

# TEST READINESS REVIEW (TRR) CHECKLIST & MoM

TRR MoM Date: 31-JAN-2007 NUMBER SPIRE-RAL-MOM-002817- Issue 1

Spacecraft / Project	Herschel / SPIRE
Instrument / Model	PFM
Sub System / Serial No.	N/A

Type of Test	PFM-5 Cold Test Campaign
AIV Facility Test No.	N/A
Location & Date(s) of Testing	SPIRE Test Facility
Applicable Test Specification (Document No. & Issue)	SPIRE-RAL-DOC-002535 – Issue 2.0
Applicable Test Procedure (Document No. & Issue)	SPIRE-RAL-PRC-002816 – Issue 1.0
AIV Facility Test Plan (if applicable?)	N/A

Documentation / Inspection Status				
As Built Status? List of all items /Parts	Currently at issue 2.8 – Numbers of JFET modules to be updated. Entrance aperture cover fitted & SMEC prime and redundant harness swapped			
Special Instructions				
Inspection Status and Records:				
Hazards Identified	Ref SPIRE risk assessment ESD precautions to be observed – only trained personnel to access lab.			
Cleanliness	Inspected in G56 Test facility to be class 6 (old 1000)			
Unit/Item Bagged	N/A			
Screws Locked	N/A			
Connector Savers	Are being used on FPU and Warm Units			
Other	Adaptors fitted to MCU P17 & P18 to correct error in warm test harness.			

Assignment of Personnel					
Function	Name	Contact number			
Test Director	Dave Smith	Ext 5996			
Project Manager	Eric Sawyer	Ext 5385			
AIV Facility Manager	Dave Smith	Ext 5996			
Safety Officer	Dave Smith	Ext 5996			
Product Assurance	Eric Clark	Ext 5662			



## TEST READINESS REVIEW (TRR) CHECKLIST & MoM

TRR MoM Date: 31-JAN-2007

NUMBER SPIRE-RAL-MOM-002817- Issue 1

## CONTINUATION SHEET

As Built Status (Will the following have an Impact on the test performance / results?)				
Review of all "NCR's"	NRB held on 31 <sup>st</sup> Jan 2007 – ref SPIRE-RAL-MOM-002818. No open NCRs affecting this test campaign.			
Review of all "Waiver's"	None applicable			
"Open Work"	See below			
Other				
MIP's or KIP's	Visual inspection when cryostat opened showed hardware ok after PFM-4.			

## ACTIONS / COMMENTS / OBSERVATIONS:

#### Status

SSW test – warm test performed with reworked harness - 16nVHz<sup>-1/2</sup> Harness rework appears to fixed JFET imbalance – detector spreadsheet has been updated and will be circulated.

Cryostat pumped down – LN2 shrouds filled and start to cool to 80K SMEC unlatched

## WFT

Completed successfully. Standard and closed loop tests of SMEC were fine.

## OBS

2.2G tested on AVM – ok Need to test VMs – 2 changes needed – increase time between interrupts on HW VM & implement new floating point library. Should be completed on  $1^{st}$  February.

## DCRU

No open work.

## HCSS

Acceptance testing on 0.4.1 – should be completed 1<sup>st</sup> February.

#### MIB

Imported version PFM-5 2.2G1 onto SCOS with corrected SMEC temp cal tables.

#### Scripts

There are separate scripts to recycle cooler on prime and redundant. New script needed to perform load curves with PCAL flashes at each level. Tanya to raise an SCR. AOT scripts to be ingested – will be done after HCSS acceptance tests. There are 4 sets of cal tables for SMEC Prime/Redundant & Hot/Cold – to be updated.

## QLA

V3.3 – main changes are table updates and support to dynamic changing of MCU engineering parameters.

Planned shutdown of computers over weekend has affected one of the displays on the QLA machine.



## TEST READINESS REVIEW (TRR) CHECKLIST & MoM

TRR MoM Date: 31-JAN-2007

#### NUMBER SPIRE-RAL-MOM-002817- Issue 1

Under investigation.

## **Test Plan**

Test priorities - detector characterization, SMEC testing, EMC (2 days TBC).

Fillippo expected 19<sup>th</sup>/20<sup>th</sup> February Dominique TBD

Tanya has sent round test spreadsheet based on JPL inputs for comment – JPL proposals discussed during weekly telecom.

Tanya to update test spreadsheet and distribute.

#### **JPL** Availabilities

Bernhard 12<sup>th</sup> Feb to 19<sup>th</sup> Feb Hien 7<sup>th</sup> Feb to 21<sup>st</sup> Feb Jamie 19<sup>th</sup> Feb to 28<sup>th</sup> Feb (TBC)

#### Planning

Cool Functional Test Friday/Monday Cool to 4K on Tuesday 6<sup>th</sup> Cold functional tests on Wednesday 7<sup>th</sup> Cold testing starts Friday 9th Start warm up on 2<sup>nd</sup> March Back to G56 on 12<sup>th</sup> March

#### AOB

FPGA running times continue to be logged – totals to be added.

### **Test Readiness**

We are ready to go.

Decision for test continuation:		YES / NO / REVIEW	Review Date:	31-Jan-2007
Company	Name			
RAL	Eric Sawyer Dave Smith Ken King Bruce Swinyard		Tanya Lim Doug Griffin Sunil Sider Eric Clark	
Cardiff	Matt Griffin			