

STS-118 Integrated Launch Site Requirements Review

Presenter	Josh Krupnick
Date	10-05-06

Program Freeze Point

PRCB Presentation

S115118K(Replacement Pkg)

STS-118 Integrated Launch Site Requirements Review

Presenter
Josh Krupnick
Date
10-05-06

Baseline the STS-118 Mission Specific Requirements and Flow Plans.

This CR and the associated Data Package were reviewed at the 10-02-06 FRWG.

KSC Integration*

MK-SIO

Orbiter Engineering*

Requesting Approval

USA-OE

Payload/Cargo Engineering*

USA-PI

SSME

Requesting Approval

MP21

Status in BackUp

Flight Integration

MO3/USA-PI

Flight Software

USA-FSW

GFE FCE/EVA

MV5/XA

*Backup Material

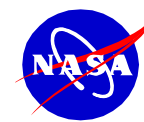


STS-118 Integrated Launch Site Requirements Review

Presenter	Amy Houts-Gilfriche	
Date	10-05-06	

Overview

• Mission Description	To Be Presented
• Performance Margin	To Be Presented
• Flight Mass Properties	To Be Presented
• Ferry Flight Mass Properties	TBD
• SSP System Drawings	No Issues*
• SSP Authorized Modifications/Non-Standard Work	No Issues*
• SSP ICD Changes (IRNs)	No Issues
• SSP LCC Changes (LCNs)	No Issues*
• SSP OMRS Changes (RCNs)	No Issues*



Presenter Amy Houts-Gilfriche
Date OCTOBER 5, 2006

STS-118 LAUNCH SITE REQUIREMENTS REVIEW

LAUNCH

06/11/07 NET
 39A/ MLP1
 CREW SIZE: 6+1 UP/6+1 DN

ORBIT

51.6 DEG
 122 NM
 DIRECT INSERTION
 DURATION: 11+3 DAYS

CONFIGURATION

OV-105 (20)
 LP03;RP04
 ET-117
 BI-130
 RSRM-97
PROPOSED: (1) 2045 (2) 2051 (3) 2047
 OI-30
 RMS,ODS,OBSS,SSPTS

CONSUMABLES

CRYO TANK SETS	5 (FULL)
GN2 TANKS	6 (FULL)
FWD RCS	1912# (2446# FULL)
AFT RCS	4970# (FULL)
OMS	24931#

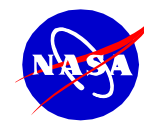
PAYLOAD

ISS 13A.1	ISS 13A.1
ITS S5	
SPACEHAB SM	
ESP-3	

LANDING

SITE	KSC
TAL	ZARAGOZA
ALT. TAL	MORON & ISTRES
SCA	905

NOTE: FDRD Update Required to Manifest SSME's

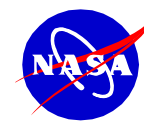


Presenter Amy Houts-Gilfriche
Date OCTOBER 5, 2006

STS-118 LAUNCH SITE REQUIREMENTS REVIEW

PERFORMANCE MARGIN

• SIMULATION MARGIN (SPLAF118)		+2924
• WEIGHT CHANGES SINCE SIMULATION		
• PAYLOAD	+937	
• OPERATOR	+442	
• SSME	-141	
• NPC	+48	
• CREW COMPARTMENT	-335	
• MPS PROP (NOT INERT)	-512	
• RECONSTR ASCENT PERF COLLECTOR	<u>-66</u>	
TOTAL WEIGHT CHANGES	+373	-373
• OTHER PERFORMANCE PROJECTIONS		
• PROTECTION FOR DOL DISPERSIONS		-700
• 6/11/07 LAUNCH DATE (PMBT&ATMOS)		+30
• PARTIAL PROJ FOR MPS BGT GEN0603S		+36
• SRB – M/P UPDATES		-105
• SRB BR / 0.90 MIL HIGHER THAN 0.3705 AVG		+180
• ISP/THST FOR GEN BLOCK 2 @104.5%		+207
• PROJ TO 5 MIN WINDOW FROM INPLANE		-600
• PERFORMANCE CHANGES ADJUSTMENT		<u>+26</u>
• CURRENT BASELINED APM (10/03/06)		+1625
• PROPOSED ENGINE SET 2045/2051/2047		+85
• IPT PROJECTED CHANGES		<u>-225</u>
• PROJ APM		+1485



STS-118 LAUNCH SITE REQUIREMENTS REVIEW

Presenter Amy Houts-Gilfriche
Date OCTOBER 5, 2006

FLIGHT MASS PROPERTIES

CASE	TOUCHDOWN		MACH 3.5	
	WEIGHT pounds (LIMIT)		X C.G. inches (LIMIT)	
NOMINAL	223164	(233000)	1076.5	(1075.7)
RTL5	238445	(245000)	1078.1	(1077.2)
TAL	236355	(244000)	1077.9	(1077.2)
AOA	233144	(242000)	1075.9	(1075.7)
CONT RTRN**	233786	(233000)	1077.1	(1075.7)

** Contingency Return case exceeds 233K NEOM limit. (See Vol. X Bk. 1 Sec. 3.3.1.1.9)

NOTE: **RTL5 25 SEC FRCS DUMP**
 TAL 65 SEC FRCS DUMP
 2697 LBS. AFT FUS BALLAST

STS-118 OV-105 Flight 20 LSRR Orbiter Element

L.R. (Bert) Wagster
Doug Cline

USA/OE
Boeing / VMMO

October 5, 2006

STS-118, OV-105 Flight 20 LSRR Orbiter

Purpose:

- Provide background of flow milestones leading into flight 20 flow
- Obtain authorization for remaining modifications to be performed prior to STS-118, OV-105 Flight 20.
 - Authorizations including current de-baseline and deferrals from OMM.

Background

- Short summary of flow milestones since previous mission
 - OV-105 previous mission STS-113 landed December 2002.
 - Began STS-115 flow processing
 - Pre-planning for J2 OMM conducted in April 2003 in response to Return-to Flight manifest changes
 - Program direction to proceed with J2 OMM in June 2003
 - Baselined full set of available mods at MSRR, and MSFR
 - Added baseline updates including 3-string GPS, SSPTS and Return-to-Flight Mods
 - Mod work efforts initiated in November 2003.
 - Full Vehicle Power-up in October 2005

OV-105 J2 OMM Mod Summary

Significant OMM major mods Performed

- **MCR 17605, 18165 – Multifunction Electronic Displays (MEDS)**
 - Completes MEDS installation for the Fleet
- **MCR 18928 – 3-string GPS Implementation**
 - First Vehicle Implementation, TACANs removed
- **MCR 19618 – Wire tray riser removal**
 - Reduces crowding and cover installation interference in wire trays to help mitigate potential damage
- **MCRs 19527, 19596 and 23167,**
 - Orbiter Wire Redundancy Separation, AC Bus Wire Separation and Arc Track Protection mods implemented
- **MCR 19631 – Cockpit Avionics Upgrade (CAU) mod**
 - Initiated, but later de-baselined. No Mid or Aft wiring installed. Some forward harnesses in crew module and other areas left in-place and stowed

OV-105 J2 OMM Mod Summary

Significant mods performed (Cont.)

- **MCR 17177 – Corrosion Protection Mods**
 - Extensive work performed to inspect, repair and apply improved corrosion protection to WLE front spar, Dome Heat Shields and Body Flap interior
 - Also, completed dome heat shield hole elongation and bushing mods
- **MCR 19789 – Station to Shuttle Power Transfer System (SSPTS)**
 - Provides electrical power to Orbiter for additional docked days at ISS
 - Orbiter installation engineering complete, awaiting decision point on APCU versus PTU installation (Dec. 1st)
- **MCR 23448 – ECO sensor voltage monitoring**
 - Adds capability to monitor signal voltage from ECO sensors pre-launch and during flight

OV-105 J2 OMM Mod Summary

Significant OMM requirements performed:

Return-To-Flight Mods Implemented

- RCC Sneak Flow protection (all panels complete)
- WLE Micro-Tau sensors
- ET Umbilical Digital Camera
- Orbiter Boom Sensor System (OBSS)
- **BRI-18 Tile Mod Implementation**
 - BRI-18 tile replacements have been performed on an attrition basis
 - 50 total tile replacements combined on Wing Leading Edge (WLE) lower surface carrier panels, Window carrier panels, Nose Landing Gear Doors (NLGDs) and Main Landing Gear Doors (MLGDs) forecast prior to rollout
 - Further replacements subject to TPS resource availability
 - MLGD tile on Forward and Outboard sides engineered and baselined for flt 20 effectivity
 - Program direction to revise all BRI-18 tile mods to an attrition basis
 - Engineering release to complete MLGD attrition engineering for OV-105 planned by end of November
 - Will recommend de-baseline of hard-coded mod record at LSFR

OV-105 OMM Requirements Performed

Significant OMM requirements performed:

- **Structural inspections performed per OMRSD requirements**
 - Structural inspection requirements reset to 12 flights and 6 years based on V30 requirements
 - Some 3 year structural inspection requirements may be due prior to last mission
 - Subsystems Requirements will be re-set to current limits (8 flights, 3 years)
 - 3 year interval OMM requirements will be re-set til April 30, 2010 (based on projected rollover date of April 30, 2007)
- **Chit J5634** - Performed detailed wire and backshell tang inspections using category 1 and category 2 criteria in all Orbiter zones.
- Full vehicle EMI testing performed at the SLF hanger in Feb-March 2005 to support Return to Flight radar enhancements
- **Chit 6116** Gap filler replacement performed for required areas
 - Close to complete on Priority 1, 2A, 2A' and forward of ET doors

OV-105 Baseline Modification Update

Request authorization to baseline the following additional mods

- **17177 – Re-route Payload Bay door latch wiring to mitigate dynamic clearance issue** Moves latch wiring from forward to aft side of bracket to eliminate wire to KYA dynamic clearance issue. Cargo clearance action from CIR.
- **17177 – ODS Vestibule Air Duct Strap Deletion** Removes Centerline Camera Duct Strap Assembly from External Airlock
- **17222 – New CCTV Pan Tilt Units** Implement GFE mod to incorporate new Pan Tilt Unit (P/N 2294822-508) for installation at the forward and aft payload bay bulkhead and RMS locations
- **17222 – RMS Elbow Wedge** Adds Elbow wedge for RMS camera
- **17222 – Installation of new WLE Micro-Tau Sensor and Relay Units** Changes sensor and relay units to use felt instead of foam inserts to eliminate concerns with battery vent port blockage
- **19768 – MPM Guillotine Bolt Replacement** , Revises fastener installations to ensure proper engagement of thread locking features
- **17334 – Orbiter Provisions to accommodate EDO Cryo Feed-through boxes –**
Installs remaining portion of TCS blankets displaced by EDO pallet T.O. M072-3446154
 - EDO plumbing and associated hardware removed during OMM

OV-105 Baseline Modification Update

Mission Kit Modifications for mission kits or MECSLSI

- **19823 – Crew Optical Alignment Sight (COAS) Stowage Container Update (CCCD update)**
 - Installs Nomex cloth cover over the inner cushion of the flight container
- **19896 – Emergency Egress Slide Deployment Mechanism – (CCCD update)**
 - Design changes to the Emergency Egress Slide Deployment Mechanism based on the results of the study performed by HPSC TPS NC05-014. Incorporates lanyard rigging and ring verification changes noted during engineering evaluation tests
- **23471 – Booster Fan Bypass for Spacehab Missions – (CCCD and MECSLSI impact)**
 - To reduce the amount of cryo used the airflow booster fan can be turned off and the airflow routed to the Spacehab. Parts stowed for liftoff and landing and configured on-orbit
- **17222 – OBSS Sensor Package Safety Wire – (MECSLSI impact)**

OV-105 Baseline Modification Update

Modification to be De-baselined

- **17222 – Aft EVA Slidewire Cushion Mod** – Installs cushion on port EVA Slidewire. Baselined early in OMM flow. DPRCB on 9-1-06 approved CR to remove slidewires for STS-116 and subs.

