

CDMU OBSW data acquisition
 File: H_FCP_DHS_1030.xls
 Author: S. Manganelli



Procedure Summary

Objectives

To acquire the status of CDMU OBSW. Can be used after a mode transition to verify the general status of CDMU tables and some HW registers.

Summary of Constraints

n/a

Spacecraft Configuration

Start of Procedure

Any

End of Procedure

Unchanged except enabling of HKID 67 if not enabled already

Reference File(s)

Input Command Sequences

Output Command Sequences

HFD1030A
 HFD1030B
 HFD1030C
 HFD1030D

Referenced Displays

ANDs	GRDs	SLDs
ZAZ28999		(None)
ZAZ7R999		

Configuration Control Information

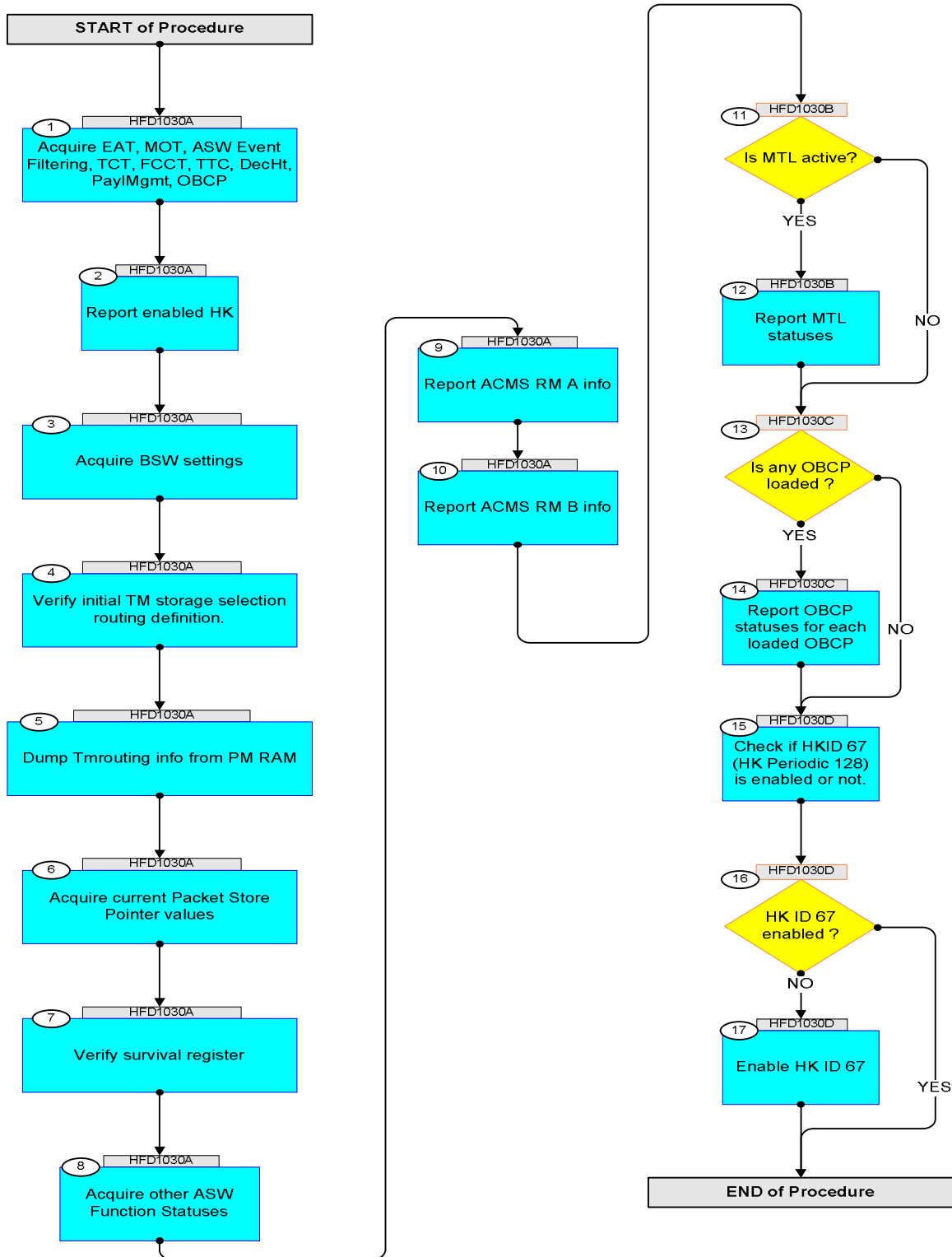
DATE	FOP ISSUE	VERSION	MODIFICATION DESCRIPTION	AUTHOR	SPR REF
28/10/08		1	Created	S. Manganelli	
12/11/08		2	Restructured after first LEOP sim	S. Manganelli	
15/01/09	2	3	Info sheet added, DB checked against OBSW 3_8	S. Manganelli	
18/02/09		4	Restructured, added timed release	S. Manganelli	
24/02/09		5	Substeps added in step 1 to ask for On-board Tables dumps from SGM A	cmevi-hp	
05/03/09	2.1	6	Modified some of the timings	S. Manganelli	
19/03/09		7	Added payload management function report at step 1 Substituted <acquisition of TMrouteinfo by SSMM dumps> with <acquisition of TMrouteinfo by PM RAM dump> Updated table in info sheet	S. Manganelli	
19/03/09		8	Manual dispatch flags removed	S. Manganelli	
23/03/09	2.2	9	Included additional value of survival register (nominal after separation)	S. Manganelli	
04/05/09	2.4	10	Added report of on board OBCPs	S. Manganelli	


