

Unit in Use table maintenance
 File: H_CRP_DHS_3017.xls
 Author: S. Manganelli



Procedure Summary

Objectives

This procedure describes the steps needed to modify the Unit in Use table, that is to perform the following actions:

- mark a unit as Nominal/Redundant;
- Mark a unit as Failed/Not failed;
- Mar a unit ON/OFF.

Summary of Constraints

Unit in Use table is managed through ASW TCs with function ID equal to 116, thus the status of the ASW function "FDIR 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

HRD3017B
 HRD3017C
 HRD3017D
 HRD3017E
 HRD3017F

Referenced Displays

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

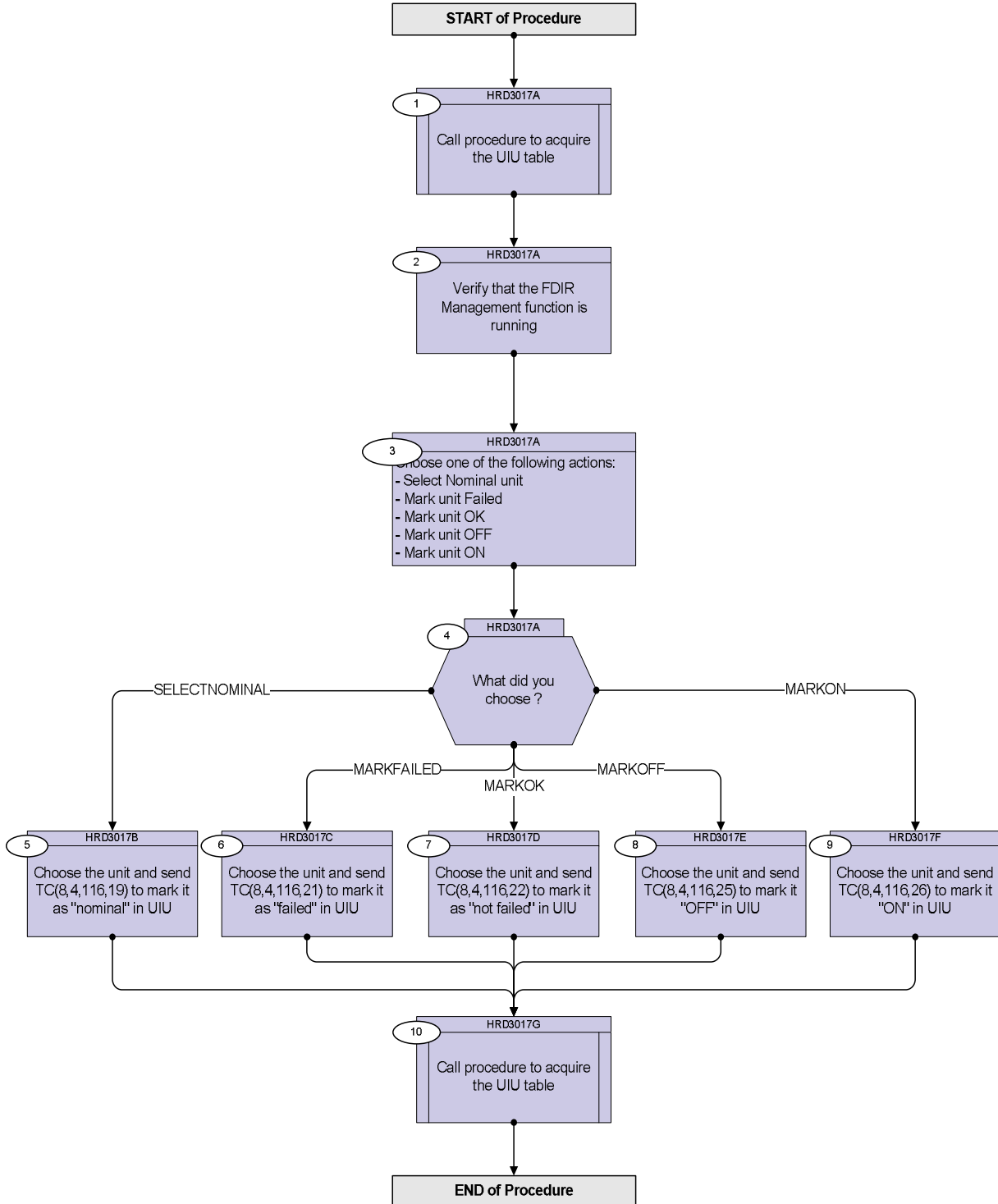
Configuration Control Information

DATE	FOP ISSUE	VERSION	MODIFICATION DESCRIPTION	AUTHOR	SPR REF
25/01/08	1	1	Created	cmevi-hp	
08/12/08	2	2	DB check against OBSW 3_6_2	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 :HRD3017A (Acquire UIU table) TimeTag Type: Sub Schedule ID: <input type="checkbox"/>				
1		Call procedure to acquire the UIU table		Next Step: 2
		Execute H_FCP_DHS_3013.		
2		Verify that the FDIR Management function is running		Next Step: 3
		Verify Telemetry <div style="display: flex; justify-content: space-around;"> FdirSts DEG23170 = Running </div>		AND=ZAZAI999
3		Choose one of the following actions: - Select Nominal unit - Mark unit Failed - Mark unit OK - Mark unit OFF - Mark unit ON		Next Step: 4
4		What did you choose ?		Next Step: SELECTNOMINAL 5 MARKFAILED 6 MARKOK 7 MARKOFF 8 MARKON 9
TC Seq. Name :HRD3017B (Select nominal) TimeTag Type: N Sub Schedule ID: <input type="checkbox"/>				
5		Choose the unit and send TC(8,4,116,19) to mark it as "nominal" in UIU		Next Step: 10
		Select Nominal Unit telecommand is used for choosing the unit A (1) or unit B (2) of a redundant unit pair to be considered as the nominal unit. After the execution of this TC the other unit of the commanded unit pair is considered the redundant unit.		

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		Execute Telecommand <p style="text-align: right;">FdirSelNomUnit_Templ</p> Command Parameter(s) : <p style="text-align: right;">FdirUnitAorB DH064170</p> TC Control Flags : <p style="text-align: right;"> GBM IL DSE --Y -- YYY</p> Subsch. ID : 10 Det. descr. : TEMPLATE Fdir Select Nominal Unit TC(8,4,116,19)	DCT31170 NOMUNIT	
TC Seq. Name :HRD3017C (Mark failed) TimeTag Type: N Sub Schedule ID: <input type="checkbox"/>				
6		Choose the unit and send TC(8,4,116,21) to mark it as "failed" in UIU		Next Step: 10
		Mark Unit Failed telecommand is used for modifying the health status of a unit as failed. No logical commands shall be delivered to unit that has been marked failed. If a nominal unit that is in use is marked failed, the redundant unit is taken into use automatically.		
