

PACS_Phot_Switchoff_OBS
 File: H_COP_PAC_D307.xls
 Author: R. Biggins



Procedure Summary

Objectives

The objective of this procedure is to power off the bolometer analog electronics clocks and bolometer A to D converter

Based on procedure:
 PACS_Phot_Switchoff_OBS (v1)

Summary of Constraints

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

Spacecraft Configuration

Start of Procedure

PACS in NO_PRIME (SAFE) mode
 - PACS is generating Photometry HK

End of Procedure

PACS in NO_PRIME (SAFE) mode
 - PACS is generating Photometry HK

Reference File(s)

Input Command Sequences

Output Command Sequences

HCPD307

Referenced Displays

ANDs GRDs SLDs
 ZAZAR999
 ZAZRW999

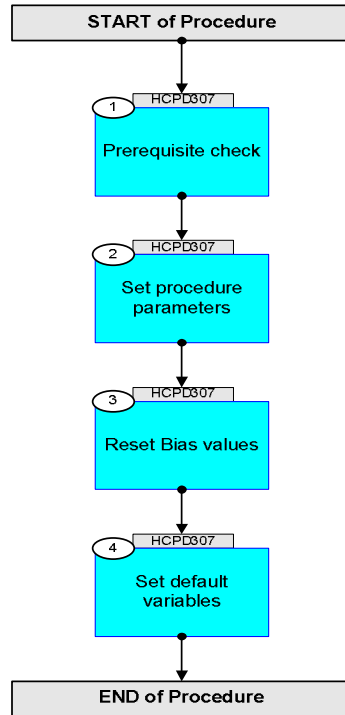
Configuration Control Information

DATE	FOP ISSUE	VERSION	MODIFICATION DESCRIPTION	AUTHOR	SPR REF
15/08/08		1	Created	R. Biggins	
14/11/08	2	2	Updates due to initial testing - New step (1) added for prerequisite check - Initial OBSID value changed to FP - AND updated for all TM parameters	R. Biggins	
15/04/09	2.3	2.01	Validation : Final updates before flight - Summary updated - TC flags updated - AND in TM checks 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 : HCPD307 (Reset Bias values)				
TimeTag Type: B Sub Schedule ID:				
□				
1		Prerequisite check		Next Step: 2
1.1		HSC/ICC input		□
		Verify that the HSC/ICC has supplied a valid OBSID value: OBS_ID = 0xxxxx 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	DMC_SET_OBSID PC078420 OBS_ID	
		Verify Telemetry DM_OBSID PM028420	OBS_ID	AND=ZAZ8W999
3		Reset Bias values		Next Step: 4
The following TCs update the bias trimmings for the Blue and Red SPU sub-assemblies				
	ET=+00.00.01 UT=+00.00.01	DMC_SEND_COMMAND_BOLC Command Parameter(s) : BOLOMETER_COMMAND PP071420 TC Control Flags : GBM IL DSE --Y -- --- Subsch. ID : 90 Det. descr. : SEND COMMAND TO BOL CONTROLLER	DMC_SEND_COMMAND_BOLC PC103420 20000 <hex>	

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	ET=+00.00.01 UT=+00.00.01	DMC_SEND_COMMAND_BOLC DMC_SEND_COMMAND_BOLC Command Parameter(s) : BOLOMETER_COMMAND PP071420 Subsch. ID : 90 Det. descr. : SEND COMMAND TO BOL CONTROLLER	PC103420 50000 <hex>	
	ET=+00.00.01 UT=+00.00.01	DMC_SEND_COMMAND_BOLC DMC_SEND_COMMAND_BOLC Command Parameter(s) : BOLOMETER_COMMAND PP071420 Subsch. ID : 90 Det. descr. : SEND COMMAND TO BOL CONTROLLER	PC103420 10000 <hex>	
	ET=+00.00.01 UT=+00.00.01	DMC_SEND_COMMAND_BOLC DMC_SEND_COMMAND_BOLC Command Parameter(s) : BOLOMETER_COMMAND PP071420 Subsch. ID : 90 Det. descr. : SEND COMMAND TO BOL CONTROLLER	PC103420 30000 <hex>	
	ET=+00.00.01 UT=+00.00.01	DMC_SEND_COMMAND_BOLC DMC_SEND_COMMAND_BOLC Command Parameter(s) : BOLOMETER_COMMAND PP071420 Subsch. ID : 90 Det. descr. : SEND COMMAND TO BOL CONTROLLER	PC103420 40000 <hex>	
	ET=+00.00.01 UT=+00.00.01	DMC_SEND_COMMAND_BOLC DMC_SEND_COMMAND_BOLC Command Parameter(s) : BOLOMETER_COMMAND PP071420 Subsch. ID : 90 Det. descr. : SEND COMMAND TO BOL CONTROLLER	PC103420 60000 <hex>	
	ET=+00.00.01 UT=+00.00.01	DMC_SEND_COMMAND_BOLC DMC_SEND_COMMAND_BOLC Command Parameter(s) : BOLOMETER_COMMAND PP071420 Subsch. ID : 90 Det. descr. : SEND COMMAND TO BOL CONTROLLER	PC103420 80000 <hex>	

