

Finish the AV Bay caps and assembly

Now that the sled is finished I will finish up the AV Bay caps and put it all together. Most of the heavy lifting for this is done. Now it's mostly just mounting and bolting the charge containers and a few other details.

On to the pictorial...



First is to drill and mount the AV Bay to the airframe. The mounting shoulder was already in the AV-bay ends. So it is just a matter of measuring and drilling the for 6 holes. Then I insert the T-nut into the back of the mounting shoulder. The view is of the mounting screw inside the av-bay and airframe.

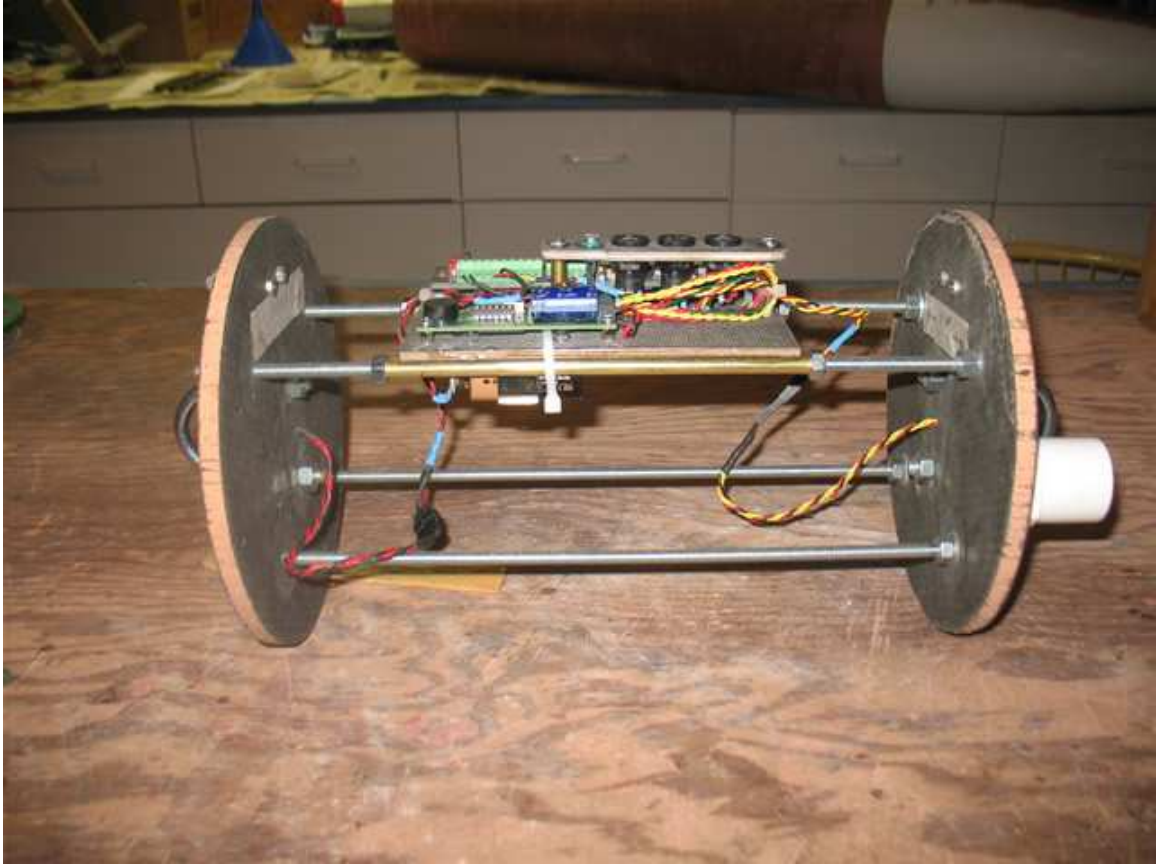
Also not shown because of the small size is the sheer pins to hold the AV-bay into the lower airframe. For this I use 3 4-40 nylon screws. Really simple...



I used six counter sunk 6/32 machine screws for mounting the av-bay to the upper airframe. This shows two of the six screws.



So I remove the AV-bay sled and rails and finish up the insides. This view shows the bay top with the main chute deployment charge cups, screw terminals and 5/16" U-Bolt. Note the AV-bay sled mounted on the rods. It is oriented to the side of the AV-bay making screwdriver access easy.



Here is another view now with the end-caps connected to the sled. I love those Molex connectors!



Here is a detailed view of the main chute end (upper end) of the AV-bay. I ran the wires through the hole originally used as the pivot for the router table. I use heat-shrink tubing over the wire bundles to protect these.



This is the drogue end (lower end) of the AV-bay. Essential the same except no charge cups. Note the wing nuts making disassembly easy. The drogue charges are dropped into the lower airframe into charge cups epoxied onto the upper centering ring. So no cups are needed on this end.



Next I drill the access holds. This is done with the AV-Bay mounted in the airframe so everything aligned exactly. I used a permanent marker to label the switched and positions to arm and remove the shunts.

Note the other holes in the AV-bay center to the right and left. There are 5 more vent holes in the AV-Bay. Calculation based on volume indicate that with 6 holds I need to use a .22 dia meter drill bit (7/32).



Now that I have the AV-Bay done I can do a final assembly of the rocket and see how it's going to look. Looks just super – and big to me!

Next up – What colors to use? And how about that name? No – it's not going to be called Gene L3 Rocket – I do have a name in mind...