SPIRE (ATC)

Monthly Report – Sep 2002

Date:

30.Sep.02

Work Package: BSM SPIRE-ATC-REP-001441

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 ADP issued 27.Sep.02. DM-2 assembly commenced. Investigations on options to reduce cost of Zeiss/PACS motor coils complete. Mating connectors and test boxes for LAM electronics completed.

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.	
	Zeiss motor quotation above budget price.		Will need to use fewer motor coils.	
	Wiring layout and specification TBC.		Discussions with RAL (D.Griffin) scheduled.	
	Cash flow (esp. allocations vs Zeiss		Discussions in hand with funding body	
	purchase orders)			

4. Engineering Activities

STM assembly with ballast mass completed. Investigated problem on thermometry (change of calibration on bake-out to BSM specification). Cross calibration scheme (via beam splitter) for laser metrology completed. Software checkout prior to for

5. Design Changes

Iterative assembly and balance check on DM-2 jiggle frame and wiring completed, and design modification introduced to trim balance.

6. PA/QA Activities

Drawing configuration scheme is being run manually due to problems with database scheme - PA is being maintained but it is labour intensive and improvements to the data base are being sought.

7. Subsystem Management Issues

Funding for motors.

8. Actions Requiring Immediate Attention

SW11MAR02.02 IP Place contract for Zeiss motors ... ongoing. Price received but > budget.

9. Status of Previous Actions

IP/D.Griffin: ATC Need MSSL definition of harness run and back-shells to procure harness via RAL. ... complete. Costs

are higher than anticipated, but OK provided STM components are re-used for CQM, FSM.

IP Configured Items Data List is required ... issued as SPIRE-ATC-PRJ-00105

10. Activities Yet to be Achieved

11. Milestones	Status				
Milestone	Baseline	Scheduled	Actual	Change	
20K test dewar available	N/A	May.02			
Integrate Prototype (in place of DM 2) to LAM	30 Mar 01	Oct.02		+ 6 months	
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	Oct.02		+ 4 weeks	
BSM STM del'y to RAL	01 Feb 00	10.Oct 02		+6 weeks	
BSM CQM delivery to LAM	Jul.02	20.Dec.02		+8 weeks	
BSM CQM del'y to RAL	13 Mar 02	Feb.03		+ 4 weeks	
BSM QM tests complete (flight design valid)	25.Apr.03	20.Jun.03		+2 weeks	
BSM PFM delivery to LAM	03.Jun 03	04.Sep.03		+2 weeks	