

# **HASP 2018 Monthly Status Report**

<b>Report Month:</b>	January, 2018
Submitted by:	Conner Shaver
Submit Date:	02 /1/ 2018
Institution:	CU-Boulder
<b>Payload Number:</b>	2018-10
Payload Name:	Miura II

# I) Activities During Previous Month:

- Hiring of the Project Manager for the 2018 Flight
  - Begin hiring process of the remaining team members for the 2018 Flight
- Brainstorming ways to implement Proposal feedback

### **II) Issues Encountered:**

• Scheduling an adequate number of interviews in the given time before the Monthly Status Report

## **III**) Milestones Achieved:

- Hired a Project Manager as of Monday, January 29th
- Halfway through the interviewing process, Will be done by Friday, February 2<sup>nd</sup> and the team will be hired by Monday, February 5<sup>th</sup>

# **IV) Plans for Coming Month:**

- Get team acclimated to Space Grant environment
- Get team familiar with Space Grant resources and their role on the Miura II team
- Implement Proposal Feedback by Friday, February 9<sup>th</sup>
  - $\circ~$  Add in testing to over-pressurization of 15% for all tests
  - Add in testing structural cage for a failure of the Pressure vessel
  - Test the entire payload to destruction of the Pressure vessel
  - Add in destructive testing after 20 cycles, then do it again after 100
  - Explore materials other then Kevlar
  - Explore compacting techniques other then folding the Kevlar (stuffing)
  - Explore only pressurizing to a fraction of atmospheric pressure for flight
  - Reach out to Lockheed Martin Co.'s NextStep program for possible insight

- Create a more in-depth schedule which includes an extra 1 to 2 months to properly test the pressure vessel and the entire system
- During all destructive testing measure the surface tension at rupture and compare the results for different amounts of cycles.
- Add in a Failure Effects Analysis for all testing procedures

## **V) Other Comments:**

We would like to thank you for your feedback on our proposal and for giving us the opportunity to improve upon our proposal and still fly.

### **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
Conner Shaver	1/29/18	Current	Project Manager	Undergrad	White		Male	No