FSU Solar Car Team

Term: Fall 2012

Meeting: 2

Date: 09/14/2012

Time: 10:00am

Location: CAPS, Building A, McLaren Classroom

Attendance: Matthew Bosworth, ECE Project Leader

 Christopher Dresner, ECE Business Administrator

 Ahmad Farhat, ECE Treasurer

 Thierry Kayiranga, Secretary

 Clay S. Norrbin, ME Leader

 Daniel R. Green, ME Finance Administrator

 Patrick Breslend, SES President

 Dr. Simon Y. Foo, Ph. D, ECE Advisror

 Dr. Jim P. Zheng, Ph. D, ECE Advisor

 Dr. Amin Naseer, ME Advisor

Absentee(s): Joseph Petite Homme

Agenda: Advices on goals from advisors

 Funding options

 Discuss meeting times for advisors.

Discussion:

* Introductions
* Realizable goal this year is to develop a concept in order to enter the Eco Shell Marathon in 2years
* Possibilities this year if upgrading the car.
* On EE Side:

 Upgrade the batteries

 Upgrade the solar panels

* On ME side:

 Develop new body. See the Eco Shell Marathon Requirements

New seat as the driver need to get out of the car within 10 seconds. See Eco Shell Marathon

 Bulk to protect electronics circuit from driver

* Advisors’ perspective on possible end of the year goals and points rose:

 Current car is NOT competitive

 Has an $18,000 motor and $2,000 controller installed after previous broke

 Last year estimate was approximately $4,000

 Can obtain funding for this year in order to ease burden for future

* Simon Y. Foo

If the team provides a brochure to Dr. Foo, he can present it to Advisor Board for funding.

 Can provide up to $5,000 funding from the ECE Department this year

* Dr. Amin Nasser

 ME have a limit on funding, $2,000

Ideas: Change batteries, lightweight batteries, batteries systems, new design, new chasis, new specifications

 New approaches: Use reverse engineering to figure out possible goals

 Divide work into smaller parts to assign to individual for faster work

Super capacitors, however they may prove costly and do instantaneous conversion. Is that what we really want?

 New and proper solar cells

* Dr. Zheng

 Can provide necessary capacitors built by him

 Can provide $1,000 in order to incite other to contribute

 Advice on overall project: Get on it; don’t fall behind schedule or slack.

* GOALS THIS SEMESTER: Funding, Design, Demonstration
* Expectations for ME:

New chassis

 New body. Ask if they can borrow Hybrid car’s body

 Designs to connect to electrical circuits from EE for demonstrations purposes

* Help on the project

Project may go faster than expected. SES will help.

On Engineering Day, members of the team can prepare a small presentation with SES to present to freshman in order to get more help on the project.

* Funding:

 Solar Panels: James Burnett, Ian Winger Inventors of the “Solar Sausage”

 Dr. Chris Edrington Ph. D, Responsible for FSU FREEDM

 Dean and Associate Dean for further help

Tasks:

\*TASK MUST BE ACCOMPLISHED BY TUESDAY 09/18/2012

 Matt: Send Eco Shell Marathon Information to advisors

 Add advisors schedules to ours

 Add Dr. Amin to group emails

 Send team contact information to Dr. Amin

 Contact Motors companies once flyers is done in order to get more funding

 \*Finish Latek frame for requirements due THURSDAY

 \*Super capacitor requirements due THURSDAY

 Chris: Flyer to Dr. Foo for funding

 \*Contact Matthew Vedrin for pictures of old car, mesh examples

 \*Batteries requirements for report due THURSDAY

 Ahmad: \*PV cells and solar requirements due THURSDAY

 TK: \*Power electronics requirements due THURSDAY

 \*Research degenerative breaking requirements due THURSDAY

 FOR ME ONLY: Biweekly reports. Minutes can submit these minutes as their reports.

 \*DC motor, body for EE report due THURSDAY

Next meeting

 Date: 09/17/2012

 Time: 09:30am

Agenda: Put together the divided report due on Thursday