CCLRC Rutherford Appleton Laboratory	INCOMING / OUTGOING INSPECTION	PRODUCT ASSURANCE Space Science and Technology Departmen			
Spacecraft/Project	HERSCHEL	Document No	SPIRE-R	AL REP-0017	72
Instrument/Model	SPIRE EGSE	Issue No	1	REV	0
Subsystem	FTS	Date	28 <sup>th</sup> Sept	2003	

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

Inspection Report	Incoming	FTS

FROM	ТО
University of Lethbridge Canada	SPIRE SSTD RAL

Inspection co	nducted by	Witnessed by (	Product Assurance)
Name	Signature / Date	Name	Signature / Date
Peter Davis-Imhof		Dave Kelsh	On Kell

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#### **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:

Documentation	SECTION	1
Containers		2
Visual Inspection of Hardware		3
Interface Verification		4

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.

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#### **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	Shipping Documents only Checked	
1.2	Is the accompanying documentation compliant with project requirements		N/A
1.3	Note DRB/MoM Document Number, minutes and note any discrepancies with respect to agreements recorded. OR attach copy of minutes.		N/A
1.4	Additional Remarks		N/A

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### **SECTION 2: INSPECTION OF CONTAINERS**

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	Wooden Crate not locked. Blackbody cardboard box damaged lower corner Holes in top (3 ok) (2 ok)	<b>✓</b>
2.2	Markings for description and destination	All	✓
2.3	Packing / unpacking instructions	To be unpacked by P.D.I. all	✓
2.4	Warning labels relating to handling, lifting, stacking limits	All	✓
2.5	Additional Remarks Check security of container	All	N/A
	Transport Containers – Internal condition		
2.6	Check environmental monitors such as humidity indicators, shock recorders and record the location and readings on the inspection		TBC N/A
2.7	Check mounting fixtures or brackets and screws, padding and packing.		TBC N/A
2.8	Additional Remarks Check security of container		TBC N/A

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#### **SECTION 3: VISUAL INSPECTION OF HARDWARE**

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.

CINUMBER	SERIAL NUMBER	
CINUMBER	SERIAL NUMBER	

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

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#### **Check All Connectors**

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

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#### 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		N/A
3.9.2	Internal / external damage		N/A
3.9.3	Internal debris		N/A
3.9.4	Protection caps fitted		N/A
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		N/A

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#### **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

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#### **SECTION 4: 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		
4.2	Electrical Interfaces Verification		