



Minutes of Meeting

Date:	28.07.08	Herschel	
Doc.-No.:	HP-2-ASED-MN-1508		
Meeting place:	ESTEC NL	Chairman:	D. Hendry
Date/Time:	28.07.08 / 15-00 hrs	Secretary:	A. Koppe
Agenda dated:	Standard agenda	Close of Meeting:	28.07.08 / 16-00 hrs

Subject: TRR for SPIRE Commissioning Test (CFT & Peak-up)

Participants:	S. Sidher RAL E. Sawyer RAL C. Scharmberg ESA B. Collaudin TASF A. Koppe ASED D. Hendry ASED J. Rautakowski ESA	Additional ESA Distribution: TAS-F
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Brief-Minutes (except following sheets)

Summary of Results of Sheets 2 till

Conclusion:-

Testing can start.



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Reference	Results	Remarks
	<p data-bbox="424 566 564 600"><u>AGENDA</u></p> <ol data-bbox="520 678 1075 1536" style="list-style-type: none">0. Introduction1. As Built / As Designed Configuration Status / S/W Status2. Inspection / Integration Status3. NCR / RFW Status4. Open Work / Open Actions5. Test Procedures / Test Reports6. Safety Hazards and Hazardous Operations7. Test Equipment / Facility and Calibration Status8. Cleanliness9. Test Personnel and Responsibilities10. Problem Areas11. AOB12. Conclusion	



Reference	Results	Remarks
	<p>0. Introduction</p> <p>This TRR covers the IST SPIRE Commissioning Test which is CFT & Peak-up Mode Test of the Spire. The procedures to be called up are the CFT Procedure HP-2-ASED-TP-0217 Issue 1.4 , the Peak-up Mode Procedure HP-2-ASED-TP-0228 Issue 1.1, plus BSM Control Loop Setting (7.5.3.3) test from the SPT Procedure HP-2-ASED-TP-0204 Issue 1.1, to be introduced via PVS.</p> <p>1.As Built / As Designed Configuration Status / S/W Status</p> <p>1.1 HW Status HW status SC is mounted vertical on MPT. SC configuration is flight configuration for SPIRE. He filling level is around 62%, problems with top up filling. LL EGSE harness is still connected (not terminated). Tank temperature was this morning 1.96 K.</p> <p>1.2 SW Status :</p> <p>HPSDB:HP-ASP-LI-1441_15 SPIRE MIB loaded in HPSDB is version 2.2.H1 PR</p> <p>Merged MIB H-P-ASP-LI-1424_04</p>	



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Reference	Results	Remarks
	<p>OBSW: Version DPU 2.2.H Partition 1 ; main and redundant Version DPU 2.2.G partition 2 ; main and redundant</p> <p>CDMS: Version 3.4.0.9</p> <p>TCL Scripts: Relevant script files: SPIRE_IST_COLDFT_Scripts_16Feb2008.zip SPIRE_IST_COLDFT_15July2008_Release_Note.txt</p> <p>Power on/off are included in TP-217_1.4</p> <p>For the BSM test a separate script will be provided by RAL.</p> <p>2. Inspection / Integration Status</p> <p>2.1 Inspection Status</p> <p>No specific inspection to be done before the test.</p> <p>2.2 Integration Status SPIRE is in the flight configuration.</p>	



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Reference	Results	Remarks
	<p>SMEC EGSE harness is connected but DVM is not attached, shorting plugs not fitted Connectors covered with ESD caps.</p> <p>Cryo conditions:He2</p> <p>Print out of CCU and Cryo SCOE is attached to this MoM (see annex).</p> <p>SC Configuration: SC is switched on in launch configuration, test will be performed in vertical (not tilted to 20°), filling is stopped for stable temperature environment CCU A & Cryo SCOE is switched on and operational</p> <p>2.3 Red/Green Tag status</p> <p>No Red Tags for SPIRE</p> <p>2.4 Parallel operations being performed No He filling is being performed during the test, therefore, no parallel operations planned.</p> <p>2.5 Constraints:</p> <p>none</p> <p>2.6 Warm Unit temperature Limits</p>	



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Reference	Results	Remarks
	<p>None</p> <p>3. NCR / RFW Status:</p> <p>There are no NCR which prevent the start of the SPIRE Commissioning.</p> <p>4. Open Work / Open Actions</p> <p>None</p> <p>5. Test Procedures / Test Reports</p> <p>Prime and redundant sides will be tested.</p> <ul style="list-style-type: none"> • SPIRE CFT SPIRE_RAL_PRC_2398 iss 2.6 • SPIRE IEGSE Setup SPIRE_RAL_DOC_002841 iss 2.2 • CFT Procedure HP-2-ASED-TP-0217, Issue 1.4 	



