



HESSI SPACECRAFT POWER OFF PROCEDURE

HSI_MIT_011C

2000-NOV-15

DAVE CURTIS

DRAFT

As Run on: _____ (Date/Time)

By _____ (Test Conductor)

DOCUMENT REVISION RECORD

Rev.	Date	Description of Change
B	2000-11-14	Add procedure for removing BFP
C	2000-11-15	Replace reference to SAI proc with HSI_MIT_049

Western Range/NASA Safety: _____

Date

Project Manager: _____
Peter Harvey

Date

System Engineer: _____
David Curtis

Date

QA: _____
Ron Jackson

Date

1. INTRODUCTION

1.1 Purpose

This document describes the normal HESSI spacecraft power-off sequence to shut off the spacecraft after testing.

2. TEST PROCEDURE

2.1 Instrument Power Down

- a. Start the "IPMT_OFF" ITOS procedure. Verify IPMT_HVDAC in the PMT ITOS page is set to zero. _____ OK
- b. Start the "IPD_OFF" ITOS procedure. Verify IPDHVDAC is set to zero in the Particle Detector ITOS page _____ OK
- c. Start the "IHV_OFF" ITOS procedure. Verify IDPU_P28HV on the IDPU Analogs ITOS page is less than 1V. _____ OK
- d. Start the "IMGR_OFF" ITOS procedure. Verify that the 5 IADP_PWR settings on the ADP ITOS page are all OFF _____ OK
- e. Start the "IDIB_OFF" ITOS procedure. Verify that the voltages on the IDIB ITOS page are all less than 1 volt. _____ OK
- f. Verify that the ICRYOMAIN and ICRYOBAL values on the ITOS Spectrometer Power page read zero. **DO NOT PROCEED OTHERWISE** _____ OK
- g. Start the "SC_CPCOFF" ITOS procedure. Verify the Cryocooler status on the PCBINTERFACE page indicates OFF _____ OK
- h. Start the "SC_IDPU_SPWROFF" ITOS procedure. Verify the IDPU +28V status on the PCBINTERFACE page indicates OFF _____ OK
- i. Start the "SC_IDPUOFF" procedure. Verify the IDPU status on the PCBINTERFACE page indicates OFF _____ OK

2.2 Spacecraft Power Down

This section powers off the SSR

- a. In the "PCB Interfaces" ITOS telemetry display window command off the SSR by clicking on the SSR "OFF" button. Verify that the status indicator for the SSR changes to "OFF." _____ OK

This section commands off all of the ACS components at the conclusion of the testing and powers down the spacecraft.

- a. In the "PCB Interfaces" ITOS telemetry display window command off the magnetometer by clicking on the Magnetometer "OFF" button. Verify that the status indicator for the magnetometer changes to "OFF." _____ OK
- b. In the "PCB Interfaces" ITOS telemetry display window command off the fine sun sensor by clicking on the FSS "OFF" button. Verify that the status indicator for the FSS changes to "OFF." _____ OK
- c. In the "PCB Interfaces" ITOS telemetry display window command off the power to the ADB X and Z1 torque rod drivers by clicking on the Torque Rod

- XZ “OFF” button. Verify that the status indicator for the Torque Rod XZ changes to “OFF.” _____OK
- d. In the “PCB Interfaces” ITOS telemetry display window command off the power to the ADB Y and Z2 torque rod drivers by clicking on the Torque Rod YZ “OFF” button. Verify that the status indicator for the Torque Rod YZ changes to “OFF.” _____OK
- e. In the “PCB Interfaces” ITOS telemetry display window command off NEB1 by clicking on the NEB1 “OFF” button. Verify that the status indicator for NEB1 changes to “OFF.” _____OK
- f. If the BFP is installed:
- Adjust the TAC voltage so that the battery current reads zero on the PACI page
 - Remove the BFP
- g. Power down the spacecraft per HSI_MIT_049, “Spacecraft Power On/Off Standard Operating Procedure,” Section 3.3. _____OK

Completed date/time: _____