CCLRC Rutherford Appleton Laboratory	INCOMING / OUTGOING INSPECTION REPORT	PRODUCT ASSURANCE Space Science and Technology Department			
Spacecraft/Project	**HERSCHEL**	**Document No**	**SPIRE-RAL REP-001873**		
Instrument/Model	**SPIRE / Flight**	**Issue No**	**1**	**REV**	**0**
Subsystem	**FM Filter modules, Back harnesses and Test boards**	**Date**	**12 November 03**		

Report at receipt/delivery or other major movement of instrument/hardware and associated GSE.

Inspection Report	**Incoming**

FROM	**TO**
JPL USA	**SPIRE RAL UK**

Inspection conducted by			***Witnessed by (Product Assurance)***	
Name		Signature / Date	Name	Signature / Date
Eric Sawer	PP	Signature Not Verified Digitally signed by Eric Clark Date: 2003.11.25 14:43:44 Z	**Eric Clark**	Signature Not Verified Digitally signed by Eric Clark Date: 2003.11.25 14:42:45 Z

Eric Sawyer Inspected the Containers, Bruce and Doug the Cross talk boards all other inspection performed by Eric Clark

CCLRC Rutherford Appleton Laboratory	INCOMING / OUTGOING INSPECTION REPORT	PRODUCT ASSURANCE Space Science and Technology Department			
Spacecraft/Project	**HERSCHEL**	**Document No**	**SPIRE-RAL REP-001873**		
Instrument/Model	**SPIRE / Flight**	**Issue No**	**1**	**REV**	**0**
Subsystem	**FM Filter modules, Back harnesses and Test boards**	**Date**	**12 November 03**		

INTRODUCTION

This inspection report shall be completed for formal transfers of hardware between RAL and customers, agencies or collaborating organisations
The following must be inspected:

	SECTION	No
Documentation	**Yes**	**1**
Containers	**Yes**	**2**
Visual Inspection of Hardware	**Yes**	**3**
Connectors	**Yes**	**4**
Harnesses	**Yes**	**5**
Pre Closure Checks	**N/A**	**6**
Interface Verification	**N/A**	**7**

Each section contains a checklist that shall be completed.

Unused boxes should have N/A entered.

Deviations e.g. items not delivered or incomplete documentation must be noted in the comments column.

For previously agreed deviations refer to the Delivery Review Board (DRB) minutes of meeting (MOM) or similar.

NCR's must be raised for other deviations, damage or defects noted.

CCLRC Rutherford Appleton Laboratory	INCOMING / OUTGOING INSPECTION REPORT	PRODUCT ASSURANCE Space Science and Technology Department			
Spacecraft/Project	**HERSCHEL**	**Document No**	**SPIRE-RAL REP-001873**		
Instrument/Model	**SPIRE / Flight**	**Issue No**	**1**	**REV**	**0**
Subsystem	**FM Filter modules, Back harnesses and Test boards**	**Date**	**12 November 03**		

SECTION 1: DOCUMENTATION

Documentation shall be checked for completeness, any items not received or to be delivered later should be noted.

Note 1: The delivery review board minutes should list outstanding items, e.g. open work, open NCRs and Waivers etc. A copy should accompany or form part of the EIDP. If there is no EIDP then it should be referenced on this report.

Note 2: All items dispatched from the Laboratory must have a Dispatch Note completed and signed, with a copy filed in the appropriate section of the EIDP.

No.	Procedure	Comments (Include NCR Number if applicable)	Check N/A or ✓
1.1	Is the documentation complete	**No A more detailed EIDP is expected than the one supplied**	
1.2	Is the accompanying documentation compliant with project requirements	**There is an ongoing discussion regarding the content of the Acceptance Document pack (EIDP) between SPIRE & JPL**	
1.3	Note DRB/MoM Document Number, minutes and note any discrepancies with respect to agreements recorded. OR attach copy of minutes.	**No Formal DRB has occurred regarding these items**	
1.4	Additional Remarks	**The content of the delivered documentation is becoming very worrying.**	

Spacecraft/Project	**HERSCHEL**	**Document No**	**SPIRE-RAL REP-001873**		
Instrument/Model	**SPIRE / Flight**	**Issue No**	**1**	**REV**	**0**
Subsystem	**FM Filter modules, Back harnesses and Test boards**	**Date**	**12 November 03**		

SECTION 2: INSPECTION OF CONTAINERS 1 CROSSTALK BOARDS.