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Reference	Results	Remarks																				
	<ul style="list-style-type: none"> • Peak-up Mode Procedure HP-2-ASED-TP-0228, Issue 1.1 • plus BSM Control Loop Setting (7.5.3.3) test from the SPT Procedure HP-2-ASED-TP-0204, Issue 1.1 <p>6. Hazards and Hazardous operations</p> <p>No other than safety issues related to test</p> <p>7. Test Equipment / Facility and Calibration Status</p> <p>I-EGSE is to be connected to CCS</p> <p>8. Cleanliness</p> <p>CL 100000</p> <p>9. Test Personnel and Responsibilities</p> <table border="1" data-bbox="389 1276 1796 1463"> <thead> <tr> <th>Responsibility</th> <th>Name</th> <th>Company</th> <th>Contact Number</th> </tr> </thead> <tbody> <tr> <td>Test Director</td> <td>B.Collaudin</td> <td>TASF</td> <td></td> </tr> <tr> <td>Test Conductor</td> <td>A.Koppe</td> <td>ASED</td> <td></td> </tr> <tr> <td>SPIRE test engineer</td> <td>S.Sidher</td> <td>RAL</td> <td></td> </tr> <tr> <td>SPIRE I-EGSE</td> <td>S. Leaks</td> <td>RAL</td> <td></td> </tr> </tbody> </table>	Responsibility	Name	Company	Contact Number	Test Director	B.Collaudin	TASF		Test Conductor	A.Koppe	ASED		SPIRE test engineer	S.Sidher	RAL		SPIRE I-EGSE	S. Leaks	RAL		
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Reference	Results			Remarks
	SPIRE coordination	B. Swinyard	RAL	
	QA	T.Schmidt	ASED	
	CCS	S. Hamer	ASED	
	PA	D.Hendry	ASED	
	Instrument coordinator	C. Scharmberg	ESA	
	<p>10. Problem Areas</p> <p>None identified</p> <p>11. AOB</p> <p>PVS to be written by ASED to cover the test sequence between CFT, Peak-up and BSM test.</p> <p>Planning: Test is scheduled to start at 6-00 duration about 16 hrs nominal and redundant Spire will be available at 06-00 hrs. 2 shifts will be needed to cover this test.</p> <p>12. Conclusion</p> <p>All parties agree to start the test as planned on Wednesday, 30th July 2008, 6:00 h in the morning.</p>			

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Action Item List

Herschel

Title:

Date: 28.07.08

No.:	Description:	Due Date	Originator Comp./Pers.	Actionee Comp./Pers.	Source	Completion
01						
02						
03						

Meeting: HP-2-ASED-MN-1588

Title:

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Open Work List

Herschel

DS: 65535 ID: ZAK109 Title: KD_H_CCU_B_Mon12_HK_ParRep 1of2 Sample Time: 2008.210.14.21.28.766

Workstation: hpws21

NAME	DESCRIPTION	VALUE	UNIT	NAME	DESCRIPTION	VALUE	UNIT
DES0V161	CCU_B_SA01_LMSW	1		KD203303	C100_1_T225	1.94537	K
DES23161	CCU_B_SA01_LMSW	128		KD204303	C100_2_T107	1.90354	K
DES3A161	Ccub01RspTMSW	8		KD205303	C100_2_T112	1.96416	K
DES4H161	Ccub01RspTLSW	16384		KD206303	C100_2_T222	1.96370	K
DES0X161	CCU_B_SA08_LMSW	0		KD207303	C100_2_T231	2.08535	K
DES24161	CCU_B_SA08_LMSW	0		KD208303	C100_2_Tspare	99999.00000	K
DES3B161	Ccub08RspTMSW	65535		KD209303	C100_3_T226	1.91630	K → spine - cooler pump L0
DES4J161	Ccub08RspTLSW	65535		KD210303	C100_3_T233	2.53538	K
KM150301	Time_ConstID B	46		KD211303	C100_3_T235	2.84806	K → spine L1 (vent line)
KM154301	TIME CCU B	2008.210.14.21.27.766		KD212303	C100_3_T237	3.15175	K
KM151301	Time_M CCU B	24352		KD213303	C100_3_T248	5.16548	K
KM152301	Time_N CCU B	13415		KD214301	G_calib_s14 B	29065	
KM153301	Time_L CCU B	50220		KD215301	G_calib_s15 B	26539	
DES0Y161	CCU_B_SA11_LMSW	1		KM216303	Temp_T226_2	65535	
DES25161	CCU_B_SA11_LMSW	1024		KM217303	Temp_T233_2	65535	
DES3C161	Ccub11RspTMSW	9		KM218303	Temp_T235_2	65535	
DES4K161	Ccub11RspTLSW	16384		KM219303	Temp_T237_2	50014	
KM280301	Mon_Time CCU B	2008.210.14.12.56.766		KM220303	Temp_T248_2	21285	
KM281301	Mon_TimM CCU B	24352		DES0Z161	CCU_B_SA12_LMSW	1	
KM282301	Mon_TimN CCU B	12904		DES26161	CCU_B_SA12_LMSW	1024	
KM283301	Mon_TimL CCU B	50220		DES3D161	Ccub12RspTMSW	9	
KM370301	HK_WORD2 MB	16386		DES4L161	Ccub12RspTLSW	16384	
KM371301	HK_WORD3 MB	2		KD221303	C100_4_T208	6.47792	K
KM372301	HK_WORD4 MB	516		KD222303	C100_4_T213	6.48660	K
KM380301	Start_Mon_02 B	65279		KD223303	C100_4_T247	5.86650	K → L3
KM381301	Start_Mon_03 B	65535		KD224303	C100_4_T252	6.05078	K ⇒ L2 JFET
KM382301	Start_Mon_04 B	65535		KD225303	C100_4_T256	6.33231	K
KM383301	Start_Mon_05 B	65535		KD226303	C100_4_T703	999.99000	K
KM384301	Start_Mon_06 B	65535		KD227303	C100_4_T862	10.96203	K
KD200303	C100_0_T101	1.88269	K	KM228301	G_calib_s24 B	1	
KD201303	C100_0_T104	1.88208	K	KM229301	G_calib_s25 B	0	
KD202303	C100_1_T224	1.99380	K	KM230301	G_calib_s26 B	30696	

