

Spacecraft/Project	HERSCHEL	Document No	SPIRE-RAL REP-001885		
Instrument/Model	SPIRE / PFM & FS	Issue No	3	REV	0
Subsystem	Flight & Flight Spare Harnesses (missing items)	Date	17 <sup>th</sup> March 2004		

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

<b>Inspection Report</b>	<b>Incoming 3<sup>rd</sup> phase remainder of Harnesses</b>
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Note: Phased Deliveries

2<sup>nd</sup> phase Delivery  
3<sup>rd</sup> Phase  
FINAL REPORT

PSW & SLW FS Harnesses  
Harness inspection completed & corrected.  
HR-SP-RAL-NCR 054 resolved

SPIRE-RAL REP-001885 issue 2.0

FROM	TO
Roy Blake TEKDATA	Doug Griffin SPIRE RAL

<i>Inspection conducted by</i>		<i>Witnessed by (Product Assurance)</i>	
Name	Signature / Date	Name	Signature / Date
Doug Griffin		Eric Clark	

**THIS REPORT ADDS THE 3rd PHASE of the DELIVERY.**  
**NEW/ADDITIONAL COMMENTS ARE IN BLUE, No comment indicates, no change or differences observed.**

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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:

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

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.

<b>No.</b>	<b>Procedure</b>	<b>Comments (Include NCR Number if applicable)</b>	<b>Check N/A or ✓</b>
1.1	Is the documentation complete	<b>No Documentation seen by PA with goods</b>	
1.2	Is the accompanying documentation compliant with project requirements	<b>See above</b>	
1.3	Note DRB/MoM Document Number, minutes and note any discrepancies with respect to agreements recorded. OR attach copy of minutes.		
1.4	Additional Remarks	<b>1<sup>st</sup> delivery, delivered by Hand by Roy Blake double bagged in clean condition Connector covers removed and harnesses fit checked before this inspection performed</b> <b>2<sup>nd</sup> Delivery Delivered by hand by Roy Blake single bagged in cardboard box</b> <b>3<sup>rd</sup> Delivery, Delivered by hand, double bagged and bubble wrapped</b>	

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## SECTION 2: INSPECTION OF CONTAINERS

No.	Procedure	Remarks (Include NCR Number if applicable)	Check N/A or ✓
	<b>Transport Containers – External condition.</b>		
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	<b>Delivered by Hand</b>	<b>N/A</b>
2.2	Markings for description and destination		<b>N/A</b>
2.3	Packing / unpacking instructions		<b>N/A</b>
2.4	Warning labels relating to handling, lifting, stacking limits		<b>N/A</b>
2.5	Additional Remarks Check security of container		<b>N/A</b>
	<b>Transport Containers – Internal condition</b>		
2.6	Check environmental monitors such as humidity indicators, shock recorders and record the location and readings on the inspection		<b>N/A</b>
2.7	Check mounting fixtures or brackets and screws, padding and packing.		<b>N/A</b>
2.8	Additional Remarks Check security of container		<b>N/A</b>

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**SECTION 3: VISUAL INSPECTION OF HARDWARE NOT APPLICABLE**

**SECTION 4 CHECK ALL CONNECTORS NOT APPLICABLE**

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**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	<b>RED</b> tag items/covers fitted		N/A
3.9.8	Any other damage		N/A

**See Following Sheets for Harness Details**

**Connector covers were removed and the Harnesses Fit Checked before formal inspection performed (1<sup>st</sup> delivery )**

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Harness	PFM / FS	Connector	Ser No	Length from connector to feed through in mm		Connector	Ser No	Mass gm's	Comments (It is assumed that ser no's show continuity)
PSW	FS	JFP P29	41	225	160	BDA P01	41	300gm	The FS & PFM allocation was reversed. The Harnesses have been checked as used and the records amended to correct this
	FS	JFP P30	43	210	190	BDA P02	43		
	FS	JFP P31	45	250	155	BDA P03	45		
	FS	JFP P32	47	230	185	BDA P04	47		
	FS	JFP P33	49	220	150	BDA P05	49		
	FS	JFP P34	51	240	180	BDA P06	51		
PSW	PFM	JFP P29	42	210	185	BDA P01	42	269gm	The FS & PFM allocation was reversed. The Harnesses have been checked as used and the records amended to correct this
	PFM	JFP P30	44	200	185	BDA P02	44		
	PFM	JFP P31	46	230	175	BDA P03	46		
	PFM	JFP P32	48	240	175	BDA P04	48		
	PFM	JFP P33	50	210	170	BDA P05	50		
	PFM	JFP P34	52	245	170	BDA P06	52		
PMW	FS	JFP P37	25	220	310	BDA P01	25	235gm	The FS & PFM allocation was reversed. The Harnesses have been checked as used and the records amended to correct this
	FS	JFP P38	27	215	310	BDA P02	27		
	FS	JFP P39	29	225	310	BDA P03	29		
	FS	JFP P40	31	235	310	BDA P04	31		
PMW	PFM	JFP P37	26	210	310	BDA P01	26	230gm	Missing information recorded The FS & PFM allocation was reversed. The Harnesses have been checked as used and the records amended to correct this
	PFM	JFP P38	28	220	310	BDA P02	28		
	PFM	JFP P39	30	225	310	BDA P03	30		
	PFM	JFP P40	32	235	310	BDA P04	32		

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Harness	PFM / FS	Connector	Ser No	Length from connector to feed through in mm		Connector	Ser No	Mass gm's	Comments (It is assumed that ser no's show continuity)
PLW	FS	JFP P35	21	230	435	BDA P05	21	160gm	The FS & PFM allocation was reversed. The Harnesses have been checked as used and the records amended to correct this <b>Missing information recorded</b>
	FS	JFP P36	23	205	515	BDA P06	23		
PLW	PFM	JFP P35	22	260	410	BDA P05	22	130gm	
	PFM	JFP P36	24	240	500	BDA P06	22		
SLW	FS	JFP P13	37	300	80	BDA P05	37	125gm	The FS & PFM allocation was reversed. The Harnesses have been checked as used and the records amended to correct this <b>HR-SP-RAL-NCR 054 resolved</b>
	FS	JFP P14	39	245	370	BDA P01	39		
SLW	PFM	JFP P13	38	300	80	BDA P05	38	134.6gm	
	PFM	JFP P14	40	260	370	BDA P01	40		
SSW	FS	JFS P11	34	285	70	BDA P05	34	140 gm	The FS & PFM allocation was reversed. The Harnesses have been checked as used and the records amended to correct this <b>Missing information recorded</b>
	FS	JFS P12	36	330	175	BDA P06	36		
SSW	PFM	JFS P11	33	290	70	BDA P05	33	143gm	
	PFM	JFS P12	35	325	190	BDA P06	35		
STM			002					50gm	Thermocouple harness, delivered with the above harnesses but not FS or PFM.

**SOME HARNESSSES ORIGINALLY RECORDED AS PFM HAVE BEEN SWAPPED WITH FS IN USE. THE HARNESSSES HAVE NOW BEEN LABELED FS OR PFM AS RECORDED ON THIS LIST.**



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## SECTION 5 PRE CLOSURE CHECKS **NOT APLICABLE**

## 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	<b>Fit checked by Roy Blake &amp; Doug Griffin before incoming inspection performed</b>	✓
4.2	Electrical Interfaces Verification	<b>To be completed as part of integration</b>	✓