

Start or stop the whole FDIR function
File: H_CRP_DHS_3004.xls
Author: S. Manganelli



Procedure Summary

Objectives

The ASW function "FDIR Management" is responsible of FDIR, mostly based on the On-Board Monitoring and Event-Action services.

FDIR management implements Cross-correlated checks (hard-coded functions) for more complicated checks, where a monitoring of a single parameter is not sufficient.

This procedure describes the steps needed to switch ON or OFF the function.

Summary of Constraints

Default status of the function: "Started".

When the function is stopped, it does not accept any other telecommands than the:

- Start Function TC(8,1,116);
- Report Function Status TC(8,5,116).

Spacecraft Configuration

Start of Procedure

CDMU in default configuration, that is:

- PM A or B ON (nominally A)
- TM Encoder/OBT A or B active (nominally A)
- RM A and B enabled
- MM A and B ON

End of Procedure

CDMU in default configuration, that is:

- PM A or B ON (nominally A)
- TM Encoder/OBT A or B active (nominally A)
- RM A and B enabled
- MM A and B ON

Reference File(s)

Input Command Sequences

Output Command Sequences

HRD3004A
HRD3004B

Referenced Displays

ANDs	GRDs	SLDs
ZAIAI999		

Configuration Control Information

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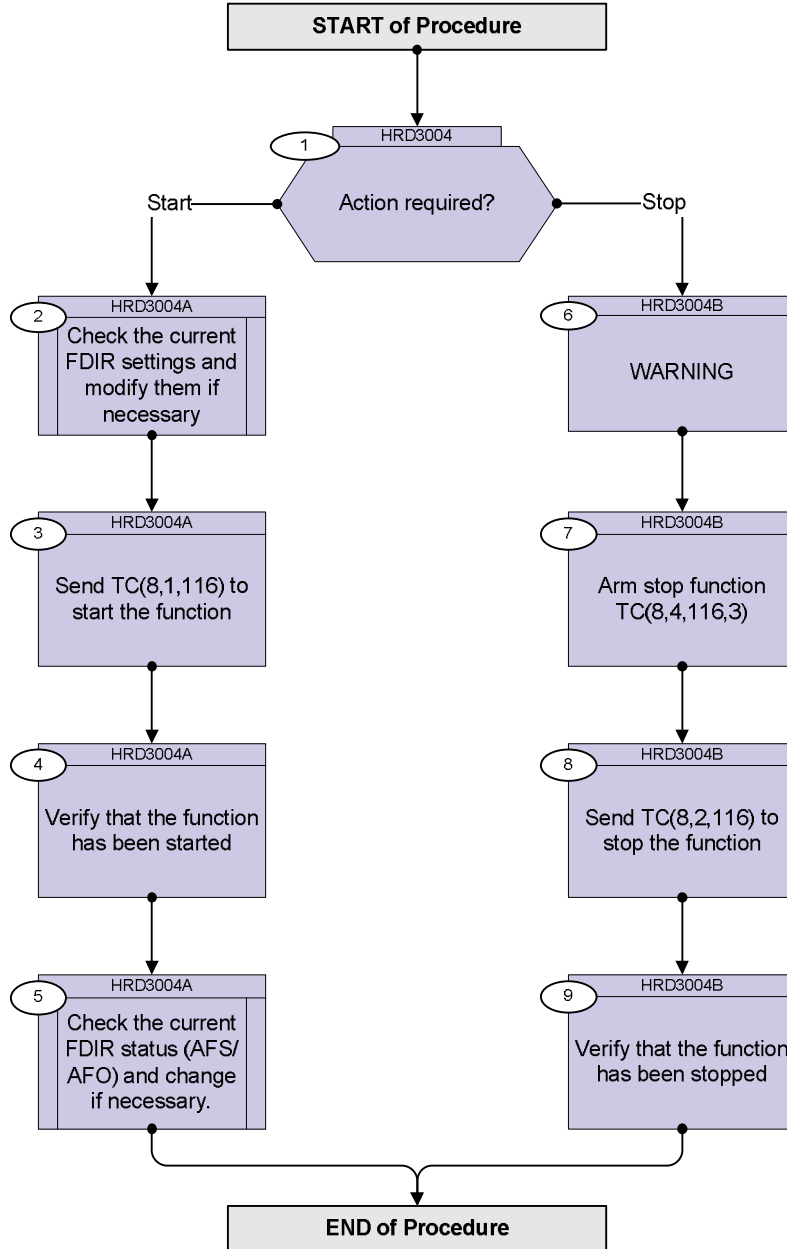


