



**MINUTES OF MEETING
(MoM)**

PRODUCT ASSURANCE
Space Science and Technology Department

Spacecraft/Project	Herschel	Document No	SPIRE-RAL-MoM-001717		
Instrument/Model	SPIRE	Issue No / Rev	1 / 0	Page	1 of 6
Subsystem	MSSL & LAM	Date	17 th June 03		

Title / Subject	MSSL & LAM NCR MRB	Chairman	Eric Clark
Meeting Place	CR 3 R61	Secretary	

Participants		Agenda
(Print Name)	(Signature Required)	Discuss the following NCR's
Alan ORIGNE		
Marc Fardet		
C BROCKLEY-BUATT		
A. Dibbens		
A.J. Coker		
DOUG GRIFFIN		
ERIC CLARK		
Additional Distribution		Attachments
B. Swales		List of NCR's

Spacecraft/Project	Herschel	Document No	SPIRE-RAL-MoM-001717		
Instrument/Model	SPIRE	Issue No / Rev	1 / 0	Page	2 of 6
Subsystem	MSSL & LAM	Date	17 th June 03		

Action No	Title and Description	Action Responsibility	Action Deadline
A01	SM7/SM8 interface – RAL to raise NCRs and LAM to fill in details	Eric C	17/06/03
A02	MSSL do not have configuration 42A. Send MSSL a Copy Source of error needs to be identified	Bruce	17/06/03
A03	Requested GS tools NCR should be changed to a RFW	Eric C	17/06/03
A04	NCR-27 Interference of 11b with box Rib needs to be machined down by 1mm to give better clearance to fit SM11b – found when mirrors were being installed – probably caused by not having interface drawings.	MSSL	
A05	Action: Check EIDP for mirror drawings and provide these to MSSL	Mark	17/06/03
A06	Also need to check if mirrors are built to drawings – inspection reports NCR also needed for 11a (Ref HR-SP-RAL-NCR-040) NCR's 027 & 040 Accepted close both NCR's	Eric	Completed 17/06/03
	NCR-35 Alignment cube interface Tapped holes in SOB are separated by 22mm, holes in alignment cube are 25mm – cube drawing specifies separation of 22mm. Cube has not been made to specification Temporary alignment mirror used for warm alignment Work around is to make interface plate and fit incorrect alignment cube for cold alignment tests. Cube not good enough for Astrium. Cube to be removed after cold alignment. Not needed again until delivery to Astrium.		

Spacecraft/Project	Herschel	Document No	SPIRE-RAL-MoM-001717		
Instrument/Model	SPIRE	Issue No / Rev	1 / 0	Page	3 of 6
Subsystem	MSSL & LAM	Date	17 th June 03		

A07	<p>For CQM/PFM make 2 cubes to drawing no 52-64-305-16 issue 7. MSSL are responsible for procuring alignment cube. Chris to send drawing to Dominique and request quotation (cc'd to Eric S).</p>	CBB	19/06/03
A08	<p>NCR-36 BSM Action 1 closed Action 2 closed Action 3 open – 4mm spacers will be removed after alignment. In plane shims have to be left in place to maintain alignment. ATC are probably not happy with vibrating with shims. ATC can make shoe with correct offsets if needed. Telephone IAN PAIN To Close Action 4 Closed - contingent on action 5</p>	Doug	20/06/03
A09	<p>Action 5: Open – MSSL to reissue ICD – needed imminently so that manufacture of PFM can start. 2 Dimensions to be added to Drawing.</p>	CBB	23/06/03
A10	<p>LAM.QA.SPI.NCR.030017 issue 1. – D-Tools D-Tools are in place and do fit. I/F plate should have a slot. New Action: Bruce to send latest JPL interface showing slot to LAM Closure of NCR is to modify I/F plate to match JPL interface.</p>	Bruce	17/06/03
A11	<p>LAM.QA.SPI.NCR.030045 – CM3 mount Cause of problem is understood (described in NCR) Mirror is being remanufactured – planned to deliver in mid August. NCR can be closed pending completion of actions</p>	Dominique	TBD

