

## **Monthly Report – September 2002**

Date:

25/9/02

Work Package: **Structure**  SPIRE-MSS-REP-001445

### 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

Thermal busbar development is continuing. Production drawings are still in progress. Received MKIII units and light baffle from Cardiff. Started the mechanical testing so that the FEA can be completed in early October. MGSE assembly is awaiting HOB simulator - This is due early October. Production of the photometer 2K box spine is still continuing, though the covers have been completed. The redesign of SCAL box is still being debated. Spectrometer 2K Detector box has been completed and is awaiting final inspection. The manufacture of the Optical Bench is continuing. Continuing to have integration team meetings with RAL, to address planning and integration issues.

#### Released Issue 16 of the interface drawing. Redesigned main cone to avoid clash with PACS. 3. Problem Areas **Remedial Action** Also other subsystems have problems with them. Development team has been set up to redefine design. Thermal busbar suspension has strong non-Continuing to work to implement design without effecting linear responses the schedule. Level 1 thermal strap interface with spacecraft Have produced design for the thermal bus bar itself. still is not confirmed Received MKIII units from Cardiff. Stared mechanical charactisation tests before going on to FEA. Production design has started Redesigned the SCAL box . Awaiting confirmation from LAM Problems within the SCAL baffle box, forseen by the and RAL at the alignment meeting on 1 October. Optical team (LAM and RAL), have led to some redesign of the SCAL BOX Delivery date now 3 months late – due to additional Constant monitoring of manufacturing progress and work on thermal busbar and the scrapping of one preplanning of follow on activities with RAL to minimise set of optical benches. impact on whole project. 4. Engineering Activities FEA on thermal busbar and new design of main cone. 5. Design Changes 6. PA/QA Activities NCR now not necessary as part has been scrapped due to another manufacturing error

7. Subsystem Management Issues

# 8. Actions Requiring Immediate Attention

9. Status of Previous Actions

## 10. Activities Yet to be Achieved

11. Milestones		Status
February 2002	Interfaces defined and reported	<pre>Completed</pre>
13-08-2002	STM delivery to RAL	now 3 months late-7-11-02
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	

13. Schedule Changes



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Due to the thermal busbar design, manufacturing problems, and optical bench checking we are lagging 3 months behind on original schedule.