STS-115/12A

FD 09 Execute Package

MSG	Page(s)	Title
099	1 - 2	FD09 Summary Timeline **(pdf)**
097A	3 - 12	FD09 Flight Plan Revision **(pdf)**
098A	13 - 14	FD09 Mission Summary **(pdf)**
100	15	FD09 Transfer Message **(pdf)**
101	16	FD09 Water Summary Message **(pdf)**
102	17	LiOH Cue Card **(pdf)**
103A	18	FD09 LiOH Transfer **(pdf)**
104	19 - 20	Undocking Camera Change **(pdf)**
105	21 - 22	Docked Audio Troubleshooting **(pdf)**
106	---	FD08 MMT Summary **(pdf - Electronic Only)**

Approved by FAO: *M. Scheib*

Last Updated: Sep 17 2006 3:55AM GMT
JEDI *(**J**oint **E**xecute package **D**evelopment and **I**ntegration), v2.04.0003*

FD09
GMT 09/17/06 (260)
MET Day 007

12 13 14 15 16 17 18 19 20 21 22 23 008/00 (04 05 06 07 08 09 10 11 12 13 14 15)

STS-115	CDR JETT	SLEEP	LOG	POST SLEEP		EXERCISE		RNDZ TOOLS C/O		RNFG*	PTV04	SETUP	MEAL	FAREL	P/TV 04 EGRS OPS		SV-3	UNDK	PWRUP	MNVR	-XLV	UNDOCK OPS	FLYAROUND	SEP	SEP	GRPB	GRPDN	OIU-D	HTRB
	PLT FERGUSON	SLEEP	POST SLEEP		N2*	POST SLEEP	IOFLUM	N2*	COND^	CIWCIT1	EXERCISE	CWCTERM	CWCXFER	MEAL	FAREL	OIU-A	H/O	FES^	UNDK	PWRUP		UNDOCK OPS	FLYAROUND	SEP	GRPB	GRPDN		N2*
	MS1/EV1 TANNER	SLEEP	POST SLEEP			XFER OPS		DAIU TRBL SHOOT		O2*	O2 SYS T/D		MEAL	FAREL	HATCH CLOSE		C/L CMR INSTL		P/TV 03 UNDCK S/U			P/TV 03 UNDCK OPS			PTV03	DEACT	SSOR	
	MS2/EV3 BURBANK	SLEEP	LOG	POST SLEEP		XFER OPS		RNDZ TOOLS C/O					MEAL	FAREL			ODS LEAK CK					UNDOCK OPS	FLYAROUND	SEP	PST UNDK PGSC CNFG		WLES#	♣
	MS3/EV2 PIPER	SLEEP	SLVA	LOG	POST SLEEP		XFER OPS				XFER	TAGUP	BRIEF	MEAL	FAREL	HATCH CLOSE			EMU INSTL			UNDOCK OPS	FLYAROUND	SEP	EXER CISE			
	MS4/EV4 MACLEAN	SLEEP	SLVA	LOG	POST SLEEP		XFER OPS	DAIU TRBL SHOOT	EXERCISE				MEAL	FAREL			ODS LEAK CK					UNDOCK OPS*	FLYAROUND	SEP				⊕
ISS	ISS CDR	SLEEP - ISS	POSTSLEEP-ISS		PREP WORK	DPC	DPART PREP		TVIS				MIDDAY-MEAL	FAREL	ГПЭ-ЭП11-PREP									TVIS				
	FE-1	SLEEP - ISS	POSTSLEEP-ISS		PREP WORK	DPC		RED			O2*	O2 SYS T/D	MIDDAY-MEAL	FAREL	HATCH CLOSE		IWIS SETUP	WND*	VTR	CNFG		PMA2 DPRT CNFG	DPART PREP	JRNL	IWIS*		PMA2 DPRS		
	FE-2	SLEEP - ISS	POSTSLEEP-ISS		PREP WORK	DPC	ITCS SAMP MTL	XFER OPS			XFER	TAGUP	MIDDAY-MEAL	FAREL	ГПЭ-ЭП11-PREP									TVIS				