OV-105 Baseline Modification Update

Request deferral of the following EOs from the current flight to a future flight

- **MCR 17177: TCTIV3617177REF,0105,0-Thermal Tape Removal** – some of the tape could not be removed from the Xo 582 frame without major component removal. A Similar amount of tape was removed on OV-103 and the mod deferred.
 - V070-320002#U31
 - V070-362261#A03
- **MCR 18928: VK70-778079-001,0105,0 GPS Three String**
 - In both cases the cable wasn't incorporated into the main bundle...this was MR accepted and won't affect form or function. These cables did receive Cat II inspections (no problems). Additional spot ties will adequately secure the cable during flight. In both cases the routing has been accepted by MR.
 - V070-793821 G39: Routing of W5 (cable 1C2768C24) outside of bundle- doesn't follow EO (ref PR OEL-5-20-4583)
 - V070-793881 F23: Routing of W5 (cable 2C2714EE24) outside of bundle- doesn't follow EO (ref PR OEL-5-20-4617)

OV-105 Baseline Modification Update

Request deferral of the following mods to the NFS category:

- **MCR 23227: VK70-795155-001,0105,0-Connector Saver Installation** – during testing the J6 location on EA-1 (KU-Band) connector saver was found to be skewed or on a slant (see photo in back-up). This turned out to be the connector saver. The J6 location was mated directly without a connector saver which is technically acceptable. Request this mod record and EO for the J6 location of EA-1 be deferred to NFS which will enable the replacement of a new saver if accessed in the future. This condition has been MR accepted by the technical community. Ref COM-5-20-0298.
 - V070-703044#A01
- **MCR 12999: TCTIV1912999REF,0105,0-Wing Elevon T. E. Protruding Rivets SIP Cutout-need to make NFS.** This mod was NFS when it was baselined in 2003 and will need to be NFS for future flights.

OV-105 STS-118, LSRR Orbiter

Potential Mods

- These mods are in work pending further engineering release and may be baselined at a later date
 - **23452 – Fiducial Markings on WLE T-Seals** –, Provides reference on WLE RCC T-seals to aid on-orbit imagery evaluation
 - Awaiting arc jet test results and engineering updates prior to implementation
 - **23467 – WCS Configuration change (CFE)** – Updates engineering to reflect WCS1000-25 configuration installation
 - No vehicle mod work required. CCCD Update only

Requirements Under Development For STS-118, OV-105 Flt 20

Requirement	Summary / Status	Action Required
GPC BBU R & R	<p>Chit J6135 approved for replacement of GPC 5 BBU on OV-105</p> <p>For GPC's 1-4, another chit will be submitted later with specific flt effectivities after partnering with Ground Ops and obtaining OPO approval</p> <ul style="list-style-type: none"> - Board Date TBD, current plan is to target OV-105 Flight 20, but not mandatory for STS-118 	Generate Chit
Radiator Retract Hoses Halogen Check	<p>RCN OV17146 submitted, adds halogen leak check for every flow at both OPF & Pad</p> <ul style="list-style-type: none"> - Board Date 10/6/2006 	RCN Approval
SSPTS Checkout	<p>Chit under development for STS-118, will be followed by RCN for future flows</p> <ul style="list-style-type: none"> - Board date TBD, targeting late Nov or early Dec 2006 	Generate Chit
<p>OBSS Integrated Test Requirements</p> <p>(Clearance checks if MPM(s) are removed)</p>	<p>Preliminary RCN OV17103 - requires OBSS clearance checks on initial install & if MPM's are removed</p> <ul style="list-style-type: none"> - Board date TBD - Generate Chit if RCNs do not support schedule (Chit likely) 	RCN Approval (possible chit)
<p>OBSS Integrated Test Requirements</p> <p>(IBA detailed inspection)</p>	<p>Preliminary RCN OV17032 for OBSS IBA inspection (requirements for all flights as well as contingencies) is in rewrite, being worked in parallel with limited life requirement update RCN OS16824</p> <ul style="list-style-type: none"> - Board date TBD - Generate Chit if RCNs do not support schedule (Chit likely) 	RCN Approval (possible chit)

Requirements Under Development For STS-118, OV-105 Flt 20

Requirement	Summary / Status	Action Required
NLG Thermal Barrier As-Built Data Supporting Design Change	Explore design change options, generate CHIT if required to collect as-built data on FWD edge gap between structure and chin panel - Expect this will not be required	Mod decision
Putty Repair Minimum Gap Assessment	Inspect for minimum gaps in critical areas due to STS-121 putty repair failures caused by less than minimum gaps - No CHIT required. PRT has put plan in place for engineering inspection via type B TPS	None
STBD PLBD Crossover Linkage Clearance Assessment	Chit required to perform clearance check during next PLBD closing opportunity, expected to be in late October 2006 - Board Date TBD, targeting early Oct 2006	Generate Chit

STS-118
ISS – 13A.1 ITS-S5, SPACEHAB/SM, ESP3
LAUNCH SITE REQUIREMENTS REVIEW

PAYLOAD CARGO ENGINEERING STATUS

ABBAS ELSABAGH

Phone 281-212-6186

Date 10-05-2006

STS-118/ISS-13A.1 LSRR

CARGO CLOSE CLEARANCE PROCESS

- **THE FOLLOWING CLOSE DYNAMIC CLEARANCE AREAS HAVE BEEN IDENTIFIED:**
 - **ESP3 KYA AND ORBITER CROSSOVER ELECTRICAL WIRE - HARD INTERFERENCE**
 - **ORBITER APPROVED TO RELOCATE THE WIRE TO PROVIDE POSITIVE DYNAMIC CLEARANCE**
 - **ESP3 KEEL TRUNNION IS PULLING UP INTO KEEL LATCH BEARING BY 0.24”**
 - **SLD PANEL APPROVED THE EXCEEDANCE BASED ON THE LOADS AND AND DYNAMIC CLEARANCE OF 0.24 INCHES**
 - **IF VLA SHOWED ANY HIGHER LOADS OR INCREASE IN THE EXCEEDANCE, PCE WILL HAVE TO BRING THE ISSUE BACK TO SLD PANEL**
- **TWO CHIT ARE BEING DEVELOPED TO TAKE CLOSE CLEARANCE MEASUREMENTS OF ALL CLOSE CLEARANCE POINTS**
 - **AT THE OPF, DURING PLB DOOR RECYCLE AND PAYLOAD IS NOT INSTALLED, THE DIGITAL SCAN OF THE DOOR LINKAGE AND THE SURROUNDING AREA WILL BE PERFORMED TO VALIDATE THE MODEL**
 - **AT THE OPF, AFTER THE KYA INSTALLED, THE CHIT WILL MEASURE THE KYA CLOSE CLEARANCE TO ORBITER**
- **THE CHITS WILL BE SPAR APPROVED**

Endeavour STS-118

Launch Site Requirements Review

Space Shuttle Main Engine

05-October-2006

SSME- KSC
Greg Haile
(321) 861-4060
Page 23 of 84

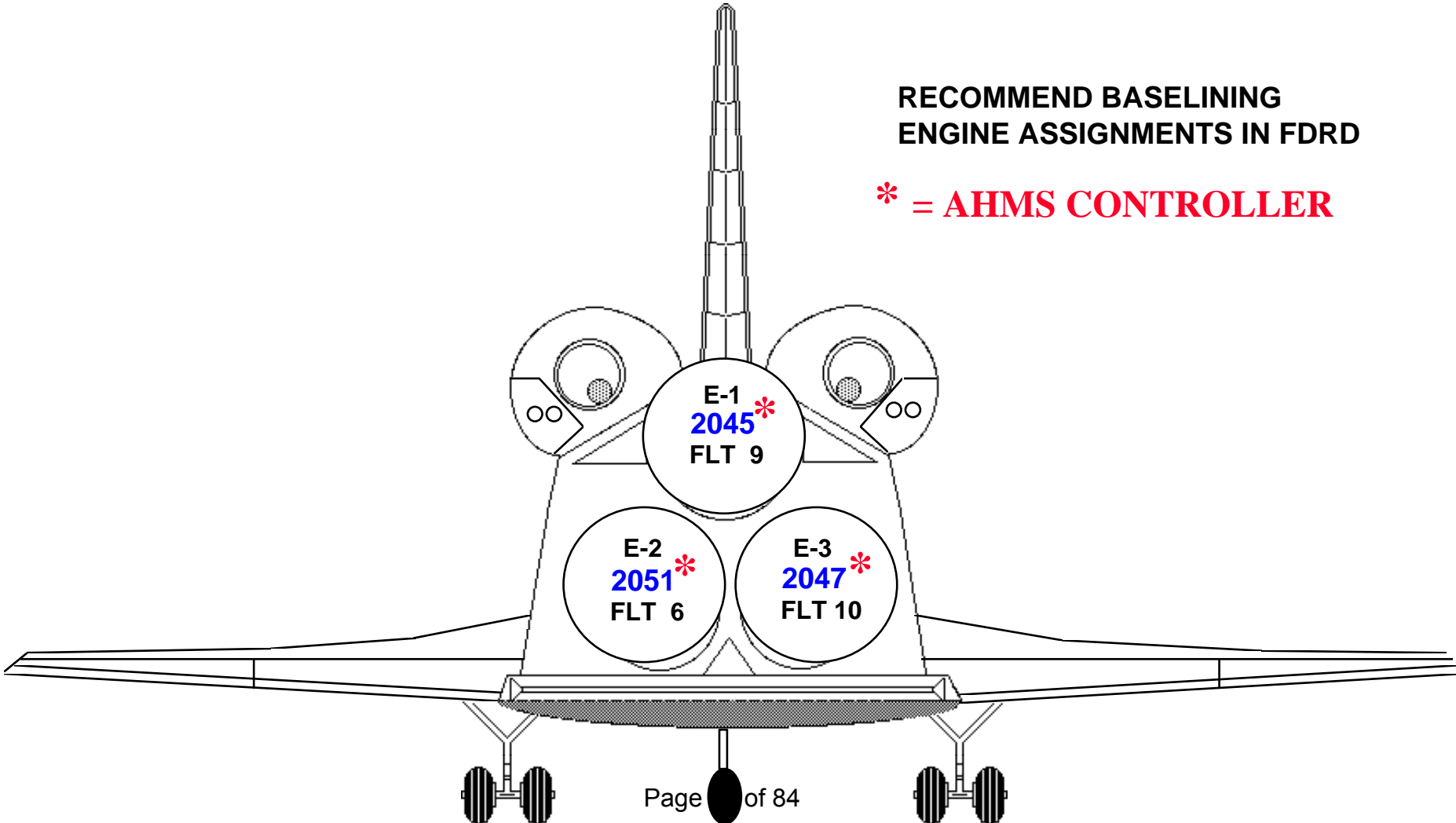


STS-118 Launch Site Requirements Review

SSME Allocations / Locations

RECOMMEND BASELINING
ENGINE ASSIGNMENTS IN FDRD

*** = AHMS CONTROLLER**





TS-118 Launch Site Requirements Review

SSME Planned Modifications

- Work authorized by Shuttle Project Action Request (SPAR) or Level II Change Request (CR)

ECP	Kit No	Description	Weight Impact	SPAR No./ CR No.	Engine	Status
1491	2R091576-10	Clamping Fasteners	+0 LB	ME-0221 R01 ME-0222 R01	2045 2051	Complete Complete
1480	2R091575-10	AHMS Controller	-4.4 LB	TBD	2045 2051 2047	To be worked To be worked To be worked
1511	2R091613-10	AHMS Weight Update	+0 LB	TBD	2045 2051 2047	To be worked To be worked To be worked



STS-118 Launch Site Requirements Review

Rocketdyne Action Requests (RAR)

RAR Number	ENGINE	SPAR	DESCRIPTION	STATUS
1566	2045 2051	ME-0221RB ME-0222RB	Dye Penetrant Inspect HPFTP Speed Sensor.	CLOSED

STS-118 Integrated Launch Site Requirements Review

Presenter	Josh Krupnick
Date	10-05-06

Backup Material

FRWG Presentation (With Minor Changes)



STS-118 LSRR FRWG

Flight Requirements Status

October 2, 2006

Gail Clark, Lead MIM
Robert Reynolds, USA Flight Mgr.



