



## ASU - High Altitude Turbine Project (HATS)

Project Update : **June '12**

Date: 6/22/12

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### Summary:

The last month has been an exercise in improving and upgrading lacking areas within the project. In many cases we were able to simplify the system and condense the electronics and subsequently have saved payload space. We were glad to hear that we could use the HASP power during descent. This design change will reduce electrical complexity and internal heat. In addition, each sensor is being scrutinized for performance and operability under different temperature and pressure regimes. Prior to arriving for integration we will have performed several tests using a small scale vacuum system and heating and cooling mechanisms. The only significant set back this month has been the dwindled size of our team. While it is unfortunate, it was not a surprise given the circumstances related to a summer break. I have brought on some additional members who will help to make sure that we are prepared for integration. In addition I have been hired by my program to ensure that this project gets the attention it needs. There will be an emphasis through July to make sure that our payload can effectively communicate with HASP.

### Key Accomplishments:

- Reduction and Simplification electronics systems
- Creation of a PCB for easy sensor connections and interfaces
- Completion of the Integration Report
- Further testing of individual sensors
- Integration of the PandaBoard single board computer to log data and handle Rx/Tx to HASP

### Upcoming Tasks:

- Purchase flights and book hotel rooms for Palestine, TX
- Finalization of the operations plan for the integration phase
- Full system tests for internal heat generation analysis.

*-Patrick McGarey // Project Manager*