DAY/NIGHT

ORBIT	119	120	121	122	123	124	125	126	127
DAILY ORBIT	15	1	2	3	4	5	6	7	8

TDRS: W -171.0, E -46.0, Z -275.0

ORB ATT: BIAS -XLV -ZVV; -XLV +ZVV; UNDOCK -ZLV -XVV

NOTES: *REPRESS INIT; ^T/D; *REPRESS TERM; *Term*SUPPLY H2O; ^ACT; *DEACT; ♣EXERCISE; ⊕FMK DPLY; *RECONFIG; #RCNFG POST DOCK; *7/21:35

FD09

GMT 09/17/06 (260) 008/00 16 17 18 19 20 21 22 23 09/18 01 02 03

MET Day 008 01 02 03 04 05 06 07 08 09 10 11 12

STS-115	CDR JETT	IMU	MULT AXIS RCS BURN	NC5	PMC A/G	PRE SLEEP						SLEEP		
	PLT FERGUSON		MULT AXIS RCS BURN	FUT	LOAD	PRE SLEEP						SLEEP		
	MS1/EV1 TANNER	UNDCK	PLBK	EXERCISE		PRE SLEEP						SLEEP		
	MS2/EV3 BURBANK	EXERCISE				PRE SLEEP						SLEEP		
	MS3/EV2 PIPER	EXERCISE				PRE SLEEP						SLEEP		
	MS4/EV4 MACLEAN	♣				PRE SLEEP						SLEEP		
ISS	ISS CDR	TVIS	⊕		COX MNT	PREP WORK		PRESLEEP-ISS				SLEEP - ISS		
	FE-1	PMA2 DPRS	TVIS		PMA2 LKCK	LINIT ♦	®	RWS *	♥	PMA2 LKCK	TERM	PRESLEEP-ISS	PFC	PS	SLEEP - ISS
	FE-2	CEVIS				PREP WORK		PRESLEEP-ISS				SLEEP - ISS		

DAY/NIGHT									
ORBIT	127	128	129	130	131	132	133	134	135
DAILY ORBIT	8	9	10	11	12	13	14	15	16

TDRS W -171.0 / E -46.0 / Z -275.0

ORB ATT: -ZLV -XVV (NC5) -ZLV -XVV

NOTES:
♣FMK DPLY
⊕C&T-RS-COMM-CNFG
♦EXPRS4-ELC-PWRUP
®ALTEA-P/L-ACT
♥PREP WORK
*CABLE CNCT

MSG INDEX

MSG NO.	TITLE
097	FD09 Flight Plan Revision
098	FD09 Mission Summary
099	FD09 Summary Timeline
100	FD09 Transfer Message
101	FD09 Water Summary Message
102	LiOH Cue Card
103	FD09 LiOH Transfer
104	Undocking Camera Change
105	Docked Audio Troubleshooting
106	FD08 MMT Summary

1. Please configure the cryo system as follows for post-sleep:

R1 CRYO O2,H2 MANF VLV TK1 (two) - OP (tb-OP)
O2 TK2 HTRS A, B (two) - AUTO
TK3 HTRS A, B (two) - OFF

2. Make the following deltas to HEATER RECONFIG - CONFIG B(CONFIG A) (ORB OPS, EPS) p6-5:

    1. Delete the ML86B:A actions.

    2. Replace the ML86B:C actions with the following:

    ML86B:C cb MNA EXT ARLK HTR STRUC Z1/2/3 - op

    cb MNB EXT ARLK HTR STRUC Z1/2/3 - cl

    If both RMS htrs active >>

3. Dan, post undock the timeline has you configuring WLES on two laptops (prime on STS4 and backup on STS3) per the procedure called out in the detail pages. Please let us know if you'd rather keep operating WLES in standard mode on STS4 post undock, which is how it's been operating most of the flight.

