

PACS_Spec_Flash_SFT
File: H_COP_PAC_D102.xls
Author: R. Biggins



Procedure Summary

Objectives

The objective of this procedure is to execute a short functional test on the detector flashers by changing the input current.

- set the blue and red detector flasher current to 0.1mA
- set the blue and red detector flasher current to 0.0mA
- set the blue and red detector flasher current to 1.0mA
- set the blue and red detector flasher current to 0.0mA

Based on procedure:
PACS_Spec_Flash_SFT (v1)

Summary of Constraints

Procedure H_COP_PAC_D101 must have been successfully completed directly before the execution of this procedure

This procedure should be executed as part of the Short Functional Test (HeII conditions)
This procedure may also be executed on PACS request

RT Science must be enabled to receive the Diagnostic HK packets

Spacecraft Configuration

Start of Procedure

- PACS in NO_PRIME (SAFE) mode
- PACS is generating Spectroscopy HK
 - PACS is generating Diagnostic HK
 - The flashers are switched ON

End of Procedure

- PACS in NO_PRIME (SAFE) mode
- PACS is generating Spectroscopy HK
 - PACS is generating Diagnostic HK
 - The flashers are switched ON

Reference File(s)

Input Command Sequences

Output Command Sequences

HCPD102

Referenced Displays

ANDs	GRDs	SLDs
ZAZ98999		
PA021420		

Configuration Control Information

Status : Version 2 - Unchanged
Last Checkin: 14/11/08

PACS_Spec_Flash_SFT
 File: H_COP_PAC_D102.xls
 Author: R. Biggins

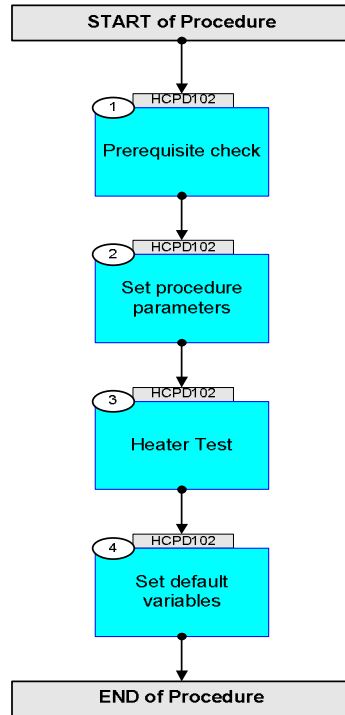


DATE	FOP ISSUE	VERSION	MODIFICATION DESCRIPTION	AUTHOR	SPR REF
14/08/08		1	Created	R. Biggins	
14/11/08	2	2	Updates due to initial testing <input type="checkbox"/> - New step (1) added for prerequisite check <input type="checkbox"/> - Initial OBSID value changed to FP	R. Biggins	
15/04/09	2.3	2.01	Validation : Final updates before flight <input type="checkbox"/> - Summary updated <input type="checkbox"/> - TC flags updated	R. Biggins	

PACS_Spec_Flash_SFT
File: H_COP_PAC_D102.xls
Author: R. Biggins



Procedure Flowchart Overview



PACS_Spec_Flash_SFT
 File: H_COP_PAC_D102.xls
 Author: R. Biggins



Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
Beginning of Procedure				
TC Seq. Name :HCPD102 (Flasher SFT)				
TimeTag Type: B Sub Schedule ID: <input type="checkbox"/>				
1		Prerequisite check		Next Step: 2
1.1		HSC/ICC input		<input type="checkbox"/>
		Verify that the HSC/ICC has supplied a valid OBSID value: OBS_ID = 0xnnnn nnnn		
2		Set procedure parameters		Next Step: 3
	ET=+00.00.00 UT=+00.00.00	DMC_SET_OBSID Command Parameter(s) : OBSERVATION_ID PP069420 TC Control Flags : GBM IL DSE --Y -- --- Subsch. ID : 90 Det. descr. : SET OBSID IN DMC	PC078420 OBS_ID	
		Verify Telemetry DM_OBSID PM028420	OBS_ID	AND=ZAZ98999
3		Heater Test		Next Step: 4
		Verify Telemetry DM_DECB_FLASH_C PM119420	= 0.0 mA	AND=PA021420
		Verify Telemetry DM_DECR_FLASH_C PM187420	= 0.0 mA	AND=PA021420
		NOTE: The following tests should be executed with the defined time delay between each TC, therefore any TM checks should be done without additional delay.		
3.1		Test 1		<input type="checkbox"/>
		The following TCs will set the blue and red detector flasher current to 0.1mA		

PACS_Spec_Flash_SFT
 File: H_COP_PAC_D102.xls
 Author: R. Biggins



Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
	ET=+00.00.01 UT=+00.00.01	DMC_SET_BBID DMC_SET_BBID Command Parameter(s) : BUILDING_BLOCK_ID PP070420 TC Control Flags : GBM IL DSE --Y -- --- Subsch. ID : 90 Det. descr. : SET BBID IN DMC	PC079420 40A60001 <hex>	
	ET=+00.00.01 UT=+00.00.01	DMC_SET_B_SPEC_FLASH_C_RAW DMC_SET_B_SPEC_FLASH_C Command Parameter(s) : CURRENT PP073420 Subsch. ID : 90 Det. descr. : SET BLUE DEC FLASH CURRENT	PC088420 0.098 mA	
	ET=+00.00.01 UT=+00.00.01	DMC_SET_R_SPEC_FLASH_C_RAW DMC_SET_R_SPEC_FLASH_C Command Parameter(s) : CURRENT PP073420 Subsch. ID : 90 Det. descr. : SET THE RED DEC FLASHER CURRENT	PC105420 0.098 mA	
		Verify Telemetry DM_BBID PM029420	= 40A60001 <hex>	AND=ZAZ98999
		Verify Telemetry DM_DECB_FLASH_C PM119420	= 0.1 mA	AND=PA021420
		Verify Telemetry DM_DECR_FLASH_C PM187420	= 0.1 mA	AND=PA021420
3.2		Test 2		□
		The following TCs will set the blue and red detector flasher current to 0.0mA		
	ET=+00.00.31 UT=+00.00.31	DMC_SET_BBID DMC_SET_BBID Command Parameter(s) : BUILDING_BLOCK_ID PP070420 Subsch. ID : 90 Det. descr. : SET BBID IN DMC	PC079420 40A60002 <hex>	

