Things to cover at the GBM, 9/27:

General Info

* Project open to all new members, no experience required, no major requirements
* Weekly meetings with 2-3 hour build days, Saturday or Sunday afternoons
* Launch by end of quarter, end of week 8 or 9
* Launch at Plaster City (about an hour away from UCSD)
* Try for launch at Plaster City launch (Holtville?) dates are on the first weekend of the month so we need to try for beginning of November (5, 6) or December (3, 4). Finals week is December 5-10. Can always launch at FAR if need be. Need to contact sites.
* Ordering parts by Sunday 10/2
* Success/Failure Analysis to be presented in GBM after launch for developing professionalism

Design

* 3” OD cardboard tubing with fiberglass reinforcement, Fuselage length TBD
* Plywood fins with fiberglass reinforcement
* Nose cones (already have on hand)
* Plywood bulkheads, set with epoxy: one for holding in motor, one for parachute eyebolt
* Eyebolt for parachute
* AeroEpoxy (in the lab)
* Hand and power tools in the lab
* StratoLoggers with Perfect Flight software for altimeter/parachute deployment
* Open Rocket for simple simulations to determine fin shape

Rocketry 101

* Handout/Quick Reference Guide
* Cool videos
* Cover solids, hybrids, and liquids
* Cover aerodynamic surfaces (i.e. fins, nosecone)
* Cover Center of Gravity and Center of Pressure
* Brief tour of the IPTs and current projects (have PMs present)
* Follow up with “experimental payload challenge,” basic guidelines, and budget
* Resume guidelines and review

Construction Guidelines

1. Cut airframe to size (~36”)
2. Cut Av Bay to size (~12”)
3. Cut Motor Mount to size (~36”)
4. Epoxy Centering rings to motor mount (4-6” from ends)
   1. Epoxy motor mount w/ centering rings to airframe, flush with rear closure
5. Cut out forward bulkhead, drill hole for eyebolt, add eyebolt
   1. Epoxy the assembled forward bulkhead into airframe with eyebolt facing forward
6. Epoxy 6” Coupler to av bay with 3” extending out
7. Cut out av bay bulkhead, drill hole for eyebolt, drill hole for ejection charge leads, add eyebolt
   1. Epoxy the assembled bulkhead into outward end of coupler with eyebolt facing out
8. Cut out fins and epoxy to airframe
9. Fiberglass av bay and airframe
10. Drill hole in av bay for pressure and ghetto stratologger switch
11. Assemble av bay internal structure (use foam to hold stratologger/payload)
12. Black Powder ejection charge
    1. Use ejection charge holders or nylon glove, fill with black powder (~2g), add ematch and run leads to av bay bulkhead holes
13. Run shock cord w/ kevlar protection for recovery
14. Pack parachute w/ protective cloth and black powder charge
15. Secure motor retainer
16. Remove ejection charge from motor, Load motor
17. Run ematch igniter to top of motor (inside)