No.	Procedure	Remarks (Include NCR Number if applicable)	Check N/A or ✓
	Transport Containers – External condition.		
2.1	Inspect the outside of the containers for obvious mechanical damage: Cracks, fasteners/locks clips, physical damage, dents or scratches etc. Handling provisions, Other damage	**Cardboard Outer box with dedicated inner case containing items**	✓
2.2	Markings for description and destination		✓
2.3	Packing / unpacking instructions	**None supplied**	
2.4	Warning labels relating to handling, lifting, stacking limits		✓
2.5	Additional Remarks Check security of container		✓
	Transport Containers – Internal condition		
2.6	Check environmental monitors such as humidity indicators, shock recorders and record the location and readings on the inspection	**None Fitted**	
2.7	Check mounting fixtures or brackets and screws, padding and packing.		✓
2.8	Additional Remarks Check security of container		✓

CCLRC Rutherford Appleton Laboratory	INCOMING / OUTGOING INSPECTION REPORT	PRODUCT ASSURANCE Space Science and Technology Department			
Spacecraft/Project	**HERSCHEL**	**Document No**	**SPIRE-RAL REP-001873**		
Instrument/Model	**SPIRE / Flight**	**Issue No**	**1**	**REV**	**0**
Subsystem	**FM Filter modules, Back harnesses and Test boards**	**Date**	**12 November 03**		

SECTION 2: INSPECTION OF CONTAINERS 2- FILTER MODULES

No.	Procedure	Remarks (Include NCR Number if applicable)	Check N/A or ✓
	Transport Containers – External condition.		
2.1	Inspect the outside of the containers for obvious mechanical damage: Cracks, fasteners/locks clips, physical damage, dents or scratches etc. Handling provisions, Other damage	**Cardboard Outer box with dedicated inner case containing items**	✓
2.2	Markings for description and destination		✓
2.3	Packing / unpacking instructions	**None supplied**	
2.4	Warning labels relating to handling, lifting, stacking limits		✓
2.5	Additional Remarks Check security of container		✓
	Transport Containers – Internal condition		
2.6	Check environmental monitors such as humidity indicators, shock recorders and record the location and readings on the inspection	**None Fitted**	
2.7	Check mounting fixtures or brackets and screws, padding and packing.		✓
2.8	Additional Remarks Check security of container		✓

SECTION 2: INSPECTION OF CONTAINERS 3 BACK HARNESSES

No.	Procedure	Remarks (Include NCR Number if applicable)	Check N/A or ✓
	Transport Containers – External condition.		
2.1	Inspect the outside of the containers for obvious mechanical damage: Cracks, fasteners/locks clips, physical damage, dents or scratches etc. Handling provisions, Other damage	**Cardboard Outer box with dedicated inner case containing items**	✓
2.2	Markings for description and destination		✓
2.3	Packing / unpacking instructions	**None supplied**	
2.4	Warning labels relating to handling, lifting, stacking limits		✓
2.5	Additional Remarks Check security of container		✓
	Transport Containers – Internal condition		
2.6	Check environmental monitors such as humidity indicators, shock recorders and record the location and readings on the inspection	**None Fitted**	
2.7	Check mounting fixtures or brackets and screws, padding and packing.		✓
2.8	Additional Remarks Check security of container		✓

SECTION 3: VISUAL INSPECTION OF HARDWARE FILTER MODULES

Insert one copy of the following section for each configuration item, OR Individual unit.

Note: Section 3 when used with the front sheet may be used as a complete report for small units prior to final closure, if this is done confirm unit interior check carried out before closure Interior check will be limited to visible items.

CI NUMBER	**1029723 B**	**SERIAL NUMBER**	**013 to 019 & 021 to 025**

No.	Procedure	Remarks (Include any NCR Numbers if Applicable	Check N/A or ✓
3.1	Check contents against shipping list		✓
3.2	Note external contamination		✓
3.3	Inspect the outside for physical damage, cracks, dents, scratches		✓
3.4	Degradation of painting		N/A
3.5	Mounting provisions		✓
3.6	Fasteners correctly locked		✓
3.7	Check for protective covers on all electrical and fluid connectors and on optical and sensor apertures		✓

