CRaTER Pre-Ship Review
(I-PSR)

Installation Procedures/Orbiter Level Test Procedures

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Post-delivery processing flow at GSFC

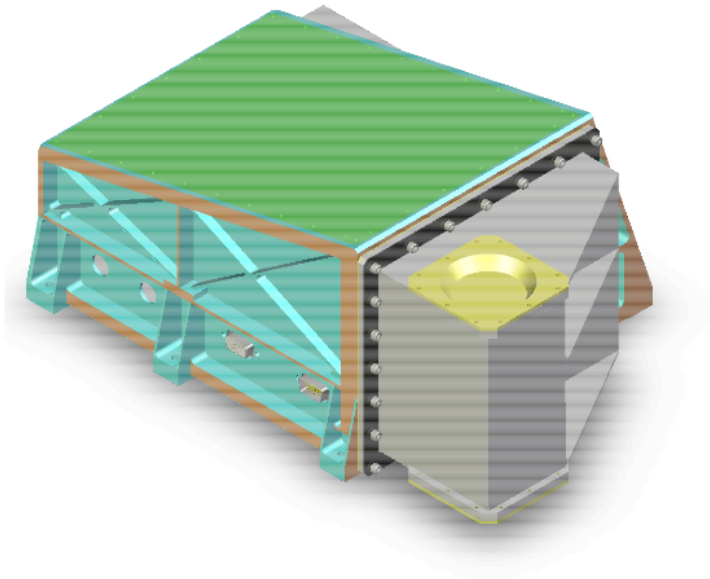
- GSFC ready to receive CRaTER in GSFC Building 7 on 1/6
  - Store in room 188 that evening, move to adjacent "Big Top" clean tent next day
- CRaTER unpacks flight unit and EGSE at Big Top week of 1/14
  - Flight Instrument inside Big Top at north end
  - CRaTER EGSE outside Big Top
- CRaTER team performs Long Form Functional with Co60 source
  - Source provided by GSFC Code 690, safety provisions in place
- GSFC Mechanical Systems performs incoming inspection
  - Mass, dimensional check against Mechanical Interface Drawing
- GSFC 540 Performs (unpowered) bakeout certification with TQCM in B-7 chamber
  - Particulate contamination verification (lift/rinse) in conjunction with bakeout cert
- CRaTER ready for Orbiter integration
  - Currently scheduled for 2/06/2008

GSFC Facilities and Procedures ready

- Processing facility ready:
  - B-7 Big Top Tent, FTD-STD-209 level 10,000
  - ESD workstation in place w/wriststraps
  - Adequate power for EGSE
  - Purge capability meets CRaTER requirements
  - Project mechanical and contamination control technicians ready to support
- Test Procedure status:
  - CRaTER will rerun their standard Long-Form Functional test used at MIT with their GSE
- Integration Procedure status:
  - LRO/CRaTER Electrical Integration Procedure (451-PROC-001144)
    - Written and used at FlatSat to integrate CRaTER Instrument Simulator
    - Update for Flight Instrument integration in progress
  - LRO/CRaTER Mechanical Integration performed on Work Order Authorization (WOA)
- GSFC WOA status - all in process
  - Unpack / Post-Ship Functional Proc - in process with LRO Payload
  - Bakeout certification WOA - in process with LRO Contamination Control
  - Mechanical Integration WOA - in process with LRO Mechanical Systems

LRO I&T/systems deem CRaTER ready to integrate from ground I&T standpoint

- CRaTER ITOS/STOL scripts used at Orbiter level ready for use:
  - Long Form Functional, Short-Form Functional, Aliveness
    - "Condensed Functional" under discussion by LRO Mission Systems
  - Original CRaTER test procedures converted to ITOS scripts by CRaTER Mission Ops lead Rich Sanidad
  - LRO ITOS/STOL scripts run at LRO FlatSat using CRaTER Instrument Simulator
- LRO C&DH database updated
- Use of GSFC-supplied radioactive Co60 source at Orbiter level has been baselined
  - Source strength: 3E-6 Curies per John Keller
  - At GSFC, will use source only during CRaTER Post-Ship Functional and Orbiter Comprehensive Performance Test
  - Source not planned at Cape



Cosmic **RA**y **T**elescope for the **E**ffects of **R**adiation