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
	ET=+00.00.01 UT=+00.00.01	DMC_SEND_COMMAND_BOLC DMC_SEND_COMMAND_BOLC Command Parameter(s) : BOLOMETER_COMMAND PP071420 Subsch. ID : 90 Det. descr. : SEND COMMAND TO BOL CONTROLLER	PC103420 70000 <hex>	
	ET=+00.00.01 UT=+00.00.01	DMC_SEND_COMMAND_BOLC DMC_SEND_COMMAND_BOLC Command Parameter(s) : BOLOMETER_COMMAND PP071420 Subsch. ID : 90 Det. descr. : SEND COMMAND TO BOL CONTROLLER	PC103420 100000 <hex>	
	ET=+00.00.01 UT=+00.00.01	DMC_SEND_COMMAND_BOLC DMC_SEND_COMMAND_BOLC Command Parameter(s) : BOLOMETER_COMMAND PP071420 Subsch. ID : 90 Det. descr. : SEND COMMAND TO BOL CONTROLLER	PC103420 f0000 <hex>	
	ET=+00.00.01 UT=+00.00.01	DMC_SEND_COMMAND_BOLC DMC_SEND_COMMAND_BOLC Command Parameter(s) : BOLOMETER_COMMAND PP071420 Subsch. ID : 90 Det. descr. : SEND COMMAND TO BOL CONTROLLER	PC103420 90000 <hex>	
	ET=+00.00.01 UT=+00.00.01	DMC_SEND_COMMAND_BOLC DMC_SEND_COMMAND_BOLC Command Parameter(s) : BOLOMETER_COMMAND PP071420 Subsch. ID : 90 Det. descr. : SEND COMMAND TO BOL CONTROLLER	PC103420 a0000 <hex>	
	ET=+00.00.01 UT=+00.00.01	DMC_SEND_COMMAND_BOLC DMC_SEND_COMMAND_BOLC Command Parameter(s) : BOLOMETER_COMMAND PP071420 Subsch. ID : 90 Det. descr. : SEND COMMAND TO BOL CONTROLLER	PC103420 b0000 <hex>	

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
	ET=+00.00.01 UT=+00.00.01	DMC_SEND_COMMAND_BOLC DMC_SEND_COMMAND_BOLC Command Parameter(s) : BOLOMETER_COMMAND PP071420 Subsch. ID : 90 Det. descr. : SEND COMMAND TO BOL CONTROLLER	PC103420 c0000 <hex>	
	ET=+00.00.01 UT=+00.00.01	DMC_SEND_COMMAND_BOLC DMC_SEND_COMMAND_BOLC Command Parameter(s) : BOLOMETER_COMMAND PP071420 Subsch. ID : 90 Det. descr. : SEND COMMAND TO BOL CONTROLLER	PC103420 d0000 <hex>	
	ET=+00.00.01 UT=+00.00.01	DMC_SEND_COMMAND_BOLC DMC_SEND_COMMAND_BOLC Command Parameter(s) : BOLOMETER_COMMAND PP071420 Subsch. ID : 90 Det. descr. : SEND COMMAND TO BOL CONTROLLER	PC103420 e0000 <hex>	
	ET=+00.00.01 UT=+00.00.01	DMC_SEND_COMMAND_BOLC DMC_SEND_COMMAND_BOLC Command Parameter(s) : BOLOMETER_COMMAND PP071420 Subsch. ID : 90 Det. descr. : SEND COMMAND TO BOL CONTROLLER	PC103420 120000 <hex>	
	ET=+00.00.01 UT=+00.00.01	DMC_SEND_COMMAND_BOLC DMC_SEND_COMMAND_BOLC Command Parameter(s) : BOLOMETER_COMMAND PP071420 Subsch. ID : 90 Det. descr. : SEND COMMAND TO BOL CONTROLLER	PC103420 140000 <hex>	
	ET=+00.00.01 UT=+00.00.01	DMC_SEND_COMMAND_BOLC DMC_SEND_COMMAND_BOLC Command Parameter(s) : BOLOMETER_COMMAND PP071420 Subsch. ID : 90 Det. descr. : SEND COMMAND TO BOL CONTROLLER	PC103420 130000 <hex>	

