Lesson 4 Rocketry vocabulary/concepts 10/5/2018

* Piston (vs flame protector) (vs rocket barf) for parachute protection
* Drogue parachute (at apogee) vs Main parachute (as rocket approaches the ground)
* Dual deploy to minimize lateral landing distance (i.e. drift with the wind on descent)
* RockSim 9.0 ($$)
* OpenRocket 15.03 (free)
* Parent-child component relationships in simulation software
* Ballast (to improve static margin in simulations and/or in reality – simulations can be off)
* Plotting options – especially altitude, velocity, acceleration, and lateral distance
* Wind-cocking – flying into the (local) wind
* Interpretation of graphs when multiple things are plotted on top of one another

Document repository: *http://www.aem.umn.edu/people/faculty/flaten/Rocketry\_Remote\_Lessons\_Fall\_2018/*

Max’s evolving photo-build instructions – check back regularly: <https://docs.google.com/presentation/d/1oepk62CjsZubKPHbRcWFAOIm7tNdElkoKxc64FFhwU4/edit#slide=id.g42ec7e3ad3_0_5>