STS-131 / 19A

FD 09 Execute Package

MSG	Page(s)	Title
069A	1 - 15	FD09 Flight Plan Revision
070	16 - 17	FD09 Mission Summary
071	18 - 19	FD09 Transfer Message
072	20	FD09 Crew Choice Downlink
073	21 - 22	Camera C Impacts to Upcoming Procedures

Approved by FAO:

L. Rush

Last Updated: Apr 13 2010 12:54 AM GMT

JEDI *(**J**oint **E**xecute package **D**evelopment and **I**ntegration), v3.0*

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MSG INDEX

MSG NO.	TITLE
MSG-069	FD09 Flight Plan Revision
MSG-070	FD09 Mission Summary
MSG-071	FD09 Transfer Message
MSG-072	FD09 Crew Choice Downlink
MSG-073	Camera C Impacts to Upcoming Procedures

1. Post-Sleep Cryo Config

For today's post-sleep cryo config, O2 and H2 tanks 1 and 5 will be active.

R1 O2,H2 MANF VLV TK1 (two) - OP (tb-OP)

Pre-Sleep Cryo Config

√MCC for deltas prior to configuring for pre-sleep.

For tonight's cryo config, manifold 1 will be closed with O2 and H2 tanks 1 and 5 active.

R1 O2,H2 MANF VLV TK1 (two) - CL (tb-CL)

2. Comm Loop Overview for Flight Day 9

S/G 1 & A/G 1	S/G 2	A/G 2
EVA 3 - EV Crew	ISS Payloads	EVA 3 - IV Comm to MCC
Exercise Constraints	Russian Ops	Transfer
	DPC	All other STS Comm
	All other ISS Comm	

3. MMT Summary

The MMT met briefly today to review orbiter systems and mission progress. Discovery and the crew continue to perform very well and folks are looking forward to EVA 3. The MMT reviewed the preliminary performance assessment of the RSRBs, ET, and SSME and they all looked good. Hopefully you enjoyed your well deserved time off.

4. P1 Beam Troubleshooting
   Dottie,
   During the P1 Beam Troubleshooting, we would like the EV crew to verify that the beam is flush to the truss structure prior to any bolting operations. Additionally, in order to reduce the chance of PGT sideloads during bolt installations, instruct the EV crew to depress the bolt as far as possible before using the PGT.

   The Get-Ahead procedures for EVA 3 can be found at the following locations:

   APFR Relocate for ULF-4
   Page FS 7-73 EV 2 column Steps 24-27

   Tool Relocate to A/L Toolbox
   Page FS 7-130, Message 131-013 (23-0186)

   S1 FHRC P-Clamp Release
   Pages FS 7-128 & 129

5. LiOH TRANSFER
   Today, Naoko is scheduled to swap 15 new LiOH cans from the MPLM (STS-131 Cans 32-46) with 15 used LiOH cans from the Shuttle LiOH Box (STS-131 Cans 1-15). Reference Transfer List Resupply Items 296-300 and Return Items 767-771. We recommend gathering all of the MPLM LiOH can CTBs on the Resupply List first and take them to the middeck prior to beginning the can swap.

6. WHC Configuration
   WHC: FYI, just prior to crew sleep, Soichi will be configuring the WHC for internal EDV use. This change will be transparent, and there is no change to WHC usage/operations. The configuration will send urine to the internal WHC tank instead of the UPA. After the RFTA R&R on FD10, WHC will be configured back to integrate with UPA. Note: There has been no change in the Station Waste Management plan: 4 ISS crew on ACY, 2 ISS crew on WHC, 5 Shuttle crew on WHC, and 2 Shuttle crew on WCS. If you have any questions, please let us know.

