EE 491 Project Project: MAY15-12

Semester II Bi-Weekly Report I

**Advisor(s):** Gary Tuttle

**Client:** NASA Marshall Space Flight Center

**Members (Roles): Isaac Johns**-Team Communicator, **Ryan Bissett**-Team Communicator, **Tom Henry**-Webmaster, **Luke Dahlman**-Team Leader, **Anh Ho**-Key Concept Holder, **Dustin Pierce**-Key Concept Holder, **Antjuan** **Buffett**

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

**Bi-Weekly Summary**

For the first few weeks of this semester, the group has been focusing on parts ordering and thinking about testing. Group meetings focused on coming up with a new timetable for the semester, making sure all our plans were in order from last semester, and that our parts were on the way.

**Group Member Contributions and Plans**

Week 1 (2/10/15):

|  |  |  |
| --- | --- | --- |
| Team Member Name | Weekly Comments | Total Time Spent |
| Isaac Johns | Researching photosil and implantox as physical and chemical modifications to the silicone rubber wheels. | 2:00 |
| Thomas Henry | Work on Boom, attended meetings | 13:00 |
| Dusting Pierce | Team Meeting last week.  For the next two weeks Ahn and I will be working on making a video of the model on solid works showing how our design works. I will also be getting more information on the testing of bearings and lubricants in space like conditions.  Over the past two weeks we have meet to keep everyone on track and make sure that we are doing the nessesary research and have as much knowledge as possible prior to sending our model to NASA for testing. | 1:00 |
| Luke Dahlman | Further research and documentation on the testing parameters that the Atmel chip underwent. Moving into the design board that was used for the testing. Went through the possible outcomes of our design code to ensure all possible outcomes have been considered. 4 | 4:00 |
| Ryan Bissett | Reading on the behavior of steel in space. | 1:00 |
| Antjuan Buffett |  |  |
| Anh Ho |  |  |

Week 2

|  |  |  |
| --- | --- | --- |
| Team Member Name | Weekly Comments and Plans for the Next 2 weeks | Total Time Spent |
| Isaac Johns | Creating Adobe Illustrator outline for acrylic box cutout - 2 hours  Searching for hollowed wheels & trip to Lowe's - 2 hours  Writing about NASA using primasil polymers and modifying the surfaces with photosil and implantox - 2 hours  Plan to help get the box laser cut and help with the assembly of the design | 6:00 |
| Thomas Henry |  |  |
| Dusting Pierce | Team Meeting last week.  For the next two weeks Ahn and I will be working on making a video of the model on solid works showing how our design works. I will also be getting more information on the testing of bearings and lubricants in space like conditions.  Over the past two weeks we have meet to keep everyone on track and make sure that we are doing the nessesary research and have as much knowledge as possible prior to sending our model to NASA for testing. | 1:00 |
| Luke Dahlman | Completed Laser cutter classes.  Continued to discover testing information on our fpga design board.  During the next week we hope to have all parts on site and start to connect the different components. We shall also have a meeting with Dr. Carr on Thursday. | 5:00 |
| Ryan Bissett | Reading up on HIDs | 2:30 |
| Antjuan Buffett |  |  |
| Anh Ho |  |  |