Team Meeting w/ JH, NM, RF, RN, RT, BT, Gary Woods

* Buck boost, fuel gauge, ldo on order waiting to arrive
* Solar testing happening RN
* Integrated sensor+comms code
* Might use Nadya as resource- oil+gas sensor
* Interrupt-based data (longer time frame), writing to fram

GW: remeasure with 1.5 ohm resistor- don’t want to drop 1V since we’re trying to measure uA…. Maybe make an op-amp circuit (transimpedance circuit) (Vout -Vcc)/R= I, can use a larger resistor still…

* BT: don’t use 727 op-amp… they’re slow
* TLO81, 6182
* RT will do that after this
* JH- system diagram- power
* BT- subject to change- 2 buckboost converters, maybe connect to Vstore instead of battery . Vstore aka Vdd supplies power to load (incoming from EH and extra from storage)
* BT- fuel gauge impedance tracking alg+ battery chemistry to figure out how much stored
* RN- will tell capacity, filter it
* JH- no crystal oscillator right now
* NM- bluefruit has a crystal oscillator we can use later
* JH- next prototype have transistor to control
* RN- or we can use enable pin for LDO
* BT- LDO go across buck-boost
* RN- we can do it in this iteration
* BT- not necessary, but we can work on it when they get in
* GW- the only thing you would want it for is the sensor
* BT- $200 for free from TI- got some buck-boost converters, fuel gauge coming
* RN- trying to put together PCB design
* GW- sooner you can get to PCB the better
* RN- wouldn’t gauge how accurate
* GW- takes a couple weeks for PCB
* BT- PCB should be brunt of our work for start next semester
* JH- even just getting parts into Eagle could be hard enough
* RN- it’s not as hard as it seems though
* BT- need to setup footprint to all have same PCB footprint
* 2nd prototype- have header pins and connect them that way, or hook them up not stacked together
* Solar cell data is ~problematic~ due to the weather
  + RN- should I just put it all in a bin except for the solar cell? Probably
* Power system characterization document- have most of the data from last week and this week
  + RN- shows best case (sunny) and worst case (cloudy). Isc\*Voc. Measurements: multiply short circuit current and open circuit voltage
  + All measurements from solar cells that meet size restraints (largest is 43mmx14mm)
* Demo- thanks Nathaniel