

Load a new OBSM image from the ASW
File: H_FCP_SPI_CLOM.xls
Author: R. Biggins



Procedure Summary

Objectives

The objective of this procedure is to patch the OBSW image via the ASW

Summary of Constraints

INPUT:
- Expected ASW version?

Spacecraft Configuration

Start of Procedure

SPIRE is in DPU_ON mode

End of Procedure

SPIRE is in DPU_ON mode

Reference File(s)

Input Command Sequences

Output Command Sequences

HFSCLOM

Referenced Displays

ANDs GRDs SLDs
ZAZ96999

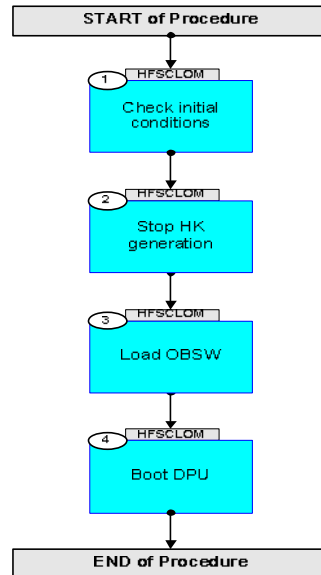
Configuration Control Information

DATE	FOP ISSUE	VERSION	MODIFICATION DESCRIPTION	AUTHOR	SPR REF
18/01/2008		1	Created Updates due to SVT-1 testing: - TM checks added at end to verify software version - Flags updated - Comments added/updated	R. Biggins	
19/05/2008	1	2	2 - AND updated for all TM parameters	R. Biggins	

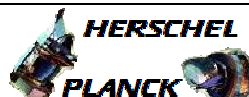
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Procedure Flowchart Overview



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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
Beginning of Procedure				
HFSCLOM Load OBSM - ASW				
SSID :				
1		Check initial conditions		Next Step: 2
1.1		SPIRE input		<input type="checkbox"/>
		Verify that the correct information has been supplied by the ICC: Software Image (verify with OBSM engineer)		
		Verify that the expected DPU software version number has been supplied by the SPIRE ICC (Step 4.6)		
1.2		Verify Mode		<input type="checkbox"/>
		Verify Telemetry MODE SM00M500 = DPU_ON		AND=ZAZ96999
2		Stop HK generation		Next Step: 3
	ET= UT=+00.00.00	Execute Telecommand CLEAR_HK_REPORT Command Parameter(s) : PCKTID_CLEARHK SPR6N500 SSID : 370	SCR01500 301 <hex>	
		Verify that the Nominal Housekeeping is not being generated [TM(3,35), APID 1282 or 1283].		
3		Load OBSW		Next Step: 4
3.1		Copy OBS to PM HIGH		<input type="checkbox"/>
		Execute Telecommand CLONE_OBS Command Parameter(s) : DEST_ADDR_CLONEOBS SPMPN500 N_PMWORDS_CLONEOBS SPMRN500 SSID : 370	SCM06500 20000 <oct> 171EC <hex>	
3.2		Load OBSW		<input type="checkbox"/>

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		OBSM engineer to run the procedure H_FCP_OBS_5110 to generate the saved stack files for upload.		
		<i>The OBSM procedure will generate a saved stack file and uplink the patch commands to SPIRE. It will also verify that the patch is successful by checksum verification of the on-board image.</i>		
4		Boot DPU		Next Step: END
		Sending the following TC will generate three TM(5,1) [No_MCU_Response_Error, No_SCU_Response_Error, No_DCU_Response_Error] packets are expected as the units are not switched on, as well as a TM(5,1) [SDB_Unhealthy] on the CDMU.		
		Execute Telecommand <div style="text-align: center;">COMMIT_OBS_AND_REBOOT</div> Command Parameter(s) : <div style="display: flex; justify-content: space-around;"> FROM_ADDR_COMMITOBS SPMSN500 </div> <div style="display: flex; justify-content: space-around;"> N_PMWORDS_COMMITOBS SPMTN500 </div> SSID : 370	SCM07500 20000 <hex> 171EC <hex>	
4.1		Verify DPU has booted		<input type="checkbox"/>
4.2		Verify current software		<input type="checkbox"/>
		Verify Telemetry <div style="text-align: center;">MODE SM00M500</div>	= DPU_ON	AND=ZAZ96999
		The following version check should ensure that the expected software version is running.		
		Verify Telemetry <div style="text-align: center;">OBSVER1 SM0EN500</div>	Version	AND=ZAZ96999
		Verify Telemetry <div style="text-align: center;">OBSVER2 SM0FN500</div>	Sub-version	AND=ZAZ96999
		Verify Telemetry <div style="text-align: center;">OBSVER3 SM05F500</div>	Revision	AND=ZAZ96999
End of Procedure				