

STEREO IMPACT SWEA FM1 Vibration Report

Document # IMP-611-DOC

Revision: --

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Date: March 29, 2005

1. OVERVIEW

The STEREO SWEA vibration tests for the flight model 1 (FM1) unit were conducted January 27, 2005 at Quanta Laboratories in Santa Clara, California. Dave Curtis and Jeremy McCauley were in attendance for instrument handling, verification and test support. Quanta Laboratories provided Test Engineer Sun Lian.

Tests were conducted in the Z-, Y-, and X-axis, where the axes are defined as in the ICD (See Appendix). Test objectives, procedures and levels are defined and explained in IMP-583-DOC, STEREO SWEA Vibration Test Procedure, Revision - (Attached).

All vibration runs were completed. No degradation to the SWEA mechanically, structurally, or functionally was shown by post-test CPTs and inspections.

2. REFERENCE DOCUMENTS (Attached):

Quanta Laboratories Report Number QL-05-060 – Vibration Report

UCB Document IMP-583-DOC, STEREO SWEA Vibration Test Procedure, Revision -

3. PASS/FAIL CRITERIA

Post-vibration CPT of the SWEA assembly verified functionality was not lost in testing. Post-vibration inspections found no notable degradation mechanically or structurally.

The SWEA was vibrated with the survival heater powered on (launch configuration) and the current monitored. There was no change in the current to the heater circuit during vibration.

4. ACCELEROMETER PLACEMENT

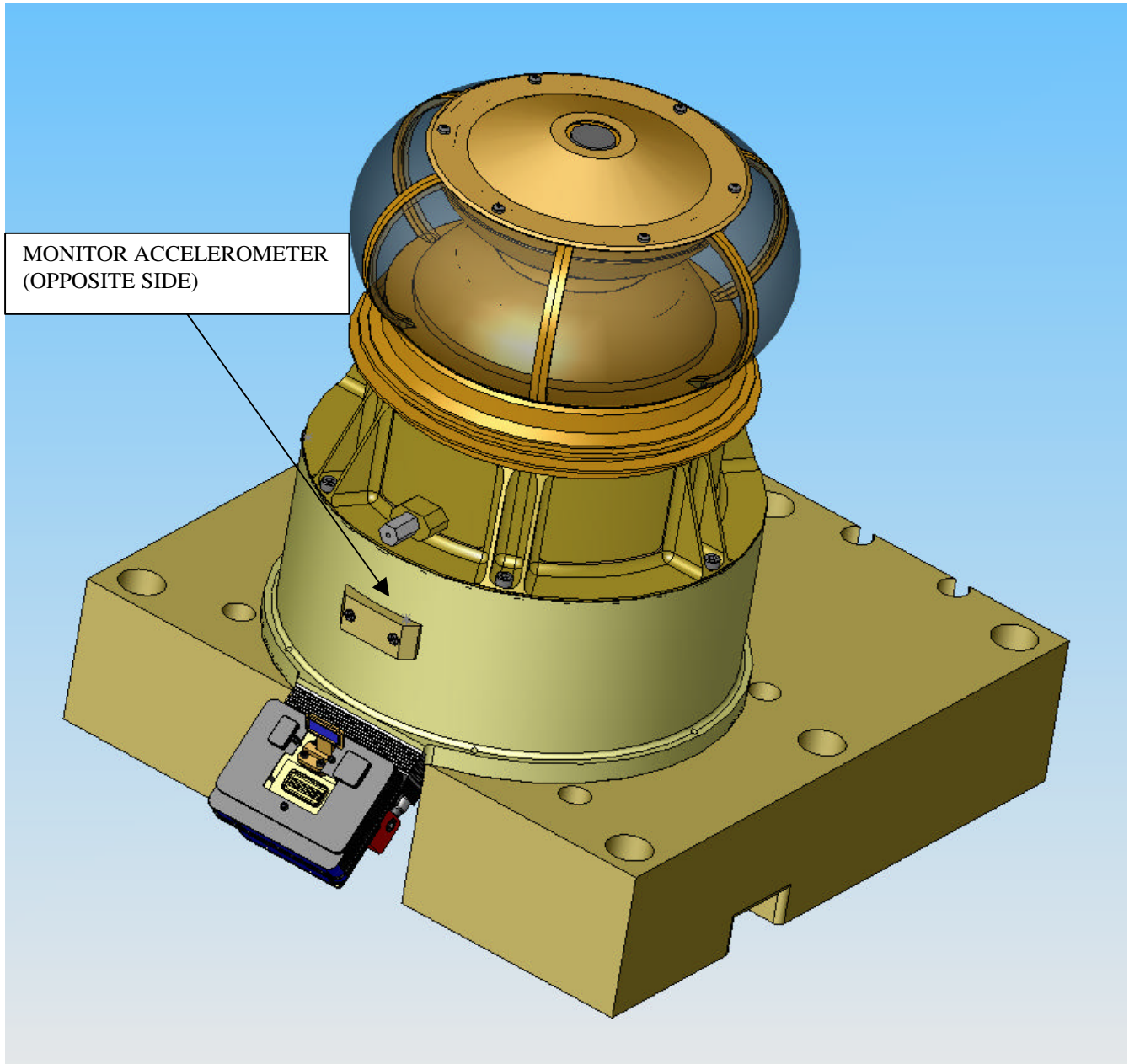


Figure 1: Control Accelerometer Placement

5. RELEVANT DATA

Full data is available for review upon request.