Flight Requirements Status

Presenter **Robert Reynolds**

Date **10/2/06**

Page **2**

- **STS-118 FRD Latest Revision: 009, dated September 1, 2006**
 - **Approved CRs for Revision 010**
 - **NSTS 17462-118-040: Update EVA Hardware**
 - **No open CRs**
- **STS-318 FRD Latest Revision: Basic, dated August 24, 2006**
 - **No Open CR's**



Flight Requirements Status

Presenter **Gail Clark**

Date **10/2/06**

Page **3**

13A.1 MIP (NSTS 21506)

- **Current version available on PILS: Revision D + Chg 1, 8/28/05**
- **MIP CRs recently approved:**
 - **21506-0038, Add Table 4-5, Utilization Payload Flight Planning Activity - 9/27/06 (FPSR)**
 - **21506-0039, Update Appendix E to add Payloads to 13A.1 - 9/27/06 (FPSR)**
 - **These CRs are adding 5 lockers of powered payloads including the first rear breather.**
- **Pending CRs:**
 - **21506-0037, Control Weight Table update – ECD 10/20/06**
 - **21506-0040, Update Payload Bay Purge Temperature – ECD 10/20/06**

Spacehab Single Module CIP (NSTS 21426)

- **Current version available on PILS: Basic + Chg 1-56, 8/18/06**
- **CRs currently in review - None**



Flight Requirements Status

Presenter **Gail Clark**

Date **10/2/06**

Page **4**

Flight Duration/SSPTS

- The decision whether SSPTS will support STS-118 must be made by December 1, 2006 for KSC to meet the June 11, 2007 launch date
- Once the decision is made a PRCB change to the FDRD will adjust the duration
 - from 11 + 3 days
 - to 14 or 13+(1) days depending on pad hold – for the SSPTS case
 - OR
 - to 11 or 11+(1) days – for the non-SSPTS case

STS-118/318 Launch Site Requirements Review Flight Software Overview

Judi Powell

PRCB 10/05/2006

STS-118 LSRR (FSW)

- STS-118/OV-105 Flight Software Payload Support:
 - ISS-13A
 - Orbiter Interface Unit (OIU)
 - Sequential Still Video (SSV)
 - Orbiter Docking System (ODS)
 - Trajectory Control System (TCS)
 - Assembly Power Converter Units (APCUs)
 - Station to Shuttle Power Transfer System (SSPTS)
- Major New Flight Software Support Items:
 - MCR 23448 - ECO Sensor (first full implementation)
 - SCR 93117 - SRB Command/Receiver Decoder (CRD) SRB Downlist

STS-118 LSRR (FSW)

- **STS-118 Source Changes/Edits for Primary Flight Software (Base 2)**
 - DR 101072 - Immediate Moding Skipped
 - DR 121191 - IPV Load/Store Problem on Discretes' Sets/Resets
 - SCR 92844A - Allow Uplink Change of AV Bay 3 Delta Pressure Parameter Scaling
 - SCR 92871C - RCS Manifold Auto-Close for Failed-On Jet
 - SCR 92872A - Make Cameras-Heater On Command Subject to RTC Moding
 - SCR 92877A - RMS SPEC 94 Changes to Support Starboard Boom
 - SCR 92879D - RMS Position Orientation Hold Select in Automatic Mode
 - SCR 92887A - RCS Auto Manifold Close Enable/Disable via SPEC 23
 - SCR 92889 - Remove Abort PE Engine-Out SSME Pitch Trim
 - SCR 92894B - RMS Auto POHS MSID Change
 - SCR 92899A - Correction CR to CR's 92871C and 92887A (RCS Auto Manifold Close)
 - SCR 92900A - SPEC 23 Display Change for Auto-Manifold Close
 - SCR 92909A - ET Camera Power Control Commands

STS-118 LSRR (FSW)

- **STS-118 Source Changes/Edits for Primary Flight Software (Base 2)(cont.)**
 - SCR 92920A - Eliminate Undesirable Roll Attitude Error Bias
 - SCR 92922B - RCS Manifold Isolation Valve Close Command Timing Correction
 - SCR 92950 – G/C Steer Roll Bias Ramp at PPD or MECO
 - SCR 92962 - Effectivity Change for SCR 92880 (STS-114 SSME Downlist Requirements)
 - SCR 93040A - Antenna Attitude Compensation Matrix Fix
 - SCR 93067A - Expand effectivity of SCR 92970B (SSPTS Computation and Display of Individual Fuel Cell Power) and SCR 92982B (SSPTS Ground Uplink Commanding by RTC Moding) to include STS-116
 - SCR 92882 – Allow Three String GPS for STS-116 and Subsequent OV-105 Flights

- **STS-118 Patch Implementation for Primary Flight Software (Base 2)**
 - SCR 93028 - Expand Effectivity of SCR 92971D (RCO-FSW Changes to Support Remote Control Orbiter)

STS-118 LSRR (FSW)

- **STS-118 Patch Implementation for Backup Flight Software (Base 2)**
 - SCR 92804A - Provide BFS Target Nz for Composite Display
 - SCR 92889 - Remove Abort PE Engine-Out SSME Pitch Trim
 - SCR 92909A - ET Camera Power Control Commands
 - SCR 93020 - LT/RT Main Landing Gear Door Uplock Discretes Correction

- **Products**
 - **STS-118/OV-105 Base 2 software production schedule (available to field)**
 - Shuttle Data Tape November 14, 2006
 - Mass Memory Unit Contents November 29, 2006
 - **STS-318/OV-105 deliveries will consist of the STS-118 Base 2 SDT/Mass Memory, STS-318 Flight Specific I-Loads and post call-up changes if required**
 - STS-318 Flight Specific I-Load patches available scheduled for TBD
 - Other mandatory changes

STS-118 LSRR (FSW)

- **Concerns/Issues**
 - **There are no known issues or concerns with Flight Software in supporting STS-118 or STS-318**

Back-up

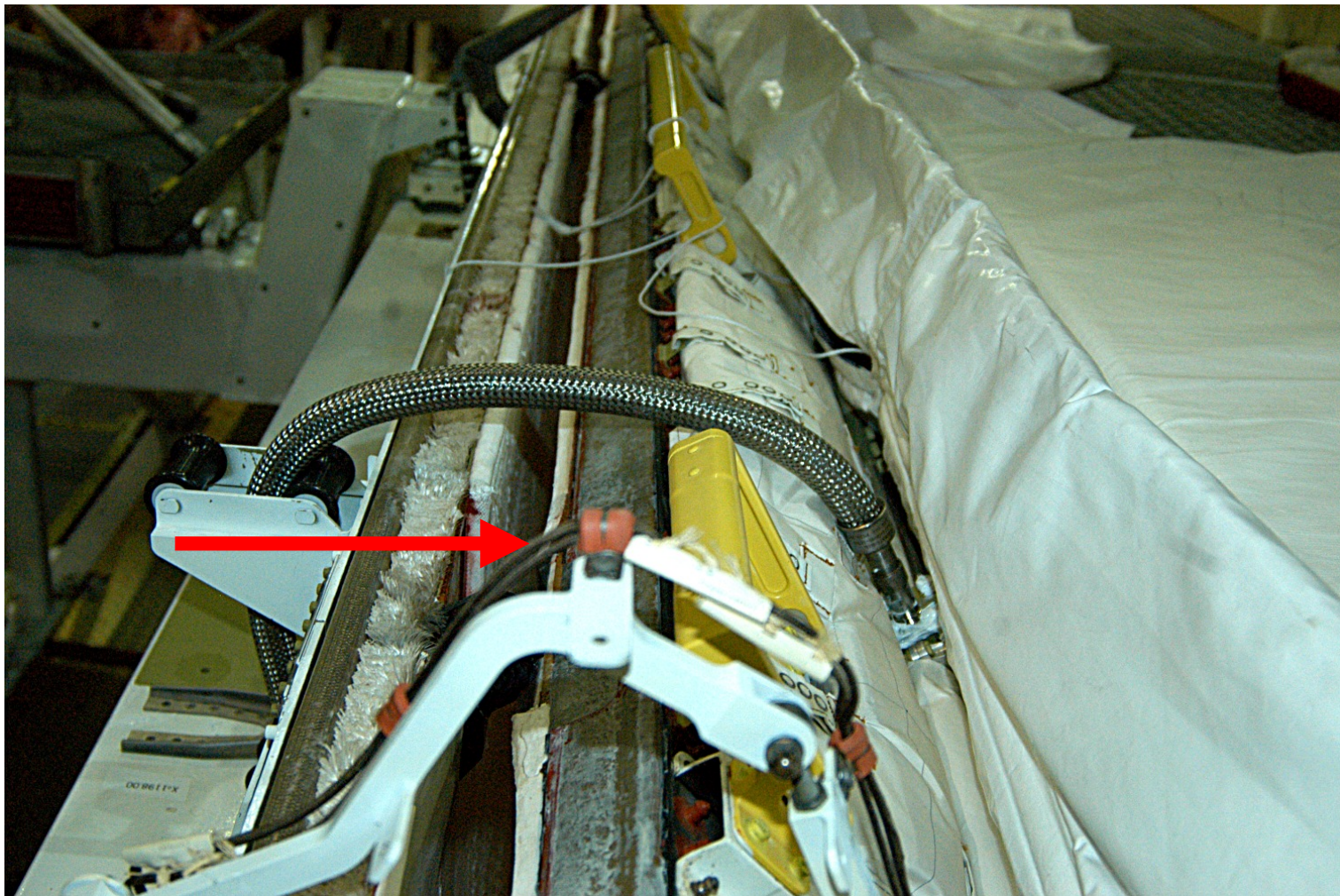
Modification record matrix

MCR NO.	MCR TITLE	KIT/ MOD RECORD & DESCRIPTION	TECH ORDER IMPACT	REMARKS
Mandatory Mods				
17177	Re-route Payload Bay door latch wiring to mitigate dynamic clearance issue for STS-118	TCTIV7917177REF, 0105, 4 Re-routes Wire harness on bay 12 starboard payload bay door crossover linkage to mitigate wire clearance issue	None	CIR concern for wire clearance OCR/D S165127 approved for wire harness installation re-routing
17177	ODS Vestibule Air Duct Strap Deletion	TCTIM0017177REF, 0003, 1 Removes Centerline camera Duct Strap Assembly from External Airlock that is no longer used for flight.	M072-643406-005 (ADD) MODEL MV0082A	MECSLSI IMPACT STS-118 to use -006 configuration per MCR 23471 (see below).
17222	New CCTV Pan Tilt Units	TCTIM0017222REF, 0005, 3 Implement GFE mod to incorporate new Pan Tilt Unit (P/N 2294822-508) for installation at the forward and aft payload bay bulkhead and RMS locations	M072-750025-060 and -067 (ADD) MODEL MV0548A	MECSLSI IMPACT
17222	RMS Elbow Wedge	TCTIM0017222REF, 0007, 2 Adds RMS Elbow Wedge	M072-544504-001 (ADD) MODEL MV0082A	MECSLSI IMPACT
17222	Installation of new WLE Micro-tau Sensor and Relay Units	TCTIM0017222, REF, 0003, 3 Modifies Sensor and relay units to use felt instead of foam inserts to eliminate concerns with battery vent port blockage	M072-756111-003, -004 (ADD) MODEL MV0866A	MECSLSI IMPACT
19823	Crew Optical Alignment Sight (COAS) Stowage Container Update	TCTIM6619823REF, 0005, 0 Installs cover made of nomex cloth glued to cushion portion that is used to line the flight container	M072-661620-015 to be manifested on CCCD	No MECSLSI Impact
19768	MPM Guillotine Bolt Replacement	TCTIM0019768REF, 0003, 0 OBSS MPM Guillotine fastener Mod TCTIM0019768REF, 0007, 0 RMS MPM Guillotine fastener Mod Revises fastener installations to ensure proper engagement of thread locking features	M072-544501-091 (IS) -083 (WAS) MODEL MV0082A M072-544505-015 (IS) -012 (WAS) MODEL MV0092A	MECSLSI IMPACT
19896	Emergency Egress Slide Deployment Mechanism	019896, 0105, 0 Placeholder The MCR authorizes the design, fabrication and certification of the recommended design changes to the Emergency Egress Slide Deployment Mechanism based on the results of the study performed by HPSC TPS NC05-014. Also incorporates lanyard rigging and ring strength changes noted during engineering evaluation tests	CCCD impact M072-661651	Engineering release planned for 10/30/06 No MECSLSI Impact
Mission Kit Updates				
17222	OBSS SENSOR PACKAGE	Installs Safety Wire on IBS to Sensor plate fasteners due to lack of sufficient breakaway torque to ensure secondary locking feature	M072-710282-007 (IS) -001 (WAS) M072-710282-006 (IS) -005 (WAS) MODEL MV0092A	MECSLSI IMPACT
23471	Booster Fan Bypass ducting for Spacehab missions	Model number MV0519A (Was MV0828A) New duct to be stowed in Mid-deck and configured on-orbit	M072-643405-002 (ADD) M072-643405-001 (ADD) M072-643406-006 (IS) M072-643406-005 (WAS) MODEL MV0828A	New duct to be stowed for ascent and entry, configured on-orbit per M072-643405-002 (CCCD impact for stowage). M072-643405-001 & M072-643406-006 (MECSLSI impact)
Mods to De-Baselined				
17222	Aft EVA Slidewire Cushion Mod	TCTIM0017222REF, 0005, 4 Installs a cushion on the Orbiter (port side) EVA slidewire to cover the stainless steel end fitting and metal cable.	M072-544700-016, M072-661618-002, M072-661618-015 MODEL MV0617A	DPRCB on 9-1-06 approved S063339M to remove Slidewire installations from STS-116 and subs - MECSLSI IMPACT

