

Minutes of Meeting

SPIRE-AST-MOM-003062

Date: 08.02.08

Herschel

Doc.-No.: HP-2-ASED-MN-1480

Meeting place: ESTEC NL

Chairman: D.Hendry

Date/Time: 08.02.08 / 11-00 hrs

Secretary: D.Hendry

Agenda dated: 08.02.08

Close of Meeting: 08.02.08 / 12-15 hrs

Subject: TRR for SPIRE wSFT

Participants: K.Goodey ESA
C.Scharmberg ESA
B.Collaudin TASF
D.Hendry ASED
E.Sawyer RAL
S.Sidher RAL

Additional ESA
Distribution: AAS-F

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Brief-Minutes (except following sheets)

Summary of Results of Sheets 2 till

The wSFT testing can start after confirmation of completion of open work

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 warm SFT for Spire and harness verification test after pin swap</p> <p>1.As Built / As Designed Configuration Status / S/W Status</p> <p>1.1 HW Status See DRB and ADP for SPIRE</p> <p>1.2 SW Status :</p> <p>HPSDB:HP-ASP-LI-1441_6</p> <p>Spire MIB:2.2.G7 PR</p> <p>OBSW:SPIRE-RAL- Not -002873 iss 1</p> <p>2nd boot shall be used due to EEprom fault for nominal side, covered in procedure. For redundant use prime partition CDMS: Version 3.1.2</p> <p>TCL Scripts: As previous SFT Check scripts are available and loaded on CCS Merged MIB not yet implemented</p>	<p>OW ASED</p>



Reference	Results	Remarks
<p>2. Inspection / Integration Status</p> <p>2.1 Inspection Status MIP has been performed prior to Spir panel closure Due to harness pin retaining clip NCR, panel will be reopened and harness deintegrated and repaired after SFT.</p> <p>Final Inspection and mate record review to be performed by RAL and ASEED QA prior to start of test.</p> <p>2.2 Integration Status Panel is closed SPIRE is connected and in the flight configuration.</p> <p>Mating of SIH SVM has to be performed see harness NCR</p> <p>Cryo conditions T239 SPIRE/HIFI level 1 305.5 K =33 C today at 10-00 hrs This present temperature would be acceptable to start the SFT but some OOL would result. All OBA temperature PT1000 are within 1/2 degree C</p> <p>2.3 Parallel operations being performed Start of Cooldown See constraints below. LOU deintegration</p> <p>2.4 Constraints:</p>	<p>OW ASEED/RAL</p>	

Reference	Results	Remarks
	<p>2.4.1 Cryo conditions, the temperature of FPU should be between 33 C and 70K . Cryo SCOE will be used to monitor the relevant temperature sensors and should be checked by test conductor and RA.</p> <p>3. NCR / RFW Status:</p> <p>ASED-NC-3942 Connector pin retaining clip broken Temporary fix and SIH mated, not blocking for test</p> <p>NCRs which should be taken into account during the SFT</p> <p>ASED-NC-3631 No impact for warm SFT</p> <p>ASED-NC-3633 HP SDB has been updated. To verified and closed during wSFT</p> <p>ASED-NC-3725 To be verified and closed by ASED-SD-203</p> <p>ASED-NCR-3733 No impact for warm SFT</p> <p>ASED-NCR-3204 Workaround existing, covered by procedure.</p>	<p>OW ASED/RAL</p>