Status : Version 10 - Unchanged
 Last Checkin: 04/05/09

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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					
HFD1030A TC Seq. Name :HFD1030A (CDMU OBSW data acq) TimeTag Type: N Sub Schedule ID: <div style="text-align: center;">□</div>					
1		Acquire EAT, MOT, ASW Event Filtering, TCT, FCCT, TTC, DecHt, PaylMgmt, OBCP		Next Step: 2	
		Execute Telecommand <div style="text-align: right;">ReptEvtActTable</div> TC Control Flags : <div style="text-align: right;">GBM IL DSE --Y -- --</div> Subsch. ID : 10 Det. descr. : TEMPLATE Report The contents of the event/action table TC(19,6)	DCT86170	TC	
	ET+= UT+=00.01.30	Execute Telecommand <div style="text-align: right;">ReportMonitList</div> TC Control Flags : <div style="text-align: right;">GBM IL DSE --- -- --</div> Subsch. ID : 10 Det. descr. : TEMPLATE Report current monitoring list, TC(12,8) no appl. data	DC51F170	TC	
	ET+= UT+=00.00.15	Execute Telecommand <div style="text-align: right;">EvFiltDumpStat_Templ</div> TC Control Flags : <div style="text-align: right;">GBM IL DSE --- -- --</div> Subsch. ID : 10 Det. descr. : TEMPLATE Dump Event Filtering Statistics TC(8,4,117,2)	DCT52170	TC	
	ET+= UT+=00.00.05	Execute Telecommand <div style="text-align: right;">ReportFdirManagSts</div> TC Control Flags : <div style="text-align: right;">GBM IL DSE --- -- --</div> Subsch. ID : 10 Det. descr. : Report Fdir Management Status, TC(8,5,116)	DCN02170	TC	
	ET+= UT+=00.00.30	Execute Telecommand <div style="text-align: right;">ReportThCtrlManagSts</div> TC Control Flags : <div style="text-align: right;">GBM IL DSE --- -- --</div> Subsch. ID : 10 Det. descr. : Report Thermal Control Management Status, TC(8,5,114)	DCN11170	TC	
	ET+= UT+=00.00.45	Execute Telecommand <div style="text-align: right;">TtcReportStatus</div> TC Control Flags : <div style="text-align: right;">GBM IL DSE --- -- --</div> Subsch. ID : 10 Det. descr. : TTC: Report TTC Management Status TC(8,5,115)	DC30F170	TC	

