

S/C Mode transition from Nominal to Earth Acquisition
 File: H_FCP_DHS_4005.xls
 Author: S. Manganelli



Procedure Summary

Objectives

This procedure describes the steps needed to perform the S/C transition from Nominal mode to Earth 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

HFD4005

Referenced Displays

ANDs **GRDs** **SLDs**
 ZAZAI999

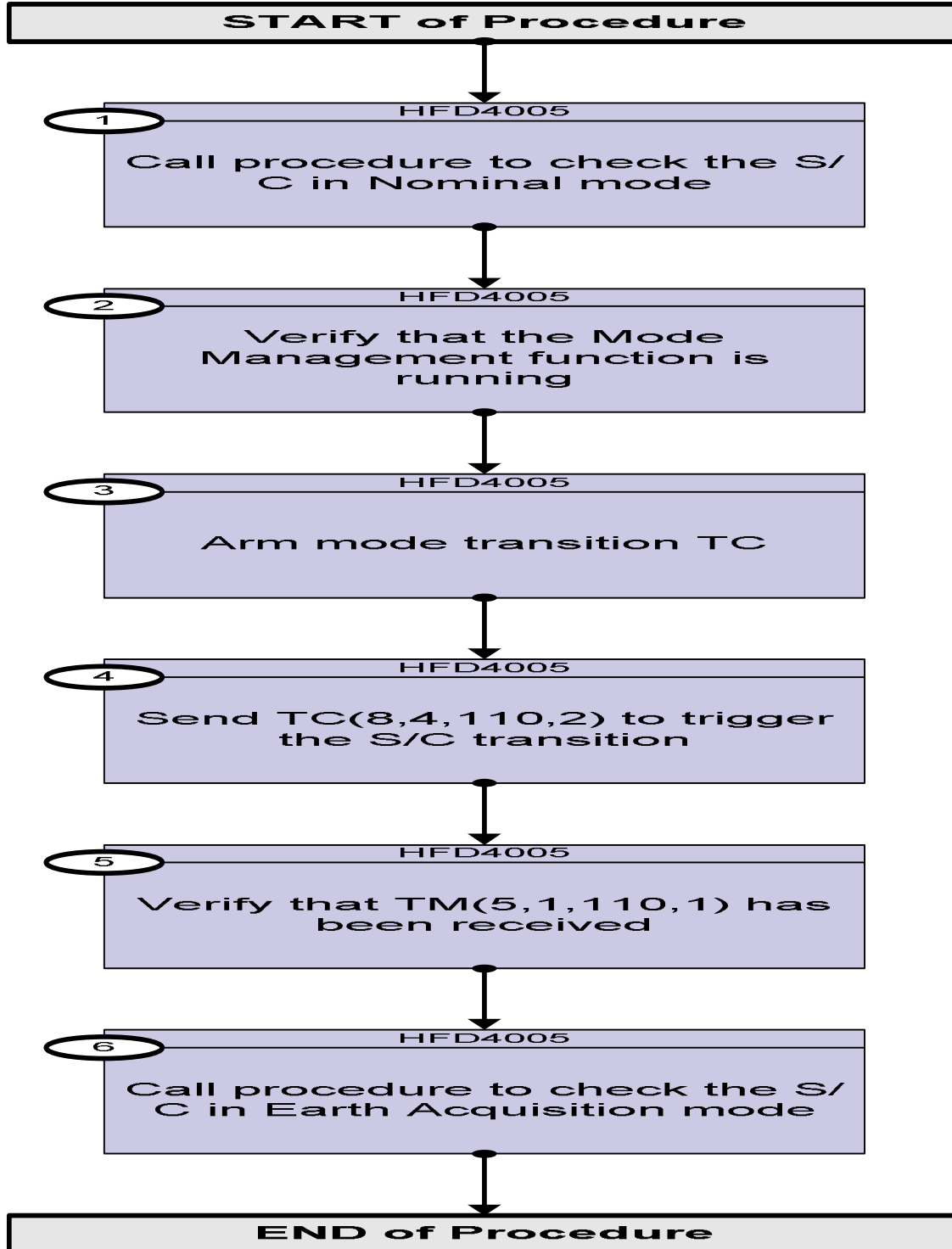
Configuration Control Information

DATE	FOP ISSUE	VERSION	MODIFICATION DESCRIPTION	AUTHOR	SPR REF
17/03/08		1	Created	cmevi-hp	
10/06/08	1	2	TC Flag and Seq Properly changed	S. Manganelli	
01/12/08	2	3	Procedure updated according to latest version received from industry on 24/10/2008	cmevi-hp	
15/04/09	2.3	4	Modified procedure calls to ESOC instantiated procedures Added a comment about AFS at step 2	S. Manganelli	

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Procedure Flowchart Overview

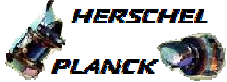


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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch	AIT Comment
Beginning of Procedure					
HFD4005 TC Seq. Name : HFD4005 (S/C from NOM to EAM) TimeTag Type: N Sub Schedule ID: □					
1		Call procedure to check the S/C in Nominal mode H_FCP_DHS_NMCK CDMU checks in Nominal Mode after Sun Acquisition Mode		Next Step: 2	
2		Verify that the Mode Management function is running Verify Telemetry <div style="text-align: center;"> ModeSts DEH21170 = Running </div>		Next Step: 3 AND=ZAZAI999	
Note: next TCs will cause, amongst other, a transition to AFS.					
3		Arm mode transition TC		Next Step: 4	
		Execute Telecommand <div style="text-align: center;">ModeManArmTrans_EaAcq</div> TC Control Flags : <div style="text-align: center;"> GBM IL DSE --Y -- --- </div> Subsch. ID : 10 Det. descr. : Mode Manag. Arm Trans. to Earth Acquisition Mode TC(8,4,110,1)	DC04G170	TC	
4		Send TC(8,4,110,2) to trigger the S/C transition		Next Step: 5	
		Execute Telecommand <div style="text-align: center;">ModeManFireTrans_EaAcq</div> TC Control Flags : <div style="text-align: center;"> GBM IL DSE --Y -- --- </div> Subsch. ID : 10 Det. descr. : Mode Manag. Fire Trans. to Earth Acquisition Mode TC(8,4,110,2)	DC09G170	TC	
5		Verify that TM(5,1,110,1) has been received		Next Step: 6	
WARNING: downlink of TM(5,1) is disable by default, thus the following packet can be acquired only if it previously enabled.					

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch	AIT Comment
		This event will be sent when the new S/C mode has been reached.			
		Verify Packet Reception CdmuAsw Event 5-1 New Mode Reached Packet Mnemonic : D_EvRp_080 APID : 16 Type : 5 Subtype : 1 PI1 : 28161 PI2 : 0			
		DEZSJ170 TM5xEventID	NewModeReached	(None) PKT=D_EvRp_080	
		DE010170 SID	0 <dec>	(None) PKT=D_EvRp_080	
		DE142170 ModeId	EarthAcquistn	(None) PKT=D_EvRp_080	
		DE069170 EventSeqCounter	<input type="checkbox"/>	(None) PKT=D_EvRp_080	
6		Call procedure to check the S/C in Earth Acquisition mode		Next Step: END	
		H_FCP_DHS_EACK CDMU checks in earth acquisition mode			
End of Sequence					
End of Procedure					