

Spacecraft/Project	HERSCHEL / SPIRE	Document No	SPIRE_RAL_MoM-00 1982		
Instrument/Model	PFM	Issue No / Rev	1	Page	Page 1 of 9
Subsystem	BSM PFM	Date	26 March 2004		

Title / Subject	BSM PFM	Chairman	Bruce Swinyard
Meeting Place	CR13 RAL	Secretary	Eric Clark

	Participants	Agenda
(Print Name) Ray Carvel Phil Parr-Burnam Eric Sawyer Doug Griffin Eric Clark Matt Griffin Bruce Swinyard	(Signature Required) NA NA NA Digitally signed by Eric Clark Date: 2004.03.26 15:38:08 NA NA NA	 Review action / comments from Dave Kelsh meeting at ATC And previous meeting at ATC with Bruce & Doug. NCR Status Open Work Review of EIDP AOB
Addi	itional Distribution	Attachments
		EIDP Check List



Spacecraft/Project	HERSCHEL / SPIRE	Document No	SPIRE_RAL_MoM-00 1982			
Instrument/Model	PFM	Issue No / Rev	1	Page	Page 2 of 9	
Subsystem	BSM PFM	Date	26 March 2004			

Action No	Title and Description	Action Responsibility	Action Deadline
	Ray expressed appreciation for bringing of the meeting forward.		
	Comments from Dave Kelsh visit were general Eric stated that most of the comments raised were a repeat of the comments made 2 years ago at the base line review attended by Doug and Eric. Phil stated that some of the Comments are due to the config system used at ATC. Which is described in the PA Plan and accepted		
	Minutes of Actions / response to ATC Meeting attended by Bruce & Doug		
	see next page		

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	HERSCHEL / SPIRE		Document No	SPIRE_RAL_M	oM-00 1	1982
Instrument/Model	PFM		Issue No / Rev	1	Page	Page 3 of 9

Actions from ATC pre-meeting:

Subsystem

ATC: Document the procedure for removing the magnets from the mirror assembly - N/A to this model

RAL: Make a formal request for more current (60mA capacity) to LAM - Open work - discussed with nLAM - it's o.k. but ECR needed

RAL: Forward procedure for staking of fasteners and lacing cord - Done

BSM PFM

ATC: Stake lacing cord and MDM nuts. – open work see list – add MDM nuts to open work list

ATC: Investigate if the un-powered positioning remains constant between cold and warm on

the BSM DM2 - test is done - it does remain constant - does not invalidate life test an analysis is in preparation (tech note)

ATC: Supply an extra shoe for alignment - N/A to this model - Not required until flight spare

ATC: Supply in EIDP a statement regarding the alignment tolerance between the Pcal mounting surface and the nominal zero-zero position of the mirror. – see EIDP

RAL: Organise the DRB meeting (invitations etc.) – done

Dave Kelsh's visit – re-iteration of requirements in ATC PA Plan – need to implement the PA Plan. Drawings are controlled in a different manner at ATC – done through Pro-Engineer – this is o.k. more or less

Date

NCR:

Add column "Major/Minor" to NCR list.

NCR 036 – non-conformance on performance even at 60 mA – plan is to accept this as is for PFM FPU build 1 then upgrade to FS BSM with bigger magnets for FPU build 2.

26 March 2004



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Spacecraft/Project	HERSCHEL / SPIRE	Document No	SPIRE_RAL_MoM-00 1982		
Instrument/Model	PFM	Issue No / Rev	1	Page	Page 4 of 9
Subsystem	BSM PFM	Date	26 March 2004		

Action No	Title and Description	Action Responsibility	Action Deadline
	NCR Review		
	NCR 34 is accepted as is. an alignment procedure will be used to rectify problem closed at DRB		
A1	A measurement accuracy should be included in sec 2.2 of SPI BSM Rep 008.	Phil	
	NCR 35 P clips replaced by Lacing so heat shrink will not be abraded and a detailed procedure is Open work		
A2	NCR 34 &36 should be updated with values from the Test report. NCR 34 can then be closed	Phil	
	NCR 36 to remain open pending further investigation.		
	Baseline plan is to fit the BSM PFM to first build of flight FPU, then swap with flight spare BSM during second build of flight FPU.		

