

Rev.	ECO	Description	Author	Approved	Date
A	32-133	Initial Release	B. Klatt		5/18/06

# CRaTER

## Subcontractor Mission Assurance Verification Matrix

Dwg. No. 32-04004

Revision A

May 18, 2006

CRaTER Instrument has two subcontractors responsible for Flight Hardware. These are MIT and Aerospace Corporation (AERO). The requirements in this Subcontractor Mission Assurance Verification Matrix were taken from the CRaTER Performance Assurance Implementation Plan (PAIP). The Contract Data requirements List contains Mission Assurance requirements that may or may not be included in the PAIP. This Subcontractor Mission Assurance Verification Matrix is an example. Both MIT and AERO are responsible for PAIP and CDRL requirements. Additionally, both MIT and AERO have agreed to abide by the PAIP. This verification matrix applies equally to both subcontractors.

The Subcontractor Mission Assurance Verification Matrix is CDRL item number 4,

<b>PAIP</b>	<b>DESCRIPTION</b>	<b>VERIFICATION METHOD</b>
1.1	Product Assurance Implementation Plan (PAIP)	32-01204, Rev. F
2.2	Problem Failure Reports (PFRs)	Review Failure Report Log
2.2	Requirements Flow Down	Inspection of Purchase Orders
3.2.1	System Safety Program Plan	Included in PAIP (32-01204)
3.2.3	Preliminary Hazard Analysis	Inspection (See 32-04015)
3.5	Hazard Control Verification and Tracking	Inspection of Hazard Reports
3.6	Ground Operation Procedures	Inspection of Documentation
4.0	Reliability Program Plan (RPP)	Included in PAIP (32-01204)
4.2.1	FMEA and Critical Items List (CIL)	Inspection (See 32-04009)
4.2.2	Parts Stress Analysis	Inspection (See 32-04010)
4.2.3	Reliability Assessments and Predictions	Inspection (See 32-04003)
4.3	Worst Case Analysis (Performance)	Inspection (See 32-04011)
4.3	Trend Analysis	Inspection
7.0	Risk Management	Inspection (See 32-01202)
9.2.1	System Performance Verification Plan/Matrix	Inspection (See 32-01206)
9.2.4	Performance Verification Procedure	Inspection (See 32-06000)
9.2.5	Performance Verification Reports	Inspection (See 32-06000)
9.4	Electromagnetic Compatibility (EMC) Requirements	Verified by Test
9.5	Vacuum, Thermal, and Humidity Requirements	Verified by Test
10.2	Workmanship	Inspection of Fabrication Documents
10.2	Printed Wiring Board (PWB) Analysis/Test Coupons	Inspection of Fabrication Data

11.0	Materials and Processes Control Program Plan	Included in PAIP (32-01204)
11.2	Materials Waiver	Inspection (See CDRL if required)
11.2	Materials Usage Agreements	Inspection (See CDRL if required)
11.2	Stress Corrosion Evaluation Form	Inspection (See CDRL if required)
11.3	Limited-Life Items List	Inspection (See 32-04005)
11.3	Shelf Life Controlled Materials	Inspection of Fabrication Documents
11.4	As-Designed/As-Built Materials and Processes List	Inspection (See 32-04001)
11.4	Polymeric Materials and Composites Usage List	Inspection (See 32-04001)
11.4	Lubrication Usage List	Does not Apply
11.4	Materials Process Utilization List	Inspection (See 32-04001)
11.4	Inorganic Materials List	Inspection (See 32-04001)
11.5	Fastener Control	Included in PAIP (32-01204)
11.8.1	Certificate of Raw Material Compliance	Inspection of Fabrication Documents
12.0	EEE Parts Control Plan (PCP)	Included in PAIP (32-01204)
12.3	Parts Control Board (PCB) Reports	Inspection of EEE Parts Database
12.4	EEE Parts Selection	Inspection of EEE Parts Database
12.4	EEE Parts Screening	Inspection of EEE Parts Database
12.5	EEE Parts Derating	Inspection of 32-04010
12.6	EEE Parts Radiation Tolerance	Inspection of EEE Parts Database
12.9	Parts Age Usage	Inspection of Fabrication Documents
12.10	EEE Parts Identification List	Inspection of EEE Parts Database

12.13	Alert Disposition and Identification	Monthly response to GSFC
13.0	Contamination Control	Inspection of Fabrication Data
14.0	ESD Control	Inspection
15.0	Configuration Management	Inspection of ECO Activity