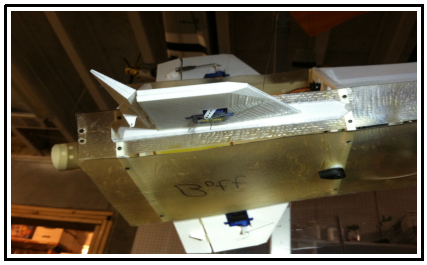
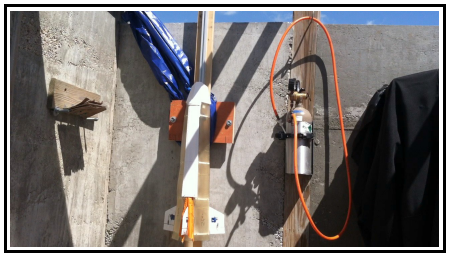
Executive Summary

This month, I continued work on the flight system. I assembled the entire rocket glider. The final mass is ~1.2 kg. This leaves 300 gm for the HTP oxidizer and PLA/$KMnO_4$ fuel. I performed a dry run for launch. Everything checks out. All systems are go for launch next month.

Technical Stuff

This month, I continued work on the flight system. I assembled the entire rocket glider using an inert rocket engine. I attached the paraglider to the frame using six lines and attached two lines to wing tips. The other end of the wing tip lines are attached to the servos on the under side of the horizontal stabilizers. A turn to starboard requires an up elevator and a down wing tip on the starboard side and a down elevator and an up wing tip on the port side. I folded the paraglider and covered it with the canopy. I installed the electronics, batteries, and nose cone. The final mass was ~1.2 kg. This left 300 gm for the HTP oxidizer and PLA/KMnO4 fuel.





Also, this month, I attached the launch rail to rocket engine test stand and performed a dry run for launch. I used water as the propellant (pressurized to 40 psi) and ejected the canopy. Other than a few minor issues, the test run was perfect (i.e. I hit all the right buttons and it worked).

Next month, I'm go for launch. I have the oxidizer, I have the fuel, and I have the MkI Viper. All I need now is clear skies and no wind.