Mount the aft airframe

Attachment of the airframe is pretty simple. The forward centering ring needs to be attached and reinforcements prepared. Then tail-cone, motor mount assembly is slipped into the airframe.

On to the pictorial...



First step is to glue the forward motor centering ring to the end of the motor mount. But first be sure to put in the two U-bolts. Aeropoxy is used throughout this assembly.



Bottom view showing the U-bolt mounting plate. Note the U-Bolt is mounded onto the inlayed plywood laminated between the carbon reinforcement.



Overall view with ring mounted.



To make the centering ring more resistant be being yanked out I added a ring of phenolic over the end of the motor mount. Also I pre-mounted fiberglass to the outer ring edge (I shaped a piece of the tail cone shoulder I cut off). Once in the airframe this allow a larger attachment point than just the ring making pulling it out less likely.



Here is the fiberglass reinforcement shaped from a piece of tail cone shoulder.



With the help of my kids I mixed up some Aeropoxy and slipped in the motor mount fin can assembly. This is looking down toward the top centering ring. Note the fiberglass reinforcements are now glued to the airframe as well. Also note the rail guide mount. You can't tell in the picture but it is rounded to it won't snag the shock cord. I will tape over this for launch.



Here is the bottom of rocket assembly hardening in the sun. I added epoxy to the forward edge of the fins to attach these.



A little more finishing – I added Aeropoxy Lite fillets to the fins. I used a spoon to do the rough shaping. Hardening I used a 24mm motor with sand paper around it to do the final shaping. If you haven't tried Aeropoxy Lite you should – it's really amazing stuff, very light and super tough. It doesn't chip or crack and no shrinkage during cure. Sands easily too!



I used some more Lite to smooth the transition between the boat tail and airframe. I also apply Bondo feathering compound to the fins and entire assembly. Then wet sand it all. The result is a perfect surface for primer and painting.

Next up – make the nose cone bulkhead and GPS bay...