

Procedure. Ref.: SVT_OPM_5050 (1,1) OPERATIONAL MODE HTR CONTROL TEST

Procedure Title: Operational Mode Heater Control Test

Last Date Modified: 12/07/99 14:57:02

Author: Kate Adamson

Purpose of Procedure:

This procedure executes the Operational Mode Heater Control Test.

This procedure is foreseen to be used during the SVT.

Initial State: OM ON in SAFE Mode.

Final State: OM ON in SAFE Mode

Step	Time	Activity/Remarks	Command	TM Verification
1		Confirm OM in SAFE Mode. Check HK status and packet arrival every 10 seconds.		<u>AND: H100</u> H5395 "OM STATE" = SAFE H5405 "ICU STATE" = OPERATIONAL P1007 "LCL CUR OM-A" = 0.81 +/-0.1 Amp H5310 "CURRENT +28 UV" = 810 +/- 100 mA
2		PREPARE FOR HEATER SWITCHING.		
2.1		Disable Standard Control Algorithm. Confirm Heater Status in HK. Confirm OM Power consumption.	<u>H6670</u> STOP HTR CONTROL	<u>AND: H100</u> H5240 "HEATER STATUS" = OFFOFFOFFOFF
2.2		Start Heater Contingency Task	<u>H5660</u> STRT HTR CCON	
3		HEATER 1 SWITCHING (MAIN INTERFACE)		
3.1		Switch ON Heater 1 - Main Interface. Heater Config 8. Confirm Status in TM.	<u>H7660</u> SET HTR CONFIG **H0380 "HEATER CONFIG" = ONOFFOFFOFF	<u>AND: H100</u> H5240 "HEATER STATUS" = ONOFFOFFOFF P1007 "LCL CUR OM-A" = 1.44 +/- 0.1 Amp H5310 "CURRENT +28 UV" = 1440 +/- 100 mA
3.2		Switch OFF Heater 1 - Main Interface. Heater Config 0. Confirm Status in TM.	<u>H7660</u> SET HTR CONFIG **H0380 "HEATER CONFIG" = OFFOFFOFFOFF	<u>AND: H100</u> H5240 "HEATER STATUS" = OFFOFFOFFOFF P1007 "LCL CUR OM-A" = 0.81 +/- 0.1 Amp H5310 "CURRENT +28 UV" = 810 +/- 100 mA
4		HEATER 2 SWITCHING (FORWARD TUBE)		
4.1		Switch ON Heater 2 - Forward Tube. Heater Config 4. Confirm Status in TM.	<u>H7660</u> SET HTR CONFIG **H0380 "HEATER CONFIG" = OFFONOFFOFF	<u>AND: H100</u> H5240 "HEATER STATUS" = OFFONOFFOFF P1007 "LCL CUR OM-A" = 1.74 +/- 0.1 Amp H5310 "CURRENT +28 UV" = 1740 +/- 100 mA

Procedure. Ref.: SVT_OPM_5050 (1,1) OPERATIONAL MODE HTR CONTROL TEST

Step	Time	Activity/Remarks	Command	TM Verification
4.2		Switch OFF Heater 2 - Forward Tube. Heater Config 0. Confirm Status in TM.	H7660 SET HTR CONFIG **H0380 "HEATER CONFIG" = OFFOFFOFFOFF	AND: H100 H5240 "HEATER STATUS" = OFFOFFOFFOFF P1007 "LCL CUR OM-A" = 0.81 +- 0.1 Amp H5310 "CURRENT +28 UV" = 810 +- 100 mA
5		HEATER 3 SWITCHING (METERING RODS)		
5.1		Switch ON Heater 3 - Metering Rods Heater Config 2. Confirm Status in TM.	H7660 SET HTR CONFIG **H0380 "HEATER CONFIG" = OFFOFFONOFF	AND: H100 H5240 "HEATER STATUS" = OFFOFFONOFF P1007 "LCL CUR OM-A" = 1.06 +- 0.1 Amp H5310 "CURRENT +28 UV" = 1060 +- 100 mA
5.2		Switch OFF Heater 3 - Metering Rods Heater Config 0. Confirm Status in TM.	H7660 SET HTR CONFIG **H0380 "HEATER CONFIG" = OFFOFFOFFOFF	AND: H100 H5240 "HEATER STATUS" = OFFOFFOFFOFF P1007 "LCL CUR OM-A" = 0.81 +- 0.1 Amp H5310 "CURRENT +28 UV" = 810 +- 100 mA
6		HEATER 4 SWITCHING (SECONDARY MIRROR)		
6.1		Switch ON Heater 4 - Secondary Mirror. Heater Config 1. Confirm Status in TM.	H7660 SET HTR CONFIG **H0380 "HEATER CONFIG" = OFFOFFOFFON	AND: H100 H5240 "HEATER STATUS" = OFFOFFOFFON P1007 "LCL CUR OM-A" = 0.95 +- 0.1 Amp H5310 "CURRENT +28 UV" = 950 +- 100 mA
6.2		Switch OFF Heater 2 - Forward Tube. Heater Config 0. Confirm Status in TM.	H7660 SET HTR CONFIG **H0380 "HEATER CONFIG" = OFFOFFOFFOFF	AND: H100 H5240 "HEATER STATUS" = OFFOFFOFFOFF P1007 "LCL CUR OM-A" = 0.81 +- 0.1 Amp H5310 "CURRENT +28 UV" = 810 +- 100 mA
7		RETURN TO STANDARD HEATER CONTROL ALGORITHM.		
7.1		Stop Heater Contingency Task Confirm Heater Status in HK. Confirm OM Power consumption.	H6660 STOP HTR CCON	AND: H100 H5240 "HEATER STATUS" = OFFOFFOFFOFF P1007 "LCL CUR OM-A" = 0.810 +- 0.1 Amp H5310 "CURRENT +28 UV" = 810 mA +- 100 mA
7.2		Enable Standard Control Algorithm	H5670 STRT HTR CONTROL	AND: H100 H5240 "HEATER STATUS" =ONONOFFOFF
8		END OF PROCEDURE		