

PRODUCT ASSURANCE Space Science and Technology Department

Subject / Title:

PFM Post Test Review "Workmanship Cold Vibration"

Document No:

t SPIRE-RAL-MoM-002721

Issue No:

1 Date

13th September 2006

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Spacecraft / Project	HERSCHEL / SPIRE	Meeting Place	Telecon,
Instrument / Model	SPIRE PFM	Subsystem	FPU

Participants		Agenda		
Print Name Signature		1. Test specimen		
RAL		- configuration		
Eric Sawyer		- inspection status		
ESA		- NCR		
Norbert Nikolaizig		- cleanliness status		
ESA		- open work		
Carsten Scharmberg		2. Test facility		
CSL		- configuration & status		
Christophe Grodent		- NCR		
emistophe Grouent		- cleanliness status		
		3. Test Reports		
<u> </u>		- Test plan and procedure configuration		
		- Test procedure deviations		
		- Evaluation and verification of test results		
		4. Conclusion		
		- The test was properly executed ?		
		- The test data confirms that the parameters were within the expected		
		required limits?		
		Additional Distribution		
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1. Test specimen

- Configuration

Full FM standard, as defined in the CIDL.

- Inspection status

Inspected on delivery, no damage.

Standard electrical check performed before test all OK.

Inspected on completion of test, no damage.

Standard electrical check performed after test NCR raised due to SMEC latch in non latched state. Latch relatched for transit.

- NCR

NCR 159 raised, SMEC latch unlatched. Attached to minutes.

- Cleanliness status

Bagged for delivery, covered when being worked on. No sign of contamination visually.

- Open work

No open work.

2. Test facility

- Configuration & status

Set up for X axis test.

No problems, bellows re-used.

All requirements for delta T and cooling rate were observed.

4 days for cool, 3.5 days for warm up.

- NCR

No NCRs on facility



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- Cleanliness status

Cleanliness status in the test report.

Small out of specification on molecular witness.

- 3. Test Reports
- Test plan and procedure configuration SPIRE-RAL-PRC-002597 issue 2 Cold workmanship vibration test plan, PFM

SPIRE-RAL-PRC-002598 issue 3 Cold workmanship vibration test procedure, PFM

- Test procedure deviations

As run procedure will be scanned and made available

No deviation from procedure.

- Evaluation and verification of test results

To be carried out by SPIRE

Vibration test report received from CSL.

- 4. Conclusion
- The test was properly carried out as per specification.
- The test data confirms that the parameters were within the expected required limits.
- Need for further testing

This campaign is complete, further tests may be required.

- Completeness of data

All data has been made available.



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The test was successfully performed.

ESA would like to thank CSL and SPIRE for a successfully run campaign.

SPIRE would also like to thank CSL.

Action			Title & Description	
No	Responsibility	Due Date	Title & Description	



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List of NCR's Raised re this Test

NCR Number	Title	Level	Originator	Date Raised
HR-SP-RAL-NCR-159	SMEC unlatched during cryo-vibration test.	Major	E Sawyer RAL	14/9/06