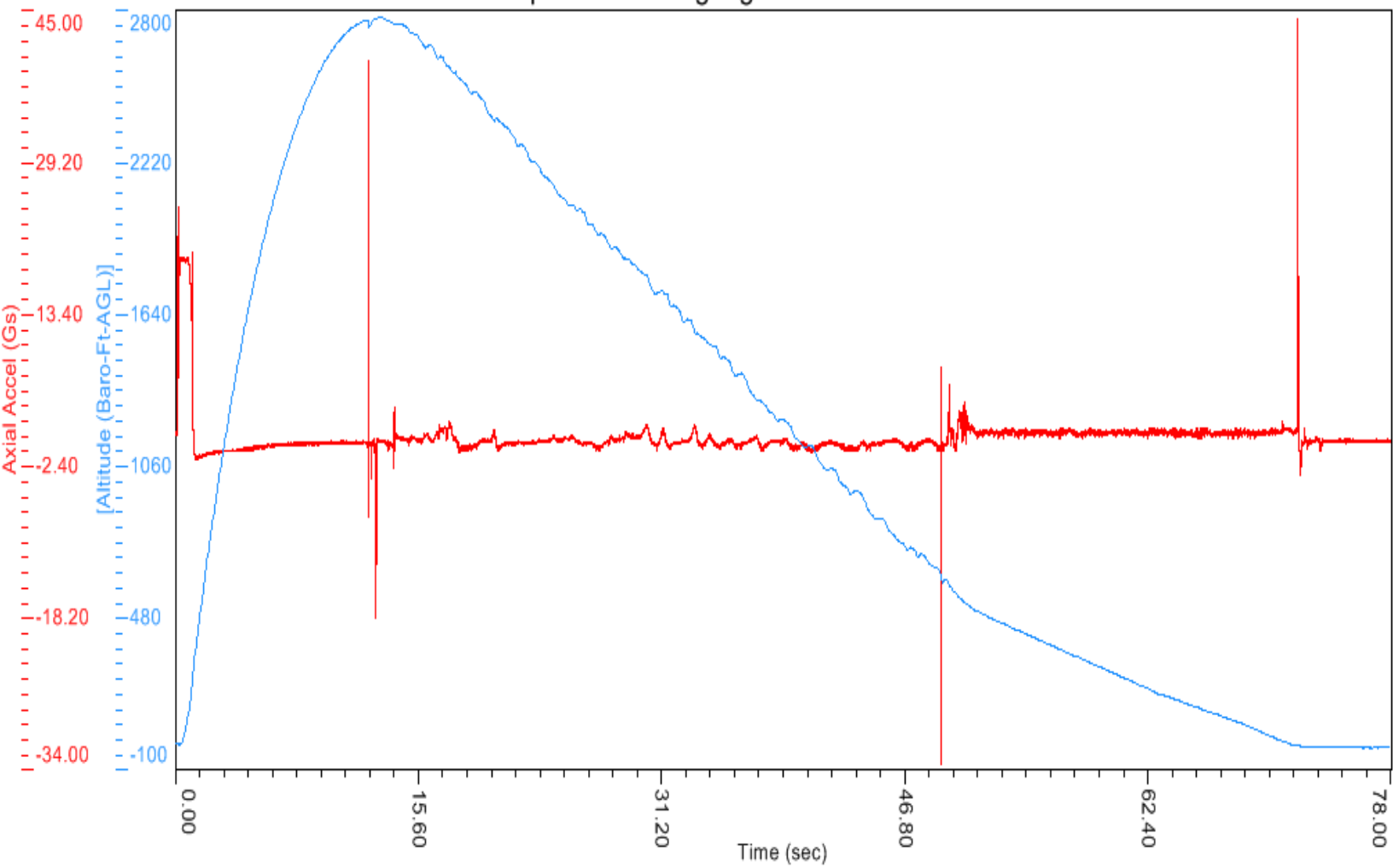


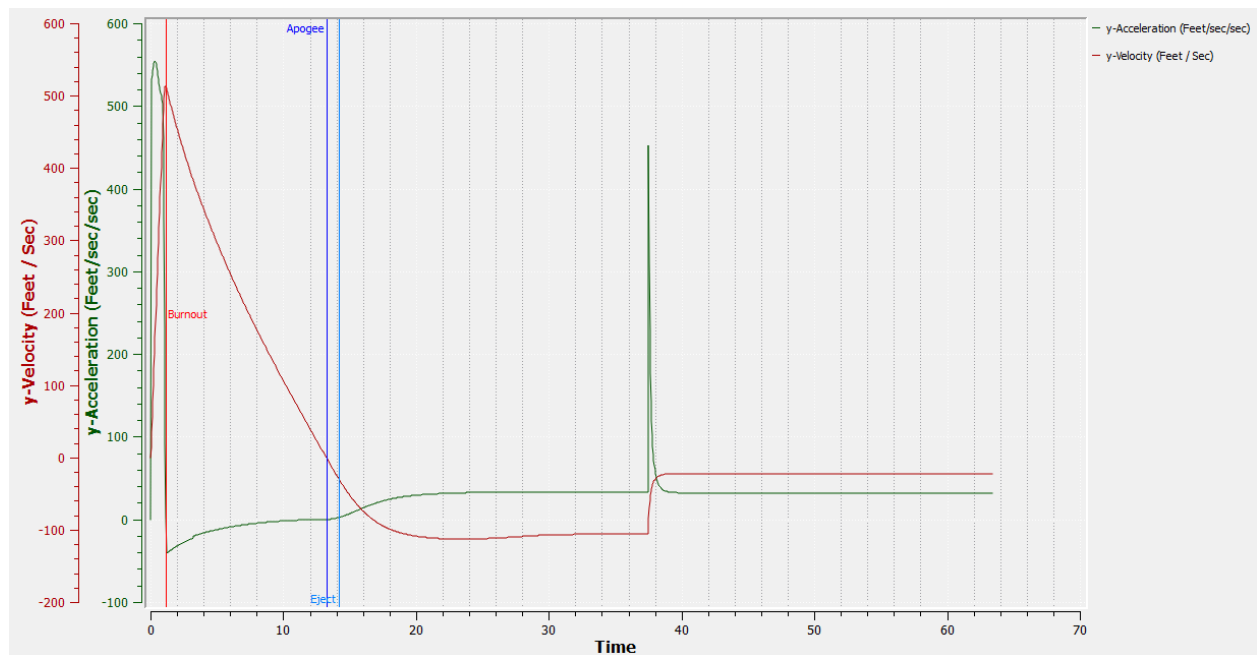
Post Operative Flight Report

Team Parasitic Swag

May 20, 2013

parasitic swag flight1.FIPa





The post operative flight report data is shown on the previous page represents the actual competition data obtained from the Raven Altimeter. After taking the excel files and running a code through MATLAB, a couple distinguishing factors were compared to the design results. The most noticeable attribute would be the max altitude achieved during the flight. Our team members were well aware that this wasn't going to be an accurate measurement. The factor that contributed the most to our flight apogee would have been the coefficient of drag. This value is hard to obtain when testing was not in our schedule. The only way to accurately obtain a Cd would be to put the rocket in a wind tunnel and measure the normal and axial forces around the body. Since this wasn't a viable option, we were to then guess a cd based off of previous knowledge. Other than that, the descent rate was accurate within 3 ft/sec, as well as the rise time being within a few seconds of one another. Our rocket behaved well up to apogee, without any dutch roll or other attainabilities. This probably had to do with the larger tail fin designs, which produced a much more stable rocket. Overall, we were happy with the results.