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch	AIT Comment									
	ET= UT=+00.00.30	Execute Telecommand <div style="text-align: right;">ReportDecontHeatSts</div> TC Control Flags : <div style="text-align: right;">GBM IL DSE --- -- ---</div> Subsch. ID : 10 Det. descr. : Report Decontamination Heating Status TC(8,5,113)	DC15M170	TC										
	ET= UT=+00.00.30	Execute Telecommand <div style="text-align: right;">ReportPayloadManagSts</div> Subsch. ID : 10 Det. descr. : Report Payload Management Status TC(8,5,111)	DC12M170	TC										
	ET= UT=+00.00.30	Execute Telecommand <div style="text-align: right;">ReptOnBoardObcps</div> TC Control Flags : <div style="text-align: right;">GBM IL DSE --Y -- ---</div> Subsch. ID : 10 Det. descr. : TEMPLATE Report list of on-board OBCPs TC(18,8)	DCT76170	TC										
1.1		Dump EAT TC Pool from SGM A												
	ET= UT=+00.00.05	Execute Telecommand <div style="text-align: right;">DumpMem_AbsAddr</div> Command Parameter(s) : <table style="margin-left: 20px; border: none;"> <tr> <td style="padding-right: 20px;">Memory_ID</td> <td>DH003180</td> <td>00B8 <hex></td> </tr> <tr> <td>Start_Address</td> <td>DH004180</td> <td>6358 <hex></td> </tr> <tr> <td>N</td> <td>DH105180</td> <td>FFFC <hex></td> </tr> </table> Subsch. ID : 10 Det. descr. : Dump Memory Using Absolute Addresses	Memory_ID	DH003180	00B8 <hex>	Start_Address	DH004180	6358 <hex>	N	DH105180	FFFC <hex>	DC602180	TC	
Memory_ID	DH003180	00B8 <hex>												
Start_Address	DH004180	6358 <hex>												
N	DH105180	FFFC <hex>												
	ET= UT=+00.00.20	Execute Telecommand <div style="text-align: right;">DumpMem_AbsAddr</div> Command Parameter(s) : <table style="margin-left: 20px; border: none;"> <tr> <td style="padding-right: 20px;">Memory_ID</td> <td>DH003180</td> <td>00B9 <hex></td> </tr> <tr> <td>Start_Address</td> <td>DH004180</td> <td>6354 <hex></td> </tr> <tr> <td>N</td> <td>DH105180</td> <td>9CC <hex></td> </tr> </table> Subsch. ID : 10 Det. descr. : Dump Memory Using Absolute Addresses	Memory_ID	DH003180	00B9 <hex>	Start_Address	DH004180	6354 <hex>	N	DH105180	9CC <hex>	DC602180	TC	
Memory_ID	DH003180	00B9 <hex>												
Start_Address	DH004180	6354 <hex>												
N	DH105180	9CC <hex>												
1.2		Dump EAT entries from SGM A												
	ET= UT=+00.00.20	Execute Telecommand <div style="text-align: right;">DumpMem_AbsAddr</div> Command Parameter(s) : <table style="margin-left: 20px; border: none;"> <tr> <td style="padding-right: 20px;">Memory_ID</td> <td>DH003180</td> <td>00B9 <hex></td> </tr> <tr> <td>Start_Address</td> <td>DH004180</td> <td>6D20 <hex></td> </tr> <tr> <td>N</td> <td>DH105180</td> <td>7D08 <hex></td> </tr> </table> Subsch. ID : 10 Det. descr. : Dump Memory Using Absolute Addresses	Memory_ID	DH003180	00B9 <hex>	Start_Address	DH004180	6D20 <hex>	N	DH105180	7D08 <hex>	DC602180	TC	
Memory_ID	DH003180	00B9 <hex>												
Start_Address	DH004180	6D20 <hex>												
N	DH105180	7D08 <hex>												