4. Shuttle Flyaround Imagery Note

During the flyaround, while capturing the planned DCS 760 imagery per P/TV 03 item 2 (**Photo TV C/L,** page 1-19), please pay special attention and try to capture images of the following items if possible:

- Both the passive and active sides of the 2A and 4A SAWs (to provide baseline images)

- P4 Solar Array Blanket Boxes (SABB) (to baseline the degradation of the aluminized kapton)

- Deployed P4 Photovoltaic Radiator (PVR) (to baseline radiator degradation)

- Images of SARJ MLI Covers (to attempt to verify outboard bolts are present)

5. Camera B has been pre-positioned specifically for Undock for you by the INCO and Imagery teams.

6. REPLACE PAGES 3-92 THROUGH 3-99.

STS-115 (FD09)

GMT Date 09/17 (260) | TDRS W E Z | DORB 15 1 2 3 | ORB 119 120 121 | MET Day 007 | STS ATI BIAS -XLV -ZVV

MET	CDR JETT	PLT FERGUSON	MCC	NOTES
12:00	SLEEP	SLEEP	**FD09 EZ ACTIVITIES:** OCAC FILTER Inspect L17 Check MCIU Filter Screen HARD Reboot PGSCs (Not KFX)	ISS EXTERNAL SURVEY
13:00	FLIGHT SLEEP LOG (ORB OPS,SDBI) POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)		
14:00		JOINT OPS: 3.106 N2 REPRESS (Init) Steps 3-4. MCC will TMBU CABIN P., RPRS DUR ~1 hour POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)		
15:00	EXERCISE	TV (ILLUMINATOR OPS) (PHOTO/TV, CUE CARDS) ILLUMINATORS OFF - C and ELBOW JOINT OPS: 3.106 N2 REPRESS (Term) Steps 5-6. MCC will TMBU software Limit. SHUTTLE CONDENSATE COLLECTION (ORB OPS, ECLS) Teardown		DTV-ON
16:00				

STS-115 (FD09)

GMT Date 09/17 (260) | TDRS W E Z | DORB 1 2 3 | ORB 119 120 121 | MET Day 007 | STS ATI BIAS -XLV -ZVV

MET	MS1/EV1 TANNER	MS2/EV3 BURBANK	MS3/EV2 PIPER	MS4/EV4 MACLEAN	NOTES
12:00	SLEEP	SLEEP	SLEEP	SLEEP	ISS EXTERNAL SURVEY
13:00	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	FLIGHT SLEEP LOG (ORB OPS,SDBI) POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	SALIVA COLLECTION (ORB OPS,SDBI) FLIGHT SLEEP LOG (ORB OPS,SDBI) POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	SALIVA COLLECTION (ORB OPS,SDBI) FLIGHT SLEEP LOG (ORB OPS,SDBI) POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
15:00	TRANSFER OPS Ref. Transfer List & MSG 100	TRANSFER OPS Ref. Transfer List & MSG 100	TRANSFER OPS Ref. Transfer List & MSG 100	TRANSFER OPS Ref. Transfer List & MSG 100	

04:00 05:00 06:00 07:00 16:00

STS-115 (FD09)

GMT Date 09/17 (260) | TDRS W E Z | DORB 3 4 5 | ORB 1 2 2 1 2 3 1 2 4

MET Day 007 | STS ATI | BIAS-XLV-ZVV

MET	CDR JETT	PLT FERGUSON	MCC	NOTES
16:00	EXERCISE	SHUTTLE/ISS H2O CNTR FILL (Init #11) (ORB OPS, ECLS) Ref MSG 101		UPLINK CNFG 763 TFL 192
	RNDZ TOOLS CHECKOUT (RNDZ, RNDZ TOOLS)			UPLINK TGT SV
08:00		EXERCISE		
17:00	After CWC fill complete: NOMINAL H2O CONFIG (ORB OPS, ECLS) FES is not req'd L1 TOP EVAP HTR DUCT - A NOZ (two) - A AUTO	SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) Terminate CWC fill CWC TRANSFER Transfer 1 CWC bag to ISS. Ref MSG 101		
09:00	P/TV04 INGRESS/EGRESS (PHOTO/TV, SCENES)Setup			
18:00	MEAL	MEAL		
10:00	FARE WELL	FARE WELL		
19:00	P/TV04 INGRESS/EGRESS (PHOTO/TV, SCENES) Ops	SSP 1 OIU PWR - OIU 1, tb-up JOINT OPS: 3.11O HANDOVER ATTITUDE CONTROL CMG TA TO ORBITER		
	SSV OUTRATE - 3	TOPPING FES STARTUP (ORB OPS, ECLS) Step 3, select FES PRI A		
11:00				
20:00				

