



Minutes of Meeting

Date: 18.08.08

Herschel

Doc.-No.: HP-2-ASED-MN-1599

Meeting place: ESTEC NL

Chairman: D.Hendry

Date/Time: 18.08.08/14-00 hrs

Secretary: D.Hendry

Agenda dated: Standard agenda

Close of Meeting: 18.08.08/ hrs

Subject: TRR for SPIRE SPT in He2 on PFM

Participants:

E.Sawyer RAL
 Sarah.Leeks RAL
 D.Griffith RAL
 Tanya. Lim RAL
 J.Huesler ESA
 P.Marliani ESA
 K.Goodey ESA
 C.Scharmberg ESA
 C.Jewell ESA
 B.Collaudin TASF
 R.Hohn ASED

Additional Distribution:

S.Hamer ASED
 H.Huber ASED pt
 A.Knight TASF pt
 B.Demolder TASF pt
 M.Cesa ESA

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 Brief-Minutes (except following sheets)

 Summary of Results of Sheets 2 till

Conclusion:-

The Testing can only start when the decision on dewar configuration is made and following the close out of the open work identified herein.
 A further review of SC related NCRs which may impact Spire SPT will be performed
 A check point meeting will be held tomorrow 14-00 hrs



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Reference	Results	Remarks
	<p><u>AGENDA</u></p> <ul style="list-style-type: none"> 0. Introduction 1. As Built / As Designed Configuration Status / S/W Status 2. Inspection / Integration Status 3. NCR / RFW Status 4. Open Work / Open Actions 5. Test Procedures / Test Reports 6. Safety Hazards and Hazardous Operations 7. Test Equipment / Facility and Calibration Status 8. Cleanliness 9. Test Personnel and Responsibilities 10. Problem Areas 11. AOB 12. Conclusion 	



Reference	Results	Remarks
	<p>0. Introduction</p> <p>This TRR covers the SPIRE SPT in He2 in accordance with procedure HP-2-ASED-TP-0204 iss 1.2</p> <p>1.As Built / As Designed Configuration Status / S/W Status</p> <p>1.1 HW Status HW status SC on MPT Vertical Tilting will be done tomorrow. Launch lock IEGSE will not be connected <i>(harness to be removed)</i> Shorting plugs fitted</p> <p>1.2 SW Status :</p> <p>HPADB:HP-ASP-LI-1441_17 SPIRE MIB loaded in HPADB is version 2.2.H1 PR</p> <p>TASF Merged MIB H-P-ASP-LI-1424_04 tbd <i>[check which version is installed on IEGSE]</i></p> <p>OBSW: Version DPU 2.2.H Partition 1 ; main and redundant</p>	



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Reference	Results	Remarks
	<p>Version DPU 2.2.H partition 2 ; main and redundant</p> <p>CDMS: Version 3.6.0.4</p> <p>TCL Scripts: Relevant script files: SPIRE_FM_SPTS_12august2008_release_note.txt Scripts not yet loaded, TRR agrees this can be loaded today</p> <p>Power on/off Spire procedure and script changed cover SPR for CDMS 3.6 No change to top level procedure. CDMS 3.6 verified on Friday 15.08.08</p> <p>2. Inspection / Integration Status</p> <p>2.1 Inspection Status Detailed H/W visual inspection was performed .</p> <p>SMEC test harness to be removed and shorting plugs fittedTBC</p> <p>2.2 Integration Status SPIRE is in the flight configuration</p>	<p>OW</p> <p>OW</p>



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Reference	Results	Remarks
	<p>Cryo conditions:He2</p> <p>Filling level 91.8 Filling is on going</p> <p>For cooling there are 2 options A) Pumping on 104 B) Shield Cooling</p> <p>See TP-0204 Shield cooling will be performed and L1 temp may drift initially Cryo cover flushing will also be performed</p> <p>Additional Dewars will be available on Wednesday.</p> <p>SPIRE agree to proceed with the base line</p> <p>SC is switched on in launch configuration</p> <p>Cryo SCOE is connected to CCU A sensors</p> <p>CCU is switched on and operational.</p>	



