

PACS_Open_Launch_Lock_OBS
 File: H_COP_PAC_LLOP.xls
 Author: R. Biggins



Procedure Summary

Objectives

The objective of this procedure is to open the grating launch lock.

- Enable Spectroscopy HK
- Open launch lock (unlock grating)

Based on procedure:
 PACS_Open_Launch_Lock_OBS (v1)

Summary of Constraints

This procedure should be executed only as part of the Short Functional Test (HeII conditions)

Spacecraft Configuration

Start of Procedure

- PACS is in NO_PRIME mode
- All PACS units powered on and connected

End of Procedure

PACS generating Spectroscopy HK

Reference File(s)

Input Command Sequences

Output Command Sequences

HCPLLOP

Referenced Displays

ANDs	GRDs	SLDs
PA031420		
ZAZ98999		
ZAZ97999		

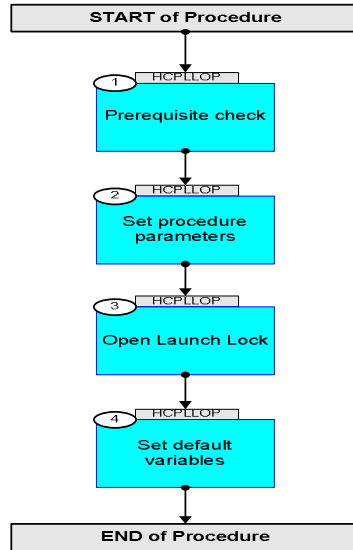
Configuration Control Information

DATE	FOP ISSUE	VERSION	MODIFICATION DESCRIPTION	AUTHOR	SPR REF
22/10/08		1	Created	R. Biggins	
13/11/08	2	2	Comment added on PACS not setting Launch Lock parameter correctly.	R. Biggins	
02/04/09	2.3	3	Final updates before flight - Summary updated - TC flags updated - Procedure description/title updated	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				
TC Seq. Name : HCP LLOP (Open Launch Lock)				
TimeTag Type: B Sub Schedule ID: □				
1		Prerequisite check		Next Step: 2
		Verify that the HSC/ICC has supplied a valid OBSID value: OBS_ID = 0xnnnn nnnn		
		Verify Telemetry DM_GC_LL_LOCKED PM495420 = LL LOCKED		AND=PA031420
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	
		The TM showing the OBSID/BBID is not downlinked by default in NO_PRIME Mode		
3		Open Launch Lock		Next Step: 4
	ET=+00.00.01 UT=+00.00.01	DPU_SET_HK_LIST Command Parameter(s) : HK_PACKET_ID PP05380 SPU_ARRAY PP025380 TC Control Flags : GBM IL DSE --Y -- --- Subsch. ID : 90 Det. descr. : SET THE PREDIFINED LIST OF HK VALUES FOR THE HK PACKET	PC003380 SPEC BOTH Array	
		Verify Telemetry DP_TM_RATE PM049380 = SPEC		AND=ZAZ97999

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
	ET=+00.00.01 UT=+00.00.01	DMC_SWON_GRAT_CONT DMC_SWON_GRAT_CONT TC Control Flags : Subsch. ID : 90 Det. descr. : SWITCH ON GRATING CONTROLLER GBM IL DSE --Y -- ---	PC108420	
	ET=+00.00.01 UT=+00.00.01	DMC_UNLOCK_GRAT DMC_UNLOCK_GRAT Command Parameter(s) : DMC_MODE PP092420 Subsch. ID : 90 Det. descr. : DEACTIVATE THE GRATING LAUNCH LOCK	PC118420 40 <dec>	
	ET=+00.00.10 UT=+00.00.10	DMC_SWOF_GRAT_CONT DMC_SWOF_GRAT_CONT Subsch. ID : 90 Det. descr. : SWITCH OFF GRATING CONTROLLER	PC109420	
		WARNING: The following TM parameter is not set correctly by PACS and should not be used as confirmation that the command has completed.		
		Verify Telemetry DM_GC_LL_LOCKED PM495420	= LL NOT LOCKED	AND=PA031420
4		Set default variables		Next Step: END
	ET=+00.00.01 UT=+00.00.01	DMC_SET_OBSID DMC_SET_OBSID Command Parameter(s) : OBSERVATION_ID PP069420 TC Control Flags : Subsch. ID : 90 Det. descr. : SET OBSID IN DMC GBM IL DSE --Y -- ---	PC078420 00000000 <hex>	
	ET=+00.00.00 UT=+00.00.00	DMC_SET_BBID 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

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		Verify Telemetry DM_BBID PM029420	= 40000000 <hex>	AND=ZAZ98999
End of Procedure				