



Minutes of Meeting

Date:	25.02.09	Herschel	
Doc.-No.:	HP-2-ASED-MN-1650		
Meeting place:	ESTEC NL	Chairman:	D.Hendry
Date/Time:	25.02.09/10:00 hrs	Secretary	D.Hendry
Agenda dated:	Standard agenda	Close of Meeting:	25.02.09/11.00 hrs

Subject: TRR for SPIRE SFT/CFT in Kourou

Participants:	B.Swinyard RAL Tanya. Lim RAL S.Sidher RAL C.Scharmberg ESA M.Cesa ESA B.Collaudin TASF A.Koppe ASED S.Ilsen ASED D.Hendry ASED S.Hamer ASED	Additional Distribution:
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Brief-Minutes (except following sheets)

Summary of Results of Sheets 2 till

Conclusion:-

The TRR has been successful and test can start on 26.02.09 at 06.00 hrs, subject to closure of the open work and pending resolution of SAS SCOE fault.



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Reference	Results	Remarks
	<p data-bbox="424 591 564 629"><u>AGENDA</u></p> <ul style="list-style-type: none"> <li data-bbox="520 701 727 734">0. Introduction <li data-bbox="520 757 1078 846">1. As Built / As Designed Configuration Status / S/W Status <li data-bbox="520 869 986 902">2. Inspection / Integration Status <li data-bbox="520 925 831 958">3. NCR / RFW Status <li data-bbox="520 981 943 1014">4. Open Work / Open Actions <li data-bbox="520 1037 1007 1070">5. Test Procedures / Test Reports <li data-bbox="520 1093 1007 1182">6. Safety Hazards and Hazardous Operations <li data-bbox="520 1205 975 1294">7. Test Equipment / Facility and Calibration Status <li data-bbox="520 1317 724 1350">8. Cleanliness <li data-bbox="520 1373 1070 1406">9. Test Personnel and Responsibilities <li data-bbox="520 1429 788 1462">10. Problem Areas <li data-bbox="520 1485 643 1518">11. AOB <li data-bbox="520 1541 735 1574">12. Conclusion 	



Reference	Results	Remarks
	<p>0. Introduction</p> <p>This TRR covers the SPIRE CFT/SFT in Kourou post transport, the cryo conditions are in He1 and the test will be performed in accordance with procedure HP-2-ASED-TP-0217 Issue 2.</p> <p>The launch latch status verification will be performed prior to the CFT, a new ACS has been raised SD-0469 to include both the manual check with the DVM and the LPU check. LL checks will be performed prior to the start of CFT .</p> <p>The OBCP verification sequence will be discussed in these mom under AOB.</p> <p>1.As Built / As Designed Configuration Status / S/W Status</p> <p>1.1 HW Status HW status:- SC on VSS in S1B clean room Vertical Launch lock IEGSE to be connected as part of ACS SD-0469 Shorting plugs are fitted and will be removed as part of ACS 0469 and reconnected after check.</p> <p>1.2 SW Status :</p> <p>HP SDB:HP-ASP-LI-1441_28 SPIRE MIB loaded in HP SDB is version 3.0.B2</p>	<p>OW ASED</p>



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	<p>CDMS 3.8.0.1 ACMS 4.0 B004</p> <p>TASF Merged MIB H-P-ASP-LI-1424_07 loaded on IEGSE</p> <p>IEGSE to CCS connection will be tested prior to start of CFT</p> <p>Spire OBSW: Version DPU 3.0.B Partition 1 ; redundant (corrupted bits in main) Version DPU 3.0.B partition 2 ; main and redundant</p> <p>TCL Scripts: Relevant script files: SPIRE_FM_CFT_scripts_22January 2009.</p> <p>Power on/off Spire procedure and script is included in the above.</p> <p>NCR 4639 SPIRE reports SAFE Mode after MCU switch OFF (SCU_ON expected) Requires updated table, this is not included in the above scripts and will now be delivered directly to ESOC Re-occurrence of this error will probably be seen during the CFT</p> <p>2. Inspection / Integration Status</p> <p>2.1 Inspection Status Detailed H/W visual inspection was performed post transport to Kourou Ref:- IR-SAT-49.</p>	<p>OW Spire/ASED</p>



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Reference	Results	Remarks
	<p>2.2 Integration Status SPIRE is in the flight configuration <i>(In advance to the SFT the mechanism LL test harness, breakout box and a DVM will be connected and the latch status read (R~173 Ω). After the measurement the flight configuration will be reconfigured for the SFT start.)</i></p> <p>Cryo conditions:He1</p> <p>Filling level 26%, no filling will be performed prior to CFT</p> <p>Cryo Temperature from 21.02.09 L0, T107) =5.6K L1, T235=10.8 K L1, T235=13.3</p> <p>25.02.09 L2, T207 OBplate=25.8K L3 T249 and T251=26.9</p> <p>The above cryo conditions are acceptable for start of the test</p> <p>Some OOL will be seen during testing but will be monitored by RAL</p> <p>Cryo SCOE and CCU will be connected during the test</p>	