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Reference	Results	Remarks
	<p>2.3 Red/Green Tag status Shorting plugs fitted on SMEC TBC (<i>harness to LLGGSE to be removed</i>)</p> <p>2.4 Parallel operations being performed</p> <p>No H/W activities on the SC during Micro vibration test. Micro vibration part of Spire SPT Microphonics can proceed. Micro vibration with accelerometers cannot be performed until next week, but this is not blocking for the Spire test.</p> <p>ETS Support Required: Environmental monitoring during the day</p> <p>RS test overnight.</p> <p>2.5 Constraints:</p> <p>Cryo conditions see TP</p> <p>When ACMS is on no H/W activities to be performed especially during microvibration.</p> <p>Scaffolding has to be reconfigured to allow access to the Spire environmental test set up, (will be done tomorrow afternoon)</p>	<p>OW</p> <p>OW</p>

Reference	Results	Remarks
	<p>2.6 Warm Unit temperature Limits</p> <p>Revised limits are not yet implemented in the HPSDB, operators should monitor these temperatures. TASF will provide a list of WU temperatures and associated sensors</p> <p>3. NCR / RFW Status:</p> <p>See Attached list: No Spire related NCRs are blocking for the SPT. Those NCRs which may reoccur during the test are identified in the list.</p> <p>SC related NCRs which may impact the Spire SPT TASF PA will check the status</p> <p>RFW: none identified</p> <p>4. Open Work / Open Actions See list in attachment</p> <p>5. Test Procedures / Test Reports</p>	<p>OW</p> <p>OW</p>



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Reference	Results	Remarks
	<p>HP-2-ASED-TP-0204 Issue 1.2</p> <p>PVS to be raised to cover Spire RS (test overnight). RAL to provide inputs</p> <p>ESA will coordinate ETS support for the following activities.- EM monitoring (preferred day 1 by Spire) RS Test</p> <p>If additional Pcal flash is needed a PVS will be raised</p> <p>PVS to change CCU data rate to 8sec</p> <p>ACS HP-2-ASED-SD-0406 is agreed and can be run at any convenient opportunity</p> <p>6.Hazards and Hazardous operations</p> <p>During Cryo operations access to the clean room will be limited.</p> <p>7. Test Equipment / Facility and Calibration Status</p> <p>IEGSE set up procedure to be run by RAL, Note time sync between IEGSE and CCS to be performed.</p> <p>Test set up for RS and CS testing see RAL procedure RALPRC-003040 Chapter 6.1.2 (Annex 3)</p>	<p>OW</p>



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Reference	Results	Remarks																																								
	<p>The Instrument team and the CCS operators ask if there can be an improvement of voice link between the CCS and IEGSE rooms</p> <p>8. Cleanliness</p> <p>CL 100000 ETS facility see FRR Ref ETS/MOM/MECH/2253</p> <p>9. Test Personnel and Responsibilities</p> <table border="1" data-bbox="369 794 1776 1182"> <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>N.Sonn</td> <td>ASED</td> <td></td> </tr> <tr> <td>SPIRE engineering</td> <td>See list</td> <td>RAL</td> <td></td> </tr> <tr> <td>QA</td> <td>R.Langenstein</td> <td>ASED</td> <td></td> </tr> <tr> <td>CCS</td> <td>S.Ilsen/S.Hamer</td> <td>ASED</td> <td></td> </tr> <tr> <td>PA</td> <td>D.Hendry</td> <td>ASED</td> <td></td> </tr> <tr> <td>Instrument coordinator</td> <td>K.Goodey</td> <td>ESA</td> <td></td> </tr> <tr> <td>FAIT</td> <td>See Shift plan</td> <td>TASF</td> <td></td> </tr> <tr> <td>Cryo Ops</td> <td>J.Huber/a.Runge</td> <td>ASED</td> <td></td> </tr> </tbody> </table> <p>SPIRE have provided a list of personnel who will support the test, all people were included in the list for picture badges, ESA will check</p>	Responsibility	Name	Company	Contact Number	Test Director	B.Collaudin	TASF		Test Conductor	N.Sonn	ASED		SPIRE engineering	See list	RAL		QA	R.Langenstein	ASED		CCS	S.Ilsen/S.Hamer	ASED		PA	D.Hendry	ASED		Instrument coordinator	K.Goodey	ESA		FAIT	See Shift plan	TASF		Cryo Ops	J.Huber/a.Runge	ASED		<p>OW</p>
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Reference	Results	Remarks
	<p>10. Problem Areas None identified</p> <p>11. AOB Planning ETS contacted (Cees , Peter) Availability W, Tr, F (partially) Plan #1 night between Wed and Thurs CS+RS Thurs (daytime) .EM monitoring</p> <p>Plan #2 Thurs (daytime) EM monitoring Night between thurs and fri CS+Rs</p> <p>TASF request food for the instrument teams as they will be working in 3 shift</p> <p>Parameter for cooler recycling BSM and detector settings need to be acquired in real time to support the RMS test</p> <p>SPT is planned to Start on Wednesday 20.08.08 at 06-00 hrs early shift. And will run with 3 shifts per day up to Friday 24-00 Saturday can be used for contingency</p>	<p>Note ASED</p> <p>Note TASF</p>