Mod Engineering and Certification Matrix

MCR NO.	MCR TITLE	Est. Engr Release (MM/DD/YY)	G.O. Engr Need (MM/DD/YY)	Est. Hdwe Delivery (MM/DD/YY)	G.O. Hdwe Need (MM/DD/YY)	MOD/CERT GO / NO-GO	CERT SUBMITTAL DATE	CERT APPROVAL DATE	CERTIFICATION CR / CAR (BOEING)	REMARKS
Mods to be Baselined										
17177	Re-route Payload Bay door latch wiring to mitigate dynamic clearance issue for STS-118 Re-routes Wire harness on bay 12 starboard payload bay door crossover linkage to mitigate wire clearance issue	9/27/2006 A	9/27/06	N/A	N/A	Go	N/R	N/R	N/R	Wire harness installation drawing update released less tree up EO.
17177	ODS Vestibule Air Duct Strap Deletion Eliminates air duct retention strap from ODS vestibule duct. Strap was previously utilized for attaching the duct end in the ODS vestibule when the crew was present and to provide some mixing of air with ISS. To improve the air circulation with ISS, a new halo by-pass ducting configuration was developed which uses a T-handle clamp to attach the end of this duct to an ISS duct just below the Halo. With this configuration and the T-handle clamp, the velcro strap is not needed for duct securing.	Released	N/A	N/A	N/A	Go		N/A	N/A Ref. OCRD S165051	OCRD S165051 approved for fleet - first effectivity is OV-104 STS-115. Tech order update removes existing strap - no new hardware. MECSLSI Mission Equipment item: M072-643406-005 (was -004) ECLSS DUCT-EXT AIRLOCK (MV0828A)
17222	New CCTV Pan Tilt Units	Released	N/A (See GFE)	N/A (See GFE)	N/A	Go		N/A	GFE Hardware	
17222	RMS Elbow Wedge	Released	N/A (See GFE)	N/A (See GFE)	N/A	Go		N/A	GFE Hardware	
17222	Installation of new WLE Micro-tau Sensor and Relay Units	Released	N/A (See GFE)	N/A (See GFE)	N/A	Go		N/A	GFE Hardware	No Orbiter Certification required
19823	Crew Optical Alignment Sight (COAS) Stowage Container Update	Released						N/A	GFE Hardware	
19768	MPM Guillotine Bolt Replacement	10/13/06	N/A					TBD	CAR 08-44-000002-001K CR 44-000002-001K	
19896	Emergency Egress Slide Deployment Mechanism	10/30/06	N/A (See GFE)	N/A (See GFE)	12/13/06		10/30/06		CR 25-623-0015-0001 CR 25-651-000002-001	
23471	Booster Fan Bypass ducting for Spacehab missions		N/A (See GFE)	N/A (See GFE)		Go	9/20/06		CR 35-643500-002 CR 17-35-643500-002S	
17334	Orbiter Provisions to accommodate EDO Cryo Feed-through boxes									

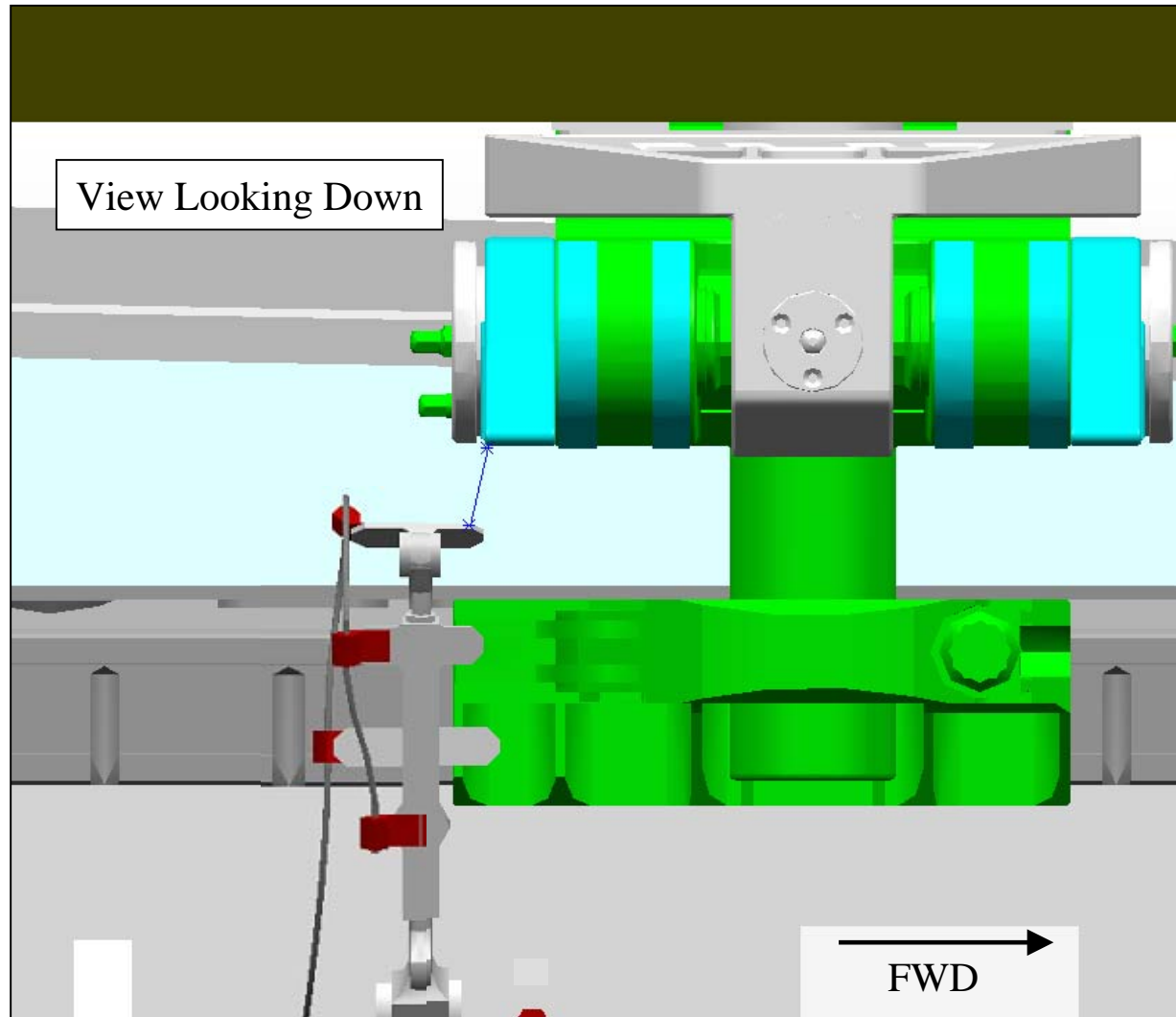
PLBD Wire Harness Routing for Cargo Clearance OV-105 Configuration (Current)



↑
FWD

CURRENT OV-105 configuration with PLBD open. Harness location is shown on FWD side of linkage bracket.

PLBD Wire Harness Routing for Cargo Clearance OV-105 Configuration (Proposed)



CAD model shows bracket/linkage in the new configuration. When harness is moved to AFT side of bracket, dynamic CLEARANCE of 0.2 inches would exist