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Reference	Results	Remarks
	<p>TASF will provide a list of sensors connected to CCU and Cryo SCOE</p> <p>2.3 Red/Green Tag status Shorting plugs fitted on SMEC (will be removed prior to test and refitted after)</p> <p>2.4 Parallel operations being performed</p> <p>No functional test will be performed in parallel</p> <p>No mechanical activities are planned in parallel.</p> <p>2.5 Constraints:</p> <p>none identified</p> <p>2.6 Warm Unit temperature Limits</p> <p>Not an issue for this test</p> <p>3. NCR / RFW Status:</p> <p>See Attached list:</p>	<p>OW TASF</p>



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Reference	Results	Remarks
	<p>HP-130000-ASED-NC-4705 CUS can be modified on IEGSE to change temperature limits: This will be monitored during this test, results will be reviewed at follow on NRB</p> <p>RFW: ESA ADVISE ALL Spire RFW are accepted.</p> <p>4. Open Actions</p> <p>HP-2-ASED-MN-1593 dated 01.08.09 AI/001: Data was placed on the ftp server : Closed AI/003: No NCR raised as data was made available see AI above: Closed AI/004: New script run during SPT : Closed AI/005: Was done additional power outlets were provided : Closed AI/002 Corrected by MIB update : Closed</p> <p>4.1 Open Work:</p> <p>4.1.1 LL checks will be performed prior to the start of CFT ASED/RAL. 4.1.2 Check Merged MIB version on Spire IEGSE :RAL 4.1.3 IEGSE to CCS connection will be tested prior to start of CFT:ASED/RAL</p>	



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	<p>4.1.4 TASF will provide a list of sensors connected to CCU and Cryo SCOE</p> <p>5. Test Procedures / Test Reports</p> <p>HP-2-ASED-TP-0217 Issue 2 Agreed and signed</p> <p>6. Hazards and Hazardous operations</p> <p>None identified</p> <p>7. Test Equipment / Facility and Calibration Status</p> <p>IEGSE start up has been performed including the time sync between IEGSE and CCS.</p> <p>8. Cleanliness</p> <p>CL 100000 CSG facility accepted by ESA ref TEC-QE/2009/140/RR</p>	



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Reference	Results	Remarks																																								
	<p>9. Test Personnel and Responsibilities</p> <table border="1" data-bbox="365 643 1776 1034"> <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>0033679353731</td> </tr> <tr> <td>Test Conductor</td> <td>A.Koppe</td> <td>ASED</td> <td></td> </tr> <tr> <td>SPIRE engineering</td> <td>Sidher/Swinyard/Lim</td> <td>RAL</td> <td>00447908343567</td> </tr> <tr> <td>QA</td> <td>T.Schmidt</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>C.Scharmberg</td> <td>ESA</td> <td>00594694415226</td> </tr> <tr> <td>FAIT</td> <td>See Shift plan</td> <td>TASF</td> <td></td> </tr> <tr> <td>Cryo Ops</td> <td>A.Runge/</td> <td>ASED</td> <td></td> </tr> </tbody> </table> <p>10. Problem Areas None identified</p> <p>11. AOB Planning: 11.1 Start of is 26.02.09 at 06.00 hrs pending resolution of SAS SCOE problem 2 shifts are planned from 06.00 hrs up 23.00 hrs</p>	Responsibility	Name	Company	Contact Number	Test Director	B.Collaudin	TASF	0033679353731	Test Conductor	A.Koppe	ASED		SPIRE engineering	Sidher/Swinyard/Lim	RAL	00447908343567	QA	T.Schmidt	ASED		CCS	S.Ilsen/S.Hamer	ASED		PA	D.Hendry	ASED		Instrument coordinator	C.Scharmberg	ESA	00594694415226	FAIT	See Shift plan	TASF		Cryo Ops	A.Runge/	ASED		
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	<p>11.2 :HP-100000-ASED-NC-4804 DRCU off This will requires retest (at least at instrument level on FS (preferred), or in Kourou Remains OPEN until modification & retest. Dedicated test slot forseen on 09.03.09 in Sib CSG</p> <p>11.3:RAL request data is made available for future on the TASF replacement of the ftp</p> <p>12. Conclusion The TRR has been successful and test can start on 26.02.09 at 06.00 hrs, subject to closure of the open work and pending resolution of SAS SCOE fault.</p>	



