Monthly Report – March 2002

Date: 22/05/02

Work Package PCAL

SPIRE-UCF-REP-001278

1. Subsystem Progress Since Project Inception

Haller-Beeman source identified which meets SPIRE requirements

PCAL enclosure design nearing completion

2. Subsystem Progress This Month

HFSS modelling of PCAL enclosure to optimise radiative coupling into light-pipe.

3. Problem Areas **Remedial Action**

4. Subsystem Management Issues

5. Engineering Activities

none

6. Design Changes

Minor design changes are in progress and nearing completion following suggestions from DDR panel. These will not affect any interface to other subsystems

7. PA/QA Activities

PA database now in use

8. Actions Requiring Immediate Attention

9. Status of Previous Actions

10. Activities Yet to be Achieved

11. Budgets

12. Milestones		Status	
5/12/00	QMW source review	Complete	
21/09/01	Prototype source testing complete	Tests continuing – not driving schedule	
19/09/01	Final interface definition from ATC	Complete	
22/05/01	Calibrators design review (internal)	Complete	
26/04/02	STM (DM) PCAL delivery to ATC	Due 26/04/02	
30/01/02	CQM PCAL design review (internal)	Complete	
26/07/02	CQM PCAL to ATC	Due 12/07/02	
18/10/02	PFM calibrators design review	On schedule	
27/06/03	PFM PCAL to ATC	Late - due 04/09/03	
19/12/03	FS PCAL to ATC	Due 18/12/03	

13. Schedule Changes

Milestones listed in section 12 updated to reflect current schedule (Cardiff spire 3 0.mpp)

Monthly Report – March 2002

Date:

22/05/02

Work Package SCAL

1. Subsystem Progress Since Project Inception

Components submitted for manufacture

2. Subsystem Progress This Month

SCAL STM and CQM components still in manufacture. Delayed due to workshop refurbishment.

3. Problem Areas

Remedial Action

None

4. Subsystem Management Issues

CPP parts will not arrive in time for STM manufacture. We need these components within 12 weeks if CQM testing is not to be compromised.

5. Engineering Activities

New thermal/mechanical prototypes in manufacture

SCAL STM and CQM components in manufacture

6. Design Changes

7. PA/QA Activities

PA database now in use

8. Actions Requiring Immediate Attention

9. Status of Previous Actions

10. Activities Yet to be Achieved

11. Budgets

12. Milestones		Status	
5/12/00	QMW source review	Complete	
22/05/01	Calibrators design review (internal)	Complete	
01/08/02	SCAL STM delivery to RAL	Due 25/07/02	
20/06/02	CQM SCAL design review	On schedule	
13/01/03	CQM SCAL to RAL	Due 10/01/03	
18/10/02	PFM calibrators design review	On schedule	
01/10/03	PFM SCAL to RAL	Late – due 27/11/03	
03/01/05	FS SCAL to RAL	Due 28/09/04	

13. Schedule Changes

Milestones listed in section 12 updated to reflect current schedule (Cardiff_spire_3_0.mpp)

Monthly Report – March 2002

Date:

22/05/02

Work Package Filters

1. Subsystem Progress Since Project Inception

SPIRE filtering scheme finalised. Prototyping in progress.

Filter SSSD updated for DDR. Slight change of MW band for commonality with HFI band.

2. Subsystem Progress This Month

Filters for JPL tests dewars (BoDAC 1 & 2) nearing completion

3. Problem Areas

Remedial Action

4. Subsystem Management Issues

5. Engineering Activities

6. Design Changes

7. PA/QA Activities

PA database now in use

8. Actions Requiring Immediate Attention

9. Status of Previous Actions

None

10. Activities Yet to be Achieved

11. Budgets

12. Milestones

Wed 21/11/01 STM filters to RAL

Wed 19/06/02 CQM Delivery to RAL
Tue 14/10/03 PFM delivery to RAL
Wed 15/09/04 FS delivery to RAL
TBD 300mK CQM filters to JPL
TBD 300mK FS filters to JPL
TBD 300mK FS filters to JPL

Status

and RAL

Late - need to re-work schedule with MSSL

On schedule
On schedule
On schedule
Need info. From JPL
Need info. From JPL
Need info. From JPL

13. Schedule Changes

STM filters to RAL - due 21/11/01 - need to re-work schedule with MSSL and RAL

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Work Package 300mK straps

1. Subsystem Progress Since Project Inception

Thermal test dewar ready

Thermal interface tests in progress

MK2 device selected as baseline support design concept

2. Subsystem Progress This Month

Mk3 design complete and interface agreed with MSSL

Cardiff light baffle design nearing completion

3. Problem Areas	Remedial Action

4. Subsystem Management Issues

Interfaces with the 2K boxes should be agreed by 13/04/02

5. Engineering Activities

6. Design Changes

Design modifications to improve robustness & reliability

7. PA/QA Activities

8. Actions Requiring Immediate Attention

Resolution of interfaces with structure

9. Status of Previous Actions

None

10. Activities Yet to be Achieved

11. Budgets

12. Milestones		Status	
Mon 28/01/02 Tue 23/04/02 Wed 03/09/03 Wed 29/10/03	STM design review - CSDR2 STM/CQM straps ready for integration PFM straps ready for integration FS straps ready for integration	Need to re-schedule Need to re-define plan On schedule On schedule	
13. Schedule	e Changes		
Development i	olan to be re-defined		

 $SPIRE \ (\textit{Cardiff})$

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Date: 22/05/02

Work Package AIV participation			
1. Subsystem Progress Since Project Inception	on		
Cryogenic black body & flip mirror/shutter concept produced – approved at AIV review Conceptual design presented at AIV DDR. 2. Subsystem Progress This Month			
Prototype stepper motors purchased for flip mirror me	echanism. Will be tested cryogenically by 13/04/02		
3. Problem Areas	Remedial Action		
An IGES or STEP file of the test cryostat would greatly assist our design – this is proving difficult for RAL to produce	.We have 2-D drawings to fall back on.		
4. Subsystem Management Issues			
5. Engineering Activities			
none			
6. Design Changes			
7. PA/QA Activities			
PA database now in use			
9. Actions Requiring Immediate Attention			
10. Status of Previous Actions			
None			
11. Activities Yet to be Achieved			
Production of CBB & flip mirror module.			
Provision of reference detector			
Provision of FTS			
12. Budgets			

13. Mileston	es	Status	
31/5/02	CBB to RAL	On schedule	
31/5/02	AIV Filters to RAL	On schedule	
TBD	FTS to RAL		
TBD	Reference detector to RAL		
14. Schedule Changes			

None

 $SPIRE \ (\textit{Cardiff})$

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Date: 22/05/02

Work Package	JPL BDA test support

1. Subsystem Performance Progress Since Project Inception			
Optics modules designed manufactured			
Test cryostats at JPL			
Fridge #1 at JPL			
Fridge #2 at JPL			
Optics modules shipped			
2. Subsystem Progress This Month			
Cryostat filters nearing completion. 300mK filters for	BoDAC tests shippe	ed. These will be replaced for CQM tests.	
3. Problem Areas	Remedial Actio	n	
4. Subsystem Management Issues			
5. Engineering Activities			
Filters in production.			
6. Design Changes			
7. PA/QA Activities			
None			
9. Actions Requiring Immediate Attention			
10. Status of Previous Actions			
None			
11. Activities Yet to be Achieved			
To be defined			
12. Budgets			
13. Milestones		Status	
14. Schedule Changes			
None			