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Reference	Results	Remarks
	<p>Additional dewars are arriving on Wednesday TS cooling will only start with the new dewars and test could only start midday Alternatively existing dewars could be used but the contamination of these dewars is not established.</p> <p>12. Conclusion The Testing can only start when the decision on dewar configuration is made and following the close out of the open work identified herein. A further review of SC related NCRs which may impact Spire SPT will be performed A check point meeting will be held tomorrow 14-00 hrs</p>	

Meeting: HP-2-ASED-MN-1599

Action Item List

Herschel

Title:

Date: 10.08.08

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

Open Work List

Herschel

Title:

Date: 18.08.08

Item	Description	Actionee	Status	Comment
1.	Scripts not yet loaded, TRR agrees they can be loaded today	ASED (SH)		
2	SMEC test harness to be removed and shorting plugs fitted TBC	ASED AIT		
3	Shorting plugs fitted on SMEC TBC	ASED AIT		
4	Scaffolding has to be reconfigured to allow access to the Spire environmental test set up, (will be done tomorrow afternoon)	ASED AIT		
5	TASF will provide a list of WU temperatures and associated sensors	TASF (BC)		
6	ESA will coordinate ETS support for the EM and RS	ESA (PM)		
7	PVS to change CCU data rate to 8sec	ASED (SI)		
8	IEGSE set up procedure to be run by RAL including CCS time sync,	RAL		
9	The Instrument team and the CCS operators ask if there can be an improvement of voice link between the CCS and IEGSE rooms	ASED (RH)		
10	SPIRE have provided a list of personnel who will support the test, all people were included in the list for picture badges, ASED will check	ASED (RH)		
11	SC related NCRs which may impact the Spire SPT TASF PA will check the status	TASF (AK)		
12	PVS to be raised to cover Spire RS (test overnight). RAL to provide inputs	RAL		

Test Conductor Approved	PA	TASF	Instrument

Note: To be completed and Signed off prior to start of the Test

	1	2	3	4
1	NCR Nr	NCR Title	Model	Status ASL # 12 date 15.08.08
2	HP-112000-ASED-NC-4423	Spire IEGSE no achiving data during Commissioning	PFM	RAL and IGSE working group to investigate; data is available and retrievable , Not blocking for SPT
3	HP-112000-ASED-NC-4422	TCL /TK problem with cooler recycling script		Script Corrected during test and validated, Configured by spire NCR can be closed.
4	HP-112000-ASED-NC-4390	Spire peak up test command not accepted by CCS		2 compliment was wrong, script corrected during test and validated on redundant side.NCR can be closed
5	HP-112000-ASED-NC-4394	Parameter sm014500 Spire MIB should be signed	PFM	Change CI to include SPIRE. Spire MIB to be updated
6	HP-112000-ASED-NC-4393	Unknown 8.6 packet from ACMS when executing AC082109 (peak up)	PFM	Change to include SPIRE CI. To be investigated by ACMS AI/TASF
7	HP-112000-ASED-NC-4355	Lost Spire IEGSE connection with CCS when starting new test script	PFM	Happened during SMEC test.trying to access data file during a test caused this problem. NCR can be closed
8				
9	HP-112000-ASED-NC-4348	Spire TM_FIFO_full and science_pool_full	PFM	Script should be updated by RAL
10	HP-113000-ASED-NC-4318	PACS IEGSE-not sync with HPCCS	PFM	Common to all Instruments, IEGSE setup procedure for each instrument to be updated to include the time sync TASF will send I/P to Spire: A CCS script has been produced to automatically check time differences.
11	HP-112000-ASED-NC-4289	SPIRE SFT Post acoustic SCAL TEMP Nom and Redundant	PFM	Spire MIB and HPSDB Cal value update required (will be delivered together with OBSW SW update) will be seen during next SFT :Status unchanged
12	HP-112000-ASED-NC-4288	SPIRE SFT post acoustic Pcalv expected value	PFM	Limits to be updated in MIB/HPSDB: status unchanged