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	<p>ASED-NCR-3211 DRCU step 1 stop HK within 90 sec close DLCU LCL and restart HK</p> <p>RFW none identified</p> <p>4. Open Work / Open Actions</p> <table border="1" data-bbox="794 448 1399 1859"> <thead> <tr> <th>Item</th> <th>Description</th> <th>Actionee</th> <th>Status</th> <th>Comment</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Check scripts are available and loaded on CCS</td> <td>ASED CCS</td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>Cryo SCOE will be used to monitor the relevant temperature sensors and should be checked by test conductor and RAL.</td> <td>TASF/ASED/RAL</td> <td></td> <td></td> </tr> <tr> <td>3</td> <td>Harness mating check and inspection</td> <td>RAL/ASED</td> <td></td> <td></td> </tr> <tr> <td>4</td> <td>ASED will setup the work station at the start of the test run.</td> <td>ASED CCS</td> <td></td> <td></td> </tr> </tbody> </table>				Item	Description	Actionee	Status	Comment	1.	Check scripts are available and loaded on CCS	ASED CCS			2	Cryo SCOE will be used to monitor the relevant temperature sensors and should be checked by test conductor and RAL.	TASF/ASED/RAL			3	Harness mating check and inspection	RAL/ASED			4	ASED will setup the work station at the start of the test run.	ASED CCS			<p>Note: CCS Operator</p>
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<p>5. Test Procedures / Test Reports</p> <p>Sequence Order</p> <p>1st Spire SFT TP-212_1</p> <p>2nd ACS SD-203</p> <p>The IGSE will be connected to retrieve the data</p> <p>6. Safety Hazards and Hazardous operations</p> <p>Herschel ESD rules for all PLM and S/C integration activities, HP-2-ASED-PR-0062,</p> <p>7. Test Equipment / Facility and Calibration Status</p> <p>CCS SCOS work station is installed in IEGSE room , ASED will setup the work station at the start of the test run.</p> <p>The internet connection is operational and was validated by IEGSE specialist.</p> <p>Voice link is installed</p> <p>8. Cleanliness</p>		



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	CL 100000 ETS facility see FRR Ref ETS/MOM/MECH/2253 9. Test Personnel and Responsibilities <table border="1" data-bbox="683 448 1110 1865"> <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 Engineering</td> <td>E.Sawyer</td> <td>RAL</td> <td></td> </tr> <tr> <td>Spire engineering</td> <td>S.Sidher</td> <td>RAL</td> <td></td> </tr> <tr> <td>QA</td> <td>Langenstein</td> <td>ASED</td> <td></td> </tr> <tr> <td>CCS</td> <td>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>ESA PA</td> <td>J.Rautakoski</td> <td>ESA</td> <td></td> </tr> </tbody> </table>				Responsibility	Name	Company	Contact Number	Test Director	B.Collaudin	TASF		Test Conductor	A.Koppe	ASED		Spire Engineering	E.Sawyer	RAL		Spire engineering	S.Sidher	RAL		QA	Langenstein	ASED		CCS	S.Hamer	ASED		PA	D.Hendry	ASED		Instrument coordinator	K.Goodey	ESA		ESA PA	J.Rautakoski	ESA		
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	<p>Planning: SFT is planned to be run on Monday 11.02.08, The SC will switched on at 06-00 The SFT will start after check of open work app 10-00 hrs expected duration app 5 hrs including verification test covered by ACS</p> <p>12. Conclusion</p> <p>The wSFT testing can start after confirmation of completion of open work</p>	

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Open Work List

Herschel

Title:

Date: 08.02.08

Item	Description	Actionee	Status	Comment
1.	Check scripts are available and loaded on CCS	ASED CCS		
2	Cryo SCOE will be used to monitor the relevant temperature sensors and should be checked by test conductor and RAL.	TASF/ASED/RAL		
3	Harness mating check and inspection	RAL/ASED		
4	ASED will setup the work station at the start of the test run.	ASED CCS		

Test Conductor Approved	PA	TASF	Instrument

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

Name	Dép./Comp.	Name	Dep./Comp.
Baldock Richard	FAE12	Schweickert Gunn	ASG23
X 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	X Vascotto Riccardo	HE Space
X 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	X 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		
X Huber Johann	ASA42		
Hund Walter	ASE252		
X Idler Siegmund	AED312		
Ivány von András	FAE12		
X 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
X Koelle Markus	ASA43		
X Koppe Axel	AED312		
X Kroeker Jürgen	AED65	Instruments:	
X La Gioia Valentina	Terma	MPE (PACS)	MPE
X Lang Jürgen	ASE252	X RAL (SPIRE)	RAL
X Langenstein Rolf	AED15	SRON (HIFI)	SRON
X Langfermann Michael	ASA41		
Liberatore Danilo	Rhea	Subcontractors:	
X Martin Olivier	ASA43	Austrian Aerospace	AAE
X 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
Reichle Konrad	ASA42	EADS CASA Espacio	ECAS
Runge Axel	OTN/ASA44	European Test Services	ETS
Sauer Maximilian Dr.	AED65	Patria New Technologies Oy	PANT
X Schink Dietmar	AED32	SENER Ingenieria SA	SEN
X Schmidt Thomas	AED15	Thales Alenia Space, Antwerp	TAS-ETCA