

CRaTER Verification Procedure/Report

Title: (8.5.11) Maximum event transmission rate Document 32-06020.41

Reference: 32-01205 Instrument Requirements Document Section 8.5.11

Requirement: CRaTER will be capable of transmitting primary science data, namely the energy deposited in each of the detectors, on at least 1000 events per second.

Procedure: The calibration system will be commanded into a mode such that the synthesized event rate exceeds the maximum rate the digital system is capable of passing through the 1553 interface and it will be verified that the first 1200 events are correctly transmitted.

Results:

Verification of the total event rate was conducted for both flight instruments through test 4.7 Check Detector Noise Levels of the Short Form Functional test procedure established in 32-06003-02, which injects a calibration pulse at 2 KHz. Both flight instruments have been observed to process 1200 events/second, which exceeds the 1000 event/second requirement.

S/N: 01 & 02

Passed/Failed: Passed

Comments:

Performed by: JCKasper

R&QA: _____

Date: 2 November 2007

Date: _____