	1	2	3	4
13	HP-100000-ASED-NC-4287	OBCP triggered during SPIRE DRCU & DPU Power OFF	PFM	linked to NCR to ASED-NC-3954 ;problem is current out of limits and secondary effect was timeout no TM being received and OBCP triggered.For future testing prior to Inst Switch off disable Spire specific FDIR update test scripr ASED (SH) : H-P-TAS-MN-10654 Script updated and verified during SMEC test #2 NCR can be closed
14	HP-130000-ASED-NC-4278	Instrument Warm Units temperature limits	PFM	No temp sensors are on SPIRE units , proposal is to use CCU sensors set to yellow op and Red at Acc. This is acceptable for Spire: HPSDB to be updated with revised limits.
15	H-P-2-112000-ASED-NC-4223	SPIRE SMEC Launch Lock EGSE not properly functioning	NA(GSE)	Procedure updated NCR can be Closed
16	H-P-2-112000-ASED-NC-4222	SMEC mechanism friction behaviour in start region	FM	See NRB Summary: Investigation on going at RAL, procedure update reqd : H-P-TAS-MN-10654 propose to perform 3rd short SMEC test.
17	HP-112000-ASED-NC-4221	Spire launch lock does not open during SMEC test	PFM	Missinterperation of data NCR can be Closed
18	H-P-000001-ESOC-629-4200	SPIRE: Checksum of first (patched) memory area not as expected	FM	Under investigation at RAL/IFSI: Status unchanged, no impact on SPT
19	H-P-000001-ESOC-628-4199	SPIRE: Invalid OOL checks	FM	RAL say invalid TM when unit is switched off, MIB to be updated. May be see again during switch on but not blocking for SPT
20	H-P-000001-ESOC-626-4198	SPIRE - CALL_BOOT TC validation error	FM	MIB update required as in NCR disposition.Could be seen during SPT but not blocking
21	H-P-000001-ESOC-625-4197	SPIRE: LS overflow error	FM	RAL to investigate. Could be seen during SPT but not blocking
22	H-P-000001-ESOC-561-4195	TM DPUM15V OOL for SPIRE	FM	MIB to be updated. Could be seen during SPT but not blocking

	1	2	3	4
23	HP-130000-ASED-NC-4128	SPIRE goes to an improper status with jamming	FM	Will be fixed by OBSW update, temp workaround do not load tables during switch on.
24	H-P-000001-ESOC-560-4105	Missing textual calibration for SPIRE	FM	MIB update required: Duplication of 4194 ESOC to merge and close 4194
25	HP-130000-ASED-NC-4086	IST Nominal Mode Robustness - SPIRE DPU BSW boot problem	FM	Memory dump has been received at RAL- under investigation by IFSI: Status unchanged. Boot from 2nd partition and therefore will not impact SPT
26	HP-112000-ASED-NC-3957	SPIRE SFT: Missing current parameter for LCL 25 & 26 (SPIRE LPU)	FM	CDMU SW update required, will be correction in version 3.6 and validated next SFT after OBSW update, workaround is in place with patch. ACS SD-406 has been provided and implementation will be decided at SPT TRR
27	HP-130000-ASED-NC-3954	IST Spire DRCU current WM408565 reports higher than expected	FM	LCL current monitoring will be included in new merged MIB by TASF: See NC 4287, will only be seen during detector test ; no further detector testing is foreseen, Limit values are correct for nominal operation NCR will be updated and closed.
28	HP-111000-ASED-NC-3698	HIFI warm SFT1 - command completion failure	FM	HP-TASF-MN-10476 . Time Sync problem between EGSE and SC ,investigation on going with SSBV: NCR to be updated.:Generic problem with all instruments IEGSE to CCS I/F, Update IEGSE setup procedure to include sync with CCS prior to start of test. Same as NCR 4318
29	HP-112000-ASED-NC-3616	SPIRE DPU Set Table TC acceptance not reported as acknowledged by CCS	FM	Will be closed together with 3698, following completion of actions HP-TASF-MN-10476: NCR to be updated with results of actions. TASF J.Hall to update with action status

