

January 27, 2012

**To:** Dr. T. Gregory Guzik - HASP Project Director  
**From:** Pat Doyle - U of MN High Altitude X-Ray Detector Testbed Team Lead  
**RE:** HASP Monthly Status Report

## 1. Activities

Two students have thus far been recruited to assist in subsystem design (see roster below). A meeting has been scheduled with the faculty advisor for the University of Minnesota Balloon Team to address the issues raised in the Student Payload Summary regarding student involvement and thermal subsystem design.

Devoted laboratory space has been allocated.

Preliminary structure design has begun. Research into commercial-off-the-shelf (COTS) CubeSat structures and materials has provided groundwork for the preliminary design.

Introduction to flight computer software has begun and hardware I/O connection requirements (except x-ray detector) established.

## 2. Issues Encountered

A decision must be made on purchasing an x-ray detector. Reports from our collaborator at NASA/GSFC indicate that their package may not be ready for testing and integration until summer. If the decision to purchase a detector is made, we have been reassured that the NASA/GSFC designs will be made available as indicated in their letter of support.

## 3. Milestones Achieved

No milestones have been achieved at this time.

## 4. Current Student Team

<b>Name</b>	<b>Academic Level</b>	<b>Responsibilities</b>
Patrick Doyle	Graduate Student – 1 <sup>st</sup> year	Team Lead – design, construction, and integration of all subsystems.
Curtis Albrecht	Graduate Student – 1 <sup>st</sup> year	Assist in power management and thermal subsystem designs.
Steven Haviland	Undergraduate – Senior	Assist in attitude determination subsystem integration.