

Work Package: Structure SPIRE-MSS-REP-001415

1. Subsystem Progress Since Project Inception		
Several concepts evaluated for the structure. Base line design decided upon in June 2000. Working on the system implications and implementation since first half of 2001. Continuing to close interfaces with the various subsystems. Started with production drawings in February 2001. The concept of the suspension has been analysed and decided on implementation. Hardware produced and tested, meets specifications. Detailed design continuing and manufacture is continuing.		
2. Subsystem Progress This Month		
Subsystem interfaces for RF filters and SMEC are frozen by the structure. Thermal busbar development has started. Production drawings are still in progress. Awaiting Cardiff to send MKIII units for testing so that the FEA can be completed in early September. MGSE production has been completed and awaiting HOB simulator before assembly – This is due mid September. Production of the photometer 2K box spine and covers is still continuing, though the cover walls have been completed. The manufacture of the light traps have been completed. The redesign of SCAL box is still being debated. Spectrometer 2K Detector box is still in manufacture. Optical Bench drawing has been released and is in manufacture. Main FPU mounts and detector box mounts have been released and are in manufacture. Continuing to have integration team meetings with RAL, to address planning and integration issues. Analysis reports completed.		
3. Problem Areas		Remedial Action
<p>-Difficult to close interface definitions.</p> <p>Also other subsystems have problems with them.</p> <ul style="list-style-type: none"> - Thermal busbar suspension has strong non-linear responses - Level 1 thermal strap interface with spacecraft still is not confirmed <p>Problems within the SCAL baffle box, forseen by the Optical team (LAM and RAL), have led to some redesign of the SCAL BOX</p>		<p>-Most interfaces are closed. The outstanding ones include the RF filters, JFETS and the SMEC. MSSL has taken their interface to these items to be frozen.</p> <ul style="list-style-type: none"> - Development team has been set up to redefine design. Continuing to work to implement design without effecting the schedule. - Have produced design for the thermal bus bar itself . Awaiting Cardiff to produce MKIII of its support in early September to finish testing and FEA work. - Production design work will start on 24 September <p>Design work on SCAL box completed and awaiting confirmation from LAM and RAL.</p>
4. Engineering Activities		
Analysis and alignment reports continuing. FEA on thermal busbar.		
5. Design Changes		
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6. PA/QA Activities		
NCR raised on one of the one piece photometer cover walls – repair is in placed and NCR closed out on 29 August 2002		
7. Subsystem Management Issues		
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8. Actions Requiring Immediate Attention		
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9. Status of Previous Actions		
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10. Activities Yet to be Achieved		
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11. Milestones		Status
February 2002	Interfaces defined and reported	On going
13-08-2002	STM delivery to RAL	On schedule - now 2 months late-15-10-02
01-02-2002	CQM FTB enclosure to RAL	On schedule
10-06-2003	PFM delivery to RAL	On schedule
01-10-2002	PFM FTB enclosure to RAL	On schedule
6-01-2004	FS delivery to RAL	On schedule

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13. Schedule Changes
Due to the thermal busbar design, manufacturing problems, and optical bench checking we are lagging 2.5 months behind on original schedule.