



Minutes of Meeting

Date:	05.06.08	Herschel	
Doc.-No.:	HP-2-ASED-MN-1558		
Meeting place:	ESTEC NL	Chairman:	D.Hendry
Date/Time:	05.06.08/15-00 hrs	Secretary	D.Hendry
Agenda dated:	Standard agenda	Close of Meeting:	05.06.08/17-15hrs

Subject: TRR for Herschel Instruments SFT He1 post Acoustic

Participants:	E.Sawyer RAL <i>Sawyer</i> C.Scharmberg ESA K.Goodey ESA <i>Goodey</i> M.Cesa ESA <i>M.Cesa</i> B.Collaudin TASF V.La Gioia ASED P.Roelfsema SRON pt P.Dieleman SRON pt H.Feuchtgruber MPE by phone S.Idler ASED by phone W.Laauwen SRON by phone	A.Koppe ASED D.Hendry ASED <i>D.Hendry</i>	Additional: ESA Distribution: TASF
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Brief-Minutes (except following sheets)

Summary of Results of Sheets 2 till

SFT can start subject to completion of open work listed here in and successful completion of acoustic test.



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Reference	Results	Remarks
	<p data-bbox="432 566 571 600"><u>AGENDA</u></p> <ol style="list-style-type: none"><li data-bbox="528 678 730 712">0. Introduction<li data-bbox="528 734 1082 824">1. As Built / As Designed Configuration Status / S/W Status<li data-bbox="528 846 991 880">2. Inspection / Integration Status<li data-bbox="528 902 831 936">3. NCR / RFW Status<li data-bbox="528 958 948 992">4. Open Work / Open Actions<li data-bbox="528 1014 1011 1048">5. Test Procedures / Test Reports<li data-bbox="528 1070 1011 1160">6. Safety Hazards and Hazardous Operations<li data-bbox="528 1182 979 1272">7. Test Equipment / Facility and Calibration Status<li data-bbox="528 1294 730 1328">8. Cleanliness<li data-bbox="528 1350 1075 1384">9. Test Personnel and Responsibilities<li data-bbox="528 1406 794 1440">10. Problem Areas<li data-bbox="528 1462 651 1496">11. AOB<li data-bbox="528 1518 740 1552">12. Conclusion	



Reference	Results	Remarks
	<p>0. Introduction From the Mechanical test TRR, it has been requested to be able to run an instrument health check between acoustic test and sine test. Acoustic test is planned to start middle of week 23, for 5 days SFT would then take place around 10th June</p> <p>This TRR covers the Herschel Instruments SFT He1 post acoustic test as requested by ESA due to concern with the FPU qualification level compared to the acoustic specification levels. The areas of concern are the PACS bolometer supports and cooler heater switches. It should be noted that some areas of the instruments, eg, detectors are not verified during the SFT in He1 and will only be verified in He2</p> <p>Test Sequence: SC switch on with FDIR 06-00 to 10-00 PACS HP-2-ASED-TP-0221 issue 1 (10-00 to 15-00) SPIRE procedure HP-2-ASED-TP-212 issue 1.2 (16-00 to 20-00) HIFI HP-2-ASED-TP-219 issue 1.1 (20-00 to 01-00)</p> <p>When prime instrument is tested the other 2 instruments are switched off</p> <p>1.As Built / As Designed Configuration Status / S/W Status</p> <p>1.1 HW Status The test will be performed in the leaf following acoustic test SC is fully flight configured with the following exceptions: LOU baffle is integrated but will be redesigned and replaced PACS filterwheel cross strapping is not yet implemented</p>	



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Reference	Results	Remarks
	<p>1.2 SW Status :</p> <p>HP SDB:HP-ASP-LI-1441_10 release Note</p> <p>SPIRE MIB 2.2.H1 PR SPIRE Merged MIB H-P-ASP-LI-1424_04</p> <p>HIFI MIB 11.6 Merged LI 1422_04</p> <p>PACS MIB 8.17 Merge LI 1423_04</p> <p>SPIRE OBSW: Version DPU 2.2.H Partition 1 ; main and redundant Version DPU 2.2.H partition 2 ; main and redundant</p> <p>HIFI OBSW ICU 5.4 Partition 1 N and R ICU 5.2 partition 2 n and R</p>	