OV-105 STS-118, LSRR Orbiter

Wing Front Spar Corrosion Protection



Before

After



OV-105 STS-118, LSRR Orbiter

Body Flap Bead Blasting and Corrosion Protection

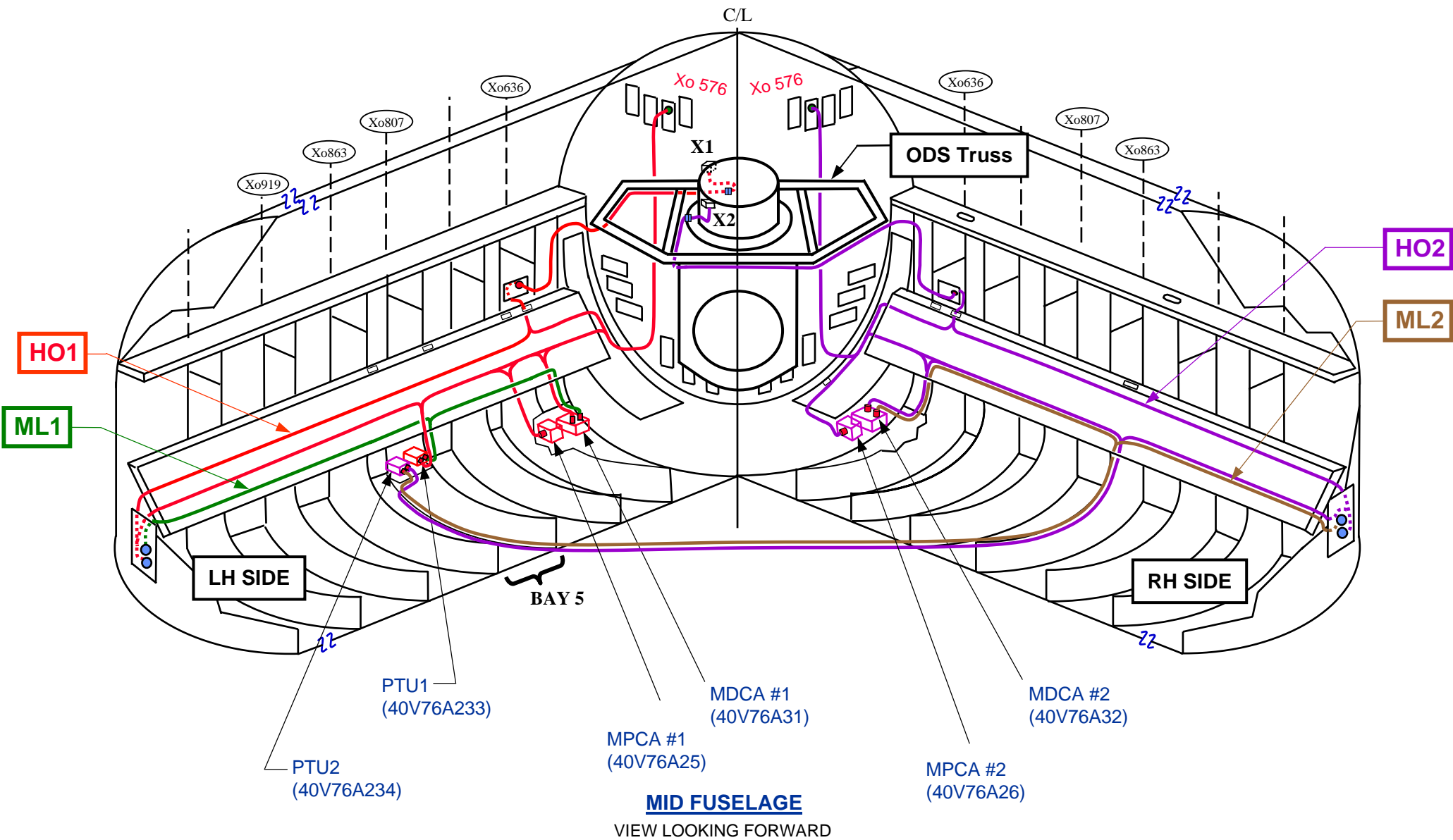


**Body Flap Forward Spar
After Bead Blasting**

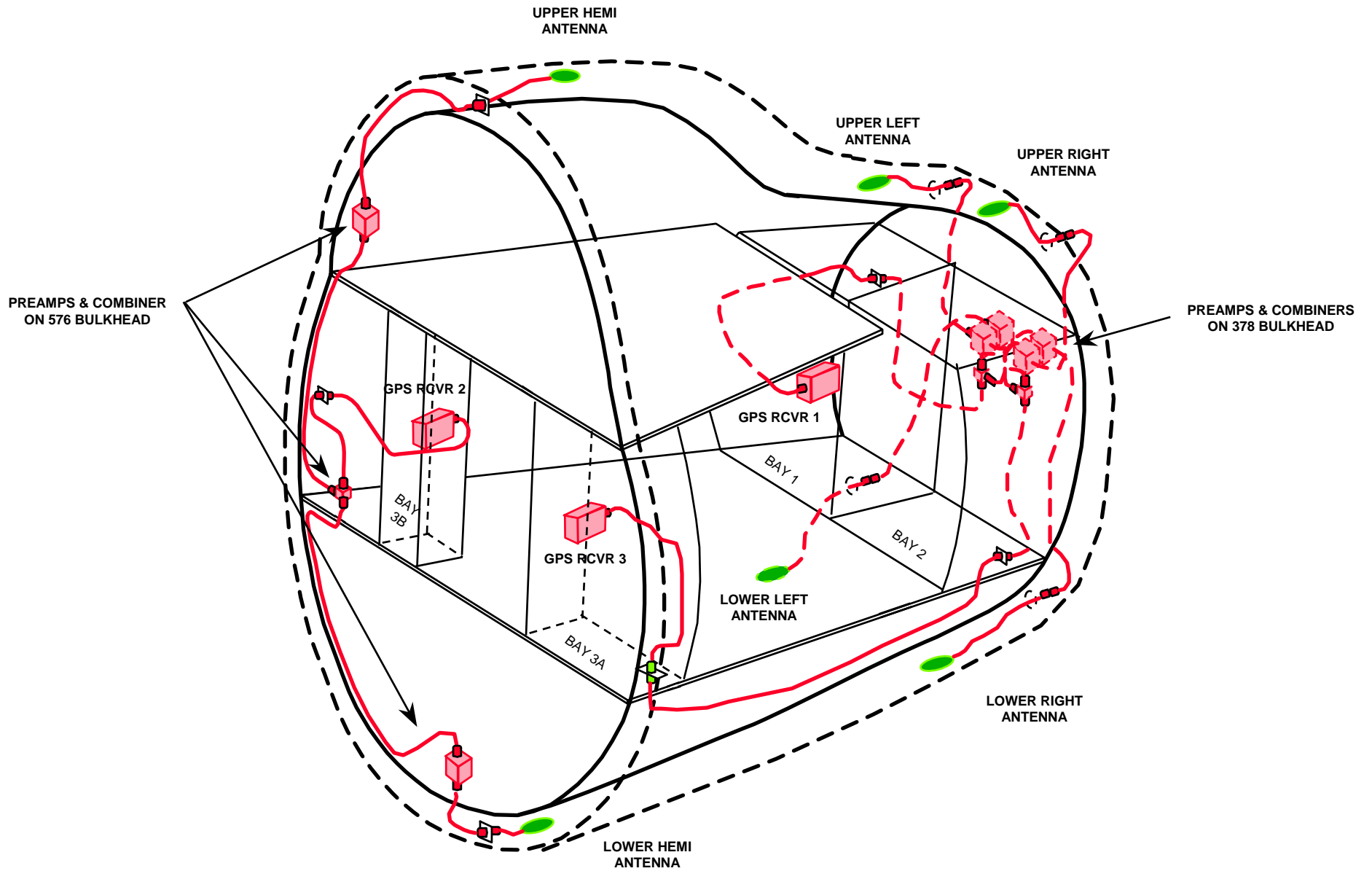


**Body Flap Forward Spar
After Painting**

SSPTS Mid-Body Cable Routing



3-String GPS Antenna & Coax Installations

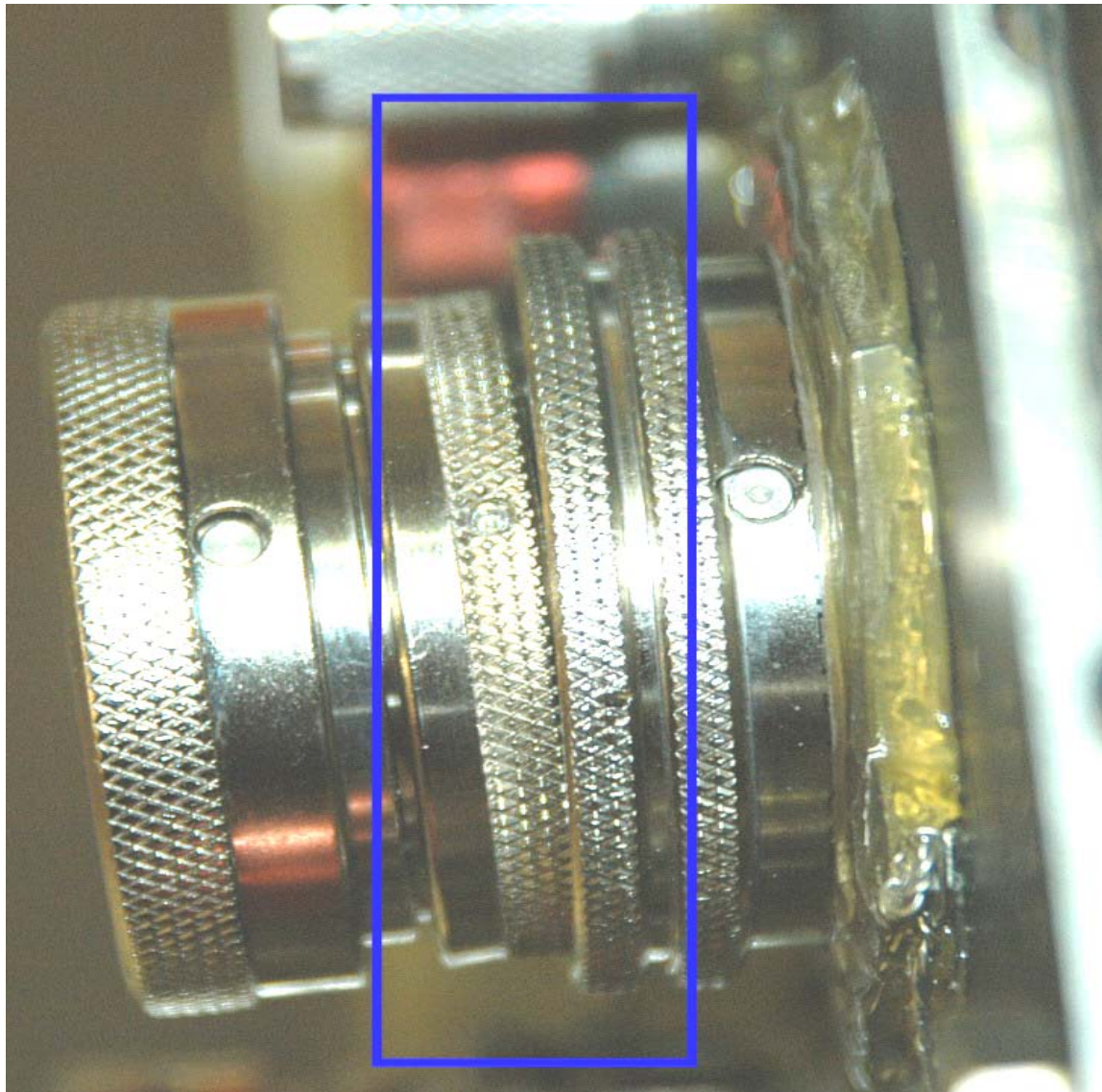


OV-105 STS-118, LSRR Orbiter

OV-105 Power-up



Figure 1: KU Band EA-1 J6 Connector Saver





	Presenter MV5/Bruce Sauser	
	Date Oct 5, 2006	Page 1

STS-118 LSRR FCE/GFE Status

Bruce Sauser
Manager, GFE & Flight Crew Equipment Office
Johnson Space Center
Oct 5, 2006



STS-118 LSRR Flight Crew Equipment/GFE	Presenter MV5/Bruce Sauser	
	Date Oct 5, 2006	Page 2

- **Currently, no hardware certification issues for STS-118 hardware**
- **Need dates and delivery dates are partnered; team working to partner remaining dates**
- **Anticipate no issues delivering hardware**
- **Tech orders and hardware list noted in backup charts**



STS-118 LSRR Flight Crew Equipment/GFE	Presenter MV5/Bruce Sauser	
	Date Oct 5, 2006	Page 3

BACKUP



STS-118 LSRR
Flight Crew Equipment/GFE

Presenter MV5/Bruce Sauser	
Date Oct 5, 2006	Page 4

STS-118 Rev-009 MV5 GFE

Hardware	Tech Order	Eng(TO) Release	In MEC	Ce rt O/ C	KSC HDW Need O/D	JSC HDW Planned O/D	KSC Remarks	JSC Remarks	JSC Contact
A (port forward)	M072-750025-058	03/24/2005	07/18/2006	C	02/05/2007	02/05/2007			Randall Moore
B (port aft)	M072-750025-067	03/24/2005	07/18/2006	C	02/05/2007	02/05/2007			Randall Moore
C (starboard aft)	M072-750025-060	03/24/2005	07/18/2006	C	02/05/2007	02/05/2007			Randall Moore
D (starboard forward)	M072-750025-061	11/24/2004	07/18/2006	C	02/05/2007	02/05/2007			Randall Moore
SRMS elbow camera	M072-544504-001	01/24/2005	07/18/2006	C	02/05/2007	02/05/2007			Randall Moore
SRMS wrist camera	M072-544504-003	03/04/2005	07/18/2006	C	02/05/2007	02/05/2007			Randall Moore
Centerline Airlock Camera (stowed)	M072-660828-002, plus CCCD stow	03/17/1999	07/18/2006	C	02/19/2007	02/19/2007			Randall Moore
Lefthand Umbilical Camera (forward)	M072-705001-017	10/28/2004	07/18/2006	C	04/27/2007	04/27/2007			Randall Moore
Lefthand Umbilical Camera (aft)	M072-705001-016	10/28/2004	07/18/2006	C	04/27/2007	04/27/2007			Randall Moore



STS-118 LSRR
Flight Crew Equipment/GFE

Presenter
MV5/Bruce Sauser

Date
 Oct 5, 2006

Page 5

Hardware	Tech Order	Eng(TO) Release	In MEC	Cert O/C	KSC HDW Need O/D	JSC HDW Planned O/D	KSC Remarks	JSC Remarks	JSC Contact
Righthand Umbilical Camera	M072-705001-024	10/28/2004	07/18/2006	C	04/27/2007	04/27/2007			Randall Moore
Digital Television (DTV)	M072-710570-007		07/18/2006	O	11/01/2006	11/01/2006			Larry Schmidt
MCIU/RMS Situational Awareness Display (RSAD)	M072-710543-001	03/07/2000	07/18/2006	O	11/13/2006	11/13/2006			Larry Schmidt
Portable Foot Restraint (PFR)	M072-661568-029	03/11/2005	07/18/2006	C	02/12/2007	02/12/2007			Mickey McElroy
Sequential Still Video (SSV)	STOWED			C					Larry Schmidt
Tools for Rendezvous and Docking (TRAD)	M072-730021-018		07/18/2006	O	10/09/2006	10/09/2006			Larry Schmidt
Video Processing Unit (VPU)	M072-710338-006	07/05/2001	07/18/2006	C	11/13/2006	11/13/2006			Larry Schmidt
Winches	V070-650007-085	11/19/2004		C	02/12/2007	05/05/2006			Mickey McElroy
Wireless Video System (WVS)	M072-744007-001 UHF M072-344828-001 mount M072-744004-014 S-BAND M072-744004-013 S-BAND M072-744004-012 S-BAND M072-744004-015 S-BAND M072-744004-017 S-BAND M072-744004-018 S-BAND M072-744004-016 S-BAND			C					Gary Cox



STS-118 LSRR
Flight Crew Equipment/GFE

Presenter
MV5/Bruce Sauser

Date
 Oct 5, 2006

Page 6

Hardware	Tech Order	Eng(TO) Release	In MEC	Cert O/C	KSC HDW Need O/D	JSC HDW Planned O/D	KSC Remarks	JSC Remarks	JSC Contact
Space to Space Orbiter Radio (SSOR)	M072-344828-002 M072-740828-002 antenna			C					Larry Schmidt
RMS Sideview Camera (RSC)	M072-710281-002 M072-000416-004 camera	11/24/2004	07/18/2006	C	02/05/2007	02/05/2007			Randall Moore
Wing Leading Edge (WLE) Instrumentation - Left Wing**	M072-756111-003			C		07/19/2006			Gary Cox
Wing Leading Edge (WLE) Instrumentation - Right Wing**	M072-756111-004			C		07/19/2006			Gary Cox
OBSS Sensor Package 1	M072-710282-001		07/18/2006	O	02/13/2007	02/13/2007			Randall Moore
OBSS Sensor Package 2	M072-710282-004			O	02/13/2007				Larry Schmidt
WLE Batteries	M072-756111-003 M072-756111-004		07/18/2006	C	03/12/2007	03/12/2007			Gary Cox
SCU				C				Installed	
Port LWTSA				O	03/01/2007	03/01/2007			Mickey McElroy
Aft Thrust Structure Micro-Strain Gauge Unit (SGU)	M072-755110-007			C					Gary Cox
Aft Thrust Structure Micro-SGU batteries				O					Gary Cox



