ASU- High Altitude Tracking Solar Survey (HATS 2.0)

Project Update: March '13 Date: 3/26/2013
Project Manager: Pye Pye Zaw Contact: Pye2zaw@asu.edu

Summary:
This month, our team was focused on programming our Arduino and starting to compile a planned command list. Project is moving forward as some of the team 3D printed our tracker mount and now have decided to construct it using key stock metal. The servos initially listed in the parts list have been discontinued and a new servo with metal gears will need to be procured. Looking at the possibility of using pan tilt servos now for the solar tracker subsystem. We have dedicated some time over Spring Break to researching more on the specifics of solar concentrations and the high altitude environment. A report on thermal properties of the components is also near completion. Research and organization of materials for the preliminary CDR and HASP Prelim PSIP has begun. We have received the base plate which is verified to be the exact same as last year's thus we will be reusing it. Outreach efforts are continuing and will be focused on more ASU events to raise awareness about HATS 2.0 and the HASP program. There have been no additional personnel to the team.

The following is division of labor and responsibilities:
• Project Management: Pye Pye Zaw
• Systems Engineer: Jose Lopez
• Mechanical: Jacob Kloos
• Software: John Paul Jones and Elizabeth Dyer
• Electrical: Jason Babbel and Josh Lincoln

Key Accomplishments:
- Received solar panel for tests
- Initial programming- Arduino
- Additional research
- Solar tracker mechanics

Upcoming Continued Tasks:
- Electronics inventory and finalizing thermal (Josh and team)
- PSIP (Pye and Liz)
- Preliminary CDR (Pye and Liz)
- Machine top plate and solar panel with key stock (John and Jake)
- Find new servos with metal gear (Jason and Josh)
- Blogging (Liz)

Questions for HASP:
Would you like us to send the base plate back since we will be re-using the one from last year that is already attached to our payload electronics box?