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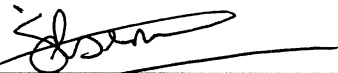

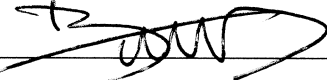

Open Work List

Herschel

Title:

Date: 25.02.09

Item	Description	Actionee	Status	Comment
1.	LL checks will be performed prior to the start of CFT ASED/RAL.	RAL/ASED	Done	
2	Check Merged MIB version on Spire IEGSE :RAL	RAL	Done	
3	IEGSE to CCS connection will be tested prior to start of CFT:ASED/RAL	ASED/RAL	Done	
4	TASF will provide a list of sensors connected to CCU and Cryo SCOE	TASF	Done	included in the as run
5				
6				
7				
8				
9				
10				
11				
12				

Test Conductor Approved	PA	TASF	Instrument
			

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

	A	B	C	D
1	NCR Nr	NCR Title	Status 03.02.09	Status 25.02.09
2				
3	HP-100000-ASED-NC-4805	IST2 FDIR OBCP: Nominal HK stops after SPIRE OBCP DRCU OFF	Expected operation. Spire will update their Inst User manual.TASF will confirm inclusion in SC user manual. No impact on operations documentation only.	NA for this test
4	HP-100000-ASED-NC-4804	Unexpected triggering of SPIRE_OPE_STOP OBCP after SPIRE STANDBY OBCP	A new script was supplied and successfully run IST2 OBCP. DRCU problem to be addressed at TRB.Updated OBCP covered by NCR 4827. SPIRE FDIR table shall be modified to avoid the generation of SPIRE_OPE_STOP. R_SPIRE_DRCU_ANOMALY (5,2) message is sent several time. The 2nd & subsequent messages shall be suppressed, to avoid re-triggering the OBCP. This will requires retest (at least at instrument level on FS (preferred), or in Kourou (only if requested)) Remains OPEN until modification & retest.	NA for this test
5	HP-100000-ASED-NC-4725	TBTV - VC1 Overflow During SPIRE TV Cold	This is caused by excess data caused by the PTC test. Commissioning script will reduce the packet rate.Script will be updated and verified at Instrument level prior SFT in Kourou.	NA for this test, new script will be delivered directly to ESOC, RAL will notify delivery for closure of this NCR

	A	B	C	D
6	HP-130000-ASED-NC-4705	TBTV SPIRE ? detector problem in spectroscopy	tested during SVT2 and as part of the SMEC campaign. Both tests satisfactory, but thermal conditions were not the same as during TV. Will be flagged in Prisma. Critical has a major in flight impact. Spire to provide update to user manual and TASF to include in SC user manual.	CUS can be modified on IEGSE to change temperature limits: This will be monitored during this test, results will be reviewed at follow on NRB
7	HP-100000-ASED-NC-4639	SPIRE reports SAFE Mode after MCU switch OFF (SCU_ON expected)	problem now understood, a new table 211 will be supplied. RAL to confirm when update will be available and how it is to be verified. Discuss at TRB: New table will be uploaded during SFT slot, Spire will validate at instrument level prior to SFT: Problem understood. New table will be provided by SPIRE, tested on the FS. Remains OPEN until modification & retest	Requires updated table, this is not included in the above scripts and will now be delivered directly to ESOC Re-occurrence of this error will probably be seen during the CFT
8	HP-130000-ASED-NC-4393	Unknown 8,6 Packet from ACMS when executing AC082109 (Peak-Up)	HPSDB will be updated, cannot be verified by test but will be verified by code inspection by TASF. Not necessary to update ACMS SW for this problem.	NA for this test. Not Spire problem

	A	B	C	D
9	HP-130000-ASED-NC-3513	During RMS 48 hrs, SPIRE TC sequence errors	<p>This problem was fixed in 2.2.H, but a different problem is now apparent. Further investigation required. ICD non compliance has to be assessed by TASF. AIT will provide further information and this will be discussed during the TRB tomorrow. TAS-F (FS or GPD) to recheck that the wrap around for TC Packet Description counter is 2 instead of 1 for Nominal configuration (in the annex of PS-ICD)</p> <p>The TC Packet Description counter wrap from HEX 18 to 2 (expected because of the reconfiguration that occurred).</p> <p>If this is confirmed: NCR can be closed. If not (1) TASF to define the way forward.</p>	NA for Spire in this test, but will be seen.
10	HP-130000-ASED-NC-3512	During RMS 48, SPIRE DPU reports missing Time Sync Pulse on MIL Bus 1553	UM will be updated.	NA for this test
11				