

Action Items—This week

- a. Balancing circuitry almost complete
 - Missing a few sets, and one set blew up
 - Notes: will need to build 3 more sets this week to complete circuit
- b. Locating the Hot
 - Opened up the panel – lots of wires
 - Notes: can't pull the panel of far enough because lack of lag in wires
 - Looking for a bus possibly
- c. Charging circuitry complete
 - Initial testing used regular 2:1 transformer
 - Not enough voltage difference b/w generator output and ultracaps
 - Modified transformer into 3:2 autotransformer (not tested yet)
 - Will test today or tomorrow to measure current output
- d. Current sensors (Bill and Matt update)
 - Temperature sensor that we can mount to the engine? Possible better design
 - Microcontroller interface to starter, globe plug, on/off signals
 - Circuitry not working after re-soldering a disconnected wire—going to try to add a load for testing, see if that was the problem
 - Should use current sensors using same “family” to have consistency in the circuitry
 - 2 places where we want to sense current:
 - Current into capacitor stack
 - Current into the motorcontroller
- e. GPS (Anne update)
 - Garmin GPS will meet our needs (spoke with representative)
 - Found new possibility at approximately half the cost—Inventek
 - Will confirm this week that these OEMs will also meet our needs\
 - Will prefer serial to RS-232
 - Will want remote antenna
 - Schafer has a box of gps antennas we can look through
- f. Ultra-capacitor boxes (Anne update)
 - Will look for possible off-the-shelf solution

Action Items—Open

- a. Circuit board design
- b. SD card interface with GPS
 - Need ability to write to a file
 - Import data into excel to evaluate performance
 - Work with Rob Jones (already been working on interface for his project)
- c. 70-amp fuse
 - Need to be aware of connections
- d. Hot wire connection
 - Timing: end of this week at the latest
- e. Low-Level Design
 - Written document this week
- f. Demo on all items going onto a circuit board