	1	2	3	4
30	HP-130000-ASED-NC-3572	SPIRE Unknown type (5,x) packet during SPIRE cooler recycle, RMS 48hrs	PFM	To be checked when the next cooler recycling is performed (SPT or RMS IST) : NCR to be updated to monitor during next cooler recycling , not considered a problem: validate during next RMS
31	HP-130000-ASED-NC-3512	During RMS 48, SPIRE DPU reports missing Time Sync Pulse on MIL Bus 1553	FM	Still open: under investigation at IFSI OBSW .RAL say low priority , could result in use as is :ESA to consider acceptance for operation and documentation eg user manual:Status unchanged
32	HP-100000-ASED-NC-3299	Update of RMS MTL SPIRE time-tagged TCs in verification history	PFM	HP-TASF-MN-10476 . Corrected in CCS SW will be verified during RMS IST: Status unchanged
33	HP-112000-ASED-NC-1804	SPIRE EMC E-Field RS test results non conformances	EQM	RS test will not now be performed at SC level, RAL will raise an RFW

	Name	Dep./Comp.		Name	Dep./Comp.
	Baldock Richard	FAE12		Schweickert Gunn	ASG23
	Barlage Bernhard	AED13	X	Sonn Nico	ASG51
X	Bayer Thomas	ASA42		Steininger Eric	AED32
	Brune Holger	ASA45	X	Stritter Rene	AED11
	Chen Bing	HE Space		Suess Rudi	OTN/ASA44
	Edelhoff Dirk	AED2		Theunissen Martijn	DSSA
	Fehringer Alexander	ASG13		Vascotto Riccardo	HE Space
	Fricke Wolfgang Dr.	AED 65		Wagner Klaus	ASG23
	Geiger Hermann	ASA42		Wietbrock Walter	AET12
	Grasl Andreas	OTN/ASA44		Wöhler Hans	ASG23
	Grasshoff Brigitte	AET12		Wössner Ulrich	ASE252
X	Hamer Simon	Terma		Zumstein Armin	ASQ42
	Hanka, Erhard	FI552			
	Hendrikse Jeffrey	HE Space			
X	Hendry David	Terma			
	Hengstler Reinhold	ASA42			
	Hinger Jürgen	ASG23			
X	Hohn Rüdiger	AED65			
	Hofmann Rolf	ASE252			
	Hopfgarten Michael	AED32			
	Huber Johann	ASA42			
	Hund Walter	ASE252			
X	Idler Siegmund	AED312			
	Ivány von András	FAE12			
	Jahn Gerd Dr.	ASG23			
	Jolk Matthias	AET1	X	ESA/ESTEC	ESA
	Kalde Clemens	ASM2	X	Thales Alenia Space Cannes	TAS-F
	Klenke Uwe	ASG72		Thales Alenia Space Torino	TAS-I
	Koelle Markus	ASA43			
X	Koppe Axel	AED312			
	Kroeker Jürgen	AED65		Instruments:	
	La Gioia Valentina	Terma		MPE (PACS)	MPE
X	Lang Jürgen	ASE252	X	RAL (SPIRE)	RAL
	Langenstein Rolf	AED15		SRON (HIFI)	SRON
	Langfermann Michael	ASA41			
	Liberatore Danilo	Rhea		Subcontractors:	
	Martin Olivier	ASA43		Austrian Aerospace	AAE
	Maukisch Jan	ASA43		Austrian Aerospace	AAEM
X	Much Christoph	ASA43		BOC Edwards	BOCE
X	Müller Martin	ASA43		Dutch Space Solar Arrays	DSSA
	Pietroboni Karin	AED65		EADS Astrium Sub-Subsyst. & Equipment	ASSE
	Platzer Wilhelm	AED2		EADS CASA Espacio	CASA
X	Reichle Konrad	ASA42		EADS CASA Espacio	ECAS
	Runge Axel	OTN/ASA44		European Test Services	ETS
	Sauer Maximilian Dr.	AED65		Patria New Technologies Oy	PANT
	Schink Dietmar	AED32		SENER Ingenieria SA	SEN
	Schmidt Thomas	AED15		Thales Alenia Space, Antwerp	TAS-ETCA