

Executive Summary

This month, after several weather delays, I finally got to drop the rocket glider. Unfortunately, the tail section of the glider hit the safety straps, flipped, and crash landed. The impact bent the frame. As such, the rocket glider is no longer usable. That's okay because I've exceeded my mass limit anyway. So, it's back to redesign and a new frame. Also, I have to extend my launch tower adapter so that I don't hit the safety straps next time. In this case, failure is an option.

Technical Stuff

This month, I continued working on the drop tower and rocket glider. I tried several ejection techniques and settled on a 1/2" CPVC pipe with loop holes at several points along the top of the paraglider (pictured below). I used a high resistant nichrome wire to burn through a fishing line to innate the drop. After several weather delays, I finally got to drop the rocket glider. The ejector worked. Unfortunately, the tail section of the glider hit the safety straps, flipped, and crash landed. The impact bent the frame. As such, the rocket glider is no longer usable. That's okay because I've exceeded my mass limit by ~100 gm anyway. So, it's back to redesign and a new frame. Also, I have to extend my launch tower adapter so that I don't hit the safety straps next time.



Next month, I'll continue working on a new glider design and drop tower adapter. The three separate sections of the glider proved to be troublesome. Stringing up the paraglider and making electrical connections was a pain in the a##. I plan on using a smaller diameter propellant tank. This should make the fuselage more streamline. Also, I'm switching to full length fiberglass panels down the length of the glider. Finally, I'm moving the servos back toward the center and using three foam RC rudders with control rods.