

Delivery Review Board Minutes of Meetings (MoM) & Check list

PRODUCT ASSURANCE Space Science and Technology Department

EIDP DRB Subject: FM DPU Deliv	very DRB MoM N°	SPIRE-RAL-MoM-002678	Issue No: 1	Page 1 of 3
EIDP Doc N\(\frac{1}{2}\)issue:	DRB Location:	RAL SPIRE Project	t Office DRB Date:	20-June 06
Spacecraft / Project: HERSCH	EL / SPIRE Instrument / Mo	odel: FM	Ser No:	<u>.</u>

AGENDA & PARTICIPANTS

	Participants:	Agenda:
Print Name	Signature Required	
RAL	PP	
Eric Sawyer	(in dance)	
RAL:	11/1/16	
Eric Clark	arla	
CGS	/) Chan 20 11.	
Alessandro Ricciu	Illuallo fl-	
CGS	100 100	
Massimo Vitta	Monto	
ASI	m co sin m	
Maria Christina Falvella	ale il antitolette	
ASI	(P) \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
Luigi de Angelis	Jungs De Duger	
IFSI	2 (
Paolo Saraceno	Jado 50	
ISFI		
Sergio Molinari	Worker 1910	
Company / Institute		Additional Distribution
	, ,	
Company / Institute		



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PRODUCT ASSURANCE
Space Science and Technology
Department

EIDP DRB Subject:

FM DPU Delivery

DRB MoM No:

SPIRE-RAL-MoM-002678

Issue No:

1

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	Action		Title 9 Decemention
No	Responsibility	Due Date	Title & Description
No	Responsibility	Due Date	Incoming inspection (visual inspection) carried out by CGS and RAL, IFSI and ASI present during this inspection. See incoming inspection report SPIRE-RAL-REP-002677 All inspection satisfactory. Two shock monitors tripped, see report. Minor particulate contamination, removed. The EIDP was sent by separate package at the same time as the hardware, but has not arrived at RAL yet. RAL already has an electronic copy, but a paper copy will be delivered. Functional test carried out using OBS V1, by IFSI with support from RAL and CGS. Procedure HERS-SPIRE-PR-CGS-002 issue 2 was followed. Sections C18.3, C22.6, C22.17, C22.22, E18.3, E22.6, E22.17, E22.22 were followed; behaviour was nominal for all tests. This unit is now considered delivered to SPIRE project SPIRE project will take responsibility for handling the unit from now. The unit (hardware) is covered by guarantee by CGS for two years.

		_			
Sub System	DPU		Date	20th June 2006	Model FM
		INCO	MING INSPECT	ION REPORT	
	FROM]	ТО	
	CGS			Proje Rutherford Applete Space Science and Tecl Chilto DIDCO OXOI OX11 0	on Laboratory nnology Department in OT N
	P 11 4		<u>.</u> 1	5	
	applicable sections	T		Drawings / Docum	
	Containers	Yes		Photo	'S
	I Visual Inspection rnal Connector	Yes			
	rnal Connector ocumentation	Yes Yes			
	tion of Interfacess	No			
	Comments Sheets	Yes			
INSP NAME	PECTION CONDUCTED BY	ATE	y 1	WITNESS	BY DATE
Massimo Vitta / Ale Ricciu	acandra	une 2006		Eric Clark (PA) & Eric Sawyer	20th June 2006

Spacecraft/Project	HERSCHEL / SPIRE	Document	Number SPIRE-RAL-REP-002677	Issue 1
Sub System	DPU	Date	20th June 2006	Model FM
		CONTAIN	IER INSPECTION	
TRANSPORT C	ONTAINERS EXTERNAL CO	NDITION	REMARKS	Status
Mechanical damage to handling provisions	o container fasteners, locks, o	lips or		Checked
Security / Locking Fitt	ted		Each fastener was locked with wire	See Remarks
Markings for destination	on and description			Checked
	g to handling lifting and stac	king limits		Checked
Any additional Comme			Delivered in a metal suitcase type containe	er See Remarks
TRANSPORT C	CONTAINERS INTERNAL COM	IDITION	REMARKS	Status
Check Mounting fixtur	es fitted internal packaging			Checked
Internal padding / pacl	kaging required			Checked
Mounting provisions s	ecure			Checked
Any additional Comme	ents			None
		ENVIROME	NTAL MONITORS	
Temp Monit Fitted: Condition:	Fitted:	tiy Monitors	X Axis Two of the three Shock	erd Information 15g 25g 50g watch monitors were tripped ephoto's

Spacecraft/Project HERSCHEL / SPIRE	Document Number SPIRE-RAL-REP- 002677	Issue 1
Sub System DPU	Date 20th June 2006	Model FM
	INSTRUMENT VISUAL INSPECTION	

CHECK LIST	REMARKS	RESULTS
Contents against shipping list	Only one box containing DCU found, box containing EIDP missing	Incorrect
Instrument label		Acceptable
Note status of external contamination	Some slight particulate contamination observed removed at RAL	See Remarks
Degradation of paintwork or Coating?		None
Fasteners correctly locked?	No visible Screw locking/staking seen	See Remarks
Check protective covers are correctly labelled and fitted?		N/A
Additional Comments	Some slight particulate contamination observed removed at RAL	See Remarks

