Switch ON HCS of HPS16
File: H_CRP_TCS_16H1.xls
Author: E. Picallo

Procedure Summary

Objectives

This procedure describes the steps needed to switch ON a selected Heater Control Switch (HCS) of HPS16.

The location units of the HCSs belonging to HPS16 are the following:
- HCS1: FBOLC
- HCS2: CRS 1
- HCS3: FPMECDEC
- HCS4: RCS piping
- HCS5: CCU/HSDCU/HSFCU
- HCS6: GYRO

Nominally the temperature control, and therefore the HCSs ON/OFF commanding, is managed by the CDMU ASW and it is driven through the Thermal Control Table (TCT).

Summary of Constraints

The selected HCS is switched ON through ASW TC(8,4,112,5); thus the status of the ASW function "PCDU Management" has to be "running".

Spacecraft Configuration

Start of Procedure

CDMU in default configuration;
HPS16 ON;
HCS OFF.

End of Procedure

CDMU in default configuration;
HPS16 ON;
HCS switched ON.

Reference File(s)

Input Command Sequences

Output Command Sequences

HRT16H1

Referenced Displays

ANDs **GRDs** **SLDs**

WAHT3584

Configuration Control Information

DATE	FOP ISSUE	VERSION	MODIFICATION DESCRIPTION	AUTHOR	SPR REF
17/02/09	2.1	1	Created	E. Picallo	

Status : Version 1 - Unchanged
Last Checkin: 17/02/09

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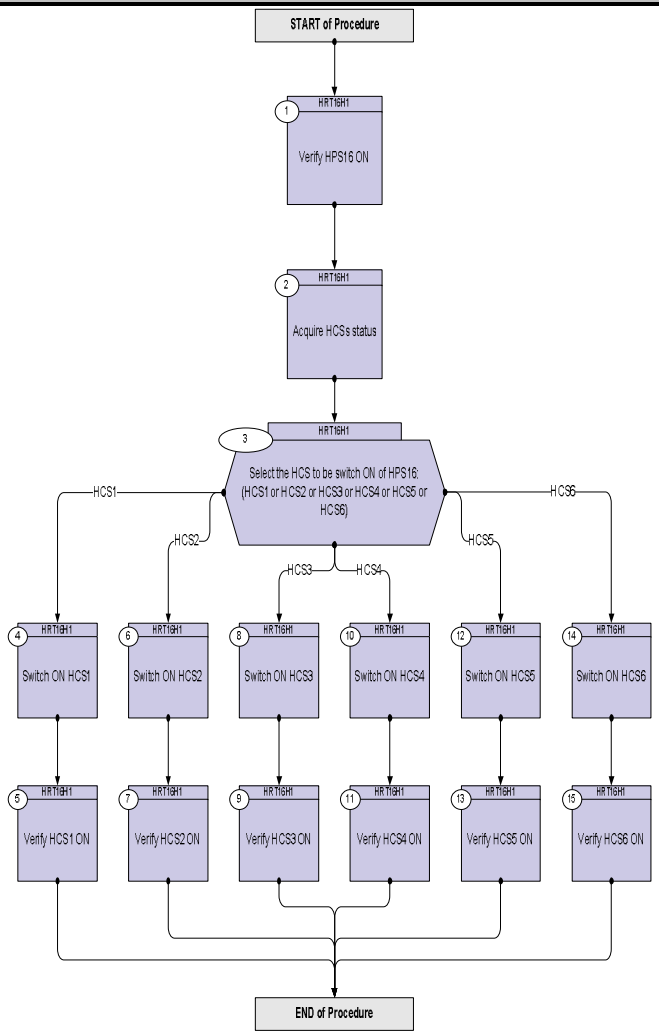
Procedure Flowchart Overview