7. REPLACE PAGES 2-30, 2-32, 2-34 AND 3-94 THROUGH 3-103.

REPLANNED

FD08

GMT 04/12/10 (102)
β = 1
MET Day 007

06 17 18 07 08 19 20 21 22 23 04/13 01 02 03 04 09 10 11 12 13 14 15 16 17 18

STS-131

| | | |

FD09 **REPLANNED**

GMT 04/13/10 (103)
β = 3
MET Day 007

05 06 07 08 09 10 11 12 13 14 15 16
18 19 20 21 22 23 008/00 01 02 03 04 05 06

STS-131

CDR POINDEXTER	ILOFF, INHIB, PAD, MPLM XFER, P/TV 07 S/U, P/TV07 EVA, IMU, MEAL, CWC#4, INIT, P/TV07 EVA, CWC, TERM, CWC, XFER, P/TV07 EVA, PTV07, FLTR INSP, EXERCISE, MPLM XFER
PLT DUTTON	EVA PREP, EMU, PURGE, EMU PREBREATHE, C-LK DPRS, P-DPS, SSRMS ATA RETRIEVE, SSRMS LWAPA RETRIEVE, P-RPS, C-LK, RPRS, POST EVA W/H20, EXERCISE ARED
MS1 MASTRACCHIO	EVA PREP, EMU, PURGE, EMU PREBREATHE, C-LK DPRS, P-DPS, EGRS, S1 ATA FLD CNCTRS, A/L, MMOD, AGB STOW, PLB SETUP, ATA INSTL/FGB RMV, S1 ATA FGB INSTALL, LWAPA INST ON LMC, Z1 SGANT PREP, P1 RAD GF BEAM T/S, CLNUP, INGRS, P-RPS, C-LK, RPRS, POST EVA W/H20
MS2 METCALF-LINDENBURGER	POST, SLEEP, MPLM XFER, EVA IVA SPPRT PREP, EVA IVA SUPPORT, MPLM XFER
MS3 WILSON	POST, SLEEP, MDDK, MPLM XFER, DOUG, S/U, SSRMS ATA RETRIEVE, SSRMS LWAPA RETRIEVE, EXERCISE, MPLM XFER, AEM#, MDDK
MS4 YAMAZAKI	PSTSLP, XFER, UPDAT, EXERCISE, MPLM XFER, MEAL, LIOH TRANSFER, MPLM XFER, PRE SLEEP
MS5 ANDERSON	EVA PREP, EMU, PURGE, EMU PREBREATHE, C-LK DPRS, P-DPS, EGRS, A/L MMOD RETRIEVE, AGB STOW, PLB SETUP, ATA INSTL ON LMC, SSRMS SETUP, LWAPA RETRV, LWAPA INST ON LMC, SSRMS CLNUP, GET AHEADS, CLNUP, INGRS, P-RPS, C-LK, RPRS, POST EVA W/H20

EVA 3 (6:30)

TDRS W E Z

DAY/NIGHT

ORBIT 123 124 125 126 127 128 129 130 131

ORB ATT BIAS -XLV -ZVV

TDRS AVAIL

NOTES: NO EXERCISE (Dual Grapple); NO UNISOLATED EXERCISE (ESP#2 OPS) (APFR OPS)

STATUS CHECK#

FLT PLN/131/FLT

REPLANNED

FD09

GMT 04/13/10 (103)
β = 6
MET Day 008

17 18 19 20 21 22 23 04/14 01 02 03 04
06 07 08 09 10 11 12 13 14 15 16 17 18

FD10

STS-131														
CDR POINDEXTER	PRE SLEEP			PMC A/G	PRE SLEEP			SLEEP						POST SLEEP
PLT DUTTON	PRE SLEEP							SLEEP						POST SLEEP
MS1 MASTRACCHIO	PRE SLEEP							SLEEP					ASPRN	POST SLEEP
MS2 METCALF-LINDENBURGER	PRE SLEEP							SLEEP						POST SLEEP
MS3 WILSON	PRE SLEEP							SLEEP					LOG	POST SLEEP
MS4 YAMAZAKI	PRE SLEEP	XFER TAGUP	PRE SLEEP	XFER BRIEF	PRE SLEEP			SLEEP					LOG	POST SLEEP
MS5 ANDERSON	PRE SLEEP							SLEEP					ASPRN LOG	POST SLEEP

TDRS W E Z

DAY/NIGHT

ORBIT 131 132 133 134 135 136 137 138

ORB ATT BIAS -XLV -ZVV

TDRS AVAIL

NOTES

5

STS-131/19A FD09

REPLANNED

GMT Date 04/13 (103) | W | TDRSE | Z | D/N | ORB | MET Day 007 | STS ATI | CDR POINDEXTER | PLT DUTTON | MS2 METCALF-LINDENBURGER | NOTES

16:00 — POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

FD09 EZ ACTIVITIES:
TEPC (ORB OPS, CREW SYSTEMS)
Check Status
OCAC Filter Inspection
Check MDDK Duct Screen
Hard reboot all PGSCs not shut down overnight.