DS: 65535 ID: ZAK119 Title: KD_H_CCU_B_Mon12_HK_ParRep 2of2 Sample Time: 2008.210.14.28.23.766

Workstation: hpws21

NAME	DESCRIPTION	VALUE	UNIT	NAME	DESCRIPTION	VALUE	UNIT
KD231301	G_calib_s31 B	65535		KD259303	PT1000_T908	294.04319	K
KD232303	PT1000_T311	294.83512	K	KD260303	PT1000_T912	294.03277	K
KD233303	PT1000_T313	294.17136	K	KD261303	PT1000_T507	288.20506	K
KD234303	PT1000_T315	293.87791	K	KD262303	PT1000_T342	293.60594	K
KD235303	PT1000_T904	292.62642	K	KD263301	G_calib_s63 B	50288	
KD236303	PT1000_T906	293.58652	K	KD264303	Pres_P502	0.22659	mbar
KD237303	PT1000_T910	293.77012	K	KD265303	Pres_Psp	0	bar
KD238303	PT1000_T932	294.28576	K	KD266301	Com_Cal_P2 B	19	
KD239303	PT1000_T934	294.36953	K	KD267301	G_calib_P1 B	108	
KD240303	PT1000_Tsp	0	K	KD268301	G_calib_P2 B	42505	
KD241303	PT1000_Tsp	0	K	KM269303	Valv_Stat_VS106	CLOSED	
KD242303	PT1000_T422	14.52607	K	KM270303	Valv_Stat_VS503	CLOSED	
KD243303	PT1000_T441	37.14985	K	KM271303	Valv_Stat_VS505	OPEN	
KD244303	PT1000_T444	54.40435	K	KD272303	Mon_Mur_B	20365	V
KD245303	PT1000_T462	72.16289	K	KD273303	Mon_Mir_B	54743	A
KD246303	PT1000_T701	27.79709	K	KD274303	Temp_CCUiTM2M B	297.44680	K
KD247301	G_calib_s47 B	0		KD275303	Volt_CCUiV5 B	5.04066	V
KD248303	PT1000_T332	293.46534	K	KD276303	Volt_CCUiV15 B	14.76383	V
KD249303	PT1000_T334	293.41296	K	KD277303	Volt_CCUiV9_5 B	9.41924	V
KD250303	PT1000_T336	293.45867	K	KD278303	Temp_CCUiTVCM B	297.41722	K
KD251303	PT1000_T338	293.46079	K	KM279301	Zero_Ref B	1516	
KD252303	PT1000_T340	293.45248	K	DED40161	SdbRtaCfgCCU_B	31	
DES10161	CCU_B_SA13_LMSW	1		DED41161	CCUB_OnOff	ON	
DES27161	CCU_B_SA13_LMSW	1024		DED42161	CCUB_DeadAlive	Alive	
DES3E161	Ccub13RspTMSW	9		DED43161	CCUB_WellSickTC	Well	
DES4M161	Ccub13RspTLSW	16384		DED44161	CCUB_WellSickTM	Well	
KD253303	PT1000_T322	-999.99000	K	DED45161	CCUB_ValidInval	Valid	
KD254303	PT1000_T324	-999.99000	K	DED6F161	SDB_RT_CfgCCU_B	9	
KD255303	PT1000_T504	294.07037	K	DED6J161	CCUB_VitalCnt	1	
KD256303	PT1000_T506	294.06074	K	DED6G161	CCUB_VitalNonV	NonVital	
KD257303	PT1000_T652	293.58134	K	DED6H161	CCUB_NomRed	NOMINAL	
KD258303	PT1000_T902	293.85388	K	DED7F161	SdbNofCCU_B_ACQ	52089	