DetroitSat 11/22/15, 1:00pm Google Hangouts meeting

Matt - PocketQube ($50 sat was one of these… kind of)
Trying to sell a package. Looked at how they do their stuff, found their solar panels. Need to reach out to company to see how much they charge.
5 5cm x 5cm PCB's = $5000, PCB area plus solar panels, 370mW per panel PCB, 14.75 mW/cm^2
Going to reach out to firm, need general budget range.
Triangular panels?

- What are we doing for a ground station?
- What is the budget? Target $10,000 not to exceed? - Paul

Also, this project is not dissimalr from what we are doing: http://amsat-uk.org/tag/wren/ Again, in the pocketQube size class. May be worth asking about the camera and downlink that they used

Paul - Take a look at Picosat size constraints, launcher type
Check amateur satellite frequency bands, see which ones we can use
Size antenna and comms power budget on this
Need corresponding ground station, talk to the i3 HAM group
Look at outgassing rules and regs for LEO sats

Scott - Magnetic stabilization vs gravity gradient stabilization
Position sensing
Attidute Correction/Orientation
https://www.princeton.edu/~stengel/MAE342Lecture13.pdf
http://citeseerx.ist.psu.edu/viewdoc/download?rep=rep1&type=pdf&doi=10.1.1.208.3894

Investigate,commercially available picosat structures

Failure States, "Anti-trolling"
-Pointing Camera at sun for extended period
-Orienting solar panels away from sun for extended period

Corey - Updates on film roll sat?

- Figure out flexible solar panels
- Figure out how to deploy a film roll

Asif - How can we deploy antennas and tethers? Ideas for deploying gravity boom?

- Deployment mechanisms - how do we keep it latched during launch then deploy in orbit?