03:00 — 122

PRIVATE MEDICAL CONFERENCE VIA S/G 2

17:00 — POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

EVA SYSTEMS: 1.211 HYGIENE BREAK
Steps 21-end. MCC-H will perform step 23.

04:00 — BIAS-XLV-ZVV

EVA SYSTEMS: 1.216 EVA PREP

18:00 — ILLUMINATOR OPS (Cue Card, TV)
ILLUMINATOR OFF - ALL

EVA 3 INHIBIT PAD
Ref. MSG 059

05:00 — 123

19:00 — TRANSFER OPS
Ref. MPLM Transfer Lists and MSG 071

TRANSFER OPS
Ref. MPLM Transfer Lists and MSG 071

EVA SYSTEMS: 1.220 EMU PURGE

EVA SYSTEMS: 1.225 EMU PREBREATHE

06:00 — 124

20:00

IVA SUPPORT PREP

STS-131/19A FD09

REPLANNED

GMT Date 04/13 (103) | W | TDRSE | Z | D/N | ORB | MET Day 007 | STS ATI

MS1 MASTRACCHIO	MS3 WILSON	MS4 YAMAZAKI	MS5 ANDERSON	NOTES
POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	SLEEP LOGBOOK (SDBI 1634) POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	SLEEP LOGBOOK (SDBI 1634) POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
EVA SYSTEMS: 1.211 HYGIENE BREAK MCC-H will perform steps 1-4, 16-20, and 23.			EVA SYSTEMS: 1.211 HYGIENE BREAK MCC-H will perform steps 1-4, 16-20, and 23.	
EVA SYSTEMS: 1.216 EVA PREP			EVA SYSTEMS: 1.216 EVA PREP	
	MERLIN STATUS CK (Cue Card) GLACIER STATUS CK (Cue Card) STL STATUS CK (Cue Card)	DAILY TRANSFER LIST UPDATE Ref. Transfer Lists & MSG 071		
	TRANSFER OPS Ref. MPLM Transfer Lists and MSG 071	EXERCISE		
EVA SYSTEMS: 1.220 EMU PURGE			EVA SYSTEMS: 1.220 EMU PURGE	
EVA SYSTEMS: 1.225 EMU PREBREATHE	POC: 2.7.501 DOUG STARTUP PROCEDURE Step 1 ROBO: 1.320 EVA 3 ATA RETRIEVE	TRANSFER OPS Ref. MPLM Transfer Lists and MSG 071	EVA SYSTEMS: 1.225 EMU PREBREATHE	

Time scale: 03:00, 04:00, 05:00, 06:00; 16:00, 17:00, 18:00, 19:00, 20:00

122, 123, 124

BIAS-XLV-ZVV

7

STS-131/19A FD09

REPLANNED

GMT Date 04/13 (103) | W | TDRSE | Z | D/N | ORB | MET Day 007 | STS ATI

CDR POINDEXTER	PLT DUTTON	MS2 METCALF-LINDENBURGER	NOTES
TRANSFER OPS Ref. MPLM Transfer Lists and MSG 071	EVA SYSTEMS: 1.225 EMU PREBREATHE		NO EXERCISE (WHILE ATA IS DUAL GRAPPLED BY SSRMS & POA
	EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CUE CARD Perform CREWLOCK DEPRESS	IVA SUPPORT PREP	
P/TV07 EVA (P/TV, SCENES) SETUP			
	C-LK DPRS/RPRS CC (POST DEPRESS) ROBO: 1.320 EVA 3 ATA RETRIEVE		
P/TV07 EVA (P/TV, SCENES) OPS			
			NO UNISOLATED EXERCISE (WHILE CREW ON ESP#2)
IMU STAR OF OPPTY ALIGN (ORB OPS, GNC)		IVA SUPPORT FOR EVA 3	
MEAL			
	ROBO: 1.330 EVA 3 LWAPA RETRIEVE/SPDM ASSEMBLY SUPPORT		NO UNISOLATED EXERCISE (WHILE CREW IN APFR)
SHUTTLE/ISS H2O CONTAINER FILL (HC) (ORB OPS, ECLS) Perform CWC FILL #4, Ref. MSG 012			
P/TV07 EVA (P/TV, SCENES) OPS			

