

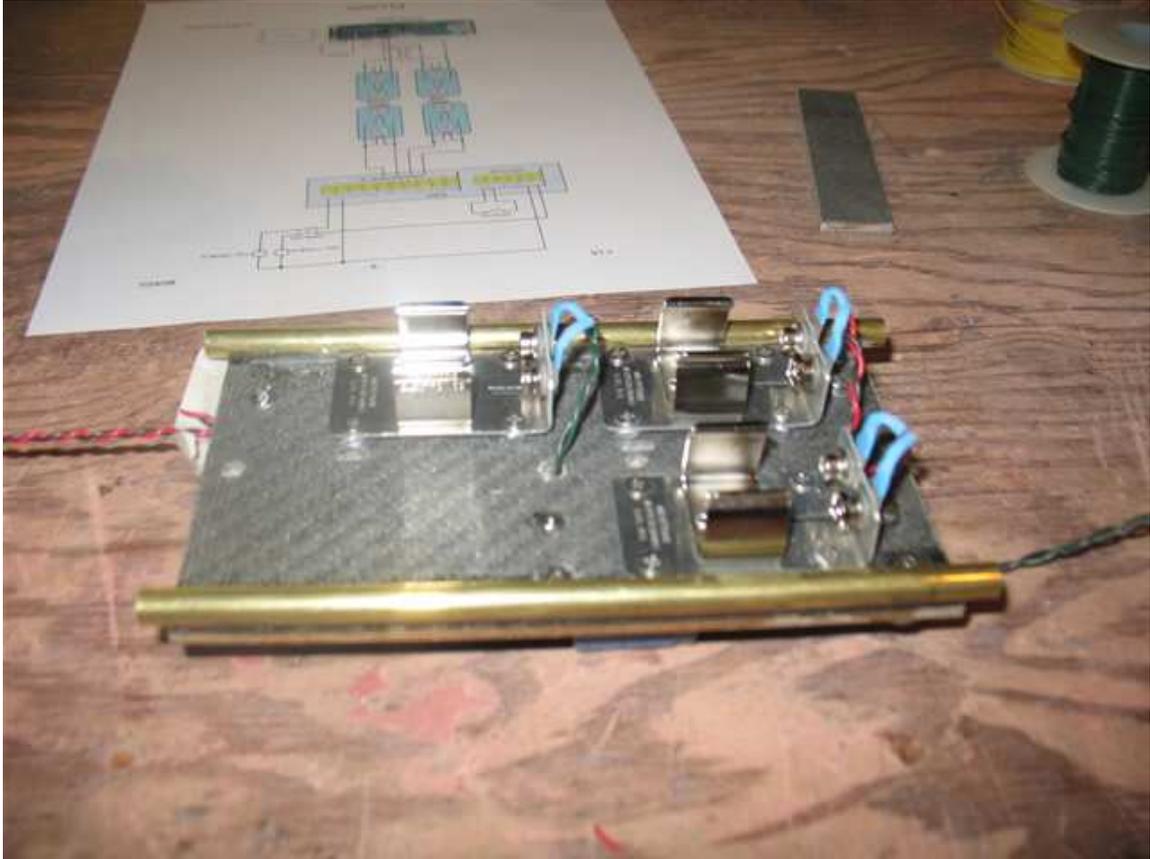
AV-Bay sled and electronics

For the electronics I am using a G-Wiz HCX and the Perfect Flight miniAlt. Although I have lots of room in the bay I wanted a compact sled that can be used on smaller projects. This design should let me use this sled in projects using as small as 5.5" airframes.

On to the pictorial...



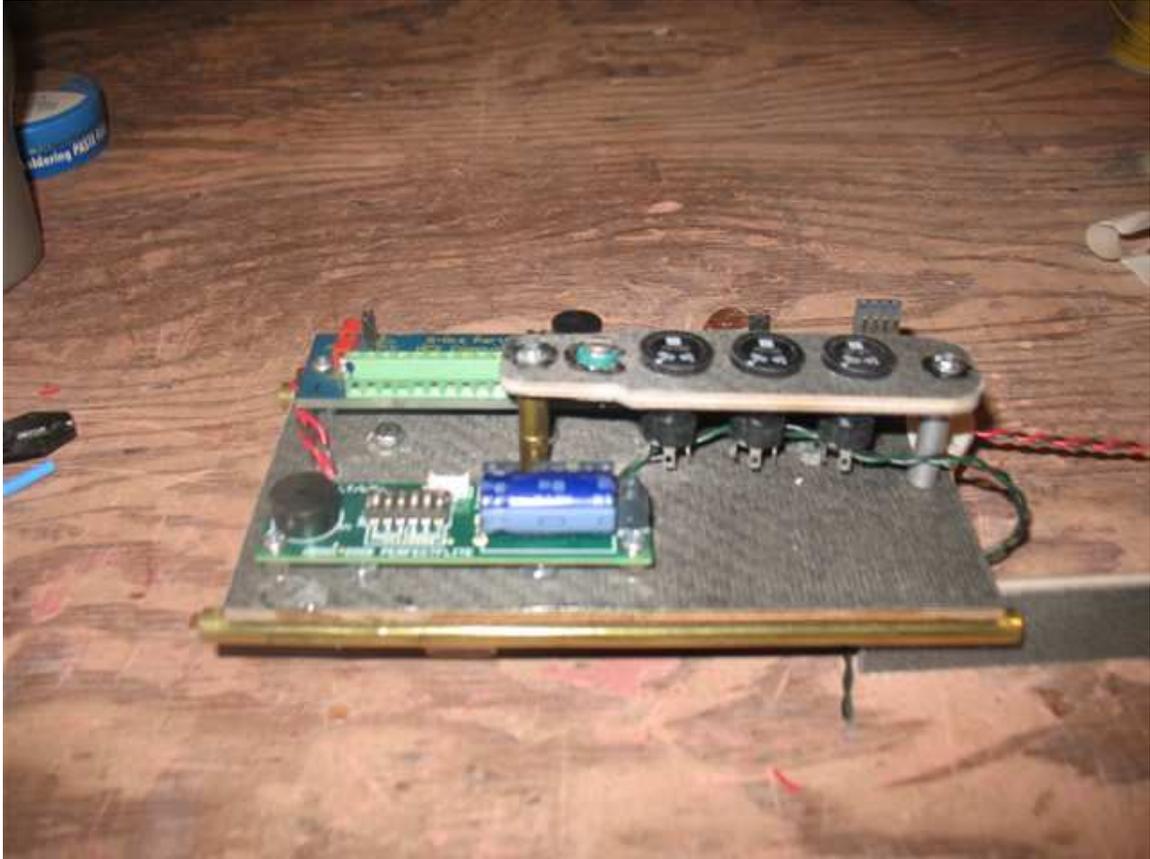
For the sled I vacuum bagged carbon reinforcement over 1/8" ply. Why? Because it's cool and I could! Then I epoxied two brass tubes to the edges. These will slide over two of the four 1/4" threaded rod used in the AV Bay.



