

HADES 2013 Status Report
Month: September

1. Activities of the Team Members:

A. Mechanical:

- Returned C clamps to machine shop
- Helped Noelle unpack and sort HADES components
- Returned some HADES components to Noelle and helped mount two rod holders in brackets and then into a chamber
- Looked into 3D printing of chambers
- Revisited and submitted a theoretical volumetric calculation to Noelle Bryan

B. Electrical: David Branch

- September was spent doing post flight analysis. No electrical activities to report.

C. Software: David Branch, Michael Stewart

- September was spent doing post flight analysis. No software activities to report.

D. Biology:

- Microscopic analysis of atmospheric samples recovered during flight
- Attempting to isolate any viable microorganisms
- Data analysis from ATP measurements

2. Issues Encountered:

A. Mechanical:

- No notable issues

B. Electrical:

- September was spent doing post flight analysis. No electrical issues to report.

C. Software:

- September was spent doing post flight analysis. No software issues to report.

D. Biology:

- The high variation in the samples made data analysis difficult. After seeking advice from the Experimental Statistics depart and committee members, analysis is successfully underway.

3. Milestones Achieved:

A. Mechanical:

- Submitted theoretical volumetric calculation to Noelle Bryan.

B. Electrical:

- With in-flight operations for all flights nearly analyzed, it seems all electrical components operated as expected.

C. Software:

- With in-flight operations for all flights nearly analyzed, it seems all software operated as expected

D. Biology:

- Completed all microscope counts of the samples and have a statistically significant signal

4. Current Team Members and Advisors:

Name	Year	Demo	Role
Noelle Bryan	Graduate Student	Caucasian	Team Lead, Biology
Scott Burke	Senior	Caucasian	Mechanical
David Branch	Junior	Caucasian	Software
B. Christner			PI