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch	AIT Comment
1.3		Dump MOT from SGM A			
	ET=+ UT=+00.00.20	Execute Telecommand <div style="text-align: right; margin-right: 20px;">DumpMem_AbsAddr</div> DC602180 Command Parameter(s) : <div style="margin-left: 40px;"> Memory_ID DH003180 Start_Address DH004180 N DH105180 </div> 00B9 <hex> EA28 <hex> 5DC0 <hex> Subsch. ID : 10 Det. descr. : Dump Memory Using Absolute Addresses	DC602180	TC	
1.4		Dump TCT from SGM A			
	ET=+ UT=+00.00.20	Execute Telecommand <div style="text-align: right; margin-right: 20px;">DumpMem_AbsAddr</div> DC602180 Command Parameter(s) : <div style="margin-left: 40px;"> Memory_ID DH003180 Start_Address DH004180 N DH105180 </div> 00BA <hex> 47E8 <hex> 21E8 <hex> Subsch. ID : 10 Det. descr. : Dump Memory Using Absolute Addresses	DC602180	TC	
1.5		Dump FCCT from SGM A			
	ET=+ UT=+00.00.20	Execute Telecommand <div style="text-align: right; margin-right: 20px;">DumpMem_AbsAddr</div> DC602180 Command Parameter(s) : <div style="margin-left: 40px;"> Memory_ID DH003180 Start_Address DH004180 N DH105180 </div> 00BA <hex> 69D0 <hex> 8C4 <hex> Subsch. ID : 10 Det. descr. : Dump Memory Using Absolute Addresses	DC602180	TC	
1.6		Dump DCT from SGM A			
	ET=+ UT=+00.00.20	Execute Telecommand <div style="text-align: right; margin-right: 20px;">DumpMem_AbsAddr</div> DC602180 Command Parameter(s) : <div style="margin-left: 40px;"> Memory_ID DH003180 Start_Address DH004180 N DH105180 </div> 00BA <hex> 7294 <hex> 94 <hex> Subsch. ID : 10 Det. descr. : Dump Memory Using Absolute Addresses	DC602180	TC	
2		Report enabled HK		Next Step: 3	

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch	AIT Comment
	ET=+ UT=+00.00.15	Execute Telecommand <div style="text-align: right;">ReportEnabledTm</div> Subsch. ID : 10 Det. descr. : Report Enabled Telemetry Packets	DC904180	TC	
3		Acquire BSW settings		Next Step: 4	
	ET=+ UT=+00.00.45	Execute Telecommand <div style="text-align: right;">ReportPktStrAlloc</div> TC Control Flags : <div style="text-align: right;">GBM IL DSE ----</div> Subsch. ID : 10 Det. descr. : Report Packet Store Allocation	DC809160	TC	
	ET=+ UT=+00.00.05	Execute Telecommand <div style="text-align: right;">RepDownlinkTMStorage</div> TC Control Flags : <div style="text-align: right;">GBM IL DSE ----</div> Subsch. ID : 10 Det. descr. : Report Telemetry Packets Down-linking/ Storage Status	DC141160	TC	
	ET=+ UT=+00.00.05	Execute Telecommand <div style="text-align: right;">ReportEnabledTm</div> TC Control Flags : <div style="text-align: right;">GBM IL DSE ----</div> Subsch. ID : 10 Det. descr. : Report Enabled Telemetry Packets	DC904180	TC	
	ET=+ UT=+00.00.05	Execute Telecommand <div style="text-align: right;">ReportTcRoutingFilter</div> TC Control Flags : <div style="text-align: right;">GBM IL DSE ----</div> Subsch. ID : 10 Det. descr. : Report TC Routing Filter	DC807180	TC	
4		Verify initial TM storage selection routing definition.		Next Step: 5	
	ET=+ UT=+00.00.05	Execute Telecommand <div style="text-align: right;">ReportStorageSelDef</div> Command Parameter(s) : <div style="text-align: right;">Store_Id DH003160 0 <dec></div> TC Control Flags : <div style="text-align: right;">GBM IL DSE ----</div> Subsch. ID : 10 Det. descr. : Report Storage Selection Definition	DC160160	TC	

