SPIRE (ATC)

Monthly Report – Oct 2002

Date:

30.Oct.02

Work Package: BSM SPIRE-ATC-REP-001780

1. Subsystem Progress Since Project Inception

Baseline design accepted at Delta-PDR, including digital electronics control by MCU. CPP parts requested. Single axis prototyping complete. DDR held. 2 axis prototype tests complete. IBDR complete. **Development Model testing**

2. Subsystem Progress This Month

STM Acceptance review Board held 17.Oct.02: minor adjustments in hand, delivery due next ~1 wk. DM-2 assembly continues : alignment of chop mirror performed. LAM electronics board checked out (stand-alone).

3. Problem Areas		Remedial Action		
	Full checks on repeatability/linearity in		high efficiency anti-reflection coating window received and tested warm.	
	dewar to be achieved		Will test further in conjunction with DM-2.	
	Launch Latch relocated on design and		Change to proposed ATC mounting in hand - will need to tie up with	
	problem noted with DM-2 motor wiring.		LAM. DM-2 motor wiring not a problem as can route away from LL	
	Tayco flexi-tape delayed 8wks by export		Investigated JPL route but determined would not help.	
	paperwork			
	Zeiss motor quotation above budget price		Agreed with PI & PPARC - extra funding to be provided.	
	Cash flow		Discussions in hand with funding body: additional funds authorised	

4. Engineering Activities

Completed re-calibration of Cernox thermometer. Wiring layout and specification Discussed with RAL (D.Griffin): use of STQ thought to be OK. Solder buckets will be OK for SPIRE..

5. Design Changes

Problem routing wiring for DM-2 jiggle frame sensor is being worked on, minor design changes will result

6. PA/QA Activities

Improvements to the drawing configuration data base are being sought. Useful discussion with RAL PA on requirements here. A number of RID responses have been worked on, and the backlog of open ECRs will be addressed also. Two 'major' NCRs raised: (1) mirror contamination on STM (traced to dew formation on warm up where Cernox thermistor indicated warm enough to open, but mirror surface remained cold). Several procedural changes introduced as a result. (2) tapped holes missing on STM for PCAL (originated as original DM-1 parts did not need to mount PCAL, and drawings were not updated): has been rectified.

7. Subsystem Management Issues

Funding for motors. Late delivery of flexi-tape.

8. Actions Requiring Immediate Attention

SW11MAR02.02 IP Place contract for Zeiss motors ... ongoing.

9. Status of Previous Actions

IP/D.Griffin: ATC PO placed with Tekdata for central procurement of harness.

10. Activities Yet to be Achieved

STM shipment has slipped a few weeks but is in hand. Overall slippage of DM-2 assembly and test: impacts liaison with LAM and possible knock on to CQM delivery for Jan03.

11. Milestones	Status				
Milestone	Baseline	Scheduled	Actual	Change	
20K test dewar available	N/A	Nov.02		+6 months	
Integrate DM 2 at LAM	30 Mar 01	Nov.02			
DM release for manufacture	Oct.01	Nov.01	Dec.01		
DM-2 release for manufacture	N/A	Apr.02	Apr.02		
2 axis prototyping at ATC complete	N/A	Mar.02	Apr.02		
SPIRE IBDR	N/A	Mar.02	Mar.02		
DM-2 tests complete	30.Apr 02	Nov.02		+ 4 weeks	
BSM STM del'y to RAL	01 Feb 00	5.Nov 02		+3 weeks	
BSM CQM delivery to LAM	Jul.02	20.Dec.02			
BSM CQM del'y to RAL	13 Mar 02	Feb.03			
BSM QM tests complete (flight design valid)	25.Apr.03	20.Jun.03			
BSM PFM delivery to LAM	03.Jun 03	04.Sep.03			