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Reference	Results	Remarks
	<p>PACS OBSW:- DPU 8.4 DECMEC: 6.0.20 SPU :13.8</p> <p>CDMS: Version 3.6</p> <p>2. Inspection / Integration Status</p> <p>2.1 Inspection Status Inspection has been performed prior to acoustic test see Mechanical TRR An inspection will be performed post acoustic</p> <p>2.2 Integration Status SC in full flight configuration in the acoustic chamber</p> <p>Spire Launch Latch monitoring is connected and will be connected during acoustic and vibration,</p> <p>Cryo conditions:He1</p> <p>As HP-2-ASED-MN-1528 Cryo conditions for FPU testing in He1 dated 10.04.08:</p> <p>No constraint for He-I conditions from any FPU if temperatures are in the following range</p>	



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Reference	Results	Remarks
	<p>Level 0 (HTT upper bulkhead, T107): 4.2 – 6.5 K (4.2 – 7K at L0 I/F) Level 1 (vent line, T231 – 237): 4.2 – 15 K Level 2 (OBP, T254 T207): 5 – 30 K Level 3 (Spire J-FET, T246 T247): 5 - 50 K No constraint on thermal shield and CVV Cryo cover: 220 -260 K Temperatures might drift in the above range during test. S/C vertical and no movement during test.</p> <p>Present temperatures will be distributed to all instruments.</p> <p>HIFI cooling to be installed and operating for SFT</p> <p>2.3 Parallel operations planned</p> <p>Telescope alignment</p> <p>3. NCR / RFW Status:</p> <p>See Annex 1</p> <p>All 3 instruments confirm there are no open NCRs blocking for the test. A number of the existing NCRs will be evident during the testing and reoccurrence shall be noted in the log and subsequence update of the NCR.</p>	



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Reference	Results				Remarks
	RFW none identified				
	4. Open Work / Open Actions				
	Item	Description	Actionee	Status	Comment
	1.	Readout of L0, L1 and mass flow	ASED		
	2	HP-2-ASED-TP-0219_1.1 Page 24 ,Step 13 script need updated and checksum	SRON		
	3	HP-2-ASED-TP-0219_1.1 Page 25 remove _warm redline procedure	ASED		
	4	HP-2-ASED-TP-0219_1.1 Page 40 use master script ; PVS to be raised.	ASED		
	5	HP-2-ASED-TP-0219_1.1 Page 49 SFT standby PVS 5 was performed manually :SRON to confirm if can be run with master script	SRON		
	6	Check/reset Time sync	ASED		



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Reference	Results				Remarks	
		between IEGSE and CCS				
	7	IEGSE reconfiguration for HIFI nominal and redundant to be clarified	SRON			
	8	PVS to be raised on PACS TP step 1.2 set bus profile to prime	ASED			
	9	HIFI cooling cart to be connected and operating	ASED			
<p>5. Test Procedures :</p> <p>5.2.PACS:- PACS SFT (Duration 4:00 + 3h to switch S/C with FDIR): 5.3.SFT AIT Procedure : HP-2-ASED-TP-0221_1 - FM PACS Cold SFT in Hel Red lined as run from 09.04.08 see TR ASED-0250 5.3.1Additional Changes: Sec 7.2.3.3 step 4.c Script name changed to PACS_spec_Gra_SFT_He1_OBS Step 19 for redundant. PVS 2 and 3 not to be implemented.</p> <p>HP-2-ASED-TP-0134_4 (Switch on procedure with FDIR activation, needed for PACS)</p>						



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Reference	Results	Remarks
	<p>SFT PACS procedure:PACS-ME-TP-017_2_1- PACS Short Functional Tests for information</p> <p>Test Scripts: PACS_MASTER_Scripts_20080506.zip + PACS_CCS_templates-2008-05-06-12-20.zip</p> <p>HIFI:_ HIFI SFT (Duration 4:00) SFT AIT Procedure :HP-2-ASED-TP-0219_1.1 - FM HIFI SFT in Hel or Hell.</p> <p>Additional changes to as run procedure:- Page 24 ,Step 13 script need updated and checksum. OW SRON Page 25 remove _warm redline procedure Page 40 use master script ; PVS to be raised. Page 49 SFT standby PVS 5 was performed manually :SRON to confirm if can be run with master script PVS 1 to 6 not to be executed. Run full SFT nominal and redundant</p> <p>SFT HIFI procedure: SRON-G-HIFI-PR-2007-017_1_16 - HIFI_Power_on SRON-G-HIFI-PR-2007-018_1_16_1 - HIFI IST SFT</p> <p>Test Scripts:HIFI_tcl_files_V1_16.zip</p>	