CCLRC Rutherford Appleton Laboratory	INCOMING / OUTGOING INSPECTION REPORT	PRODUCT ASSURANCE Space Science and Technology Department			
Spacecraft/Project	**HERSCHEL**	**Document No**	**SPIRE-RAL REP-001873**		
Instrument/Model	**SPIRE / Flight**	**Issue No**	**1**	**REV**	**0**
Subsystem	**FM Filter modules, Back harnesses and Test boards**	**Date**	**12 November 03**		

List of Hardware items inspected

Item	Part No	Ser No	Mass	NOTES
FM Filter Module	1029723 B	013	**46.9 g (including Connector Savers)**	**HR-SP-JPL-NCR-004 included in EIDP Item 1 in Disposition / corrective Action states "Requesting for a Waiver to use the 12 Filters listed herein as is"** **No Waiver received as of 25th November 03 EC to chase JPL**
FM Filter Module	1029723 B	014	**46.6 g (including Connector Savers)**	
FM Filter Module	1029723 B	015	**45.5 g (including Connector Savers)**	
FM Filter Module	1029723 B	016	**45.3 g (including Connector Savers)**	
FM Filter Module	1029723 B	017	**46.4 g (including Connector Savers)**	
FM Filter Module	1029723 B	018	**45.4 g (including Connector Savers)**	
FM Filter Module	1029723 B	019	**46.3 g (including Connector Savers)**	
FM Filter Module	1029723 B	021	**46.1 g (including Connector Savers)**	
FM Filter Module	1029723 B	022	**46.9 g (including Connector Savers)**	
FM Filter Module	1029723 B	023	**45.1 g (including Connector Savers)**	
FM Filter Module	1029723 B	024	**45.6 g (including Connector Savers)**	
FM Filter Module	1029723 B	025	**45.2 g (including Connector Savers)**	

,

Note

The Cross-talk boards were removed by Bruce Swinyard / Doug Griffin for electrical Test.

SECTION 4 CHECK ALL CONNECTORS

No.	Procedure	Remarks (Include NCR Number if applicable)	Check N/A or ✓
3.8.1	Bent pins	**All Filter Modules were inspected**	✓
3.8.2.	Internal / external damage		✓
3.8.3	Internal debris		✓
3.8.4	Connector covers fitted		✓
3.8.5	Connector savers in position		✓
3.8.6	EMC Covers Fitted		**N/A**
3.8.7	**RED** tag items/covers fitted		**N/A**
3.8.8	Any other damage		✓

SECTION 4 CHECK ANY HARNESS AND ASSOCIATED CONNECTORS ASSOCIATED WITH THE HARDWARE

No.	Procedure	Remarks (Include NCR Number if applicable)	Check N/A or ✓
3.9.1	Bent pins		✓
3.9.2	Internal / external damage		✓
3.9.3	Internal debris		✓
3.9.4	Protection caps fitted		✓
3.9.5	Connector Savers fitted		**N/A**
3.9.6	EMC Covers Fitted		**N/A**
3.9.7	**RED** tag items/covers fitted		**N/A**
3.9.8	Any other damage		**None**

HSJEP-J28 & J27 No Jack screws fitted all other connectors OK
HSJFS-J09 & J10 No Jack screws fitted all other connectors OK
HSJFP-J25 & J26 No Jack screws fitted all other connectors OK

SECTION 5 PRE CLOSURE CHECKS

No.	Procedure	Remarks (Include NCR Number if applicable)	Check N/A or ✓
3.10.1	All internal units securely fastened locked		N/A
3.10.2	All internal connector fasteners locked		N/A
3.10.3	All cabling secure		N/A
3.10.4	No internal debris		N/A
3.10.5	Check packaging is correct		N/A
3.10.6	Shock recorders reset		N/A
3.9.7	Additional remarks		N/A

SECTION 6: VERIFICATION OF INTERFACES

Confirm all required interface-checking activities have been carried out.

4.1 **Mechanical interface** dimensions specified in the interface control documents such as mass, flatness of surfaces, location of fixing holes and overall dimensions should be measured accurately and recorded. **Record Test Report Number**, or confirm that measurement result is included in delivery documentation, (EIDP).

4.2 **Electrical interfaces:** verifying the location and types of connectors against interface control document is normally carried as part of mechanical verification, confirm this has been done.
Functional testing: final functional test report number should be noted.

No.	Procedure	Remarks (Include NCR Number if applicable)	Check N/A or ✓
4.1	Mechanical Interfaces Verification	**Will be checked when integrated**	
4.2	Electrical Interfaces Verification	**Will be checked when integrated**	