BaDSTAR

LAUNCH READINESS REVIEW

Mitchell Community College
Rocket Team
06/02/2014
Mission Overview

Mission Statement

Our goal is to develop a gravity gradient boom deployment system for use on a CubeSat along with testing a system to receive and transmit an image from a suborbital rocket.
Payload
Payload
Payload
Payload
Testing Updates

- Payload activates properly
- Payload fulfills all mission requirements
  - Both boom systems deploy
  - Transceiver is transmitting data from accelerometer

Lewis Smash Test completed; Shake test tomorrow
Testing Updates

Receiving accelerometer readings from the transceiver.
# User Guide Compliance

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Status/ Reason (if needed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center of gravity in 1&quot; mid-can?</td>
<td>Still needs to be calculated</td>
</tr>
<tr>
<td>Contained in Can?</td>
<td>Yes</td>
</tr>
<tr>
<td>Connected to can by 4/5 bulkheads on top and bottom only</td>
<td>Yes</td>
</tr>
<tr>
<td>No voltage on the can</td>
<td>Have not tested yet</td>
</tr>
<tr>
<td>Activation wires at least 4 ft.</td>
<td>Consulting to someone about</td>
</tr>
<tr>
<td>Activation wires at least 24 gauge</td>
<td>Consulting to someone about</td>
</tr>
<tr>
<td>Early Activation: current &lt; .1 A</td>
<td>Have not tested yet</td>
</tr>
<tr>
<td>Battery Type:</td>
<td>LiPo</td>
</tr>
</tbody>
</table>
Integration Plan and Procedure

- Based on the mission simulation everything is functioning properly.
- The Payload has been tested off the plates. The payload will be fully assembled and tested within the next three days.
- Pin reference sheet has been made and printed out for connections.
Level of Readiness

- Transceiver is transceiving
- Booms are deploying

- Camera mount will need to be redesign.
- Integrating activation wires is under development
- Code needs to be modify slightly
- Countdown timer needs to be modify
- Certain mounts are still needed to be mounted
Level of Readiness

Actions between now and WFF trip:
- Redesign the camera mount
- Integrate activation wires
- Modify code slightly and countdown timer
- Have everything mounted securely
Check-In Inspection

- The payload has not gone through a full check-in inspection.
  Questions about Check-in inspection
- What is the frequency used for the vibrations test?
Final Questions

No further questions