

Work Package: Structure

SPIRE-MSS-REP-001158

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

Continuing design of the photometer 2K box. Subsystem interfaces still open are thermal busbar, thermistors, RF filters and SMEC. Detailed design for MGSE nearly completed. DDR was held on 29 and 30 November. Minor changes to documentation needed. These changes implemented. Schedule stands at delivery of STM in Early September. Harness routing continuing. Production of second optical bench, mirror and dichroic mounts has started. Detail drawings of filter mounts completed.

3. Problem Areas

-Difficult to close interface definitions, lagging behind about 6 months now.

Also other subsystems have problems with them.

- Thermal busbar suspension has strong non-linear responses

STM delivery scheduled for delivery early September 2002, which includes a margin of 1 month.

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. Concept designs have been chosen and vibration testing has been completed on MSSL low tension design. Waiting results from Cardiff and RAL tests on their designs.

Contacting suppliers and negotiating a reduction in lead times.

4. Engineering Activities

Evaluating the use of titanium for the A Frames.

5. Design Changes**6. PA/QA Activities**

DDR held on 29 & 30 November.

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 covers and side panels.

11. Milestones

February 2001	Interfaces defined and reported
13-09-2002	STM delivery to RAL
01-02-2002	CQM FTB enclosure to RAL
10-06-2003	PFM delivery to RAL
01-10-2002	PFM FTB enclosure to RAL
6-01-2004	FS delivery to RAL

Status

On going
On schedule/1 month margin
On schedule
On schedule
On schedule

13. Schedule Changes

Due to the closure of interfaces, we are lagging 1.5 months behind on original schedule.