		Execute Telecommand <p style="text-align: right;">FdirMarkUnitFail_Templ</p> Command Parameter(s) : <p style="text-align: right;">FdirUnitAorB DH064170</p> TC Control Flags : <p style="text-align: right;"> GBM IL DSE --Y -- YYY</p> Subsch. ID : 10 Det. descr. : TEMPLATE Fdir Mark Unit Failed TC(8,4,116,21)	DCT34170 FAILUNIT	
TC Seq. Name :HRD3017D (Mark OK) TimeTag Type: N Sub Schedule ID: <input type="checkbox"/>				
7		Choose the unit and send TC(8,4,116,22) to mark it as "not failed" in UIU		Next Step: 10

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		Mark Unit OK telecommand is used for modifying the health status of a unit as OK. The unit shall not be switched ON by this command, but it allows other the unit commanding by other telecommands or software functions.		
		Execute Telecommand <p style="text-align: right;">FdirMarkUnitOk_Templ</p> Command Parameter(s) : <p style="text-align: right;">FdirUnitAorB DH064170</p> TC Control Flags : <p style="text-align: right;">GBM IL DSE --Y -- YYY</p> Subsch. ID : 10 Det. descr. : TEMPLATE Fdir Mark Unit OK TC(8,4,116,22)	DCT35170 OKUNIT	
TC Seq. Name :HRD3017E (Mark OFF)				
TimeTag Type: N Sub Schedule ID: <input type="checkbox"/>				
8		Choose the unit and send TC(8,4,116,25) to mark it "OFF" in UIU		Next Step: 10
		Mark Unit OFF telecommand is used for modifying the ON/OFF status of a unit as switched OFF. Note that this TC does not command the HW at all, it only modifies the unit's status ASW's internal unit-in-use table		
		Execute Telecommand <p style="text-align: right;">H_FdirMarkUnitOff_Templ</p> Command Parameter(s) : <p style="text-align: right;">H_ConfStsUnitId DHZ00170</p> TC Control Flags : <p style="text-align: right;">GBM IL DSE --Y -- YYY</p> Subsch. ID : 10 Det. descr. : TEMPLATE FDIR: Mark Unit OFF, TC(8,4,116,25), Herschel Version	DC91H159 OFFUNIT	
TC Seq. Name :HRD3017F (Mark ON)				
TimeTag Type: N Sub Schedule ID: <input type="checkbox"/>				

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
9		Choose the unit and send TC(8,4,116,26) to mark it "ON" in UIU		Next Step: 10
		Mark Unit ON telecommand is used for modifying the ON/OFF status of a unit as switched ON. Note that this TC does not command the HW at all, it only modifies the unit's status ASW's internal unit-in-use table.		
		Execute Telecommand <p style="text-align: right;">H_FdirMarkUnitOn_Templ</p> Command Parameter(s) : <p style="text-align: right;">H_ConfStsUnitId DHZ00170</p> TC Control Flags : <p style="text-align: right;">GBM IL DSE --Y -- YY</p> Subsch. ID : 10 Det. descr. : TEMPLATE FDIR: Mark Unit On, TC(8,4,116,26), Herschel Version	DC93H159 ONUNIT	
TC Seq. Name :HRD3017G (Acquire UIU table)				
TimeTag Type: Sub Schedule ID: <input type="checkbox"/>				
10		Call procedure to acquire the UIU table		Next Step: END
		Execute procedure H_FCP_DHS_3013.		
End of Procedure				