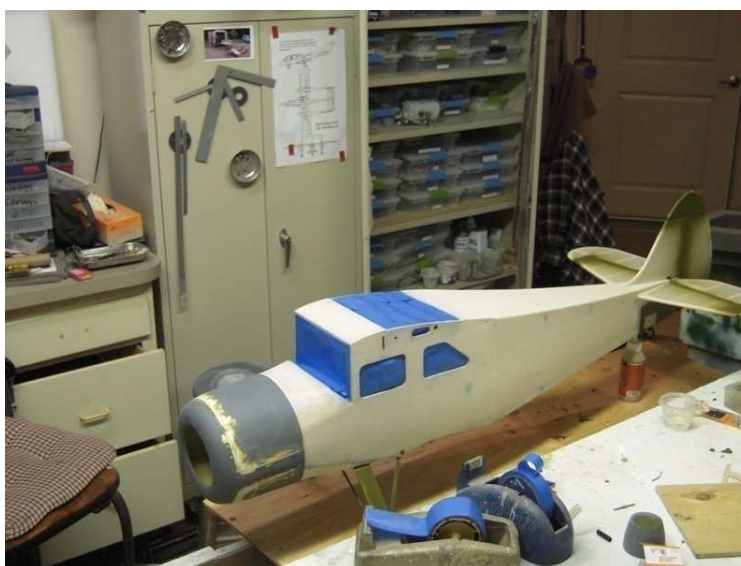
I didn't like the tail wheel provided. It was hooked into the rudder and not in the scale position so I installed a Dubro scale tail wheel and also went with Golden rods on the control surfaces. Next I fitted all the radio gear and battery rack and painted the interior.



Covering with Solartex was easy. Far easier than Monocoat or any of the plastic/mylar coverings I've used.



Once the covering was completed it was ready to paint. Since my airplanes are electric I don't have to worry about fuel proofing or what kind of paint to use. I like to work with latex. My airplane was going to be Olive Drab so armed with the correct color chip I went to Lowes. As luck would have it Bear makes the perfect semi gloss Olive Drab, only they call it Mountain Mist. First I painted all the small parts that would be hard to paint when the assembly was finished. I used an air brush and about 1/3 of a pint of paint to complete the job.





The wings got painted last because on the number of times they would have to be installed and removed. I simply didn't want to have to fix scratches and scrapes.



She has had about ten flights now with no adjustments. She flew just fine exactly as she left the bench. This airplane is not difficult to fly, but as Bob Benjamin points out she is "Difficult to fly well". You really need to know how to use the rudder with this plane. She is fast becoming my favorite plane.

This winter she will be back in the shop to have the flying wires installed the paint touched up with detail and weathering.

