**Balloon Todo**

* **Engineering**
  + Prototype o-ring seal, tell the machine shop to make the rest of the doors
  + Order o-rings and o-ring grease
  + Finalize fan selection and mounts for fans
  + Finalize luer-lock stuff
  + Make assembly for attaching actuators to doors
  + Attach rod holders to doors using epoxy or better
  + Freezer test the new actuator enclosure
  + Freezer test the fans
  + Finalize plan for mounting chambers to the payload
    - Print mounting brackets
  + Finalize electronics and PCB
  + Finalize payload layout with all the electronics
  + Test software and simulate flight with simulated GPS data
    - Ensure actuators open when required
    - Debug!!! Software should robustly handle actuators, thermistors, data logging, cameras, etc. Program should fail gracefully so that it doesn’t completely crash if something goes wrong
  + Finalize interface with CSA gondola. Possibly test manual commands
  + Build payload, and perform final vibration, freezer, and other tests
* **Science**
  + Rehearse chamber preparation and loading, train people how to do it. Chamber preparation will involve:
    - cleaning and sterilizing the chambers
    - coating the rods
    - inserting the rods into the rodholder without contamination
    - inserting the door+rods into a sterile bag
    - when ready: attaching the door to the chamber and attaching the chamber to the payload, and finally ripping the sterile bag
  + Collect a sample with out payload from the ground? Analytical dry-run. Would serve as a control too