STS-115 (FD09)

GMT Date 09/17 (260) | MET Day 007 | STS ATI

W E Z | DORB 3 4 5 | ORB 1 2 2 1 2 3 1 2 4

MS1/EV1 TANNER	MS2/EV3 BURBANK	MS3/EV2 PIPER	MS4/EV4 MACLEAN	NOTES
TRANSFER OPS Ref. Transfer List & MSG 100	TRANSFER OPS Ref. Transfer List & MSG 100	TRANSFER OPS Ref. Transfer List & MSG 100	TRANSFER OPS Ref. Transfer List & MSG 100	
DAIU TROUBLESHOOTING Ref MSG 105	RNDZ TOOLS CHECKOUT (RNDZ, RNDZ TOOLS)		DAIU TROUBLESHOOTING Ref MSG 105	UPLINK TGT SV
JOINT OPS: 3.116 HIGH PRESSURE TANK O2 TRANSFER (Term)Step 3 JOINT OPS: 3.118 OXYGEN TRANSFER TEARDOWN Steps 1-6		TRANSFER TAGUP Coordinate with transfer counterpart, Ref MSG 100 TRANSFER BRIEF Call down status to MCC, Ref MSG 100	EXERCISE	
MEAL	MEAL	MEAL	MEAL	
FARE WELL	FARE WELL	FARE WELL	FARE WELL	
√MCC-H steps 1 & 2 complete JOINT OPS: 4.103 DUCT REMOVAL AND HATCH CLOSE (BYPASS CONFIG) Steps 3-10.4		√MCC-H steps 1 & 2 complete JOINT OPS: 4.103 DUCT REMOVAL AND HATCH CLOSE (BYPASS CONFIG) Steps 3-10.4		
C/L CAMR INSTALL (PHOTO/TV, C/L CAMR) Step 1 Only	JOINT OPS: 4.104 ODS VEST/PMA DEPRESS & HATCH LEAK CHECK		JOINT OPS: 4.104 ODS VEST/PMA DEPRESS & HATCH LEAK CHECK	

BIAS-XLV-ZVV

STS-115 (FD09)

GMT Date 09/17 (260) | TDRS W E Z | DORB 5 6 7 8 | ORB 124 125 126 127 | MET Day 007 | STS ATI

MET	CDR JETT	PLT FERGUSON	MCC	NOTES
20:00	O6 S TRK PWR -Z - ON G2 SET EXPANSION (ORB OPS, DPS) Triple G2	O6 S TRK PWR -Z - ON G2 SET EXPANSION (ORB OPS, DPS) Triple G2		
	MNVR (TRK) -XLV, +ZVV TG=2 BV=5 P=180 Y=0 OM=0 A12/AUTO/VERN Init TRK (07/20:30)			
12:00	UNDOCKING/SEPARATION T/L (RNDZ, UNDOCK/SEP T/L)	UNDOCKING/SEPARATION T/L (RNDZ, UNDOCK/SEP T/L)		
21:00	-XLV +ZVV			
	< UNDOCK 21:35			
	SEP/FLYAROUND (RNDZ, UNDOCK/SEP T/L)	SEP/FLYAROUND (RNDZ, UNDOCK/SEP T/L)		
13:00				UPLINK β21+Box Box B1, -35<AZ<45 -35<EL<40
22:00	UNDOCK			
	SEP BURN (RNDZ, UNDOCK/SEP T/L)	SEP BURN (RNDZ, UNDOCK/SEP T/L)		
14:00	< SEP 22:50			
23:00				UPLINK TFL 161 β21+Mask
	< SEP 23:18			
	PRIORITY PWRDN GRP B (Single G2) Steps 5,6,9,10	PRIORITY PWRDN GRP B (Single G2) Steps 5,6,9,10		
15:00	OIU DEACTIVATION (ORB OPS, OIU) HTR RCNFG-Config B (ORB OPS, EPS) Ref MSG 097 item 2	N2 REPRESS USING PL N2 (Term) MO10W PL N2 SYS 1,2 vlv (two) - CL L2 O2/N2 CNTLR VLV SYS 2 - CL (O2)		
00:00				

