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## 1. GENERAL

The following documents relate to the requirements and specifications for Solar-B EIS. Paragraph 4 defines the build status of the hardware for the MTM/TTM.

## 2. REQUIREMENT DOCUMENTS

SLB-120 iss 3.0		Solar B Electrical Design Standards
SLB-124 rev 2.0	January 2001	Environmental Conditions for Solar-B
SLB-150	May 2000	Solar B Telescope Thermal Interface Condition
TK7-00-0017	March/2000	Mechanical Integration and Alignment Procedure for Solar B Telescopes

## 3. SPECIFICATIONS

MSSL/SLB-EIS/SP003.07	13-Mar-02	Interface Control Document
MSSL/SLB-EIS/SP008.01	30-Jun-00	Model Philosophy and Test Plan
MSSL/SLB-EIS/SP011.01	29-Jun-00	EIS System Definition
MSSL/SLB-EIS/SP021.02	20-Jun-01	MTM/TTM Build Specification

## 4. DESIGN DOCUMENTS

### 4.1 Electronic

MSSL/SLB-EIS/DD014.02	13-Feb-02	MTM/TTM Wiring Definition
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### 4.2 Mechanical

#### 4.2.1 Structure - General

Panel Layout	SR8256_C
G.A Electrical Layup (+ Heater Positions)	SR8279_B
G.A STA Dim Proposal	SR8189_B
G.A structure	SR8193_L2
Jointing methods for structure	SR8203_A
G.A temp sensor placement	SR8225_A
GA Interface Proposal	SR8160_A
Forward Shroud	SR8373_A
Forward Shroud - Basic	SR8374_A
Grating Mount (Spacer)	SR8377_B
Primary Mirror Shim	SR8378_B
Witness Mirror Mount	SR8437_A
Witness Mirror Cover Plate	SR8438_A
Witness Mirror G.A.	SR8439_A
G.A. Showing EIS Thermal with Shroud Extension	SR8471_A
Eyebolt Flange Plate	SR8472_A
Eyebolt Clamping Plate	SR8473_A
Cowl Mount (Forward Shroud to B'Head 12A0 Brackets)	SR8474_A
Mirror - MLI Shroud	SR8475_A

Inverted Suspension Eyebolt Modification drawing	SR8477_A
Inverted Suspension Eyebolt Bush (2 Sizes)	SR8478_A
Handling Wheel - Bulkhead No.7 End (Assembly of Parts)	SR8479_A
Handling Wheel - Bulkhead No.8 End (Assembly of Parts)	SR8480_A
Baffle Zero Detail	SR8484_A
Bulkhead B8 Stiffening Angle	TBD
Baffle Zero Detail	SR8484_A
Bulkhead B8 Stiffening Angle	TBD

#### 4.2.2 Panels and Bulkheads

Panel P1 Base plate	SR8248_J
Panel P1 Base Plate (Process Drawing)	SR8421_A1
Panel P1 Base Plate Insert Positions & Type	SRID8248_A
Panel 2 Side Plate	SR8350_C
Panel 2 Insert Positions & Type	SRID8350_A
Panel 3 Side Plate	SR8348_E
Panel 3 Insert Positions & Type	SRID8348_A
Panel 4 Side Plate	SR8349_G
Panel 4 Side Plate (Process Drawing)	SRP8349_G1
Panel 4 Insert Positions & Type	SRID8349_A
Panel 5 Top Cover Rear (Lid)	SR8352_C
Panel 5 Top Cover Rear (Lid) Insert Positions & Type	SRID8352_A
Panel 6 Top Cover Front (Lid)	SR8353_C
Panel 6 Top Cover Front (Lid) Insert Positions & Type	SRID8353_A
Panel 9 Side Plate	SR8354_A
Panel 9 Insert Positions & Type	SRID8354_A
Panel 10 Side Plate	SR8355_A
Panel 10 Insert Positions & Type	SRID8355_A
Panel 11 Side Plate	SR8356_A
Panel 11 Insert Positions & Type	SRID8356_A
Panel 17 Side Plate	SR8357_A
Panel 17 Insert Positions & Type	SRID8357_A
Bulkhead B8	SR8358_A
Bulkhead B8 Insert Positions & Type	SRID8358_A
Bulkhead B12A0 (HONEYCOMBE VERSION FOR MTM ONLY)	SR8359_A
Bulkhead B12A0 Insert Positions & Type	SRID8359_A
Bulkhead B12C0	SR8360_A
Bulkhead B12C0 Insert Positions & Type	SRID8360_A
Bulkhead B13	SR8361_A
Bulkhead B13 Insert Positions & Type	SRID8361_B
Bulkhead B14	SR8362_A
Bulkhead B14 Insert Positions & Type	SRID8362_A
Bulkhead B15	SR8363_A
Bulkhead B15 Insert Positions & Type	SRID8363_A
Bulkhead B16	SR8364_A
Bulkhead B16 Insert Positions & Type	SRID8364_A
Bulkhead B7	SR8365_B
Bulkhead B7 Insert Positions & Type	SRID8365_C