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	ET=+ UT=+00.00.05	Execute Telecommand ReportStorageSelDef Command Parameter(s) : Store_Id DH003160 TC Control Flags : GBM IL DSE ---- Subsch. ID : 10 Det. descr. : Report Storage Selection Definition	DC160160 1 <dec>	TC	
	ET=+ UT=+00.00.05	Execute Telecommand ReportStorageSelDef Command Parameter(s) : Store_Id DH003160 TC Control Flags : GBM IL DSE ---- Subsch. ID : 10 Det. descr. : Report Storage Selection Definition	DC160160 2 <dec>	TC	
	ET=+ UT=+00.00.05	Execute Telecommand ReportStorageSelDef Command Parameter(s) : Store_Id DH003160 TC Control Flags : GBM IL DSE ---- Subsch. ID : 10 Det. descr. : Report Storage Selection Definition	DC160160 3 <dec>	TC	
	ET=+ UT=+00.00.05	Execute Telecommand ReportStorageSelDef Command Parameter(s) : Store_Id DH003160 TC Control Flags : GBM IL DSE ---- Subsch. ID : 10 Det. descr. : Report Storage Selection Definition	DC160160 128 <dec>	TC	
	ET=+ UT=+00.00.05	Execute Telecommand ReportStorageSelDef Command Parameter(s) : Store_Id DH003160 TC Control Flags : GBM IL DSE ---- Subsch. ID : 10 Det. descr. : Report Storage Selection Definition	DC160160 129 <dec>	TC	
	ET=+ UT=+00.00.05	Execute Telecommand ReportStorageSelDef Command Parameter(s) : Store_Id DH003160 TC Control Flags : GBM IL DSE ---- Subsch. ID : 10 Det. descr. : Report Storage Selection Definition	DC160160 130 <dec>	TC	

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch	AIT Comment
	ET+= UT+=00.00.05	Execute Telecommand ReportStorageSelDef Command Parameter(s) : Store_Id DH003160 TC Control Flags : GBM IL DSE --- -- Subsch. ID : 10 Det. descr. : Report Storage Selection Definition	DC160160 131 <dec>	TC	
5		Dump Tmrouting info from PM RAM		Next Step: 6	
	ET+= UT+=00.00.10	Execute Telecommand DumpMem_AbsAddr Command Parameter(s) : Memory_ID DH003180 Start_Address DH004180 N DH105180 Subsch. ID : 10 Det. descr. : Dump Memory Using Absolute Addresses	DC602180 228 <hex> 80A8 <hex> 2000 <hex>	TC	
6		Acquire current Packet Store Pointer values		Next Step: 7	
6.1		Send TC (15,12) to report catalogues for selected packet store			
		When this request is received by the CDMS, the catalogues for the specified Packet Stores are reported with TM(15,13).			
	ET+= UT+=00.00.15	Execute Telecommand ReportCatSelPktStore Command Parameter(s) : Store_Id DH003160 TC Control Flags : GBM IL DSE --- -- Subsch. ID : 10 Det. descr. : Report Catalogues for Selected Packet Store	DC169160 0 <dec>	TC	
	ET+= UT+=00.00.15	Execute Telecommand ReportCatSelPktStore Command Parameter(s) : Store_Id DH003160 TC Control Flags : GBM IL DSE --- -- Subsch. ID : 10 Det. descr. : Report Catalogues for Selected Packet Store	DC169160 1 <dec>	TC	

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch	AIT Comment
	ET=+ UT=+00.00.15	Execute Telecommand ReportCatSelPktStore Command Parameter(s) : Store_Id DH003160 TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 10 Det. descr. : Report Catalogues for Selected Packet Store	DC169160 2 <dec>	TC	
	ET=+ UT=+00.00.15	Execute Telecommand ReportCatSelPktStore Command Parameter(s) : Store_Id DH003160 TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 10 Det. descr. : Report Catalogues for Selected Packet Store	DC169160 3 <dec>	TC	
	ET=+ UT=+00.00.05	Execute Telecommand ReportCatSelPktStore Command Parameter(s) : Store_Id DH003160 TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 10 Det. descr. : Report Catalogues for Selected Packet Store	DC169160 127 <dec>	TC	
	ET=+ UT=+00.00.15	Execute Telecommand ReportCatSelPktStore Command Parameter(s) : Store_Id DH003160 TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 10 Det. descr. : Report Catalogues for Selected Packet Store	DC169160 128 <dec>	TC	
	ET=+ UT=+00.00.15	Execute Telecommand ReportCatSelPktStore Command Parameter(s) : Store_Id DH003160 TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 10 Det. descr. : Report Catalogues for Selected Packet Store	DC169160 129 <dec>	TC	

