Lesson 5 Rocketry vocabulary/concepts Oct. 10, 2017

* Avionics/Payload Bay (av-bay)
* Utility of having a removable av-bay
* Coupler tube with collar (always exposed)
* Sled (will need to be modified due to eyebolt placement)
* Threaded rods and alignment tubes (not the only way to attach it)
* Screw switch (epoxy thoroughly to deal with application of “wrench”) (don’t lose screw!)
* Orientation of battery holder (and reason for it)
* Polarity of battery (my main dislike for this battery holder) (labels) (zip ties – later)
* Why we use a “CopperTop” Duracell 9-volt battery
* Raven3 altimeter < http://www.featherweightaltimeters.com/The\_Raven.php>
* Raven3 wiring diagram
* Featherweight Interface Program (free software download)
* Altimeter programming options (4 channels)
* Raven3 flight simulation test (with LEDs (watch polarity!) and safety resistors)
* Soldering
* Venting the av-bay (later lesson calculation)
* Bleed holes (where and why) (later lesson calculation)
* Ejection charge size (later lesson calculation)
* Wiring for an ejection charge test (to be done just prior to flight)
* Making the av-bay “explosion-tight”

Document repository: [*http://www.aem.umn.edu/people/faculty/flaten/Rocketry\_Remote\_Lessons\_Fall\_2017/*](http://www.aem.umn.edu/people/faculty/flaten/Rocketry_Remote_Lessons_Fall_2017/)

Danny’s evolving photo-build instructions – check back regularly: [*https://docs.google.com/presentation/d/14IxzFs65U64-Dv\_CV8lyb0TSgxyj1ti4kJh6mG2wQh8/edit?usp=sharing*](https://docs.google.com/presentation/d/14IxzFs65U64-Dv_CV8lyb0TSgxyj1ti4kJh6mG2wQh8/edit?usp=sharing)