Time scale: 07:00, 08:00, 09:00, 10:00; 20:00, 21:00, 22:00, 23:00, 00:00

Orbits: 124, 125, 126, 127

BIAS-XLV-ZVV

8

STS-131/19A FD09

REPLANNED

GMT Date 04/13 (103) | W | TDRSE | Z | D/N | ORB | MET Day 007 | STS ATI

MS1 MASTRACCHIO	MS3 WILSON	MS4 YAMAZAKI	MS5 ANDERSON	NOTES
EVA SYSTEMS: 1.225 EMU PREBREATHE	ROBO: 1.320 EVA 3 ATA RETRIEVE		EVA SYSTEMS: 1.225 EMU PREBREATHE	NO EXERCISE (WHILE ATA IS DUAL GRAPPLED BY SSRMS & POA
EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CUE CARD Perform CREWLOCK DEPRESS			EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CUE CARD Perform CREWLOCK DEPRESS	
C-LK DPRS/RPRS CC (POST DEPRESS)			C-LK DPRS/RPRS CC (POST DEPRESS)	
EGRESS			EGRESS	
S1 ATA FLUID CONNECTORS		TRANSFER OPS Ref. MPLM Transfer Lists and MSG 071	A/L MMOD SHIELD RETRIEVE	
A/L MMOD SHIELD RETRIEVE				NO UNISOLATED EXERCISE (WHILE CREW ON ESP#2)
AGB STOW			AGB STOW	
PLB SETUP			PLB SETUP	
ATA INSTALL ON LMC/FGB REMOVAL	ROBO: 1.330 EVA 3 LWAPA RETRIEVE/SPDM ASSEMBLY SUPPORT	MEAL	ATA INSTALL ON LMC	NO UNISOLATED EXERCISE (WHILE CREW IN APFR)
S1 ATA FGB INSTALL		LIOH TRANSFER Ref. MSG 069, item 5 Ref. MPLM Transfer Lists: Resupply Items: 296-300 & Return Items: 767-771	SSRMS SETUP	

Time scale: 07:00, 08:00, 09:00, 10:00; 20:00, 21:00, 22:00, 23:00, 00:00

Orbits: 124, 125, 126, 127

BIAS - XLV - ZVV

6

STS-131/19A FD09

REPLANNED

GMT Date 04/13 (103) | W | TDRSE | Z | D/N | ORB | MET Day 008 | STS ATT

CDR POINDEXTER	PLT DUTTON	MS2 METCALF-LINDENBURGER	NOTES
P/TV07 EVA (P/TV, SCENES) OPS	ROBO: 1.330 EVA 3 LWAPA RETRIEVE/SPDM ASSEMBLY SUPPORT		
SHUTTLE/ISS H2O CONTAINER FILL (HC) (ORB OPS, ECLS) Perform FILL TERMINATION			
CWC TRANSFER Transfer CWC to ISS			
P/TV07 EVA (P/TV, SCENES) OPS			
		IVA SUPPORT FOR EVA 3	
P/TV07 EVA (DEACTIVATION) (P/TV, SCENES)	C-LK DPRS/RPRS CC (PRE REPRESS)		
FILTER CLEANING (IFM, SCHEDULED MAINTENANCE) Inspect filters and clean as necessary	EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CUE CARD Perform CREWLOCK REPRESS		
	EVA SYSTEMS: 1.240 POST EVA With EMU H2O Recharge, No METOX Ref. CONSUMABLES TRACKING CUE CARD	TRANSFER OPS Ref. MPLM Transfer Lists and MSG 071	