Spacecraft/Project	Herschel	Document No	SPIRE-RAL-MoM-001717		
Instrument/Model	SPIRE	Issue No / Rev	1 / 0	Page	4 of 6
Subsystem	MSSL & LAM	Date	17 th June 03		

A12	<p>LAM.QA.SPI.NCR.030038 – Spectrometer mechanism issue 1 & 2 NCR can be closed</p> <p>12 30 Mark & Alain left meeting</p> <p>HR-SP-MSSL-NCR-001 – Gold Plating Incorrect specification for Gold Plating of 300mK bus bars 300mK bus bar – requested specification from Cardiff for gold plating – response was 25µm thick and soft gold. Bus bar plated sent to Cardiff but rejected because it was not nice and shiny.</p> <p>Correct MIL specification has since been sent and bus bar has been stripped and replated to MIL std.</p>	Dominique	TBD
A13	<p>Disposition of NCR is to update all drawings. NCR can be closed.</p>	Eric	17/06/03
A14	<p>HR-SP-RAL-NCR-017v1 Use as is HR-SP-RAL-NCR-022 Use as is</p> <p>Provided that there is no strain on the blades there should be no problem with holes. No strain encountered – holes lined up ok. Close NCR's</p>	Eric	17/06/03
A15	<p>HR-SP-RAL-NCR-028 JD has up-issued the NCR to 28v1</p>	Eric Sawyer	WE 4th July 03

Spacecraft/Project	Herschel	Document No	SPIRE-RAL-MoM-001717		
Instrument/Model	SPIRE	Issue No / Rev	1 / 0	Page	5 of 6
Subsystem	MSSL & LAM	Date	17 th June 03		

<p>A16</p> <p>A17</p> <p>A18</p> <p>A19</p>	<p>RAL drawings have been checked and show an error CQM cover is slotted PFM?</p> <p>HR-SP-RAL-NCR-031 Screw Sheered off Screws were 1D helicoils hence V short – screws called in drawing were correct for flight thermal strap – but thinner thermal strap was used hence screws bottomed out. Should use grease – however would prefer to use WS₂ for flight model should alleviate need to re-lubricate screws.</p> <p>Do we need to slot very small screws – recommend that below certain diameter slotting should not be done below 6/32UNC. MSSL to advise</p> <p>Action: MSSL to inspect helicoils after cold alignment tests</p> <p>Action: ask Anso Are 2 of the 3 screws adequate.</p> <p>Action: MSSL to provide check list of torque settings.</p> <p>HR-SP-RAL-NCR-038v2 – light traps Light traps are being remade and will be inspected properly before Leave NCR open</p>	<p>J Coker</p> <p>CBB</p> <p>Dave Smith</p> <p>CBB</p>	<p>TBA</p> <p>TBA</p> <p>17/06/03</p> <p>TBA</p>
---	--	--	--



**MINUTES OF MEETING
(MoM)**

**PRODUCT ASSURANCE
Space Science and Technology Department**

Spacecraft/Project	Herschel	Document No	SPIRE-RAL-MoM-001717		
Instrument/Model	SPIRE	Issue No / Rev	1 / 0	Page	6 of 6
Subsystem	MSSL & LAM	Date	17 th June 03		

LIST OF NCR'S

RAL	Action	MSSL	Action	LAM	Action
HR-SP-RAL-NCR017v1	CLOSED	HR-SP-MSSL-NCR-001	Close	LAM.QUA.SPI.NCR.030017 ISSUE 1	CLOSED
HR-SP-RAL-NCR-022	CLOSED			LAM.QUA.SPI.NCR.030038 ISSUE 1 & 2	CLOSED
HR-SP-RAL-NCR-027	CLOSED			LAM.QUA.SPI.NCR.030045 ISSUE 1	CLOSED
HR-SP-RAL-NCR-028	OPEN				
HR-SP-RAL-NCR-029	CLOSED				
HR-SP-RAL-NCR-031	OPEN				
HR-SP-RAL-NCR-035	OPEN				
HR-SP-RAL-NCR-036	OPEN				
HR-SP-RAL-NCR-038v2	OPEN				

TO BE RAISED

					GS Tools NCR	
					SM7 Orientation & mounting	
					SM8 Orientation & mounting	