S/C Mode transition from Nominal to Sun Acquisition
File: H_CRP_DHS_3059.xls
Author: cmevi-hp

Procedure Summary

Objectives

This procedure describes the steps needed to perform the S/C transition from Nominal mode to Sun Acquisition mode.

Summary of Constraints

The S/C mode is changed through ASW TCs(8,4,110,1/2) thus the status of the ASW function "Mode Management" has to be "running".

Spacecraft Configuration

Start of Procedure

n/a

End of Procedure

n/a

Reference File(s)

Input Command Sequences

Output Command Sequences
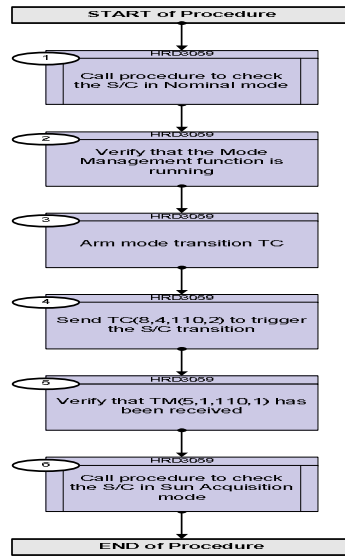
HRD3059

Referenced Displays

ANDs	GRDs	SLDs
ZAZAI999		

Configuration Control Information

DATE	FOP ISSUE	VERSION	MODIFICATION DESCRIPTION	AUTHOR	SPR REF
12/11/08	2	1	Created	cmevi-hp	

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Procedure Flowchart Overview

```
                    START of Procedure

              1          HRD3059
                   Call procedure to check
                   the S/C in Nominal mode

              2          HRD3059
                   Verify that the Mode
                   Management function is
                   running

              3          HRD3059
                   Arm mode transition TC

              4          HRD3059
                   Send TC(8,4,110,2) to trigger
                   the S/C transition

              5          HRD3059
                   Verify that TM(5,1,110,1) has
                   been received

              6          HRD3059
                   Call procedure to check
                   the S/C in Sun Acquisition
                   mode

                    END of Procedure
```

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HERSCHEL PLANCK **esa**

Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		Beginning of Procedure		
		TC Seq. Name :HRD3059 (S/C from NOM to SAM) *TimeTag Type: N* *Sub Schedule ID:*		
1		*Call procedure to check the S/C in Nominal mode*		Next Step: 2
		Execute procedure H_FCP_DHS_4003.		
2		*Verify that the Mode Management function is running*		Next Step: 3
		Verify Telemetry **ModeSts DEH21170**	**= Running**	AND=ZAZAI999
3		*Arm mode transition TC*		Next Step: 4
		Execute Telecommand **ModeManArmTrans_SunAcq** *TC Control Flags :* **GBM IL DSE** **--Y -- ---** *Subsch. ID : 10* Det. descr. : Mode Manag. Arm Trans. to Sun Acquisition Mode TC(8,4,110,1)	**DC02G170**	
4		*Send TC(8,4,110,2) to trigger the S/C transition*		Next Step: 5
		Execute Telecommand **ModeManFireTrans_SunAcq** *TC Control Flags :* **GBM IL DSE** **--Y -- ---** *Subsch. ID : 10* Det. descr. : Mode Manag. Fire Trans. to Sun Acquisition Mode TC(8,4,110,2)	**DC07G170**	
5		*Verify that TM(5,1,110,1) has been received*		Next Step: 6
		<u>WARNING:</u> downlink of TM(5,1) is disable by default, thus the following packet can be acquired only if it previously enabled.		
		This event will be sent when the new S/C mode has been reached.		

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		Verify Packet Reception **CdmuAsw Event 5-1 New Mode Reached** *Packet Details:* APID: Type: Subtype: PI1: PI2:	**D_EvRp_080** **16** **5** **1** **28161** 0	
		Verify Packet Telemetry (Pkt = D_EvRp_080) **TM5xEventID** DEZSJ170	= **NewModeReached**	(None)
		Verify Packet Telemetry (Pkt = D_EvRp_080) **SID** DE010170	= **0 <dec>**	(None)
		Verify Packet Telemetry (Pkt = D_EvRp_080) **ModeId** DE142170	= **SunAcquisition**	(None)
		Verify Packet Telemetry (Pkt = D_EvRp_080) **EventSeqCounter** DE069170		(None)
6		*Call procedure to check the S/C in Sun Acquisition mode*		Next Step: END
		Execute procedure H_FCP_DHS_4002.		
	End of Procedure			