PACS_Spec_Flash_SFT
 File: H_COP_PAC_D102.xls
 Author: R. Biggins



Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
	ET=+00.00.01 UT=+00.00.01	DMC_SET_B_SPEC_FLASH_C_RAW DMC_SET_B_SPEC_FLASH_C Command Parameter(s) : CURRENT PP073420 Subsch. ID : 90 Det. descr. : SET BLUE DEC FLASH CURRENT	PC088420 0.000 mA	
	ET=+00.00.01 UT=+00.00.01	DMC_SET_R_SPEC_FLASH_C_RAW DMC_SET_R_SPEC_FLASH_C Command Parameter(s) : CURRENT PP073420 Subsch. ID : 90 Det. descr. : SET THE RED DEC FLASHER CURRENT	PC105420 0.000 mA	
		Verify Telemetry DM_BBID PM029420	= 40A60002 <hex>	AND=ZAZ98999
		Verify Telemetry DM_DECB_FLASH_C PM119420	= 0.0 mA	AND=PA021420
		Verify Telemetry DM_DECR_FLASH_C PM187420	= 0.0 mA	AND=PA021420
3.3		Test 3		<input type="checkbox"/>
		The following TCs will set the blue and red detector flasher current to 1.0mA		
	ET=+00.00.31 UT=+00.00.31	DMC_SET_BBID DMC_SET_BBID Command Parameter(s) : BUILDING_BLOCK_ID PP070420 Subsch. ID : 90 Det. descr. : SET BBID IN DMC	PC079420 40A60003 <hex>	
	ET=+00.00.01 UT=+00.00.01	DMC_SET_B_SPEC_FLASH_C_RAW DMC_SET_B_SPEC_FLASH_C Command Parameter(s) : CURRENT PP073420 Subsch. ID : 90 Det. descr. : SET BLUE DEC FLASH CURRENT	PC088420 1.001 mA	
	ET=+00.00.01 UT=+00.00.01	DMC_SET_R_SPEC_FLASH_C_RAW DMC_SET_R_SPEC_FLASH_C Command Parameter(s) : CURRENT PP073420 Subsch. ID : 90 Det. descr. : SET THE RED DEC FLASHER CURRENT	PC105420 1.001 mA	

PACS_Spec_Flash_SFT
 File: H_COP_PAC_D102.xls
 Author: R. Biggins



Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		Verify Telemetry DM_BBID PM029420	= 40A60003 <hex>	AND=ZAZ98999
		Verify Telemetry DM_DECB_FLASH_C PM119420	= 1.0 mA	AND=PA021420
		Verify Telemetry DM_DECR_FLASH_C PM187420	= 1.0 mA	AND=PA021420
3.4		Test 4		<input type="checkbox"/>
		The following TCs will set the blue and red detector flasher current to 0.0mA		
	ET=+00.00.31 UT=+00.00.31	DMC_SET_BBID DMC_SET_BBID Command Parameter(s) : BUILDING_BLOCK_ID PP070420 Subsch. ID : 90 Det. descr. : SET BBID IN DMC	PC079420 40A60004 <hex>	
	ET=+00.00.01 UT=+00.00.01	DMC_SET_B_SPEC_FLASH_C_RAW DMC_SET_B_SPEC_FLASH_C Command Parameter(s) : CURRENT PP073420 Subsch. ID : 90 Det. descr. : SET BLUE DEC FLASH CURRENT	PC088420 0.000 mA	
	ET=+00.00.01 UT=+00.00.01	DMC_SET_R_SPEC_FLASH_C_RAW DMC_SET_R_SPEC_FLASH_C Command Parameter(s) : CURRENT PP073420 Subsch. ID : 90 Det. descr. : SET THE RED DEC FLASHER CURRENT	PC105420 0.000 mA	
		Verify Telemetry DM_BBID PM029420	= 40A60004 <hex>	AND=ZAZ98999
		Verify Telemetry DM_DECB_FLASH_C PM119420	= 0.0 mA	AND=PA021420
		Verify Telemetry DM_DECR_FLASH_C PM187420	= 0.0 mA	AND=PA021420
4		Set default variables		Next Step: END

PACS_Spec_Flash_SFT
 File: H_COP_PAC_D102.xls
 Author: R. Biggins



Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
	ET=+00.00.01 UT=+00.00.01	DMC_SET_OBSID Command Parameter(s) : OBSERVATION_ID PP069420 TC Control Flags : GBM IL DSE --Y -- --- Subsch. ID : 90 Det. descr. : SET OBSID IN DMC	PC078420 00000000 <hex>	
	ET=+00.00.00 UT=+00.00.00	DMC_SET_BBID Command Parameter(s) : BUILDING_BLOCK_ID PP070420 Subsch. ID : 90 Det. descr. : SET BBID IN DMC	PC079420 40000000 <hex>	
		Verify Telemetry DM_OBSID PM028420	= 00000000 <hex>	AND=ZAZ98999
		Verify Telemetry DM_BBID PM029420	= 40000000 <hex>	AND=ZAZ98999
End of Procedure				