

June 28, 2013

To: Dr. T. Gregory Guzik - HASP Project Director
From: Patrick Doyle – Current U of MN Team Lead
Seth Frick – Team Lead Trainee
RE: HASP Monthly Status Report

1. Activities

Completed design of new interface and power board to consolidate existing hardware components and simplify wiring.

Completed final PSIP.

Obtained lead for detector shielding and calculated the thickness needed.

Designed (with help of department lab coordinator) and began testing amplitude detection circuitry to measure energy levels of photon events.

Completed solid modeling of internal hardware components.

Began manufacturing of new external structure.

Designed and built a thermal control subsystem (autonomously controlled heaters independent of the flight computer).

2. Issues Encountered

Interfacing amplitude detection circuitry with flight computer software will be more difficult than originally thought.

A new, larger detector housing will need to be machined and shielded to act as a collimator.

3. Milestones Achieved

All electrical hardware finalized.

Design of interior payload layout and integration completed.

4. Current Student Team

Name	Gender	Ethnicity	Race	Student Status	Responsibilities
Patrick Doyle	M	Non-hispanic	Caucasian	Graduate 2 nd year	Current team lead, new member training
Seth Frick	M	Non-hispanic	Caucasian	Graduate 1 st year	Team lead in training, thermal monitoring
Curtis Albrecht	M	Non-hispanic	Caucasian	Graduate 2 nd Year (Graduated)	Flight computer and power systems advisor, new member training
Andrew Mahon	M	Non-hispanic	Caucasian	Undergraduate Sophomore	GPS and IMU operation, structure hardware configuration and fabrication
Haley Rorvick	F	Non-hispanic	Caucasian	Undergraduate Sophomore	Structure design, hardware configuration, and fabrication
Josiah DeLange	M	Non-hispanic	Caucasian	Undergraduate Sophomore	Flight computer and power systems, flight software
Alec Forsman	M	Non-hispanic	Caucasian	Undergraduate Sophomore	Flight computer and power systems, flight software
Michael Joseph	M	Non-hispanic	Caucasian	Undergraduate Sophomore	Detector energy detection, testing, and shielding
Seth Merrifield	M	Non-hispanic	Caucasian	Undergraduate Sophomore	Thermal monitoring and protection.
John Jackson	M	Non-hispanic	Native American	Undergraduate Sophomore	Detector energy detection and testing