STS-115 (FD09)

GMT Date 09/17 (260) | TDRS W E Z | DORB 5 6 7 8 | ORB 124 125 126 127 | MET Day 007 | STS ATI -XLV +ZVV UNDOCK

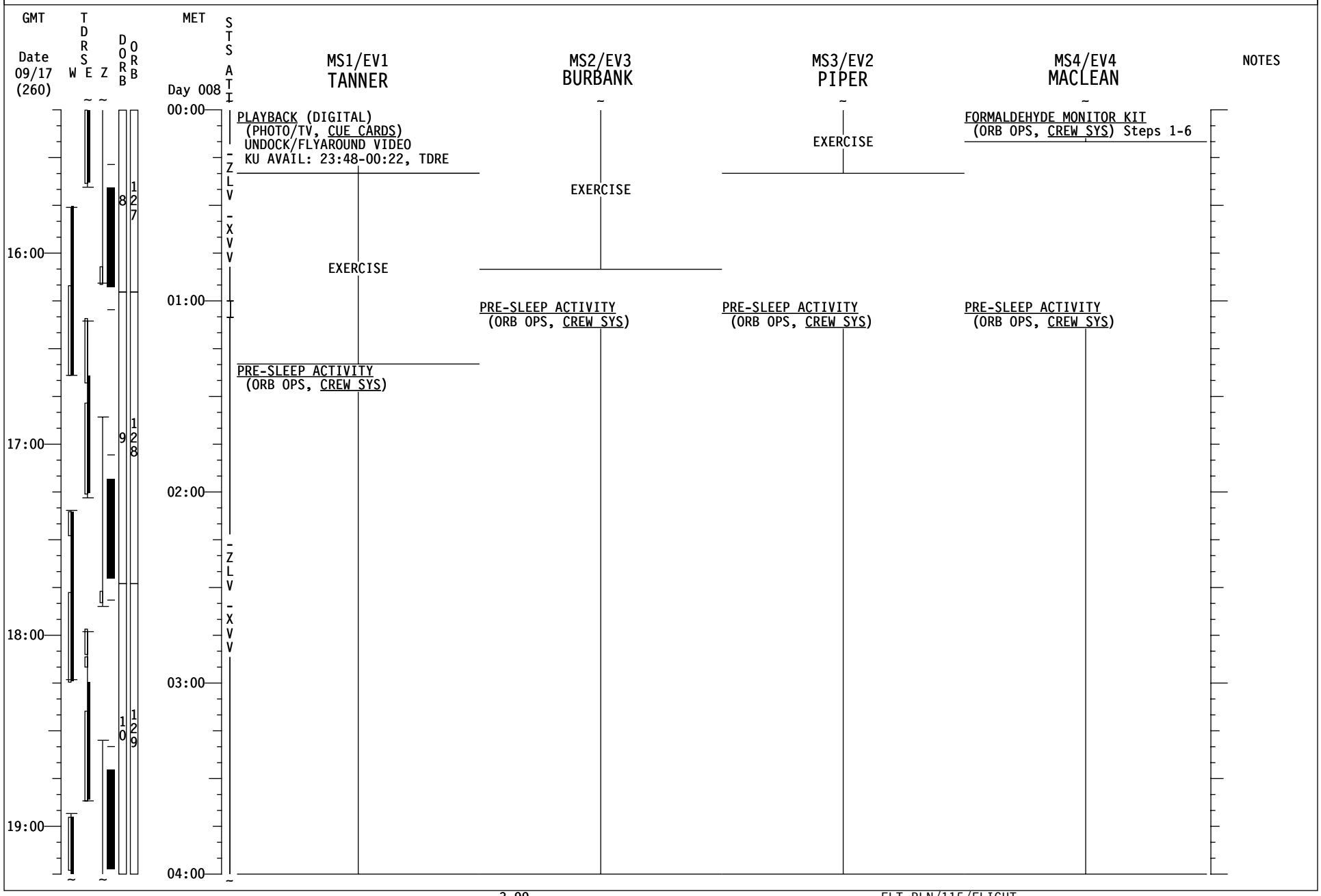
MS1/EV1 TANNER	MS2/EV3 BURBANK	MS3/EV2 PIPER	MS4/EV4 MACLEAN	NOTES
	JOINT OPS: 4.104 ODS VEST/PMA DEPRESS & HATCH LEAK CHECK		JOINT OPS: 4.104 ODS VEST/PMA DEPRESS & HATCH LEAK CHECK	
P/TV03 UNDOCK (PHOTO/TV, SCENES)Setup Ref MSG 097 item 4, MSG 104		EMU INSTALLATION (EVA, AIRLOCK CONFIG) Move EMUs to Airlock		
P/TV03 UNDOCK (PHOTO/TV, SCENES) Ops	UNDOCKING/SEPARATION T/L (RNDZ, UNDOCK/SEP T/L)	UNDOCKING/SEPARATION T/L (RNDZ, UNDOCK/SEP T/L)	UNDOCKING/SEPARATION T/L (RNDZ, UNDOCK/SEP T/L)	
	SEP/FLYAROUND (RNDZ, UNDOCK/SEP T/L)	SEP/FLYAROUND (RNDZ, UNDOCK/SEP T/L)	SEP/FLYAROUND (RNDZ, UNDOCK/SEP T/L)	
	SEP BURN (RNDZ, UNDOCK/SEP T/L)	SEP BURN (RNDZ, UNDOCK/SEP T/L)	SEP BURN (RNDZ, UNDOCK/SEP T/L)	
P/TV03 DOCK (PHOTO/TV, SCENES) Deact	PGSC NETWORK RCNFG Configure PGSCs			
JOINT OPS: 6.106 SSOR DEACT	WLES RCNFG POST DOCK/UNDOCK (ORB OPS, WLE SENSORS)	EXERCISE		
	EXERCISE		FORMALDEHYDE MONITOR KIT (ORB OPS, CREW SYS) Steps 1-6	

