

February 27, 2015

To: Dr. T. Gregory Guzik - HASP Project Director
From: Seth Frick – Team Lead
RE: HASP Monthly Status Report

1. Activities

Completed and submitted our response to the LSU HASP team's comments concerning our 2015 payload proposal.

Established complete functional design of the 2015 payload including structural components and electrical subsystems.

Began ordering parts for the 2015 payload, including the flight computer, power supply, additional detector equipment (avalanche photodiodes and front end circuitry), and structural components.

Began detailed design and layout of custom circuit boards, including a four-channel front end board, a four-channel pulse height analysis board, and a four-channel high-voltage power supply board (to provide the avalanche photodiode bias voltages).

Met with new students from collaborating groups, including the AEM senior design group, MXP physics students, and a physics student conducting directed research. Established specific tasks and goals for each group.

2. Issues Encountered

Through our contact with technical personnel at NavCom Technology, Inc. we have discovered that it will not be possible to acquire customized firmware to allow the SF-3050 GNSS receiver to operate at high altitudes. This receiver is not critical to the 2015 payload design and will not be flown on HASP.

3. Milestones Achieved

None.

4. Current Student Team

Name	Gender	Ethnicity	Race	Student Status	Responsibilities
Seth Frick	M	Non-hispanic	Caucasian	Graduate 2 nd year	Team lead, detector systems and photon energy measurement, GPS and IMU operation
Haley Rorvick	F	Non-hispanic	Caucasian	Undergraduate Senior	Structure design and fabrication, hardware configuration (AEM senior design)
Josiah DeLange	M	Non-hispanic	Caucasian	Undergraduate Senior	Detector systems, flight software (AEM senior design)
Alec Forsman	M	Non-hispanic	Caucasian	Undergraduate Senior	Detector systems, flight software (AEM senior design)
Seth Merrifield	M	Non-hispanic	Caucasian	Undergraduate Senior	Structure design and fabrication (AEM senior design)
John Jackson	M	Non-hispanic	Caucasian	Undergraduate Senior	Flight computer, flight software (AEM senior design)
Guy Squillace	M	Non-hispanic	Caucasian	Graduate 1 st year	New team member
Charles Denis	M	Non-hispanic	Caucasian	Undergraduate Junior	New team member
Thomas Georgiou	M	Non-hispanic	Caucasian	Undergraduate Senior	New team member – AEM senior design
Yunus Agamawi	M	Non-hispanic	Caucasian	Undergraduate Senior	New team member – AEM senior design
Aron Lindell	M	Non-hispanic	Caucasian	Undergraduate Senior	New team member – physics directed research
Aaron Ahlgren	M	Non-hispanic	Caucasian	Undergraduate Senior	New team member – physics MXP
Kevin Haar	M	Non-hispanic	Caucasian	Undergraduate Senior	New team member – physics MXP
Kate Schumitsch	F	Non-hispanic	Caucasian	Undergraduate Junior	New team member