

### Week III Report

**Advisor(s):** Gary Tuttle

**Client:** NASA Marshall Space Flight Center

**Members (Roles):** Isaac Johns, Ryan Bissett, Tom Henry, Luke Dahlman, Anh Ho, Dustin Pierce, Antjuan Buffett

**Project Title:** Remote Deployment Circuit and Mechanism for Lightweight CubeSat Solar Panels

#### Weekly Summary

Our main goals for this week were to come up with a few preliminary ideas for the project's construction and to delegate our research responsibilities for the next two weeks based on information from Mr. Carr.

#### Meeting Notes

From our weekly meetings:

- We each brought in a potential design for the boom/solar panel deployment system, compared pros and cons of each.
- We tentatively picked one design we all liked the best and incorporated the better parts of the others to make it better.
- Decided that this design isn't necessarily what we'll go ahead and build- it's just a jumping off point we can use to do practical research on and come up with specific questions from that we wouldn't have thought of otherwise.
- We are getting ready for our second group meeting with our Faculty Advisor, Gary Tuttle. We will meet with him this Wednesday (September 24<sup>th</sup>) and show him our progress and ideas so far.
- Created a game plan and formed a clearer idea of what exactly we have to do before our next advisor meeting.

#### 09/17/2014    Group Meeting to Decide Course of Action

**Duration:** 1hr  
Ho, Dustin Pierce

**Members Present:** Isaac Johns, Ryan Bissett, Tom Henry, Luke Dahlman, Anh

#### 09/22/2014    Group Meeting to Discuss Ideas

**Duration:** 1hr  
Pierce

**Members Present:** Ryan Bissett, Tom Henry, Luke Dahlman, Anh Ho, Dustin

### **Purpose and Goals**

- Come up with ideas for the project to pitch to each other and eventually to Mr. Tuttle and Mr. Carr.

### **Achievements**

- This week we decided to each come up with an idea each on how to design the project at a very basic level and compare them so that we could figure out the best way forward. Now that we have an idea better formed about what we want to do, we can start looking into materials needed, how the environment of space will affect them, and start coming up with questions specific to our idea for our advisors.

### **Pending Issues**

- Contact our advisor and client to see how they like our preliminary idea after we do some more research to avoid asking very simple questions.

### **Plans for Next Week**

- Luke: Contact Professor Tuttle and John Carr
- Isaac and Ryan: Weekly Group Report
- Anh & Dustin: Keep group on Task
- Tom and Antjuan: Manage Google Docs and Weebly site
- In addition, everyone will create and submit a short (~1 page) report on the idea they came up with along with a list of its pros and cons to be included in our final report.
- Everyone has been assigned a research topic suggested by our client so we can better prepare for challenges specific to the project.

### **Individual Contributions This Week**

- Luke: Organized meetings, attending meetings.
- Isaac: Edited weekly report and attended meetings.
- Ryan: Wrote weekly report and attended meetings.
- Tom: Updated online media, attended meetings.
- Dustin: Attended meetings, kept group on task.
- Anh: Attended meetings, kept group on task.
- Antjuan: Attended first meeting, pitched ideas.
- Each member also came up with an idea for the project and will be writing a short report on their ideas.

### **Total Contributions for this Project**

- Luke: 2hrs
- Isaac: 2hrs
- Ryan: 2hrs
- Tom: 2hrs
- Dustin: 2hrs
- Anh: 2hrs
- Antjuan: 2hrs