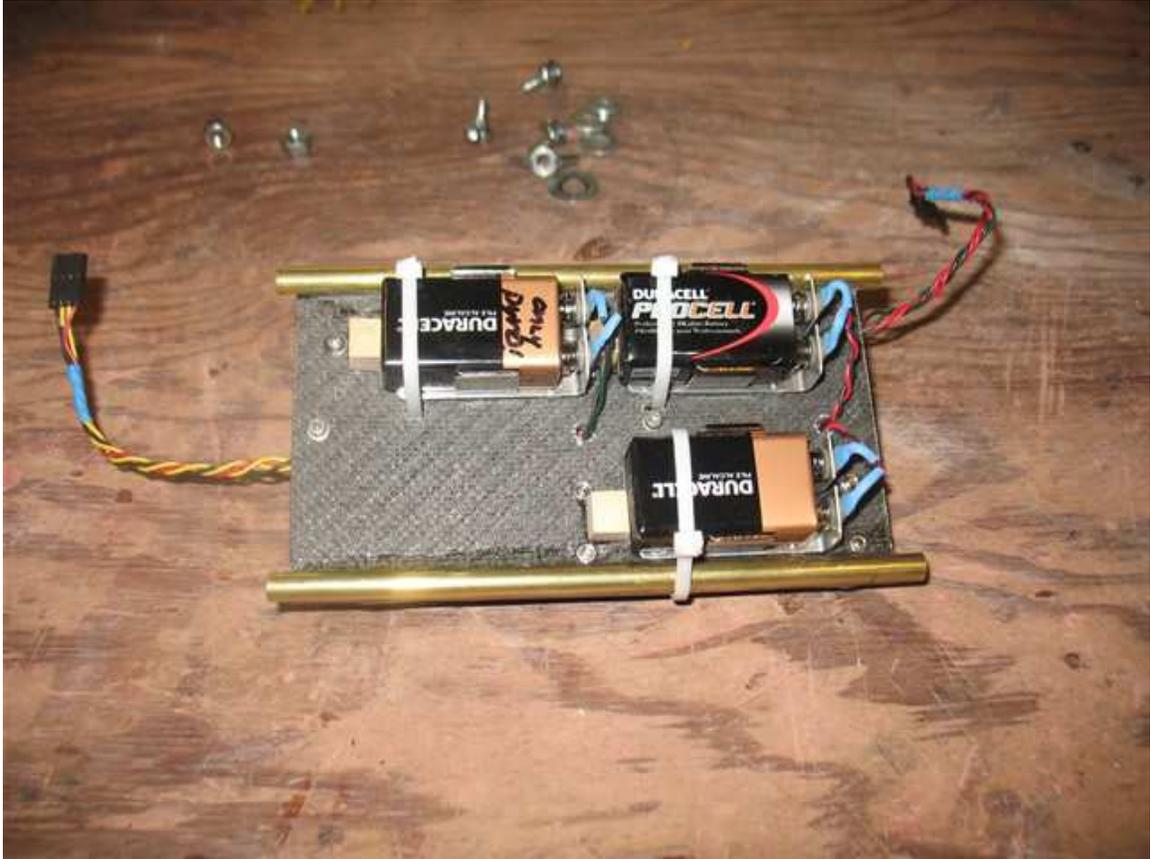
Next I need the electronics. First I mount the batter holders to the back of the board. In tis case I need three, two for the HCX, and one for the miniAlt.



Then I mount the controllers and switches to the front. I also used a piece of carbon board for the switches and shunts. I like the rotary switched and screw shunts for this. The standoff get's the switched up off the main board allowing connection underneath. It also get's the switches closer to the AV-bay side making it a simple matter of using a screw driver inserted through the rocket side to turn on and off.



Here is another view before all the wiring.



After wiring here is the back side. Note the cool Molex connectors used to allow easy removal from the e-bay. The connectors mate to each of the AV-bay end caps which have matching connectors. The Molex connectors lock together and use high-quality gold plated pins.



Now the front side view all wired up. Next I did swing tests for the HCX (accelerometer based controller). I was able to insert the entire assembly into the AV-bay coupler and draw a vacuum to test the miniAlt. All test were perfect.

Next up – Finish the AV-bay caps and assembly...