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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		Beginning of Procedure		
		TC Seq. Name :HRT16H1 (Switch ON HCS HPS16) *TimeTag Type: N* *Sub Schedule ID:*		
1		*Verify HPS16 ON*		Next Step: 2
		Verify Telemetry **GRP16_HPS_STS WM92G565**	**= ON**	AND=WAHT3584
2		*Acquire HCSs status*		Next Step: 3
		Verify Telemetry **FPBOLC_G16H1_S WM91A565**		AND=WAHT3584
		Verify Telemetry **CRS1_G16H2_S WM91B565**		AND=WAHT3584
		Verify Telemetry **FPMECDEC_G16H3s WM91C565**		AND=WAHT3584
		Verify Telemetry **RCSpipG16H4_S WM91D565**		AND=WAHT3584
		Verify Telemetry **CcuHdHf_G16H5_S WM91E565**		AND=WAHT3584
		Verify Telemetry **GYRO_G16H6_S WM91F565**		AND=WAHT3584
3		*Select the HCS to be switch ON of HPS16:* *(HCS1 or HCS2 or HCS3 or HCS4 or HCS5 or HCS6)*		Next Step: HCS1 4 HCS2 6 HCS3 8 HCS4 10 HCS5 12 HCS6 14
4		*Switch ON HCS1*		Next Step: 5
		Execute Telecommand **SwOn_FPBOLC_G16H1** *TC Control Flags :* **GBM IL DSE** **--Y -- ---** *Subsch. ID : 10* Det. descr. : PCDU:TC(8,4,112,5) switch On FPBOLC Group 16 HCS 1	**DCD09170**	

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
5		*Verify HCS1 ON*		Next Step: END
		Verify Telemetry **FPBOLC_G16H1_S WM91A565**	**= ON**	AND=WAHT3584
6		*Switch ON HCS2*		Next Step: 7
		Execute Telecommand **SwOn_CRS1_G16H2** *TC Control Flags :* **GBM IL DSE --Y -- ---** *Subsch. ID : 10* Det. descr. : PCDU:TC(8,4,112,5) switch On CRS1 Group 16 HCS 2	**DCD10170**	
7		*Verify HCS2 ON*		Next Step: END
		Verify Telemetry **CRS1_G16H2_S WM91B565**	**= ON**	AND=WAHT3584
8		*Switch ON HCS3*		Next Step: 9
		Execute Telecommand **SwOn_FPMECDEC_G16H3** *TC Control Flags :* **GBM IL DSE --Y -- ---** *Subsch. ID : 10* Det. descr. : PCDU:TC(8,4,112,5) switch On FPMECDEC Group 16 HCS 3	**DCD11170**	
9		*Verify HCS3 ON*		Next Step: END
		Verify Telemetry **FPMECDEC_G16H3s WM91C565**	**= ON**	AND=WAHT3584
10		*Switch ON HCS4*		Next Step: 11
		Execute Telecommand **SwOn_RCSpip_G16H4** *TC Control Flags :* **GBM IL DSE --Y -- ---** *Subsch. ID : 10* Det. descr. : PCDU:TC(8,4,112,5) switch On RCS piping Group 16 HCS 4	**DCD12170**	

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
11		*Verify HCS4 ON*		Next Step: END
		Verify Telemetry **RCSpipG16H4_S WM91D565**	**= ON**	AND=WAHT3584
12		*Switch ON HCS5*		Next Step: 13
		Execute Telecommand **SwOn_CCUHSDHSF_G16H5** *TC Control Flags :* **GBM IL DSE** **--Y -- ---** *Subsch. ID : 10* Det. descr. : PCDU:TC(8,4,112,5) switch On CCU/HSDCU/HSFCU Group 16 HCS 5	**DCD13170**	
13		*Verify HCS5 ON*		Next Step: END
		Verify Telemetry **CcuHdHf_G16H5_S WM91E565**	**= ON**	AND=WAHT3584
14		*Switch ON HCS6*		Next Step: 15
		Execute Telecommand **SwOn_GYRO_G16H6** *TC Control Flags :* **GBM IL DSE** **--Y -- ---** *Subsch. ID : 10* Det. descr. : PCDU:TC(8,4,112,5) switch On GYRO Group 16 HCS 6	**DCD14170**	
15		*Verify HCS6 ON*		Next Step: END
		Verify Telemetry **GYRO_G16H6_S WM91F565**	**= ON**	AND=WAHT3584

End of Procedure