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch	AIT Comment
	ET=+ UT=+00.00.15	Execute Telecommand ReportCatSelPktStore Command Parameter(s) : Store_Id DH003160 TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 10 Det. descr. : Report Catalogues for Selected Packet Store	DC169160 130 <dec>	TC	
	ET=+ UT=+00.00.15	Execute Telecommand ReportCatSelPktStore Command Parameter(s) : Store_Id DH003160 TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 10 Det. descr. : Report Catalogues for Selected Packet Store	DC169160 131 <dec>	TC	
	ET=+ UT=+00.00.15	Execute Telecommand ReportCatSelPktStore Command Parameter(s) : Store_Id DH003160 TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 10 Det. descr. : Report Catalogues for Selected Packet Store	DC169160 255 <dec>	TC	
7		Verify survival register		Next Step: 8	
7.1		Activate TTR function			
	ET=+ UT=+00.00.05	Execute Telecommand StartTtrManag TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 10 Det. descr. : Start Ttr Management TC(8,1,109)	DCN06170	TC	
		Verify Telemetry TtrSts DELL17170	= Running	AND=ZAZ28999	
7.2		Acquire survival register and alarm status info RM A			

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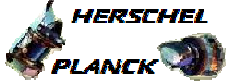

Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch	AIT Comment
	ET=+ UT=+00.00.30	Execute Telecommand ReadSurvContxt Command Parameter(s) : RmId DH093170 TC Control Flags : GBM IL DSE ---- - - - - Subsch. ID : 10 Det. descr. : TEMPLATE Read Survival Context TC(8,4,109,6)	DCT60170 RM_A (Def)	TC	
		Verify Telemetry RmId DE283170	= RM_A	AND=ZAZ7R999	
		Verify Telemetry SurvBits1 DE343170	= 000202F7 <hex>	(None)	
		Above here: nominal value before separation			
		Verify Telemetry SurvBits1 DE343170	= 000303F7 <hex>	(None)	
		Above here: nominal value after separation			
		Verify Telemetry SurvBits2 DE344170	= 00F70101 <hex>	(None)	
	ET=+ UT=+00.00.15	Execute Telecommand ReadAlarmSts Command Parameter(s) : RmId DH093170 TC Control Flags : GBM IL DSE ---- - - - - Subsch. ID : 10 Det. descr. : TEMPLATE Read Alarm Status TC(8,4,109,8)	DCT62170 RM_A (Def)	TC	
7.3		Acquire survival register and alarm status info RM B			
	ET=+ UT=+00.00.15	Execute Telecommand ReadSurvContxt Command Parameter(s) : RmId DH093170 TC Control Flags : GBM IL DSE ---- - - - - Subsch. ID : 10 Det. descr. : TEMPLATE Read Survival Context TC(8,4,109,6)	DCT60170 RM_B	TC	
		Verify Telemetry RmId DE283170	= RM_B	AND=ZAZ7R999	
		Verify Telemetry SurvBits1 DE343170	= 000202F7 <hex>	(None)	
		Verify Telemetry SurvBits2 DE344170	= 00F70101 <hex>	(None)	

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch	AIT Comment
	ET=+ UT=+00.00.15	Execute Telecommand ReadAlarmSts Command Parameter(s) : RmId DH093170 TC Control Flags : GBM IL DSE ---- -- -- Subsch. ID : 10 Det. descr. : TEMPLATE Read Alarm Status TC(8,4,109,8)	DCT62170	TC	
7.4		Dectivate TTR function			
	ET=+ UT=+00.00.15	Execute Telecommand StopTtrManag TC Control Flags : GBM IL DSE ---- -- -- Subsch. ID : 10 Det. descr. : Stop Ttr Management TC(8,2,109)	DCN07170	TC	
		Verify Telemetry TtrSts DEL17170	= Stopped	AND=ZAZ28999	
8		Acquire other ASW Function Statuses		Next Step: 9	
	ET=+ UT=+00.00.05	Execute Telecommand ReportMonStatus TC Control Flags : GBM IL DSE ---- -- -- Subsch. ID : 10 Det. descr. : Report On Board Monitoring Status, TC(8,5,106)	DC55F170	TC	
	ET=+ UT=+00.00.05	Execute Telecommand Report_PCDU_Man_Status TC Control Flags : GBM IL DSE ---- -- -- Subsch. ID : 10 Det. descr. : Report PCDU Management Status TC(8,5,112)	DC05A170	TC	
	ET=+ UT=+00.00.05	Execute Telecommand RptModeManagSts Command Parameter(s) : Function_ID DH010170 TC Control Flags : GBM IL DSE ---- -- -- Subsch. ID : 10 Det. descr. : Report Mode Management Status TC(8,5,110)	DC00G170	TC	Mode_Manag (Def)