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Spacecraft/Project	HERSCHEL / SPIRE	Document No	SPIRE_RAL_MoM-00 1982		
Instrument/Model	PFM	Issue No / Rev	1	Page	Page 5 of 9
Subsystem	BSM PFM	Date	26 March 2004		

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	NCR 37 (not supplied in EIDP) metallic debris during Vibration test. Still open BSM to be retested with PCAL & Thermistor's, when mounted. NCR 35 and 37 can be closed by ATC with above note added.		
	Open NCR are accepted with no impact on delivery.		
	Open Work		
A3	Complete Test plan SPIRE-ATC-PRJ-000736.		
	Formal tests to be performed to confirm previous observations.	David McNiell /Brian Stobe	
	Additional staking of wire (p clip replacement) procedure to be written NCR 35		
	Fixing of PCAL		
	Fixing of Thermistor's		
	Staking of Nuts(MDM)		
	None of the Open work, apart from the testing, effects delivery as it would have to be done on delivery to RAL when the PCAL and Thermistor's are fitted to the BSM		



Rutherford Appleton Laboratory	, ,				
Spacecraft/Project	HERSCHEL / SPIRE	Document No	SPIRE_RAL_MoM-00 1982		
Instrument/Model	PFM	Issue No / Rev	1	Page	Page 6 of 9
Subsystem	BSM PFM	Date	26 March 2004		

Action No	Title and Description	Action Responsibility	Action Deadline
	Review of EIDP.		
	Check list used attached to Minutes.		
A4	Send Pad forms to ATC and Cardiff re self purchased EEE parts.	Eric C	
	AOB		
	None		
	Accordance carried subject to completion of Open Work		
	Acceptance agreed subject to completion of Open Work		



Delivery Review Board (DRB) Check List

Spacecraft/Project	HERSCHEL SPIRE	EIDP Document No	SPI-ATC-DOC-000738		
Instrument/Model	BSM / PFM	Issue No	1	REV	4
DRB Held At	RAL CR 13	Date	26 th March 2004		

No	Record applicable answers and	Yes	No	N/A	Comments	Responsible
	provide explanations in comment					Sign & Date
	column					
1	Are all Documents, Drawings, etc		x		Provide higher fidelity electronic versions	
	complete, approved and under				of drawings	
	configuration control				Update GA drawing to reflect as built	
					status – remove P-clips	
					Include the interface drawing	
					Note - Test report will contain position of	
					mirror etc	
					Design description should be 000587 -	
					variations in as built item should be	
					checked against design description and	
					variations noted.	
					Add information that tells which coil and	
					position sensor is fitted to which	
					axis/motor	
					Add a CIDL in normal format	
2	Do the Released items above reflect all		x		No see comments on design description	
	approved Changes				and GA drawings	
3	Is the Hardware identical to other		x		No – previous item was STM	
	Hardware delivered? If not provide				_	
	difference list					



Delivery Review Board (DRB) Check List

PRODUCT ASSURANCE Space Science and Technology

Spacecraft/Project HERSCHEL SPIRE EIDP Document No SPI-ATC-DOC-000738
Instrument/Model BSM / PFM Issue No 1 REV 4

DRB Held At RAL CR 13 Date 26th March 2004

No	Record applicable answers and provide explanations in comment column	Yes	No	N/A	Comments	Responsible Sign & Date
4	Does the Hardware fulfil its functional requirements, Specifications? RFW's, ICD's etc.	х			Yes except as noted in NCR list Verification matrix to be completed Add reference to test report(s) in verification matrix	
5	Does the As built Configured Items List reflect instrument as delivered	х			Drawing list is o.k.	
6	Have all required environmental tests & analyses been completed		х		See open work list	
7	Have all the required Tests and Qualification procedures and reports been completed and available to review.		х		See open work list	
8	Have all the Declared Lists, i.e. DML, DMPL, DPL & components (EEE Parts) list been released (May not be included in EIDP, but must be available)		х		Not included in EIDP - DML; DPL to be included in CIDL	
9	Have PADS been raised and approved where required.		x		Connectors – require PADS RAL Position sensors – check status ATC	



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No	Record applicable answers and	Yes	No	N/A	Comments	Responsible
	provide explanations in comment					Sign & Date
	column					
10	Are the Test Readiness Review (TRR)	x			TRR minutes present	
	minutes and the Post Test Reviews				PTR not applicable as test not complete	
	(PTR) complete and available?					
11	EIDP CHECK		x		Mate- de-mate log – make note that saver is	
	Are all agreed sections of the EIDP				fitted where this is done.	
	complete. Record any anomalies.				Change name of section 3.13 to Historical	
	-				Log,	
					Add rows for additional work to be carried	
					out at RAL.	
					CIDL list to be added as noted above.	
					Waivers raised for closure of NCRs not	
					formally closed – to be sent to RAL for	
					signature.	