EVA Status

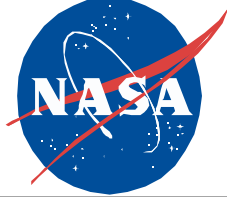
STS-118/13A.1

Launch Site Readiness Review

XA/Linda Thomas

Johnson Space Center

October 5, 2006



- **Bulkhead PFR, SED33105308-307**
 - Bulkhead PFR installation – Tech Order: M072-661568-029
- **Winches**
 - Forward Winch, SED33101570-327
 - Aft Winch, SED33101570-325
- **Port TSA (Lightweight)**
 - Port LWTSA installation – Tech Order: M072-660850-003
 - Port LWTSA Tools installation – Tech Order: M072-660853-002
- **No Starboard TSA**
- **No Safety Tethers Routed in PLB**
- **No Slidewires**

STS-118
ISS – 13A.1 ITS-S5, SPACEHAB/SM, ESP3
LAUNCH SITE REQUIREMENTS REVIEW

PAYLOAD CARGO ENGINEERING STATUS

ABBAS ELSABAGH

Phone 281-212-6186

Date 10-05-2006

STS-118/ISS-13A.1 LSRR

ENGINEERING FLIGHT PRODUCT STATUS

FRED RRELEASE

ECD: 10/13/2006

THE FOLLOWING ENGINEERING PRODUCTS WILL BE INCLUDED:

<u>DRAWING NO.</u>	<u>TITLE</u>
V072-200196	MECSLSI
VA72-200196	CARGO ARRANGEMENT
VD72-200196	AVIONICS DIAGRAM
VS72-200196	INTEGRATED SCHEMATIC
VS70-540196	RETENTION SCHEMATIC

RESCUE FLIGHT STATUS

- STS-320 RECONFIGURATION ENGINEERING PRODUCTS WILL BE DEVELOPED BY THE ENGINEERING ORDER TO FOLLOW (EOTF) PROCESS.

ENGINEERING OPEN WORK

- ESP3 POWER CABLE

STANDARDIZATION

- MISSION CONFIGURATION DOES COMPLY WITH ORBITER/PAYLOAD INTEGRATION STANDARDIZATION DOCUMENT NSTS 60523

STS-118/ISS-13A.1 LSRR

OMRS STATUS

OMRSD OPEN WORK

PAYLOAD OMRS (FILE II, VOL. 2 -POST MATE)

<u>RCN</u>	<u>TITLE</u>	<u>RCN RELEASE</u>	<u>ECD</u>
PP17184	P506 - ISS 13A.1 / ESP3 BASELINE	09/21/2006A	10/13/2006

PAYLOAD OMRS (FILE II, VOL.4 -PRE MATE)

<u>RCN</u>	<u>TITLE</u>	<u>RCN RELEASE</u>	<u>ECD</u>
DPS12115	STS-118 MISSION UNIQUE LIST	10/29/2006	11/16/2006
DPS12118	STS-118 FILE III MUL	10/29/2006	11/16/2006
DPSXXX	STS-118 ADJACENT BENT PIN TEST	10/29/2006	11/16/2006

ISSUES/CONCERNS

NONE

STS-118/ISS-13A.1 LSRR

ANNEX 1 OPEN WORK

ISS-13A.1-NSTS 21506-A01

	<u>CUSTOMER</u> <u>SUBMITTAL</u>	<u>CR</u> <u>RELEASE</u>	<u>CR</u> <u>ECD</u>
• GENERAL UPDATE	08/17/2006 A	09/18/2006 A	10/02/2006
• SAFETY CRITICAL SWITCH LIST & INTERIM WEIGHT UPDATE (L-4)	01/09/2007	01/26/2007	02/09/2007
• FINAL WEIGHT UPDATE (L-1)	04/30/2007	05/04/2007	05/11/2007

SPACEHAB-NSTS 21426-A01

	<u>CUSTOMER</u> <u>SUBMITTAL</u>	<u>CR</u> <u>RELEASE</u>	<u>CR</u>
<u>BASELINE</u>			
• WEIGHT & MASS PROPERTIES UPDATE	10/02/2006	10/13/2006	10/30/2006
• INTERIM WEIGHT UPDATE (L-70D)	03/30/2007	04/06/2007	04/20/2007
• FINAL WEIGHT UPDATE (L-1)	04/30/2007	05/04/2007	05/11/2007

ISSUES/CONCERNS

- NONE

STS-118/ISS-13A.1 LSRR

TGHR STATUS

- **OPEN WORK**

- CUSTOMER SUBMITTAL (L-4)
- RELEASE FOR REVIEW (L-3)
- BASELINE (L-2)

ECD

02/09/2007

03/09/2007

04/09/2007

- **ISSUES/CONCERNS**

- NONE

STS-118/ISS-13A.1 LSRR

PAYLOAD ICDs/PIRNs

- ALL PAYLOAD-UNIQUE ICDS ARE BASELINED

ICD STATUS (* = IMPACT FLIGHT PRODUCTS)

<u>PIRN #/ICD/PAYLOAD</u>	<u>TITLE</u>	<u>ECD</u>	<u>STATUS</u>
ICD-A-21506-ESP3	EXTERNAL STOWAGE PLATFORM 3 (ESP3)	09/07/06	BASELINED
• A05155*	BASELINE EXCEEDANCES	10/13/06	IN REVIEW
• A05280*	POWER DATA	10/27/06	IN REVIEW
• A05281*	KYA TO ORBITER CLEARANCE	11/23/06	IN REVIEW
• ICD-A-21506-OOR	ISS 13A.1 ON-ORBIT	01/09/2003 A	BASELINED
• A05151	ON-ORBIT VENTING (HATCH EQUILIZATION)	09/19/2006	IN REVIEW
• A05287	UPDATE SECTION S.3	10/30/06	PENDING LPM APPROVAL
• A05292	ADD SPPTS	11/06/06	IN REVIEW
• ICD-A-21506-S5	ITS-S5	08/05/2002	BASELINED
• A05266	UPDATE PER LATEST IDD IRNS	10/20/2006	IN REVIEW

ISSUES/CONCERNS

- NONE

STS-118/ISS-13A.1 LSRR

CARGO INTEGRATION HARDWARE STATUS

DELIVERY STATUS

- ALL REQUIRED CIH HAS BEEN DELIVERED
- CARGO INTEGRATION HARDWARE WILL TRANSFERED FROM STS-116, 15 WEEKS MINIMUM TURN AROUND IN OPF
- INVENTORY HARDWARE WERE MANIFESTED TO REDUCE THE AMOUNT OF HW TRANSFERRED FROM STS-116

ISSUES/CONCERNS

- NONE



STS-118 Integrated Launch Site Requirements Review

Presenter	Amy Houts-Gilfriche	
Date	10-05-06	

SSP LCC Changes

The Following LCC Open Work is designated STS-118 Mandatory:

- **LCN 01192 – SRB Implementation of New CRD Requirements** **ECD: 05-25-07**

This change updates Booster Range Safety System (BRSS) requirements to accommodate new Command Receiver Decoder (CRD) implementation scheduled for STS-118.

The Following LCC Open Work is designated STS-118 Non-Mandatory:

- **LCN 01193 – SRB Changes to Existing IRD Req. Due to New Req.** **ECD: 05-25-07**

This change retains the Integrated Receiver Decoder (IRD) specific requirements for missions equipped with IRD prior to the first flight of the new SRB RSS CRD scheduled for STS-118.



STS-118 Launch Site Requirements Review		Presenter	
		MK-SIO / A. Swift	
		Date	Page
		10-5-06	1

Mandatory RCNs:

OV17032	V54 - OBSS IBA TESTING	Preliminary
OS16824	F2V3 - RMS RE-CERT U/D AND IBA LL	Preliminary
OV16366	V58 - HYD GRND SRVC QDC RELOCATION	Preliminary

Non-Mandatory Value Added RCNs:

KV16239	V58 - WSB GN2 TK MOISTURE SAMPLE	09/29/06
OV17182	V46 - APU SCRUB	Preliminary
OV17135	V30 - RCM PHASE IV WING AND TAIL	Preliminary
OV17103	V54 - OBSS MPM STATIC CLEARANCE MEAS	Preliminary
OV17061R2	V09 - LESS/RCC & "D" FIELD UPDATE	Preliminary
OV16885	V54 - "D" FIELD UPDATE & EFF CORRECTION	Preliminary
KS16593R1	VOL3 - ECLSS FAN TIME CYCLE ADDITIONS	Preliminary



STS-118 Integrated Launch Site Requirements Review

Presenter	Amy Houts-Gilfriche	
Date	10-05-06	

SSP System Drawings

The Drawings Baseline Was Released By PRCB S0115118BR2 on 07-11-06

- V072-000001-259 (Rev. UR01) Space Shuttle System (Rel. 07-13-06)
 - V072-200196-003 (Rev. D01) Mission Equipment Cargo Support (Rel. 07-14-06)
 - SGD32104441-501 (Rev. NC) Crew Compartment Configuration (Rel. 08-01-06)
 - 502 Descent
 - V070-000001-005 Orbiter General Assembly
 - V070-410100-018 SSME Installation
 - 10100-0001-164 Integrated SRB General Assembly (BI-130)
 - 80901000000-519 External Tank Assembly (ET-117)
- STS-118 CIR + 70 days Mission Configuration Product Plan (MCP) was published on 10-27-06 and will be republished at LSRR +18 days on 10-23-06.



STS-118 Integrated Launch Site Requirements Review

Presenter	Amy Houts-Gilfriche	
Date	10-05-06	

SSP System Drawings - Cont'd

Ferry Configuration

- V072-000001-260 (Rev. UR01) Space Shuttle System Drawing (Rel. 07-13-06)
- V072-200196-004 (Rev. D01) Mission Equipment Cargo Support (Rel. 07-14-06)
- SGD32104441-001 (Rev. NC) Crew Compartment Configuration (Rel. 08-01-06)
- V072-300055-014 (Rev. BL01) Ferry Flight Configuration (Rel. 06-21-06)

SCA 905



STS-118 Integrated Launch Site Requirements Review

Presenter	Amy Houts-Gilfriche	
Date	10-05-06	

Modification Impact Report

Mission Equipment Modifications and Orbiter Modifications analyzed for impacts to OMRSD, LCC, ICD, EMI, Software, and GSE.