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
	ET=+00.00.01 UT=+00.00.01	DMC_SEND_COMMAND_BOLC DMC_SEND_COMMAND_BOLC Command Parameter(s) : BOLOMETER_COMMAND PP071420 Subsch. ID : 90 Det. descr. : SEND COMMAND TO BOL CONTROLLER	PC103420 110000 <hex>	
	ET=+00.00.01 UT=+00.00.01	DMC_SEND_COMMAND_BOLC DMC_SEND_COMMAND_BOLC Command Parameter(s) : BOLOMETER_COMMAND PP071420 Subsch. ID : 90 Det. descr. : SEND COMMAND TO BOL CONTROLLER	PC103420 150000 <hex>	
	ET=+00.00.01 UT=+00.00.01	DMC_SEND_COMMAND_BOLC DMC_SEND_COMMAND_BOLC Command Parameter(s) : BOLOMETER_COMMAND PP071420 Subsch. ID : 90 Det. descr. : SEND COMMAND TO BOL CONTROLLER	PC103420 160000 <hex>	
	ET=+00.00.01 UT=+00.00.01	DMC_SEND_COMMAND_BOLC DMC_SEND_COMMAND_BOLC Command Parameter(s) : BOLOMETER_COMMAND PP071420 Subsch. ID : 90 Det. descr. : SEND COMMAND TO BOL CONTROLLER	PC103420 170000 <hex>	
		The following TC powers off all the bolometer clocks and A to D converter		
	ET=+00.00.01 UT=+00.00.01	DMC_SEND_COMMAND_BOLC DMC_SEND_COMMAND_BOLC Command Parameter(s) : BOLOMETER_COMMAND PP071420 Subsch. ID : 90 Det. descr. : SEND COMMAND TO BOL CONTROLLER	PC103420 a000000 <hex>	
		Verify Telemetry BOL_VDDPRO_BUB1 PM236410	= 0.0 V	AND=ZAZ8W999
		Verify Telemetry BOL_VDDPRO_BUB2 PM266410	= 0.0 V	AND=ZAZ8W999
		Verify Telemetry BOL_VDDPRO_BUB3 PM296410	= 0.0 V	AND=ZAZ8W999
		Verify Telemetry BOL_VDDPRO_BUB4 PM326410	= 0.0 V	AND=ZAZ8W999

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		Verify Telemetry BOL_VDDPRO_BUR1	PM356410	= 0.0 V AND=ZAZ8W999
		Verify Telemetry BOL_VDDPRO_BUR2	PM386410	= -0.0 V AND=ZAZ8W999
		Verify Telemetry BOL_VDDPRO_CLB1	PM229410	= 0.0 V AND=ZAZ8W999
		Verify Telemetry BOL_VDDPRO_CLB2	PM259410	= 0.0 V AND=ZAZ8W999
		Verify Telemetry BOL_VDDPRO_CLB3	PM289410	= 0.0 V AND=ZAZ8W999
		Verify Telemetry BOL_VDDPRO_CLB4	PM319410	= -0.0 V AND=ZAZ8W999
		Verify Telemetry BOL_VDDPRO_CLR1	PM349410	= 0.0 V AND=ZAZ8W999
		Verify Telemetry BOL_VDDPRO_CLR2	PM379410	= -0.0 V AND=ZAZ8W999
		Verify Telemetry BOL_GND_BU_B_1	PM230410	= 0.0 V AND=ZAZ8W999
		Verify Telemetry BOL_GND_BU_B_2	PM260410	= -0.0 V AND=ZAZ8W999
		Verify Telemetry BOL_GND_BU_B_3	PM290410	= 0.0 V AND=ZAZ8W999
		Verify Telemetry BOL_GND_BU_B_4	PM320410	= 0.0 V AND=ZAZ8W999
		Verify Telemetry BOL_GND_BU_R_1	PM350410	= 0.0 V AND=ZAZ8W999
		Verify Telemetry BOL_GND_BU_R_2	PM380410	= 0.0 V AND=ZAZ8W999
		Verify Telemetry BOL_PWR_ANA_P_1	PM242410	= 0.0 V AND=ZAZ8W999
		Verify Telemetry BOL_PWR_ANA_P_2	PM272410	= 0.0 V AND=ZAZ8W999
		Verify Telemetry BOL_PWR_ANA_P_3	PM302410	= 0.0 V AND=ZAZ8W999
		Verify Telemetry BOL_PWR_ANA_P_4	PM332410	= 0.0 V AND=ZAZ8W999
		Verify Telemetry BOL_PWR_ANA_P_5	PM362410	= 0.0 V AND=ZAZ8W999
		Verify Telemetry BOL_PWR_ANA_P_6	PM392410	= 0.0 V AND=ZAZ8W999

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
4		Set default variables		Next Step: END
	ET=+00.00.01 UT=+00.00.01	DMC_SET_OBSID Command Parameter(s) : OBSERVATION_ID PP069420 TC Control Flags : 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=ZAZ8W999
		Verify Telemetry DM_BBID PM029420	= 40000000 <hex>	AND=ZAZ8W999
End of Procedure				