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch	AIT Comment
	ET=+ UT=+00.00.05	Execute Telecommand RptEvtAcManagSts Command Parameter(s) : Function_ID DH010170 SPARE_8_BIT GPS08000 TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 10 Det. descr. : Report event/action management status TC(8,5,108)	DCT92170	TC	
	ET=+ UT=+00.00.05	Execute Telecommand ReportEvtFiltManagSts TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 10 Det. descr. : Report Event Filtering Management Status, TC(8,5,117)	DCN12170	TC	
	ET=+ UT=+00.00.05	Execute Telecommand ReportTtrManagSts TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 10 Det. descr. : Report Ttr Management Status, TC(8,5,109)	DCN08170	TC	
	ET=+ UT=+00.00.05	Execute Telecommand ReportObcpManagSts TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 10 Det. descr. : Report Obcp Management Status, TC(8,5,107)	DCN05170	TC	
	ET=+ UT=+00.00.05	Execute Telecommand RptOBoardSchedSts TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 10 Det. descr. : Report on-noard scheduling status TC(8,5,105)	DC92F170	TC	
9		Report ACMS RM A info		Next Step: 10	
	ET=+ UT=+00.00.05	Execute Telecommand Get RM-A status Command Parameter(s) : RMStat DF86Cmd AH841001 Enable 86 RMStat DD86Cmd AH842001 Enable 86 TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 20 Det. descr. : TC(8,1) - Get RM-A status	ACZZ4109	TC	

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch	AIT Comment
10		Report ACMS RM B info		Next Step: 11	
	ET=+ UT=+00.00.15	Execute Telecommand Get RM-B status Command Parameter(s) : RMStat DF86Cmd AH841001 RMStat DD86Cmd AH842001 TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 20 Det. descr. : TC(8,1) - Get RM-B status	ACZZ5109	TC	
End of Sequence					
HFD1030B TC Seq. Name :HFD1030B (MTL status checks) TimeTag Type: N Sub Schedule ID: □					
11		Is MTL active? type: [If]		Next Step: YES 12 NO 13	
12		Report MTL statuses		Next Step: 13	
		Execute Telecommand RetStatusOfCmdSchedule TC Control Flags : GBM IL DSE --Y -- --- Subsch. ID : 10 Det. descr. : TEMPLATE ReportStatusOfCmdSchedule, TC(11,18), no appl. data	DCT25170	TC	
		Execute Telecommand ReptSummaryMtl Command Parameter(s) : N_Repetition DH041170 TC Control Flags : GBM IL DSE --Y -- --- Subsch. ID : 10 Det. descr. : ReportWhole MTL TcSchedule in summary form, TC(11,12)	DC86F170	TC	
End of Sequence					
HFD1030C TC Seq. Name :HFD1030C (OBCP status checks) TimeTag Type: Sub Schedule ID: □					

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch	AIT Comment
13		Is any OBCP loaded ? type: [If]		Next Step: YES 14 NO 15	
14		Report OBCP statuses for each loaded OBCP		Next Step: 15	
		The following command WILL NOT BE EXPORTED : it must be instantiated depending on the OBCP ID present on board.			
		Execute Telecommand <div style="text-align: right; margin-left: 200px;">ReptObcpStatus</div> <i>Command Parameter(s) :</i> <div style="margin-left: 100px;">ObcpId DH135170</div> <i>TC Control Flags :</i> <div style="margin-left: 150px;">GBM IL DSE</div> <div style="margin-left: 150px;">--Y -- ---</div> <i>Subsch. ID : 10</i> <i>Det. descr. : TEMPLATE Report OBCP Status and Parameters TC(18,12)</i> This Telecommand will not be included in the export	DCT78170	TC	
End of Sequence TC Seq. Name :HFD1030D (CDMU BSW EV counters) HFD1030D <i>TimeTag Type: N</i> <i>Sub Schedule ID:</i> <input type="checkbox"/>					
15		Check if HKID 67 (HK Periodic 128) is enabled or not.		Next Step: 16	
		In step 2 a report to downlink the list of currently enabled HKIDs was asked. Check if HKID 67 is enabled. If not enabled, further check that there are max 15 hk packets active, so HKID 67 can be now activated as well. If 16 packets are already active, deactivate one before continuing.			
16		HK ID 67 enabled ? type: [If]		Next Step: NO 17 YES END	
17		Enable HK ID 67		Next Step: END	

