

# HASP Monthly Status Report - January 2015

North Carolina Infrasound

January 30, 2015

*Student Leader:* Daniel C. Bowman (phone: 1-575-418-8555, email: daniel.bowman@unc.edu)

*Faculty Advisor:* Jonathan M. Lees (phone: 1-919-962-1562, email: jonathan.lees@unc.edu)

## 1 Synopsis

- Received notification of provisional payload acceptance
- Continued analysis of HASP 2014 data indicates that number of sensors is more important than array aperture
- Team decided to remove the reeldown component of the proposed HASP 2015 payload
- North Carolina State University team to focus on wind speed and gondola motion quantification

## 2 Activity Summary

Notification of preliminary acceptance of HASP 2015 payload was received on January 20th, 2015. Reviewer comments on the proposed payload were received on January 28th, 2015. Based on ongoing analysis of HASP 2014 acoustic data, perceived engineering issues with the proposed reeldown system, and concerns raised during the payload review, the North Carolina team has decided to forgo an attempt to lower instruments beneath the gondola. Instead, the team will propose a dense sensor array on the flight ladder. C. Scott Johnson of North Carolina State University (supervised by Dr. Rachana Gupta) will begin developing sensors to measure wind speed and gondola motion.

## 3 Issues Encountered

Full acceptance of payload hinges on resolution of issues raised during the payload proposal review.

## 4 Milestones Achieved

The payload was provisionally accepted, and addressing the reviewers' concerns will not adversely affect the scientific outcome of the experiment.

## 5 Team

The student team consists of Daniel C. Bowman and Patrick Gouge (University of North Carolina at Chapel Hill), C. Scott Johnson (North Carolina State University) and Jacob F. Anderson (Boise State University). Jonathan M. Lees (UNC Chapel Hill) and Rachana Gupta (North Carolina State University) serve as Faculty Advisors.