Time scale: 11:00, 12:00, 13:00, 14:00

Day 008: 00:00, 01:00, 02:00, 03:00, 04:00

Orbits: 127, 128, 129

BIAS-XLV-ZVV

STS-131/19A FD09

REPLANNED

GMT Date 04/13 (103) | W | TDRSE | Z | D/N | ORB | MET Day 008 | STS ATI

11:00 12:00 13:00 14:00

127 128 129

00:00 01:00 02:00 03:00 04:00

BIAS-XLV-ZVV

MS1 MASTRACCHIO	MS3 WILSON	MS4 YAMAZAKI	MS5 ANDERSON	NOTES
S1 ATA FGB INSTALL	ROBO: 1.330 EVA 3 LWAPA RETRIEVE/SPDM ASSEMBLY SUPPORT	LIOH TRANSFER Ref. MSG 069, item 5 Ref. MPLM Transfer Lists: Resupply Items: 296-300 & Return Items: 767-771	SSRMS SETUP LWAPA RETRIEVE	
LWAPA INSTALL ON LMC			LWAPA INSTALL ON LMC	
Z1 SGANT PREP			SSRMS CLEANUP	
P1 RADIATOR GRAPPLE FIXTURE BEAM TROUBLESHOOTING		TRANSFER OPS Ref. MPLM Transfer Lists and MSG 071	GET AHEADS	
CLEANUP			CLEANUP	
INGRESS			INGRESS	
C-LK DPRS/RPRS CC (PRE REPRESS) EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CUE CARD Perform CREWLOCK REPRESS			C-LK DPRS/RPRS CC (PRE REPRESS) EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CUE CARD Perform CREWLOCK REPRESS	
EVA SYSTEMS: 1.240 POST EVA With EMU H2O Recharge, No METOX Ref. CONSUMABLES TRACKING CUE CARD	EXERCISE		EVA SYSTEMS: 1.240 POST EVA With EMU H2O Recharge, No METOX Ref. CONSUMABLES TRACKING CUE CARD	

STS-131/19A FD09

REPLANNED

GMT Date 04/13 (103) | W | TDRSE | Z | D/N | ORB | MET Day 008 | STS ATT | CDR POINDEXTER | PLT DUTTON | MS2 METCALF-LINDENBURGER | NOTES

15:00 16:00 17:00 18:00

130 131 132

04:00 05:00 06:00 07:00 08:00

BIAS-XLV-ZVV

CDR

FILTER CLEANING
(IFM, SCHEDULED MAINTENANCE)
Inspect filters and clean as necessary

EXERCISE

TRANSFER OPS
Ref. MPLM Transfer Lists
and MSG 071

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)
Air Quality Report

L9 PAYLOAD STATION A/G (two) - OFF
PRIVATE MEDICAL CONFERENCE VIA A/G 2

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

PLT

EVA SYSTEMS: 1.240 POST EVA
With EMU H2O Recharge, No METOX
Ref. CONSUMABLES
TRACKING CUE CARD

EXERCISE
ARED AVAILABLE

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

MS2

TRANSFER OPS
Ref. MPLM Transfer Lists
and MSG 071

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

STS-131/19A FD09

REPLANNED

GMT Date 04/13 (103) | W | TDRSE | Z | D/N | ORB | MET Day 008 | STS ATT

MS1 MASTRACCHIO	MS3 WILSON	MS4 YAMAZAKI	MS5 ANDERSON	NOTES
EVA SYSTEMS: 1.240 POST EVA With EMU H2O Recharge, No METOX Ref. CONSUMABLES TRACKING CUE CARD	EXERCISE		EVA SYSTEMS: 1.240 POST EVA With EMU H2O Recharge, No METOX Ref. CONSUMABLES TRACKING CUE CARD	
	TRANSFER OPS Ref. MPLM Transfer Lists and MSG 071	TRANSFER OPS Ref. MPLM Transfer Lists and MSG 071		
		PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)		
	AEM UNIT#1 CK (Cue Card) AEM UNIT#2 CK (Cue Card) MERLIN STATUS CK (Cue Card) GLACIER STATUS CK (Cue Card) STL STATUS CK (Cue Card) PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)			
PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)		TRANSFER TAGUP Coordinate with transfer counterparts PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
		TRANSFER BRIEF Call down status to MCC PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)		

Time scale: 15:00, 16:00, 17:00, 18:00; 04:00, 05:00, 06:00, 07:00, 08:00

130, 131, 132

BIAS-XLV-ZVV

STS-131/19A FD09

REPLANNED

GMT Date 04/13 (103) | W | T D R S E | Z | D / N | O R B | MET Day 008 | STS ATI

CDR POINDEXTER | PLT DUTTON | MS2 METCALF-LINDENBURGER | NOTES

08:00 — PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)

