



HASP 2018 Monthly Status Report

Report Month: February 2018
Submitted by: Erica Dao
Submit Date: 02 / 23 / 2018
Institution: McMaster University
Payload Number: 2018-04
Payload Name: Stratospheric Measurements of Charged & Neutral Radiation

I) Activities During Previous Month:

Management

- Participated in HASP teleconference
- Compiling proposal revisions and additions for response to reviewer's comments
- Submitted proposal with comments
- Provided Dr. Guzik with team contact for radio certification, documentation, and licensing

Mechanical

- Created updated mechanical drawings to include in the response to comments to our proposal
- Design review for overall mechanical design

Instrument

- Tested CITIROC ASIC for reading the SiPMs – fixed timing issues
- Researched pulse shaping circuit needed
- Working on incorporating MicroBlaze processing into our software
- Finalized design of amalgamated data acquisition module (DAQ)
- Development of a GUI for parsing and displaying live flight data

Power

- More detailed power budget was created
- Power block diagram created

Communications

- Contact HASP staff about certification & licensing
- Developed a defined packet structure for our data
- Designing communications antenna

II) Issues Encountered:

N/A

III) Milestones Achieved:

Overall Mechanical Design Review

IV) Plans for Coming Month:

Management

- Secure funding and create documentation for team finances

Mechanical

- Update SolidWorks models

Instrument

- Fabricate another TEPC sphere to test

Power

- Design PCB that meets the new power requirements of the added components

Communications

- Research licensing or documentation for the onboard transceiver
- Contact CSBF for required documentation and form lists

V) Other Comments:

N/A

VI) Team Composition and Organization:

Fill in text as necessary plus update table below.

Name	Start Date	End Date	Role	Student Status	Race	Ethnicity	Gender	Disabled
Erica Dao	12/01/17	Present	Student Team Lead	Grad Student	Asian	Non-Hispanic	Female	No
Ryan Scott	12/01/17	Present	Mechanical Team	Undergrad	Caucasian	Non-Hispanic	Male	No
Farazdak Bohra	12/01/17	Present	TEPC Team	Grad Student	Asian	Non-Hispanic	Male	No
Luis Lopera	12/01/17	Present	TEPC Team	Undergrad	Caucasian	Hispanic	Male	No
Jordan Cowan	12/01/17	Present	DAQ Team	Graduated	Caucasian	Non-Hispanic	Female	No
Eric Dyer	12/01/17	Present	DAQ Team	Grad Student	Caucasian/Asian	Non-Hispanic	Male	No
Bhavesh Kakwani	12/01/17	Present	DAQ Team	Graduated	Asian	Non-Hispanic	Male	No
Chelsea Urquico	12/01/17	Present	DAQ Team	Graduated	Asian	Non-Hispanic	Female	No
Alex Melnichuk	12/01/17	Present	ACD Team	Undergrad	Caucasian	Non-Hispanic	Male	No
James Warburton	12/01/17	Present	Power Team	Undergrad	Caucasian	Non-Hispanic	Male	No
Kyle Jackson	12/01/17	Present	GUI Development	Undergrad	Caucasian	Non-Hispanic	Male	No
Aaron Pitcher	12/01/17	Present	Communications Team	Grad Student	Caucasian	Non-Hispanic	Male	No
Jimmy Nguyen	12/01/17	Present	Communications Team	Graduated	Asian	Non-Hispanic	Male	No