Doc No. :PT-HMOC-OPS-FOP-6001-OPS-OAH

Fop Issue : 3.0
Issue Date: 13/04/10

Spectrometer Cold Functional Tests

File: H_COP_SPI_CFT4.xls
Author: L.Lucas-hp





Procedure Summary

Objectives

The objective of this procedure is to stipulate which procedures are require for the Spectrometer Functional Tests.

Summary of Constraints

The saved stack files should have been generated prior to the DTCP and sent to the HSC/ICC as defined in the procedure $H_GSP_MCS_MSTK$.

5 OBS_ID values are required from the HSC.

Spacecraft Configuration

Start of Procedure

n/a

End of Procedure

n/a

Reference File(s)

Input Command Sequences

Output Command Sequences

Referenced Displays

ANDs ZAZ7J999 GRDs

SLD

Configuration Control Information

| DATE | FOP ISSUE | VERSION | MODIFICATION DESCRIPTION | AUTHOR | SPR REF |
|----------|-----------|---------|---|------------|---------|
| 27/02/09 | 2.1 | 1 | Created | L.Lucas-hp | |
| | | | Validation: Updated to reflect new breakdown of COP procedures. SMEC tests will be in | | |
| 21/04/09 | | 1.01 | two parts, SLW alone in this CFT. | L.Lucas-hp | |
| 21/04/09 | 2.3 | 1.02 | Validation : TExt update | L.Lucas-hp | |

Status : Version 1 - Unchanged

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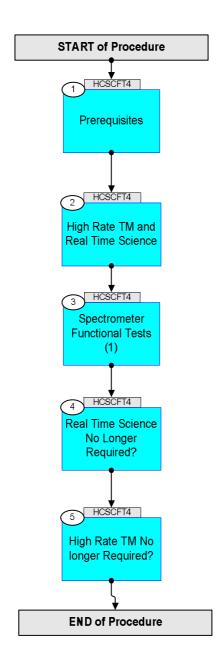
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Procedure Flowchart Overview



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| Step No. | Time | Activity/Remarks | TC/TLM | Display/ Branch |
|-------------|------|---|--------|-----------------|
| | | Beginning of Procedure | | 1 12 12 1 |
| | | TC Seq. Name :HCSCFT4 (Spec CFT 1) | | |
| | | TimeTag Type: Sub Schedule ID: | | |
| | | | | Next Step: |
| 1 | | Prerequisites | | 2 |
| | | The following test consists of one activity. An activity is represented by one saved stack file to be generated prior to the DTCP. | | |
| | | Each stack should allso be delivered to the HSC/ICC using the procedure defined in H_GSP_MCS_MSTK | | |
| | | NOTE: Naming Convention for saved stack file: | | |
| | | yyyymmdd_nnnn_H_SAVED_xxvv | | |
| | | <pre>yyyy = Year [of expected uplink] mm = Month [of expected uplink] dd = Day [of expected uplink] nnnn = OD [of expected uplink] xx = TSF number (defined in each activity) vv = version number</pre> | | |
| | | Note: The five procedures defined below should be brought together into the TBC saved stack file prior to the DTCP: | | |
| | | yyyymmdd_nnnn_H_SAVED_xxvv This file is then called up and executed on the manual stack during the DTCP. | | |
| | | | | |
| 1.1 | | Verify HSC/ICC inputs | | |
| | | Prerequisites, verify: DPU s/w version/subversion SPU s/w version/subversion | | |
| | | FP: OBS_ID (quantity 5) | | |
| | | | | Next Step: |
| 2 | | High Rate TM and Real Time Science | | Next Step: |
| | | Note: Both high rate TM and Real Time Science are required for this test. | | |
| 2.1 | | Verify High Rate TM is Available. | | |