STS-115 (FD09)

GMT Date 09/17 (260) | TDRS W E Z | DORB 8 9 10 | ORB 127 128 129 | MET Day 008 | STS ATI -ZLV -XVV -ZLV -XVV

MET	CDR JETT	PLT FERGUSON	MCC	NOTES
00:00	IMU STAR OF OPPTY ALIGN (ORB OPS)			
	ON-ORBIT MULTI-AXIS RCS BURN (ORB OPS, RCS)	ON-ORBIT MULTI-AXIS RCS BURN (ORB OPS, RCS)		
01:00	< NC-5 TIG (8/01:00)			
	06 √UHF MODE - OFF PRIVATE MEDICAL CONFERENCE	FUTURE LOAD MNVR (TRK) BIAS -ZLV -YVV TG=2 BV=3 OM=70 A1/AUTO/VERN Init TRK (008/12:50)		DTV-OFF
	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)		
02:00				
03:00				
04:00				

STS-115 (FD09)


GMT
Date 09/17 (260)
TDRS W E Z
DORB 8 9 10
ORB 127 128 129
MET
Day 008
STS ATI
-ZLV -XVV
-ZLV -XVV
00:00
01:00
02:00
03:00
04:00
16:00
17:00
18:00
19:00
MS1/EV1 TANNER
MS2/EV3 BURBANK
MS3/EV2 PIPER
MS4/EV4 MACLEAN
NOTES
PLAYBACK (DIGITAL)
(PHOTO/TV, CUE CARDS)
UNDOCK/FLYAROUND VIDEO
KU AVAIL: 23:48-00:22, TDRE
EXERCISE
EXERCISE
EXERCISE
EXERCISE
PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)
PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)
PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)
PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)
FORMALDEHYDE MONITOR KIT
(ORB OPS, CREW SYS) Steps 1-6

Good morning Atlantis!