A total of 26 MCRs have been approved and/or pending mods

Current MCR impact status:

No impacts for all six disciplines	15
One or more disciplines with impacts, documentation approved and/or pending approval	7
Possible impacts still under review	4

MCRs 19789, 19896, 23448, & 23452 are being reviewed for multiple impacts

MCR/ECP	STAT SITE	ITEM/KIT NUMBER TCTI NUMBER	SEQ EISN NO.	DESCRIPTION / GENERAL REMARKS	PRCB AUTHDATE	PRIO FLT
-----	INC	FEC KET-0085	0117 000	INSTALLATION OF ET GUCP INCONEL BELLOWS	ET-0063B 2002-04-02	SCHD
B02121	AUTH MAF	N091	0117 000	LO2 FEEDLINE BELLOWS HEATERS RTF CAIB RECOMMENDATION 3.2-1 FOR ET THERMAL PROTECTION SYSTEM MODIFICATION.	S062612B 2005-06-10	

TOTAL MODS = 2

MCR/ECP	STAT	ITEM/KIT NUMBER	SEQ	DESCRIPTION / GENERAL REMARKS	PRCB	PRIO
-----	SITE	TCTI NUMBER	EISN NO.	-----	AUTHDATE	FLT
012999	COMP KSC	TCTIM0012999REF	0005 002	DISCREPANT BLANKET AROUND MILKSTOOL - EOTF ADDED PER EO V525-000002 T11 & V525-366000 B01 AUTH PER S063125QR4 UNTIL STS-118 LSFR	S063125QR4 2006-06-13	MAND 020
019759	AUTH JSC	TCTIM6619759REF	0003 000	INCREASE STRENGTH OF EMERGENCY EGRESS NET MECHANISM ADDED PER V828-660101 B03	S063027P 2004-05-13	OPTY 020
019775	COMP KSC	TCTIM3619775REF	0003 000	ADD CUT LINES TO BLKT INSTL AROUND WIRE SUPRT STRUCTURE-EOTF ADDED PER EO V073-360063 B02	S063125QR4 2006-06-13	MAND 020
019823	AUTH JSC	TCTIM0019823REF	0003 000	MODIFY LONG MIDDECK BAG STRAPS TO ELIM VELCRO INTERFERENCE ADDED PER V828-000002 F09 & -660221 A06	S063027T 2005-07-18	OPTY 020
019824	AUTH KSC	TCTIM0019824REF	0007 000	IMPROVED CLEARANCE W/PLBD BELLCRANK-RMS MPM COVER FASTENER ADDED PER EO V082-000002 E08. E/I 7 HDWE WAS PARTI ALLY MODIFIED & USED/FLOWN ON OV-103 OBSS MPM	S115116J 2006-01-11	MAND 020
	AUTH KSC	TCTIM0019824REF	0003 000	IMPROVED CLEARANCE W/PLBD BELLCRANK-OBSS MPM COVER FASTENER ADDED PER EO V092-000002 A07	S115116J 2006-01-11	MAND 020
023367	AUTH KSC	K828-643012-001	0003 000	AIRLOCK BOOSTER FAN BYPASS MODIFICATION ADDED BY EDS I/F PER KIT EO NEW REF. CR S115118F	S115118F 2006-05-18	MAND 020

TOTAL MODS =

7

MCR/ECP	STAT	ITEM/KIT NUMBER	SEQ	DESCRIPTION / GENERAL REMARKS	PRCB	PRIOR
-----	SITE	TCTI NUMBER	EISN NO.	-----	AUTHDATE	FLT
	AUTH	J5338	0024 009	OMS POD ACCESS DOOR INSPECTION	OMS-0034B	SCHD
	KSC		SPAR	RP04-28	2000-07-21	028

TOTAL MODS = 1

MCR/ECP	STAT SITE	ITEM/KIT NUMBER TCTI NUMBER	SEQ EISN NO.	DESCRIPTION / GENERAL REMARKS	PRCB AUTHDATE	PRIO FLT
	COMP KSC	J5550R1	0105 000 NSW	STS-115 ADDITIONAL STRUCTURAL INSPECTION REQUIREMENTS	S115115BR4 2003-01-17	MAND 020
	PLND KSC	J5558	0105 000 NSW	OV-105 SUBSYSTEM INSPECTION REQUIREMENTS FOR OMDP EXTENSION	S115115BR1 2002-11-12	MAND 020
	XXX KSC	J5568	0105 000 SPAR	MAGR-S3S LRU ROTATION AT BATTERY CHANGEOUT OBSOLETE. CHIT CLOSURE SUBMITTED 12/14/04.	ORB-0056 R02 2003-01-07	MAND 021
	COMP KSC	J5578	0105 000 NSW	MPS BSTRA BALL ROTATION ADDED PER 2/27/03 DAILY.	S052923KZ 2003-02-28	MAND 020
	COMP KSC	J5578R2	0105 000 NSW	MPS BSTRA BALL ROTATION RECORD CREATED PER 3/6/03 DAILY.	S052923KZR1 2003-03-10	MAND 020
	COMP KSC	J5578R4	0105 000 NSW	MPS BALL STRUT TIE ROD ASSEMBLY (BSTRA) BALL ROTATION PER 8/8/03 DAILY SPRCB. REF. CR S061930C	S052923KZR2 2003-08-29	MAND 020
	PLND KSC	J5608	0105 000 NSW	INSPECTION OF REINFORCED CARBON-CARBON (RCC) PARTS	S052923LN 2003-05-21	SCHD 020
	PLND KSC	J5616A	0105 000 NSW	THERMOGRAPHY INSPECTION OF REINFORCED CARBON-CARBON PARTS CREATED PER OS DAILY CHIT.	S052923LT 2003-06-18	MAND 020
	COMP KSC	J5636	0105 000 SPAR	MODAL IMPULSE GROUND TEST TO DETERMINE FLEXLINE CHARACTERIST ICS AND VALIDATE STRUCTURAL MODELS	ORB-0066 R16 2003-07-22	MAND 020
	AUTH KSC	J5669R1	0105 000 NSW	MPS FLEX HOSE INSPECTION AND LEAK CHECK REQMTS FOR OV-105	S052923MZ 2003-12-01	MAND 020
	PLND KSC	J5670	0105 000 NSW	FLEX HOSE INSPECTION AND LEAK CHECK REQMTS FOR OV-105	S052923NA 2003-12-08	MAND 020
	PLND KSC	J5677A	0105 000 SPAR	VENDOR NDE INSPECTION & BASELINING OF RCC CHIN PANEL ASSEMBLIES AND OV-104 NOSE CAP	ORB-0066R17 2003-11-06	MAND 020
	PLND KSC	J5678	0105 000 NSW	ORBITER TPS LOWER SURFACE BOND VERIFICATION TEST	S052923MV 2003-11-10	MAND 020
	AUTH KSC	J5682R1	0105 000 NSW	ET DOOR DRIVE ACTUATOR STALL TEST NEW RECORD ADDED PER OSB DIR MOVE TO NEXT FLT WHEN MANIFESTED	S052923NB 2004-01-20	SCHD 020
	PLND KSC	J5735	0105 000 NSW	ASMT OF POT NEG MRGN IN EXISTING MLGD TILE/THERMAL BAR DSGN MOVE TO STS W/MANIFESTED	S052923NT 2004-05-04	MAND 020

AUTH	J5765	105	000	WSB POST FLIGHT TANK OFFLOAD QUANTITY	ORB-0078B	MAND
KSC		SPAR			2005-03-09	021
AUTH	J5881	0105	000	LOWER LESS ACCESS CARRIER PANEL POST FLT TORQUE CHK VERIF'N	ORB-0078R05	MAND
KSC		SPAR			2005-08-17	021
AUTH	J5883	0105	000	HUB AND DRAIN HOLE TILE MANUAL DEFLECTION TEST	ORB-0078R02	MAND
KSC		SPAR			2005-08-16	021

MCR/ECP	STAT	ITEM/KIT NUMBER	SEQ	DESCRIPTION / GENERAL REMARKS	PRCB	PRIOR
	SITE	TCTI NUMBER	EISN NO.		AUTHDATE	FLT
	AUTH	J5884	0105 000	THERMAL BARRIER FLOW PATH INSPECTION	ORB-0078R03	MAND
	KSC		SPAR		2005-08-16	021
	AUTH	J5885	0105 000	ARROWHEAD TILE INSPECTION	ORB-0078R04	MAND
	KSC		SPAR		2005-08-16	021
	PLND	J5892	0105 000	INSTRUMENTED MLG DOOR LINKAGES FOR STRAIN GAGE MEASUREMENTS	ORB-0066R25	MAND
	KSC		SPAR	TO CORRELATE STRESSES IN MECHANISM DURING GEAR CYCLES SUPPORTING ENV. SEAL RPL	2005-05-23	020
	AUTH	J5930B	0105 000	ORBITER STRUCTURE IML SURFACE CORROSION SAMPLING INSPECTION	S052923WQ	MAND
	KSC		NSW		2006-02-10	020
	AUTH	J5930CR1	0105 000	ORBITER STRUCTURE IML SURFACE CORROSION SAMPLING INSPECTION	S052923WQR1	MAND
	KSC		NSW		2006-08-01	020
	AUTH	J5941CR1	0105 000	AMES GAP FILLER ON-VEHICLE PULL TESTING	S052923VYR2	MAND
	KSC		NSW		2006-01-30	020
	PLND	J5941H	0105 000	AMES GAP FILLER ON-VEHICLE PULL TESTING AND REMOVAL	ORB-0066 R46	MAND
	KSC		SPAR		2006-05-11	020
	AUTH	J5968	0105 000	INSPECTION OF MPS LH2 FEEDLINE GIMBAL JOINT FLOWLINERS ON	ORB-0078R07	MAND
	KSC		SPAR	OV-103, OV-104, AND OV-105	2005-10-11	021
	AUTH	J5978C	0105 000	EXTERNAL TANK DOOR CLOSURE VISUAL INDICATOR	S052923WGR1	MAND
	KSC		NSW		2006-03-26	020
	COMP	J6092	0105 000	CHANGE THE HYDRAULIC FLUID IN THE OV-105 RUDDER SPEED BRAKE	ORB-0066 R45	MAND
	KSC		SPAR	(RSB) POWER DRIVE UNIT (PDU),SN 404, GEARBOX	2006-04-27	020
	COMP	J6095	0105 000	MICRO-STRAIN GAUGE UNIT (MSGU) TAPE & CRACK INSPECTION	ORB-0066R47	MAND
	KSC		SPAR		2006-05-16	020
	PLND	J6097	0105 000	OV-105 THERMAL WINDOW 3 & 4 REMOVALS	ORB-0066 R48	MAND
	KSC		SPAR		2006-05-19	020
	PLND	J6102A	0105 000	ACREAGE FLEXIBLE INSULATION BLANKET INSPECTIONS	S052923YN	MAND
	KSC		NSW		2006-06-13	020
	COMP	J6105	0105 000	MPS GHE REG OUT CHECK VALVE X-RAY INSPECTION	ORB-0066R49	MAND
	KSC		SPAR		2006-06-01	020
	PLND	J6123	0105 000	ASA #3 & #4, ATVC #3, AND RJDA #1 R&R FOR OV-105, FLT 20	ORB-0066 R51	MAND
	KSC		SPAR		2006-07-07	020

COMP	J6124A	0105 000	MAGR-S3S LINK-007 FIRMWARE UPGRADE	ORB-0066R52	MAND
KSC		SPAR		2006-07-19	020
AUTH	J6135	0105 000	REMOVAL AND REPLACEMENT OF OV-105 GPC # 5 BBU	ORB-0066R53	MAND
KSC		SPAR		2006-07-28	020
COMP	K5984	0105 000	CANNIBALIZATION OF MADS PCM FRM OV-105 IN SUPPORT OF OV-103	S052923WF	MAND
KSC		NSW		2006-01-19	020

MCR/ECP	STAT	ITEM/KIT NUMBER	SEQ	DESCRIPTION / GENERAL REMARKS	PRCB AUTHDATE	PRIO FLT
-----	SITE	TCTI NUMBER	EISN NO.	-----	-----	-----
	COMP	K5992	0105 000	CANNIBALIZATION OF RSB BLOCK SEAL FROM OV-105	S052923WL	MAND
	KSC		NSW		2006-01-23	020
	AUTH	K6161	0105 000	CANNIBALIZATION OF DSC OF2 FROM OV-105 TO OV-103	S052923ZE	MAND
	KSC		NSW		2006-09-25	020
012999	COMP	TCTIM3612999REF	0001 002	FABRICATION AND INSTALLATION OF NEW TCS BLANKET - EOTF	S063125QR4	MAND
	KSC			ADDED PER EO V439-362000 A08(REF PR TCS-5-20-1955 , -1969- PROG AUTH PER S063125QR4 UNTIL 118 LsFR	2006-06-13	020
	APPD	TCTIVXX12999REF	0105 020	SHUTTLE TURNAROUND PR/TPS EO-TO-FOLLOW OV-105 FLIGHT 20	NOT REQD	
	KSC			ADDED PER EO V070-340385 B09 (REF: STR-5-20-5367)		020
	PPDF	TCTIV1912999REF	0105 004	INSTALLATION OF SPAR ANGLE SPACER - EOTF	S063125QR4	MAND
	KSC			ADDED PER EO V070-199201 B06, REF PR TES-5-20-0611 & TES-5- 20-0612	2006-06-13	020
	PLND	TCTIV2012999REF	0105 002	DRAG CHUTE SUPPORT MOD, MATCH FASTENERS W/BLKT SLITS - EOTF	S063125QR4	MAND
	KSC			ADDED BY EDS I/F & EO V070-363909 C04 (REF PR TCS-5-20-1906)	2006-06-13	020
	COMP	TCTIV3312999REF	0105 005	CLOSEOUT PANEL FASTENER GRIP LENGTH - EOTF	S063125QR4	MAND
	KSC			ADDED BY EDS I/F & EO V070-333100 P12, REF PR: STR -5-20- 4906	2006-06-13	020
	PLND	TCTIV3312999REF	0105 006	OV-105 BLANKET REQMT FOR ADDITIONAL CUT LINES - EOTF	S063125QR4	MAND
	KSC			ADDED BY EDS I/F & V070-061005 G08	2006-06-13	020
	PLND	TCTIV3512999REF	0105 006	ATTACH GROUND JUMPERS FROM BLANKETS TO STRUCTURE - EOTF	S063125QR4	MAND
	KSC			ADDED BY EDS I/F PER EO V070-363200#C02, (PR TCS-5 -20-2035)	2006-06-13	020
	PLND	TCTIV3512999REF	0105 005	WATER SPRAY BOILER BLKT MOD DUE TO HYD LINE INTERFER - EOTF	S063125QR4	MAND
	KSC			ADDED BY EDS I/F & V070-363400 C01, V070-363453 B0 5 (REF TCS-5-20-1920)	2006-06-13	020
	COMP	TCTIV3612999REF	0105 035	FABRICATE AND INSTALL SUPPORT STRUCTURE BLANKET - EOTF	S063125QR4	MAND
	KSC			ADDED PER EO V070-362673 B02 (REF PR TCS-5-20-1930)- AUTH PER S063125QR4 UNTIL STS-118 LsFR	2006-06-13	020
	COMP	TCTIV7512999REF	0105 000	REPLACEMENT OF TEMP SENSOR MEASUREMENTS - EOTF	S063125QR4	MAND
	KSC			ADDED BY EDS I/F & V070-754109 D07	2006-06-13	020
	AUTH	TCTIV7912999REF	0105 029	TERMINAL BOARD LOCATION & HARNESS FOR OPTIMAL INSTL - EOTF	S063125QR4	MAND
	KSC			ADDED PER EO V070-797021 F13, REF PR OEL-5-20-5030 AUTH PER S063125QR4 UNTIL STS-118 LsFR	2006-06-13	020