19:00 — 132

09:00 — **CREW WAKEUP AT 08/17:00**

133

20:00 — BIAS-XLV-ZVV

10:00 — SLEEP

21:00 — 134

11:00

22:00 — 135

12:00

STS-131/19A FD09

REPLANNED

GMT Date 04/13 (103) | W | TDRS E | Z | D/N | ORB | MET Day 008 | STS ATI

MS1 MASTRACCHIO | MS3 WILSON | MS4 YAMAZAKI | MS5 ANDERSON | NOTES

19:00 | 20:00 | 21:00 | 22:00

08:00 | 09:00 | 10:00 | 11:00 | 12:00

132 | 133 | 134 | 135

BIAS-XLV-ZVV

PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)

CREW WAKEUP AT 08/17:00

SLEEP

Good Morning Discovery,

We hope you enjoyed your off-duty time, and took some good looks out the Cupola window!
We're looking forward to another great EVA day with you.

YOUR CURRENT ORBIT IS: 190 X 182 NM

NOTAMS (DELETED NKT, NTU, MODIFIED MRN)

EDW -	EDT 22R/04L IN USE. EDW 22/04 CLOSED FOR CONSTRUCTION.
EDW -	LAKEBED RWYS RED.
NOR -	LAKEBED RWYS GREEN.
FOK -	RWY 06/24 CLOSED.
DOV -	RWY 32 REIL OTS.
FMH -	RWY 23 ALS OTS.
YYT -	TACAN UYT23 AZIMUTH OTS.
JTY -	RWY 18 ALS OTS.
MYR -	RWY 18/36 CLOSED FROM 0340 - 0930 GMT.
KKI -	TACAN RIY92 OTS.
MRN -	RWY 20 THRESHOLD DISPLACED. RWY 02/20 LDA = 9085 FT.
PTN -	RWY 14/32 CLOSED.
IKF -	NOT USABLE. NO AGREEMENT.
BEN -	NOT RECOMMENDED/NOT SUPPORTED.

<u>NEXT 2 PLS OPPORTUNITIES:</u>

EDR22R ORB 130 – 8/05:19	FEW050	7	230/08P14
EDR22R ORB 145 – 9/04:07	FEW050 SCT250	7	220/10P15

<u>OMS TANK FAIL CAPABILITY:</u>

L OMS FAILS: NO
R OMS FAILS: NO

<u>LEAKING OMS PRPLT BURN:</u>

L OMS LEAK: ALWAYS BURN RETROGRADE
R OMS LEAK: ALWAYS BURN RETROGRADE

<u>OMS QUANTITIES(%)</u>

L OMS	OX = 34.08	R OMS OX = 35.28
	FU = 33.60	FU = 35.21

DELTA V AVAILABLE:

OMS	368 FPS
ARCS (TOTAL ABOVE QTY1)	30 FPS
TOTAL IN THE AFT	398 FPS
ARCS (TOTAL ABOVE QTY2)	62 FPS
FRCS (ABOVE QTY 1)	28 FPS
AFT QTY 1	80 %
AFT QTY 2	43 %

SYSTEM	FAILURE	IMPACT	WORK AROUND
EVA	Spare ATA Bolt 4 soft dock plungers failed to operate nominally during installation of the ATA on S1 during EVA 2.	Loss of crew time and incomplete objectives on EVA2. Over an hour was required to successfully soft dock Bolt 4. EVA2 required objectives were shifted to EVA3, causing the loss of the following nominal EVA3 objectives: SPDM CLPA Install, EP1 Cover Remove, and CP13 ETVCG Light.	The crew was able to exercise both spring plungers manually, but the plungers would not retract when the ATA Bolt 4 clevis bracket interfaced with the S1 Bolt 4 clevis. The crew was able to angle the ATA such that the spring plungers on the ATA Bolt 4 clevis bracket could slide underneath the edge of the soft dock feature on the S1 Bolt 4 clevis.

END OF PAGE 2 OF 2, MSG 070

Good Morning Naoko and Steph,

As Dex said last night, you should now be able to see the light at the end of the foam tunnel! Thank you again for the great work you're doing up there!