### 4.2.3 Inserts and Feet

Structure Mounting Feet - Cross section interface (at A0) detail	SR8187_E
20mm interface unit 'A0' (Titanium Foot)	SR8217_E
16mm interface unit 'CO' (Titanium Foot)	SR8218_D
16mm interface unit 'BO' (Titanium Foot)	SR8219_D
Carbon interface unit 'AO'	SR8220_E
Carbon interface unit 'CO'	SR8221_D
Carbon interface unit 'BO'	SR8222_D
Base Panel CFRP Launch Lock Interface Insert	SR8351_B
CFRP inserts	SR8237_B
CFRP Launch lock Insert	SR8261_B
CFRP Corner Connectors	SR8287_A
CFRP MHC Interface Ring	SR8347_C
CFRP ROE Interface Ring	SR8391_D
Insert Block and Joint Configurations	SR8237_B
Threaded Interface Inserts	SR8345_B
Reamed Interface Inserts	SR8346_B

### 4.2.4 Structure - Conduits

37-Way 'D' Connector Conduit - Base (20mm Panels)	SR8403_B
37-Way 'D' Connector Conduit - Top (20mm Panels)	SR8404_B
37-Way 'D' Connector Conduit - Retainer Plate (20mm Panels)	SR8405_B
37-Way 'D' Connector Conduit - Indium Gasket (20mm Panels)	SR8406_B
37-Way 'D' Connector Conduit - G.A. (20mm Panels)	SR8407_A
37-Way 'D' Connector Conduit - Base (12mm Panels)	SR8424_B
37-Way 'D' Connector Conduit - Top (12mm Panels)	SR8425_B
37-Way 'D' Connector Conduit - Retainer Plate (12mm Panels)	SR8426_B
37-Way 'D' Connector Conduit - Indium Gasket (12mm Panels)	SR8427_B
37-Way 'D' Connector Conduit - G.A. (12mm Panels)	SR8428_A
25-Way 'D' Connector Conduit - Base (12mm Panels)	SR8429_B
25-Way 'D' Connector Conduit - Top (12mm Panels)	SR8430_B
25-Way 'D' Connector Conduit - Retainer Plate (12mm Panels)	SR8431_B
25-Way 'D' Connector Conduit - Indium Gasket (12mm Panels)	SR8432_B
25-Way 'D' Connector Conduit - G.A. (12mm Panels)	SR8433_A
Master interface panel (Fits Panel 17)	SR8434_B
MHC Conduit	SR8412_B
ROE Conduit	SR8413_C

### 4.2.5 Radiators

Torlon Radiator Mount	SR8384_B
Torlon Mount Shims	TBA
Large Radiator	SR8385_B
Large Radiator Cold Cone	SR8386_C
Large Radiator Light Seal - Top	SR8387_B
Large Radiator Light Seal - Lower (Bonds into CFRP Lid)	SR8390_B

Small Radiator	SR8409_A
Small Radiator Cold Cone	SR8414_A
Small Radiator Light Seal - Top	SR8415_A
Small Radiator Light Seal - Lower (Bonds into CFRP Panel)	SR8416_A

#### 4.2.6 Clamshell - General

Flexi Bracket - (INTERIM - MTM Design)	SR8401_B
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#### 4.2.7 Mounting / Drill Template

Mounting template	SR8154_D
Mounting template - Alignment Cube Hole Details	SRID8154_A
Template Bushing at position 'AO'	SR8212_A
Template Bushing at position 'BO'	SR8213_B
Template Bushing at position 'CO'	SR8214_A
Template Bushing inserts machining sequence	SR8215_A
Template Lifting Beam Insert	SR8216_A
Template Positioning Pin Insert	SR8422_A
Template Access Hole Insert	SR8423_A
Tapped Bush - Mounting Template	SR8440_A

#### 4.7.8 Purge Ports and Vents

Purge Vent Inner	SR8315_B
Purge Vent Outer	SR8316_B
Purge port - Outer Interface	SR8341_B
Purge pipe - Inner Fitting	SR8342_B
Purge Pipe - Outer Interface	SR8343_B
Purge Pipe - Inner Interface	SR8344_B
Purge Pipe Extension Piece	SR8435_A
Purge Pipe Fitting G.A.	SR8436_A
Purge Tube (B15)	SR8485_A
Purge Tube (FEED LINK)	SR8486_A
Purge Tube (P4)	SR8487_A
Purge Tube (P3)	SR8488_A

#### 4.7.9 Launch Lock

Launch Lock layout (Interface drawing)	SR8251_F
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#### 4.7.10 Miscellaneous Drawings

Transportation Container (Wooden Crate for EIS + J-Plate etc)	SR8454_A
J-Plate Base to 'AWE' Slip Table Hole Requirements	SR8476_A

#### 4.7.11 Dummy Masses

MSSL Dummy Masses (MHC, ROE & FPA)	MSSL/SLB-EIS/TN016.01
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Primary Mirror (MIR)	3600C
Grating Assembly (GRA)	3601C
Slits/slot Assembly (SLA)	3602C

**5. TEST PROCEDURES**

BU/SLB-EIS/TN022.03	14-Mar-02	MTM Structure Vibration Test Plan
BU/SLB-EIS/TN023.01	26-Mar-01	MTM Structure High Intensity (Acoustic) Test Plan
BU/SLB-EIS/TN024.01	23-Mar-01	MTM Structure Modal Survey Test and FE Model Correlation Test Plan

**6. PA DOCUMENTS**

MSSL/SLB-EIS/PA002.01	29-Jun-00	Product Assurance Plan
MSSL/SLB-EIS/PA003.01	22-Jun-00	Cleanliness Control Plan