013201	COMP	TCTIV6513201REF 0105 000	RELOCATE SNAP STUD TO AVOID INTERFER W/SORG WATER LINE	S115118F	MAND
	KSC	NOT REQUIRED	ADDED BY EDS I/F & EO V070-650505 B38 REF. CR S115118F	2006-05-18	020
017177	AUTH	TCTIV8517177REF 0105 005	DHS PIVOT TUBE INSTL, DIAMETER SIZE CHANGE FOR DRILLED HOLE	S115116J	MAND
	KSC	NOT REQUIRED	CREATED PER EO V070-351949 A07	2006-01-11	020
019476	AUTH	TCTIV1019476REF 0105 000	IMPROVED MLG TIRE & WHEEL ASSEMBLY	S115116L	MAND
	KSC	NOT REQUIRED	ADDED BY EDS I/F PER EO V070-756124 NEW	2006-02-10	020

MCR/ECP	STAT	ITEM/KIT NUMBER	SEQ	DESCRIPTION / GENERAL REMARKS	PRCB	PRIO
-----	SITE	TCTI NUMBER	EISN NO.	-----	AUTHDATE	FLT
019775	COMP KSC	TCTIV3419775REF NOT REQUIRED	0105 004	REPLACE FASTENERS WITH HI-LOK SCREWS TO AVOID DAMAGE - EOTF ADDED BY EDS I/F AUTH PER S063125QR4 UNTIL STS-118 LSFR	S063125QR4 2006-06-13	MAND 020
	AUTH KSC	TCTIV3619775REF NOT REQUIRED	0105 004	NEW THERMAL BLKTS TO ALLOW CLEARANCE AROUND COAX CABLES-EOTF ADDED BY EDS I/F. REF PR'S TCS-5-20-1869, -1870 & -1871	S063125QR4 2006-06-13	MAND 020
	PLND KSC	TCTIV3619775REF NOT REQUIRED	0105 002	INSTALLATION OF BUTTONS AND BLANKET FOR OV-105 - (EOTF) ADDED BY EDS I/F & V070-361169 B01, V070-361100 J0 7MOVE TO OV-105 FLT 20 WHEN REMANIFESTED	S063125QR4 2006-06-13	MAND 020
	AUTH KSC	TCTIV6119775REF NOT REQUIRED	0105 006	ADD CLAMP RQMT TO SUPPORT THE RE-ROUTING OF SUPPLY LINE-EOTF ADDED BY EDS I/F & V070-623051 C04, REF: WWM-5-20-0082-	S063125QR4 2006-06-13	MAND 020
	AUTH KSC	TCTIV7319775REF NOT REQUIRED	0105 000	ELIMINATE INTERFERENCE W/ INTERNAL PANEL COMPONENTS-EOTF ADDED BY EDS I/F PER V070-730022 G02 (REF: TPSB DDC-5-20- 030)	S063125QR4 2006-06-13	MAND 020
019823	PLND KSC	TCTIV6519823REF NOT REQUIRED	0105 000	AFT WINCH INSTALLATION PROCEDURE ADDED BY EDS I/F PER EO V070-650007 F05	S063125AA 2006-04-03	MAND 020
019903	AUTH KSC	TCTIV3319903REF NOT REQUIRED	0105 000	SKY GENIE INSTALLATION AND AFD OVERHEAD CLOSEOUT PANEL MOD ADDED BY EDS I/F & V070-390392 B09, REPLACED PLACE HOLDER 019903,0105,0	S115118FR1 2006-06-27	MAND 020
	PLND JSC	VK70-660005-001 NOT REQUIRED	0105 000	MODIFY SKY GENIE ASSEMBLY RECORD BUILT PER MCR 19903, REPLACED PLACEHOLDER 0 19903, 0105,0	S115118FR1 2006-06-27	MAND 020
023272	PLND KSC	VK70-852105-001 NOT REQUIRED	0105 000	PROVISIONS FOR DOME HEAT SHIELD SPLICE LINE MODIFICATION-MOD ADDED BY EDS I/F & EO V070-857139 NEW	S115116J 2006-01-11	MAND 020
023371	AUTH KSC	TCTIV3123371REF NOT REQUIRED	0105 000	EGRESS SYSTEM T-HANDLE SAFETY PIN & FLAG REPLACEMENT W/ GFE ADDED BY EDS I/F PER EO V070-553301 D02 REF. CR S115118F	S115118F 2006-05-18	MAND 020
023410R1	AUTH KSC	VK70-421015-001 NOT REQUIRED	0105 000	FORWARD REACTION CONTROL SYSTEM (FRCS)RAIN COVER REDESIGN ADDED BY EDS I/F & KIT EO NEW REF. CR S115118F	S115118F 2006-05-18	MAND 020
023435	PLND KSC	TCTIV0023435REF NOT REQUIRED	0105 000	ET DOOR CLOSURE VISUAL INDICATOR ADDED BY EDS I/F & EO V070-000008 F09	S115116G 2006-02-14	MAND 020
023438	AUTH KSC	VK70-421018-001 NOT REQUIRED	0105 000	TYVEK COVE MOD KIT FOR DOWN FIRING THRUSTERS BUILT PER MCR 023438(NOTE: TO BE WORKED CONCURRENT LY WITH VK70-421015-001) REF. CR S115118F	S115118F 2006-05-18	MAND 020
023448	PLND KSC	TCTIV3523448REF NOT REQUIRED	0105 000	ECO SENSOR, BAYS 5 & 6 RE-WIRING ADDED PER EO V070-775505 C05 & -775506 B27 REPLACED PLCHLDR	S115118J 2006-06-30	MAND 020

RECORD 023448,0105,0

ROPN	TCTIV7023448REF 0105 000	ECO SENSOR SYSTEM INSTRUMENTATION (STARTUP)	S115118J	MAND
KSC	NOT REQUIRED	ADDED BY EDS I/F & V070-755262 D04 REF. PLCHLDR RECORD 023448,0105,0	2006-06-30	020
AUTH	TCTIV7923448REF 0105 000	ECO SENSOR, INTER-BAY WIRING, BAYS 5 & 6	S115118J	MAND
KSC		ADDED PER EO V070-775607 B16 REPLCD PLCHLDR RECORD 023448, 0105,0	2006-06-30	020

MCR/ECP	STAT	ITEM/KIT NUMBER	SEQ	DESCRIPTION / GENERAL REMARKS	PRCB	PRIOR
-----	SITE	TCTI NUMBER	EISN NO.	-----	AUTHDATE	FLT
023463	PLND	TCTIV3123463REF	0105 000	OVERHEAD WINDOW 7 FASTENER TORQUE INCREASE	S115118G	MAND
	KSC	NOT REQUIRED		ADDED BY EDS I/F & EO'S V070-310001 K30 & V070-390 003 C09, REPLACED PLACEHOLDER 023463, 0105, 0	2006-05-02	020

TOTAL MODS = 69

MCR/ECP	STAT	ITEM/KIT NUMBER	SEQ	DESCRIPTION / GENERAL REMARKS	PRCB	PRIOR
-----	SITE	TCTI NUMBER	EISN NO.	-----	AUTHDATE	FLT
	AUTH	B470ECP3789R000	B130 000	RSRM AFT SEGMENT STIFFENER RING FOAM APPLICATION TCTI	S170809R2	
	KAS				2006-08-15	
	PLND	FEC RSRM-114	B130 000	ENGR CLARIFICATION OF FIELD JOINT INSULATION J-JOINT	S171216	
	KAS				2006-08-17	

TOTAL MODS = 2

Approved STS-118 OMRS Waivers and Exceptions

WVR EXC	ELEMENT PROJECT	PRCBD NUMBER WAIVER# (STAT) (INITIAL STS)		ABSTRACT RAS REQUIREMENTS	EISN PAYLOAD	STS BEG END		
E	ORB	S053296PA		OMRSD EXCEPTION REQUEST -	105	019	020	
		EK10244	(A)	WASTE SYSTEM CITRIC ACID FLUSH (EK10244)	104	027	027	
					102	029	029	
			S053296PJ		OMRSD EXCEPTION REQUEST -	105	019	023
			EK10261	(A)	WING LEADING EDGE RCC PANEL REFURBISHME NT(EK10261)			
			S053296YY		OMRSD EXCEPTION REQUEST -	104	027	027
			EK10343R1	(A)	PBD DRIVEACTUATOR TORQUE LIMITER TEST(E K10343R1)	105	020	020
			S053297AY		OMRSD EXCEPTION REQUEST -	105	020	020
			EK10346R1	(A)	V30 - MODAL ANALYSIS EFFECTIVITY (EK103 46R1)			
			S053297ZY		OMRSD EXCEPTION REQUEST -	105	020	020
		EK10476	(A)	V30 - MIDFUSELAGE DETAILED INSPECTIONS(EK10476)				
		S053298KB		OMRSD EXCEPTION REQUEST -	105	020	020	
		EK10516	(A)	MANIPULATOR ARM ASSEMBLY MAY VIOLATE 18 0 DAYINSTALLATION TIME LIMIT (EK10516)				
W	ET	S053296PP		OMRSD WAIVER REQUEST - ET	102	028	028	
		WK10270	(A)	DOOR DRIVE PDU LIMITER SLIP TEST (WK10 270)	104	027	028	
					105	019	020	
	OMS	S053294ZV		OMRSD WAIVER REQUEST - OMS	0024	024	031	
		WK10093	(A)	HEATER RESISTANCE (WK10093)				

ACTIVE WAIVERS FOR
OV-105

Item #	Authority	Date	Waiver Description	Effectivity	Wad
53	S052428A	03/27/91	Allows specified flights to fly with interim TPS repair after each mission to minimize damage to surrounding tile during ferry flight	STS-37, STS-39, STS-40, STS-42 thru STS-999	STAYS OPEN
101	S076972	11/19/91	Permit the modified GPCs (AP101-S) Battery Back-up Unit to fly with annotated fastener improvements without rolling the LRU Part Number	STS-42, STS-44, STS-47 and STS-49 thru STS-999	STAYS OPEN
319	S115111BR7	04/30/02	Requirement is waived to allow OV-105, Flight 18 to fly with the following out-of-configuration conditions: a. M072-794011-045 (harness tank set 4) partial M072-794011#D07 partial (did not perform wire separations, did not install (4) MD152-0017-0016 spacers, did not install (4) ME127-0071-3021 clamps). b. M072-794031-017 (harness tank set 3) partial M072-794031#C15 partial (did not perform wire separations, did not install (1) ME127-0071-3020 clamp). c. M072-794051-041 (harness tank set 5) partial M072-794051#B29 (did not perform wire separations).	OV-105, Flight 18 thru OMDP-2	ref: OEL-5-18-179 OEL-5-18-2584 OEL-5-A0061 CLOSED 11/22/05 OEL-5-18-2589 OEL-5-A0062 deferred to OMM In TAIR - 07/27/06 Closed in NSTS 07700 OEL-5-18-2590 OEL-5-A0063 CLOSED 9/27/05