

S/C Mode transition from Survival to Sun Acquisition
 File: H_CRP_DHS_3045.xls
 Author: S. Manganelli



Procedure Summary

Objectives

This procedure describes the steps needed to perform the S/C transition from Survival 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

HRD3045C

Referenced Displays

ANDs	GRDs	SLDs
ZAZAI999		(None)

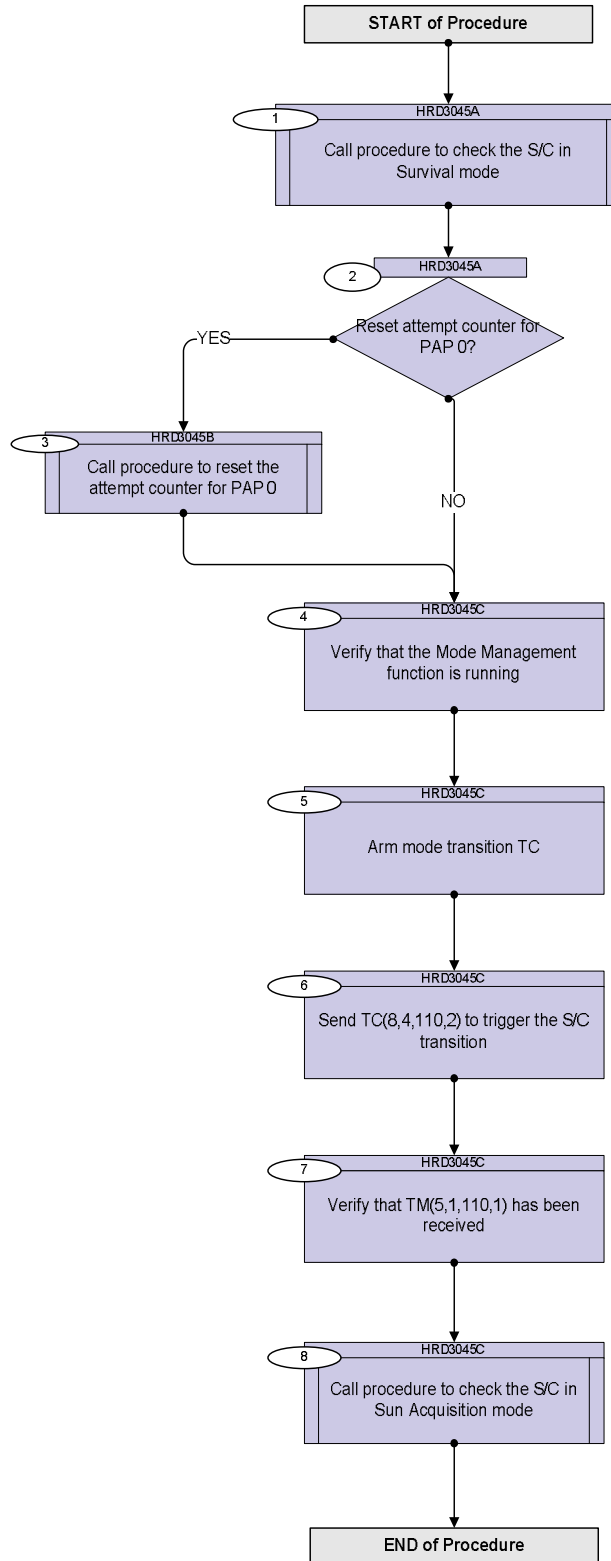
Configuration Control Information

DATE	FOP ISSUE	VERSION	MODIFICATION DESCRIPTION	AUTHOR	SPR REF
28/01/08	1	1	Created	cmevi-hp	
14/11/08	2	2	Updated following Industry inputs 16 sep 08	S. Manganelli	

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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 :HRD3045A (Check S/C Survival) TimeTag Type: Sub Schedule ID: <input type="checkbox"/>				
1		Call procedure to check the S/C in Survival mode		Next Step: 2
		Execute procedure H_CRP_DHS_3044.		
2		Reset attempt counter for PAP 0?		Next Step: NO 4 YES 3
		Attempt counter (and Last chance flag) for PAP 0 must be reset when the transition to Survival mode has been caused by a level 4 (DoD). If the transition has been commanded by Ground through a TC that emulates the sequence of commands sent by the RM for CCS 0/6, it is not necessary to reset the attempt counter.		
TC Seq. Name :HRD3045B (Reset Attempt Counte) TimeTag Type: Sub Schedule ID: <input type="checkbox"/>				
3		Call procedure to reset the attempt counter for PAP 0		Next Step: 4
		The called procedure must be executed twice.		
		Execute procedure H_CRP_DHS_3019 for RM A. Execute procedure H_CRP_DHS_3019 for RM B.		
TC Seq. Name :HRD3045C (Transition to SAM) TimeTag Type: Sub Schedule ID: <input type="checkbox"/>				
4		Verify that the Mode Management function is running		Next Step: 5
		Verify Telemetry	ModeSts DEH21170 = Running	AND=ZAZAI999

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
5		Arm mode transition TC		Next Step: 6
		Execute Telecommand <p style="text-align: right;">ModeManArmTrans_SunAcq</p> TC Control Flags : <p style="text-align: right;">GBM IL DSE --Y -- --</p> Subsch. ID : 10 Det. descr. : Mode Manag. Arm Trans. to Sun Acquisition Mode TC(8,4,110,1)	DC02G170	
6		Send TC(8,4,110,2) to trigger the S/C transition		Next Step: 7
		Execute Telecommand <p style="text-align: right;">ModeManFireTrans_SunAcq</p> TC Control Flags : <p style="text-align: right;">GBM IL DSE --Y -- --</p> Subsch. ID : 10 Det. descr. : Mode Manag. Fire Trans. to Sun Acquisition Mode TC(8,4,110,2)	DC07G170	
7		Verify that TM(5,1,110,1) has been received		Next Step: 8
		WARNING: 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.		
		Verify Packet Reception <p style="text-align: center;">CdmuAsw Event 5-1 New Mode Reached</p> Packet Details: <p style="text-align: right;">APID: 16 Type: 5 Subtype: 1 PI1: 28161 PI2: 0</p>	D_EvRp_080	
		Verify Packet Telemetry <p style="text-align: center;">TM5xEventID</p> <p style="text-align: right;">DEZSJ170</p>	= NewModeReached	(None)
		Verify Packet Telemetry <p style="text-align: center;">SID</p> <p style="text-align: right;">DE010170</p>	= 0 <dec>	(None)
		Verify Packet Telemetry <p style="text-align: center;">ModeId</p> <p style="text-align: right;">DE142170</p>	= SunAcquisition	(None)
		Verify Packet Telemetry <p style="text-align: center;">EventSeqCounter</p> <p style="text-align: right;">DE069170</p>		(None)

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
8		Call procedure to check the S/C in Sun Acquisition mode		Next Step: END
		Execute procedure H_FCP_DHS_4002.		
End of Procedure				