Sub System DPU	J	Date	20th June 2006	Model FM
		INSPECTION OF ALL C	CONNECTORS	
CHECK LIST		REMARKS (LIST CO	DNNECTOR NUMBERS)	RESULTS
Pin Alignment				Pass
Damaged Sockets				None
Internal Debris				Pass
Connector Covers fitted				Pass
Connector Savers Fitted	Fitted by Mas (0.025Nm)	simo in G56 claen room. Using	torque setting of less than 0.030Nm	See remark
EMC Covers Fitted				Pass
RED Tag Item / Green Tag Items fitted				N/A

Spacecraft/Project HERSCH	IEL / SPIRE	Document Number	SPIRE-RAL-REP- 002677	Issue 1
ub System [DPU	Date	20th June 2006	Model FM
		DOCUMENTATION C	HECKLIST	
		DOCUMENTATION C	HECK LIST	
Check		REM <i>A</i>	RKS	RESULTS
nd Item Data Pack	On delivery no	te in a second box not found a	time of inspection	No
ransportaion Documents				Yes
acking un- Packing instructions	Included in mis	ssing EIDP massimo Had a cop	y that was used	No
dditional Comments				
		Verification of Int	erfaces	
lechanical interface: dimensions sperimensions should be measured accur				
ocumentation, (EIDP).	,			,
NSPECTION / TEST REPORT NUME	BER		CHECKED To be	preformed Later
Electrical interfaces: verifying the loc onfirm this has been done. Functiona				art of mechanical verification,
	I testing: final function		noted.	art of mechanical verification,

Spacecraft/Project	HERSCHEL / SPIRE	Document Number	SPIRE-RAL-REP-002677	Issue 1
Sub System	DPU	Date	20th June 2006	Model FM
		EXTRA COMMENT	SHEET	
		LATRA COMMENT	SILLI	
Visual Check only perfo	rmed as full electrical testing will be p	performed Later.		
	lack screws cleaned at RAL			
Connector Savers and S	ack sciews cleaned at NAL			
1				

Container as delivered to PA section ready for Incoming Inspection.



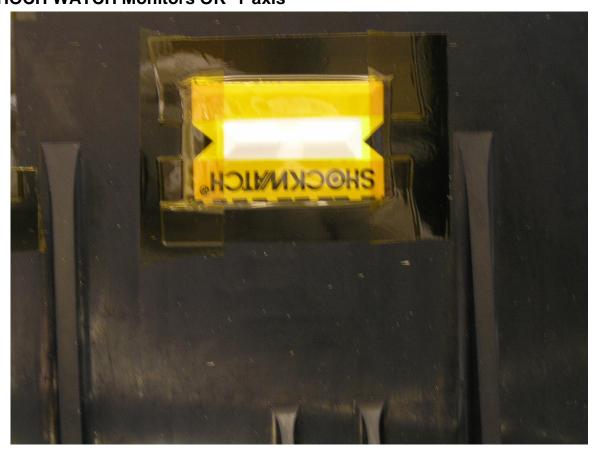
With Top Removed



FM DPU Incoming Inspection Report SHOCH WATCH Monitors Tripped Z axis



SHOCH WATCH Monitors OK Y axis



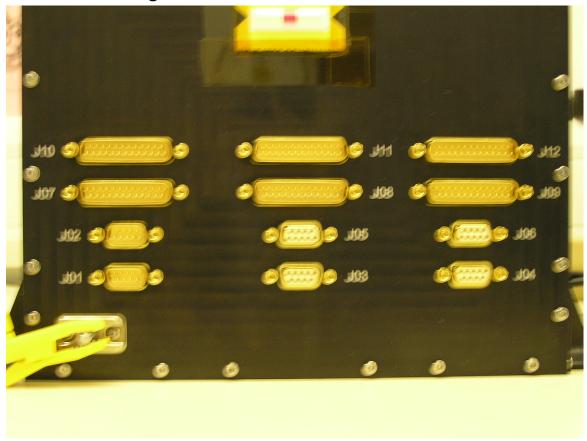
FM DPU Incoming Inspection Report SHOCH WATCH Monitors Tripped X axis



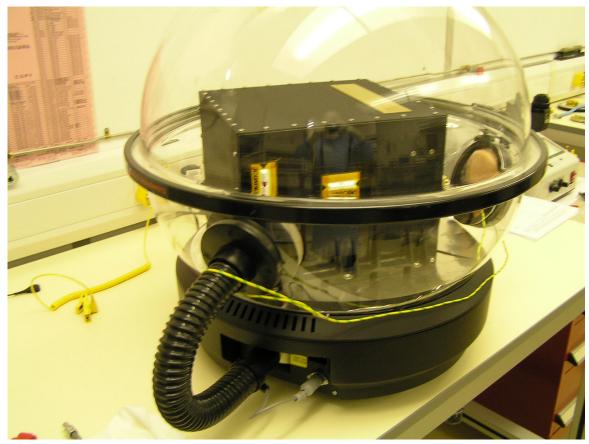
End view showing Connector covers in Place



FM DPU Incoming Inspection Report SPIR End View showing Connector covers removed



Placed inside Laminar low chamber



FM DPU Incoming Inspection Report SPIRE-RAL-REP-0026777 issue 1 Inside Laminar Flow chamber showing connector savers Fitted.

