Payload Specification & Integration Plan (PSIP)

Weight

The current payload mass is 1.7kg, leaving a margin of 1.3kg.

Measured Current Draw

The measured current draw at 30v of the ORGANS payload is 0.01A.

Downlink Data Format and Rate

ASU ORGANS will not be downlinking any data.

Uplink Commands

ASU ORGANS will not be uplinking any data.

Analog Output Usage

ASU ORGANS will not require any analog output.

Discrete Command Usage

ASU ORGANS will not require discrete commands.

Dimensioned Mechanical Drawings

Test Procedures and Validation Results

All system testing will take place in a laboratory environment prior to delivery to HASP. Testing will account for all possible scenarios, including:

- Power removed and reapplied
- Individual sensor failure
- Multiple sensor failure
- Microcontroller reboot

The validation results for all of these tests will be that the data collected prior to the event is not corrupted, and that after a reboot data continues to be collected.

Requested Test Equipment

There is no required test equipment.

Schedule and Personnel

July 31- Submit Final Flight Operation Plan
August 2- Payload transported for integration
August 3-7- Integration with HASP and thermal/vacuum testing
August 30- Prepare for HASP flight at Ft. Sumner, NM
September 2- Arrival of ORGANS team to Ft. Sumner, NM
September 4- Ready for HASP flight
December 11- Final science report due

Dr. Sri Saripalli - Faculty Advisor
Ben Stinnett - Systems Lead
Tristyn Bercel - Science Lead
Caitlin Ostrander – Operations Lead
Robert Tagtmeyer
Giovanni Pieve
David Gamez
Joseph Kelsey
Takuto Noji

Of the team members listed above, the following will be available through the summer until launch: Ben Stinnett, Robert Tagtmeyer, Giovanni Pieve, and Joseph Kelsey.