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| Step No. | Time | Activity/Remarks | TC/TLM | Display/ Branch |
|-------------|------|--|------------|-----------------|
| 1.0. | TIME | High Rate TM is required. | IC/IIM | DISPINA DIAMENT |
| | | might have im is required. | | |
| | | | | |
| | | Verify High Bit Rate | | |
| | | TME_BITRATE DEMRF160 | = 1.5 Mbps | AND=ZAZ7J999 |
| | | | | |
| | | If High Rate is not available, consult with SOM. | | |
| | | Upon confirmation from SOM, run the following | | |
| | | procedure to enable High Rate TM. | | |
| | | PROCEDURE: | | |
| | | H_FCP_TTC_TUHR [HFTTUHR] | | |
| | | | | |
| | | | | |
| | | | | |
| 2.2 | | Verify Real Time Science is Available. | | |
| | | | | |
| | | Real Time Science data is required. Check the NCTRS | | |
| | | for VC1. | | |
| | | | | |
| | | | | |
| | | If VC1 is not available, consult with SOM. | | |
| | | Upon confirmation from SOM, run the following procedure to enable RTS. | | |
| | | PROCEDURE: | | |
| | | H_FCP_DHS_1013A [HFD1013A] | | |
| | | | | |
| | | | | |
| | | | | Next Step: |
| 3 | | Spectrometer Functional Tests (1) | | 4 |
| | | | | |
| | | Note: | | |
| | | The five procedures defined below should be brought | | |
| | | together into the TBC saved stack file prior to the DTCP: | | |
| | | DICP. | | |
| | | yyyymmdd_nnnn_H_SAVED_xxvv | | |
| | | | | |
| | | This file is then called up and executed on the manual | | |
| | | stack during the DTCP. | | |
| | | | | |
| | | | | - |
| | | | | |
| 3.1 | | Activity procedures | | |
| | | | | |
| | | Run the following five, 5 procedures. | | |
| | | | | |
| | | | | |
| | | | | |
| 3.1.1 | | Spectrometer SLW BDAs Switch ON Check | | |
| | | | | |
| | | PROCEDURE: | | |
| | | H_COP_SPI_SLWN [HCSSLWN] | | |
| | | FP: | | |
| | | OBS_ID | | |
| | | | | |
| | | | | |
| | | | | |
| 3.1.2 | | Spectrometer SLW BDAs Integrity Check | | |
| | | | | |
| | | | 1 | 1 |

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| Step No. | Time | Activity/Remarks | TC/TLM | Display/ Branch |
|-------------|------|--|---------|-----------------|
| | TIME | PROCEDURE: | IC/ III | -IDPIAI/ Branch |
| | | H_COP_SPI_SLWC [HCSSLWC] | | |
| | | FP: | | |
| | | OBS_ID | | |
| | | | | |
| | | | | |
| 3.1.3 | | Spectrometer SLW BDAs Noise Check | | |
| | | PROCEDURE: | | |
| | | H_COP_SPI_SLWL [HCSSLWL] | | |
| | | FP: | | |
| | | OBS_ID | | |
| | | | | |
| | | | | |
| 3.1.4 | | Spectrometer SLW BDAs Vss Test | | |
| | | PROCEDURE: | | |
| | | H_COP_SPI_SLWV [HCSSLWV] | | |
| | | FP: | | |
| | | OBS_ID | | |
| | | | | |
| | | | | |
| 3.1.5 | | Spectrometer BDAs Switch OFF PRIME (Mode Transistion) | | |
| | | | | |
| | | PROCEDURE: | | |
| | | H_COP_SPI_MSPF [HCSMSPF] | | |
| | | FP: | | |
| | | OBS_ID | | |
| | | | | |
| | | | | Next Step: |
| 4 | | Real Time Science No Longer Required? | | 5 |
| | | Real Time Science data is no longer required for this | | |
| | | test for SPIRE. | | |
| | | | | |
| | | | | |
| 4.1 | | Verify Real Time Science is Still Required | | |
| | | Verify if RTS is still required (generally). | | |
| | | | | |
| | | Consult with SOM. | | |
| | | If it is still required, do nothing. | | |
| | | | | |
| | | If REal Time Science is not still required. | | |
| | | Upon confirmation from SOM, if RTS is no longer | | |
| | | required generally and should be disabled, run the following procedure to disable RTS. | | |
| | | PROCEDURE: | | |
| | | H_FCP_DHS_1013B [HFD1013B] | | |
| | | | | |
| | | | | |

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| Step No. | Time | Activity/Remarks | TC/TLM | Display/ Branch | | |
|--|------------------|--|--------|-------------------|--|--|
| 5 | | High Rate TM No longer Required? | | Next Step: END | | |
| | | | | | | |
| 5.1 | | Verify High Rate TM is Still Required. | | | | |
| | | Verify if High Rate TM is still required (generally). | | | | |
| | | Consult with SOM. | | | | |
| | | If it is still required, do nothing. | | | | |
| Annu giàng ann giàng ann giànn ann ann ann ann a | | If High Rate is not still required. Upon confirmation from SOM, run the following | | | | |
| | | procedure to changefrom High Rate to medium rate TM. | | | | |
| | | PROCEDURE: H_FCP_TTC_TUMR [HFTTUMR] | | | | |
| ***** | | | | | | |
| _ | | | | | | |
| | End of Procedure | | | | | |

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