DATE	FOP ISSUE	VERSION	MODIFICATION DESCRIPTION	AUTHOR	SPR REF
24/01/08	1	1	Created	cmevi-hp	
02/12/08	2	2	Checked against DB OBSW 3_6_2	S. Manganelli	

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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 :HRD3004 (Dummy sequence) TimeTag Type: Sub Schedule ID: <input type="checkbox"/>				
1		Action required?		Next Step: Start 2 Stop 6
1.1		Start		<input type="checkbox"/>
		Verify Telemetry FdirSts DEG23170	= Stopped	AND=ZAZAI999
1.2		Stop		<input type="checkbox"/>
		Verify Telemetry FdirSts DEG23170	= Running	AND=ZAZAI999
TC Seq. Name :HRD3004A (Start FDIR function) TimeTag Type: Sub Schedule ID: <input type="checkbox"/>				
2		Check the current FDIR settings and modify them if necessary		Next Step: 3
		Execute procedure H_FCP_DHS_3059.		
3		Send TC(8,1,116) to start the function		Next Step: 4
		This will start the FDIR Management function. It is therefore advisable to first check the current settings and change them if necessary.		
		Execute Telecommand StartFdirManag TC Control Flags : GBM IL DSE --Y -- YYY Subsch. ID : 10 Det. descr. : Start Fdir Management TC(8,1,116)	DCN00170	
4		Verify that the function has been started		Next Step: 5

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		Verify Telemetry FdirSts DEG23170	= Running	AND=ZAZAI999
5		Check the current FDIR status (AFS/AFO) and change if necessary. When started the function will be in the same mode, ie AFS or AFO, as before it was stopped. It is therefore advisable to check the mode and change it if necessary. Execute procedure H_FCP_DHS_3058.		Next Step: END
<p>TC Seq. Name :HRD3004B (Stop FDIR function)</p> <p>TimeTag Type: Sub Schedule ID: □</p>				
6		WARNING Stopping the FDIR Management function results no more reconfiguration when these are commanded by the ASW FDIR. The On Board Monitoring and Event/Action Management functions, if still running, will continue to raise events and the related actions. In case the recovery sequence is implemented using direct TC, ie not via the ASW FDIR, it will thus take place. Note: ASW FDIR does not include the TTR/PAP mechanism not the 1553 FDIR, thus stopping the function will not impact the others.		Next Step: 7
7		Arm stop function TC(8,4,116,3) The telecommand Stop FDIR, used for switching OFF the function, is considered critical, and therefore prior being used it must be armed with a TC(8,4,116,3).		Next Step: 8
		Execute Telecommand TC Control Flags : Subsch. ID : 10 Det. descr. : Fdir Arm Stopping Of FDIR Management TC(8,4,116,3)	FdirArmStop GBM IL DSE --Y -- YYY	DC25L170

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
8		Send TC(8,2,116) to stop the function		Next Step: 9
		WARNING: when the function is stopped, it does not accept any other telecommands than the Start Function and Report Function Status TCs.		
		Execute Telecommand <div style="text-align: right;">StopFdirManag</div> TC Control Flags : <div style="text-align: right;">GBM IL DSE --Y -- YY</div> Subsch. ID : 10 Det. descr. : Stop Fdir Management TC(8,2,116)	DCN01170	
9		Verify that the function has been stopped		Next Step: END
		Verify Telemetry <div style="text-align: right;">FdirSts DEG23170</div>	= Stopped	AND=ZAZAI999
End of Procedure				