

# Monthly Report –February 2002

**Date:** 27/2/02

Work Package: **Structure**  SPIRE-MSS-REP-001277

# 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 has started.

### 2. Subsystem Progress This Month

Subsystem interfaces still open are thermal busbar, thermistors, RF filters and SMEC. Detailed design for MGSE nearly completed. Minor changes to documentation have been implemented. Delivery of STM still in Early August with current manufacturing deadlines. Harness routing continuing. Production of second optical bench nearly completed and the production of the photometer 2K box and covers has started. Several sets of mirror mounts and the dichroic mounts have been completed. Detail drawings of spectrometer 2K box are underway.

#### 3. Problem Areas

-Difficult to close interface definitions.

Also other subsystems have problems with them. Thermal busbar suspension has strong nonlinear responses

Bend radii of proposed cabling is making the harness routing a longer task than originally anticipated

#### **Remedial Action**

-Most interfaces are closed. The outstanding ones include the RF filters, JFETS and the SMEC.

- Development team has been set up to redefine design. Final design was chosen on 25 February 2002 and was the Cardiff "Loo Roll" Design. Now working to implement design without effecting the schedule.

Continuing design work and closer co-operation with RAL.

#### 4. Engineering Activities

Analysis and alignment reports

- 5. Design Changes
- 6. PA/QA Activities
- 7. Subsystem Management Issues
- 8. Actions Requiring Immediate Attention
- 9. Status of Previous Actions

## 10. Activities Yet to be Achieved

Close the I/F with JPL for the RF filters only. Close out interface with SMEC. Finish harness routing. Detail design drawings for spectrometer side cover and spectrometer 2K box.

11. Milestones		Status	Status	
February 2002	Interfaces defined and reported	On going		
13-08-2002	STM delivery to RAL	On schedule		
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

Due to the proposed design and improved manufacturing deadlines, we are lagging 0.5 months behind on original schedule.