

# HASP Monthly Status Report - February 2014

Balloons over Volcanoes Team

February 26, 2014

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## 1 Synopsis

- Submitted response to reviewers' comments on our proposed experiment
- Discussed possible air space issues with cut down
- Provided Dr. Guzik with specifications of proposed array to transmit to CSBF
- Applied to host an IRIS undergraduate intern to assist with ground array data analysis
- Ordered data logger
- Ordered servo for cut down mechanism

## 2 Activity Summary

The Balloons over Volcanoes team continued with payload design discussions and equipment acquisition in February. We responded to reviewers' comments on our proposed design, agreeing to add command capability to the cut down to allow for direct control of the altitude and timing of array deployment. Jonathan Lees and Daniel Bowman discussed cut down design with HASP personnel. Since the deployment of a hanging array may be of concern in airspace between 20,000 and 60,000 ft, Dr. Guzik directed us to write up a detailed description and submit it to CSBF. We did so on February 17th and we are awaiting a response.

Jonathan Lees and Daniel Bowman also applied to host an Incorporated Research Institutions for Seismology (IRIS) undergraduate intern for Summer 2014. If our proposal is accepted, the intern will be tasked with analyzing data from the ground array and helping with tests and equipment design. As part of the internship, the student will present their work at the American Geophysical Union Fall Meeting or an IRIS EarthScope meeting.

Equipment acquisition continues although we are hesitant to begin designing the array until we receive word from CSBF. We recently ordered a servo for our cut down mechanism, and development will commence as soon as the servo arrives. The DataCube logger is to be shipped this week and should arrive within four weeks.

## 3 Issues Encountered

Coordinating the ordering and shipment of the data logger has taken longer than anticipated. However, the company assures us that it will be shipped no later than Friday, February 28. We are still awaiting notification from CSBF via Dr. Guzik to determine if our hanging array is acceptable.

## **4 Milestones Achieved**

Applying to host an IRIS intern and ordering equipment have been the focus for this month as we await clearance to design our array.

## **5 Team**

The student team consists of Daniel C. Bowman and Ashley Foguel (University of North Carolina at Chapel Hill), Jacob F. Anderson (Boise State University) and Aaron Curtis (New Mexico Tech). Jonathan M. Lees (UNC Chapel Hill) serves as Faculty Advisor. Paul Norman and Kyle Jones are outside advisors.