Today the ISS crew will be completing the MARES Stowage Reconfiguration, so the remainder of the MARES return items will be ready for stowage in the MPLM. Naoko will also be completing the LiOH swap between the MPLM and Middeck, followed by the KID install and the LHA scavenge.

The Transfer List Excel file, FD09_Transfer_List_STS131.xls, locations are:

- Shuttle: **C:\OCA-up\transfer** (KFX machine)
- Station: **K:\OCA-up\transfer**

<u>Transfer Notes</u>

- **LADA Root Module Return Kits:** Please confirm that item 431.2 (the two LADA Root Module Return Kits) is a quilted dark navy blue bag (see photos below) and not an aluminum box (which should be stowed inside the quilted bag for return).

Correct Return Configuration

Incorrect Return Configuration
(return in quilted bag)

<u>FD09 Choreography</u> (in timeline order)

- **Items 772 thru 778:** Transfer MARES M-bags, fences, struts, and bolts to MPLM for return following MARES STOWAGE CONFIG.
- **Item 436.6:** Stow ARED Video Cassette (from ISS crew) for return in Bag 436.
- **Swap LiOH**
  - **Items 296 thru 300:** 15 unused cans from MPLM to Middeck
  - **Items 767 thru 771:** 15 used cans from Middeck to MPLM
- **Item 131:** Transfer Kubik Drawer (KID) from MPL1A4_A1 to Columbus per KID Xfer activity.
- **Item 765:** Return KID foam in ziplock to MPLM for return.
- **Items 104:** Scavenge MPL1PA4, PF2, and PF4 LHAs - call MCC to open RPCs.

Please incorporate uplink pages as follows (Yes, we really only have one change page for you today!!):

In the Middeck Transfer List **RETURN** tab
Replace the following page:
Return 2

<u>FD10 Choreography</u> (in timeline order)

- **Item 1000:** Transfer RFTA (s/n 011) to MPLM for return following the RFTA R&R.
- **Items 187 and 707:** Swap PGTs following a successful checkout of the new PGT.
- **Item 431.1:** Transfer JAXA Nanoskeleton samples 2.5hrs after MELFI retrieval activity
- **Item 750:** Stow black clips from MPLM Kit in MPLM for return.
- **Item 294:** Transfer endcone bungee jail to ISS.
- **Item 109:** Transfer A1 inter-rack bungee jail to ISS.
- Install CBM CPAs.
- MPLM Cleanup:
    - **Items 822 and 823:** Return PBA and PFE to ISS.
    - **Item 824:** Return Pivot Fittings used to rotate RSPs to ISS.
- Configure MPLM racks for entry.
- **Item 105:** Scavenge MPL1PA1, PA2, PF1, and PF3 LHAs - call MCC to open RPCs.

Have a nice day and let us know if you have any questions!

- The STS-131 Transfer Team

MSG 072 (23-0261) - FD09 CREW CHOICE DOWNLINK

The following times indicate good Shuttle Sband on A/G 2 and ISS Ku for crew choice downlink.

AOS	LOS	Delta (min)	Notes
08/05:30	08/05:45	15	
08/06:03	08/06:42	39	A/G 20 second H/O at 06:16:47
08/07:05	08/07:28	23	
08/07:45	08/08:24	39	A/G 20 second H/O at 07:56:53

Note: Please notify MCC-H 10 minutes prior to the event to allow for ground network configuration.

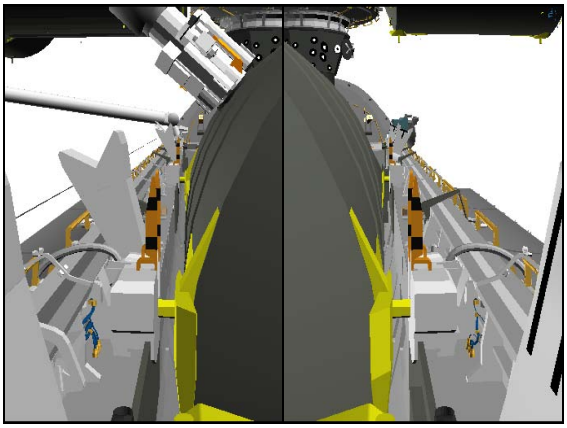
As you know camera C has an inoperable zoom function and is currently stuck in the "fully zoomed out" config. MCC agrees this is the best failed state to be in. We have taken a look at the remaining mission events where camera C would be useful:

- EVA3 (FD 9): Camera C usually used for A/L Egress & Ingress viewing.
- MPLM Demate & Berth (FD 11): Camera C used in a mux view with camera B for berthing ops - mux still available, but not at optimal zoom. Note Mux D/A also available.
- Docked Late Inspection (FD 12): Used for SRMS clearance views while on the STBD side.
- OBSS Berth (FD13): Camera C used for viewing Aft MPM pedestal during berthing ops.
- Rad Retract Hose Viewing (FD 15 / EOM): Camera C used to view the rad retract hose in a mux view with Camera A.

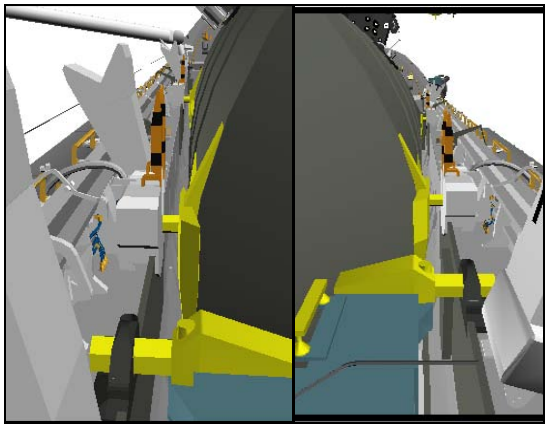
PDRS has created snapshot views for the MPLM Demate & Berth and OBSS Berth cases below. The images included are what is currently seen in the procedure and what will be seen with the current Camera C zoom configuration. (See page 2)

Note: If you attempt to zoom Camera C for MPLM Berth, INCO and PDRS request that you zoom no closer than a Field of View (FOV) of 55. If the zoom gets stuck at 55 there will be minimal impact to Docked Late Inspection, additional pan and tilt changes may be required. For OBSS Berth the Field of View will be similar to what is called out (55 vice 60).

Views for MPLM Berth

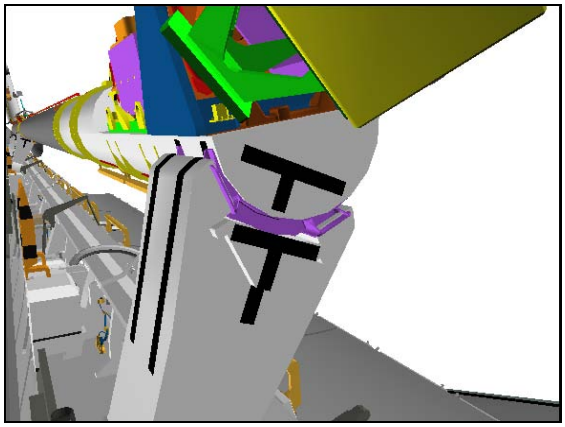


Mux B/C
HFOV: 55

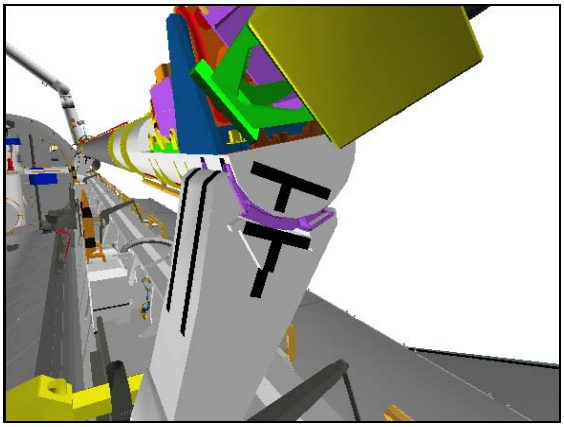


Mux B/C
HFOV: 74 (Full Out)

Views for OBSS Berth



CCTV C (30, -10)
HFOV:60



CCTV C (30, -10)
HFOV:74 (Full Out)

END OF PAGE 2 OF 2, MSG 073