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch	AIT Comment
		Execute Telecommand <div style="text-align: right;">EnableTmGen</div>	DC900180	TC	
		Command Parameter(s) : <div style="text-align: right;">N DH017180</div> <div style="text-align: right;">Sub-Type DH019180</div> <div style="text-align: right;">Packet-ID DH020180</div>	1 <dec> (Def) HK Report 67 <dec>		
		TC Control Flags : <div style="text-align: right;">GBM IL DSE</div> <div style="text-align: right;">--Y -- ---</div>			
		Subsch. ID : 10 Det. descr. : Enable Generation of Telemetry Packets			
End of Sequence					
End of Procedure					

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INFO

HERSCHEL - CDMS HK PACKETS											
Packet Type	HK Identifier	SID	Packet Name	Number of DIDs	Timing (µs)	Size (bits)	Header + SID + CRC (bits)	Total size (bits)	Period (s)	bps	bps including the correction factor in the frame (1115/1099)
Essential	HK ID = 0	0x0000	High Rate	241	4091	4416	160	4576	4	1144	1160
	HK ID = 8	0x1000	Low Rate	244	2954	4160	160	4320	64	67	67
Periodic	HK ID = 64	0x2000	P1	118	1245	2160	160	2320	1	2320	2353
	HK ID = 65	0x2186	P4	83	1123	1024	160	1184	4	296	300
	HK ID = 66	0x230C	P64	45	743	848	160	1008	64	15	15
	HK ID = 67	0x2492	P128	182	1991	2896	160	3056	128	23	23
	HK ID = 68	0x2618	CCU A Monit #1	118	1413	1872	160	2032	512	3	3
	HK ID = 71	0x2AAA	CCU B Monit #1	118	1413	1872	160	2032	512	3	3
Diagnostic	HK ID = 96	0x5000	BSW 1	22	242	528	160	688	8	86	87
	HK ID = 97	0x5186	BSW 2	9	99	432	160	592	8	74	75
	HK ID = 98	0x530C	BSW 3	26	286	512	160	672	8	84	85
	HK ID = 105	0x5D86	BSW 4	37	1650	4416	160	4576	256	17	17
	HK ID = 99	0x5492	ASW 1	54	486	1728	160	1888	64	29	29
	HK ID = 106	0x5F3C	ASW 2	20	180	400	160	560	8	70	71
	HK ID = 100	0x5618	TCS	159	3342	2344	160	2704	64	42	42
	HK ID = 101	0x579E	CCU A D LCM	61	729	960	160	1120	1	1120	1136
	HK ID = 102	0x5924	CCU A Monit #2	118	1413	1872	160	2032	8	254	257
	HK ID = 103	0x5AAA	CCU B D LCM	61	729	960	160	1120	1	1120	1136
	HK ID = 104	0x5C30	CCU B Monit #2	118	1413	1872	160	2032	8	254	257

Table 25: Herschel - CDMS HK packets summary

OBCP description (H)	Hex ID	Dec ID
DB OBCP H MODE PL SC	1	1
DB OBCP H SPIRE DRCU OFF	1102	4354
DB OBCP H SPIRE OFF.txt	1103	4355
DB OBCP H SPIRE OFF CTRL	1104	4356
DB OBCP H SPIRE STANDBY	1105	4357
DB OBCP H SPIRE OPE STOP	1106	4358
DB OBCP H SPIRE OPE RESUME	1107	4359
DB OBCP H PACS SAFE	1208	4616
DB OBCP H PACS POWER CYCLE	120A	4618
DB OBCP H PACS IMMEDIATE OFF	120B	4619
DB OBCP H PACS NORMAL OFF	120C	4620
DB OBCP H HIFI RESET	130D	4877
DB OBCP H HIFI STANDBY	130E	4878
PACS normal off	9000	36864
PACS switch on CCS	900F	36879
DB_OBCP_H_DUMMY	9999	39321