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Reference	Results	Remarks
	<p>SPIRE:- SPIRE SFT (Duration 4h): Option 1</p> <p>SFT AIT Procedure :HP-2-ASED-TP-0212_1.1 - SPIRE FM Short Functional test (IEGSE not needed, standalone scripts) Steps 7.2.5 and 7.2.9 will not be executed</p> <p>SFT SPIRE procedure: SPIRE-RAL-PRC-002494_2.5 -SPIRE_SFT_Procedures Test Scripts: SPIRE_FM_SFT_Scripts_10Sep2007.zip</p> <p>6.Hazards and Hazardous operations</p> <p>None</p> <p>7. Test Equipment / Facility and Calibration Status</p> <p>IEGSE is connected: Time sync test between IEGSE and CCS to be performed Cryo SCOE connection not mandatory as CCU is operational.</p> <p>ACMS is not needed</p> <p>HIFI cooling cart to be connected and operating</p> <p>8. Cleanliness</p>	



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Reference	Results				Remarks
	CL 100000 ETS facility see FRR Ref ETS/MOM/MECH/2253				
	9. Test Personnel and Responsibilities				
	Responsibility	Name	Company	Contact Number	
	Test Director	B.Collaudin	TASF		
	Test Conductor	S.Idler/A.Koppe/N.Son n	ASED		
	SPIRE	S.Sidher	RAL		
	HIFI	P.Dieleman	SRON		
	HIFI	A.De.Jonge	SRON		
	PACS	H.Feuchtgruber	MPE		
	PACS	NN	MPE		
	QA	Hogg/Vascotto/ Lamonby			
	CCS	V.La Gioia/Elsley Chen/Klenke	ASED		
	PA	D.Hendry	ASED		
	Instrument coordinator	K.Goodey/M.Cesa	ESA		
ESA PA	J.Rautakoski	ESA			
Note: Personnel to cover 2 consecutive shifts shall be identified					



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Reference	Results	Remarks
	<p>10. Problem Areas None</p> <p>11. AOB Planning: Test is scheduled to start 06-00 on Monday 09.06.08 with power on of SC Duration 1 day 3 shifts PTR can be held 10.06.08</p> <p>12. Conclusion SFT can start subject to completion of open work listed here in and successful completion of acoustic test.</p> <p>Post TRR Note:- It's been discussed at the AFT3 TRR and agreed with TASF (B. Collaudin) that, to complement the AFT3 (prior to vibration) tomorrow, where the instruments will be left off, we can add one PVS per instrument for the SFT on Monday. This, to test both bus interfaces of nominal and redundant units. It shouldn't take longer than 5 minutes per unit. Content of the PVSes will be: "Once the instrument's unit (nominal/redundant) is in standby/safe mode: 1) send TC from command stack SetBusB.hpws21 to switch from bus A to B 2) check that instrument's HK is correctly received 3) send TC from command stack SetBusA.hpws21 to switch back from bus B to A 4) carry on with the SFT as per calling procedure." ASED VL will take care of inserting the PVSes in the corresponding procedures right after power on section, before SFT section.</p>	

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Action Item List

Herschel

Title:

Date: 05.06.08

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

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Open Work List

Herschel

Title:

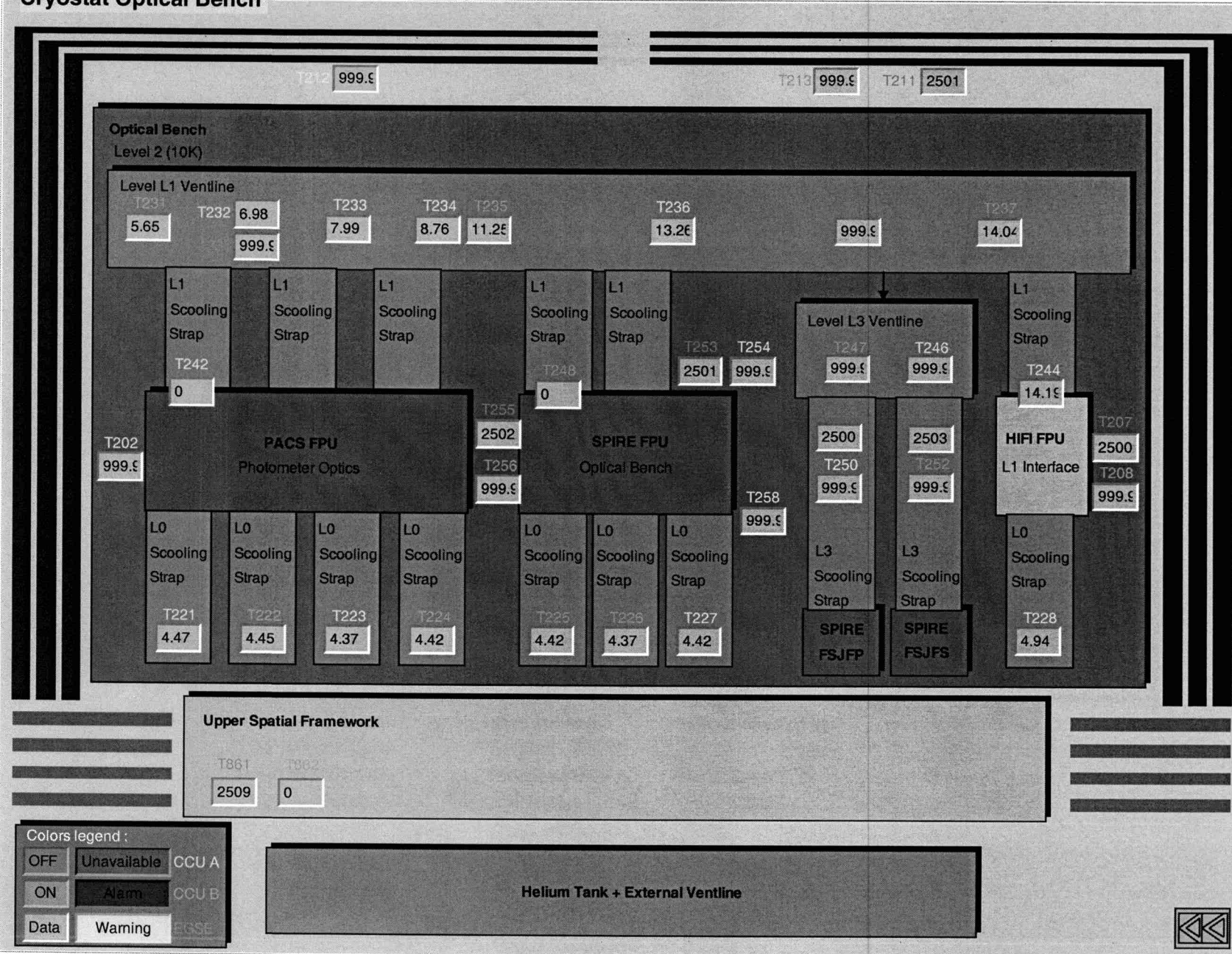
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6	Check/reset Time sync between IEGSE and CCS	ASED		
7	IEGSE reconfiguration for HIFI nominal and redundant to be clarified	SRON		
8	PVS to be raised on PACS TP step 1.2 set bus profile to prime	ASED		
9	HIFI cooling cart to be connected and operating	ASED		

Test Conductor Approved	PA	TASF	Instrument

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

Cryostat Optical Bench



Colors legend :

OFF	Unavailable	CCU A
ON	Alarm	CCU B
Data	Warning	EGSE



Cryostat Control Unit

Sunshade

T311 294.1
+Y Panel

T312 293.4

T316 293.8

Center Panel

T315 293.0

T313 293.4

-Y Panel

T314 294.0

CCU A 0.18 Avail. **CCU A** On

MIL 1553

Alive Well TM

Valid Well TC

CCU B 0.17 Avail. **CCU B** On

MIL 1553

Alive Well TM

Valid Well TC

Colors legend :

OFF Unavailable CCU A

ON Alarm CCU B

Data Warning EGSE

