SPIRE Structure programme review. Minutes of meeting held at MSSL on 29/8/01. SPIRE-RAL-MOM-000841

Present

Matt Griffin

Bruce Swinyard

Berend Winter

Eric Sawyer

Christine Brockley-Blatt

John Coker

Ray Carvell

Alan Smith (part time)

Agenda items

BDA interfaces in preparation for review at JPL on 6/7 and 11/12 September.

Subsystem vibration levels.

Mirrors interfaces.

Status and plans for thermal straps.

Overall schedule.

Documentation

Project personnel

Summary of project personnel. Berend around 50%; John around 80%; Chris 100% at present, Paul Gocher 100% (on leave this week), Peter Bonhomme 50%. Solar-B draughtsman now available for SPIRE

Detector interfaces.

BDA

John Coker to attend detector summit.

Request JPL interface drgs for review before the summit so that they can be signed off at the summit.

Details can be finalised at the summit but sufficient work to be done before the meeting to allow final decisions can be made.

MSSL to define the positions of the thermal strap interface.

Orientation has now been defined by Bruce, including tolerances.

Focal distance is defined but not yet on the JPL interface drawing

Interface ring shall be defined by JPL and manufactured by MSSL. MSSL stated that this is not practical and suggested that the ring is manufactured by JPL- to be discussed at the summit.

Thermal control hardware is still poorly defined.

JFET

RAL now responsible for the JFET interface and supply of mounting hardware. Interface to be at the connector panel in the clamshell.

ECS to document this change of responsibility, and cost change of responsibility, MSSL could do the manufacture if necessary.

Instrument level vibration.

Reduced levels now agreed levels with ESA, with notching against equivalent quasistatic i/f loads. (at 4 sigma) Actual notch proposed by Berend to ESA, awaiting response.

BDA level vibration.

For BDA tests the 100g equivalent static force overrides the restriction on the notch width.

Mechanical design.

Optimisation of photometer detector box supports continues. It currently has a mode about 175Hz which is too close to the BDA frequencies.

Investigating non isostatic solutions.

Mirror interfaces.

Optical data is now correct and can be used for the mechanical design.

Mirror mount drawing available end Sept.

Thermal straps.

Work is require on this critical item, see schedule

MGSE

Transit container.

Only one container required, possibly an option on a second.

Handling equipment

Schedule.

About 1.5 to 2 months of margin has been used.

DDR date, Mid November proposed, with delta review for thermal straps, decide date at the DDR,

All areas that affect other subsystems need to be addressed.

Thermal straps could be reviewed separately.

What's the latest time we can finalise thermal straps and still deliver STM HW in time? Needs to be delivered in July 2002

Cardiff top priority to thermal straps after the 18 Sept. review

Complete Thermal Strap review by the end of the year . . .

Two main manufacturers identified

Action on ECS to review when a suitable date for the instrument IBDR would be.

Action on RC to sound out other instrument DDR plans.

Action BW to query ESA on plans for vibration test plate at C SL.