

<b>SPIRE</b> (MSSL)	<b>Monthly Report – February 2003</b>	<b>Date:</b> 17/3/03
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**Work Package: Structure SPIRE-MSS-REP-001791**

<b>1. Subsystem Progress Since Project Inception</b>		
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 and were finished in January 2003. The concept of the suspension has been analysed and decided on implementation. Hardware produced and tested, meets specifications. Detailed design has been completed and manufacture is continuing. The initial integration has started.		
<b>2. Subsystem Progress This Month</b>		
Production of Busbar has been completed and it is currently with the goldplaters. FEA of Busbar was completed and the results have been presented at the delta DDR on 14 February. Spectrometer 2K Detector box is still in production and will be completed in Early March. Optical Bench was completed in early February and is currently undergoing fit checking and alignment procedure development. MSSL's workshop continues to finish all the smaller parts of the structure, like dowels and special washers. EIDP is still in progress.		
<b>3. Problem Areas</b>		<b>Remedial Action</b>
<p>Also other subsystems have problems with them.</p> <ul style="list-style-type: none"> <li>- Thermal busbar suspension has strong non-linear responses</li> <li>- Level 1 thermal strap interface with spacecraft still has been confirmed</li> </ul> <p>Redesign of the Level 0 Thermal Straps</p> <p>Delivery date now 7 months late – due to loss of supplier for detector box and optical bench. Manufacturing problems with the optical bench have led to a 2 month delay.</p>		<ul style="list-style-type: none"> <li>- The busbar has been completed.</li> <li>- Delta DDR was held on for 14 February. A report has been produced.</li> </ul> <p>The thermal test of the 99.999% pure Aluminium wire is scheduled for End of March. The design of the alternative isolation joint will commence in mid March as well as the redesign of the Level 0 outer baffle.</p> <p>Constant monitoring of manufacturing progress and preplanning of follow on activities with RAL to minimise impact on whole project.</p>
<b>4. Engineering Activities</b>		
Redesign of the Level 0 straps and isolation joint form results of the TMM.		
<b>5. Design Changes</b>		
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<b>6. PA/QA Activities</b>		
Preparation of End Item Data Package is still continuing		
<b>7. Subsystem Management Issues</b>		
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<b>8. Actions Requiring Immediate Attention</b>		
Trying to work progressively and methodological to get the structure to RAL.		
<b>9. Status of Previous Actions</b>		
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<b>10. Activities Yet to be Achieved</b>		
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<b>11. Milestones</b>		<b>Status</b>
February 2002	Interfaces defined and reported	Completed
13-08-2002	STM delivery to RAL	now 7 months March 03
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	
<b>13. Schedule Changes</b>		
Due to liquidation of our main supplier and integration problems, we are lagging 7 months behind on original schedule.		