Great job on the press events yesterday! You all looked great, and we are glad you could do the events from the spacious Destiny Lab! Thanks for your words of praise about the whole team! We wish you an enjoyable last half day with your hosts and a smooth undocking!

YOUR CURRENT ORBIT IS: 190 X 180 NM

NOTAMS:

EDWARDS (EDW) – 15/33 ELS ONLY – 18L CLOSED
WHITE SANDS (NOR) – RED
AMBERLY (AMB) - CLOSED
ANDERSEN (GUA) - 06L/24R CLOSED, ALTERNATE 06R/24L
ANDERSON BACKUP (UNZ CH 100) VORTAC FREQUENCY CHANGED TO CH 105
EDWARDS (EDW) – DUE TO 22/04 CONSTRUCTION 30 MIN. NOTICE REQ'D TO CLEAR MEN & EQUIPMENT
ISTRES (FMI) - RUNWAY 33 DISTANCE MARKERS @ 300, 600, 900M
LAJES (LAJ) RWY 33 EXTREME CAUTION DUE TO LOOSE ASPHALT 210 AND 400 FT FROM THRESHOLD
LAJES (LAJ CH 45) OUT OF SERVICE
ORMOND BEACH (OMN CH 73) AZIMUTH OUT OF SERVICE
RIO GALLEGOS (AWG) - NOT APPROVED
SALISBURY (SBY CH 49) OUT OF SERVICE (PRIME TACAN FOR WALLOPS)
STEPHENVILLE (YJT CH78) OUT OF SERVICE
WAKE ISLAND (WAK) - CLOSED
WAKE ISLAND (AWK CH 82) OUT OF SERVICE
WILMINGTON (ILM) - CLOSED

NEXT 2 PLS OPPORTUNITIES:

KSC15 ORB 124 – 7/19:42 (FEW020 FEW080, 060@05P07)
EDW04 ORB 141 - 8/21:35 (FEW 250, 040@06P10)

OMS TANK FAIL CAPABILITY:

L OMS FAILS: NO
R OMS FAILS: NO

LEAKING OMS PRPLT BURN:

L OMS LEAK: ALWAYS BURN RETRO
R OMS LEAK: ALWAYS BURN RETRO

OMS QUANTITIES(%)

L OMS	OX = 33.5	R OMS	OX = 33.0
	FU = 34.5		FU = 33.7

SUBTRACT I'CNCT COUNTER FOR CURRENT OMS QUANTITIES

DELTA V AVAILABLE:

OMS	341 FPS
ARCS (TOTAL ABOVE QTY1)	37 FPS
TOTAL IN THE AFT	378 FPS
ARCS (TOTAL ABOVE QTY2)	71 FPS
FRCS (ABOVE QTY 1)	49 FPS
AFT QTY 1	88 %
AFT QTY 2	50 %

THERE ARE NO FAILURE/IMPACT/WORK AROUNDS FOR TODAY.

Good Morning Crew!

The Transfer List Excel file, FD09_TransferList_STS115.xls, is located on the KFX machine in **C:\OCA-up\transfer**.

For ISS, the Transfer List Excel file, FD09_TransferList_STS115.xls, is located in **K:\OCA-up\transfer**.

Transfer Choreography for FD9:

- Transfer EMUs and EVA SYS Mesh Bag to Middeck (Item #'s 708 and 709, 711)
- Transfer ITCS Samples (Item # 729)
- RF LAN Access Points (Item # 20)
- Laptop Transfer (Item # 29)
- Complete Return Transfers

Transfer Notes

- CWC 1055 will not be returned. There is no available volume in the Mddk for additional return items.
- We've added T-bar swap items: item 806 (s/n 1006 from ISS to Mddk) and item 211 (s/n 1001 from Mddk to ISS). This return of s/n 1006 is because it was reported to have a sticky end effector. **Note that the MWS baseplates should NOT transfer with these T-bars.**
- We've added LiOH swap items: 213 (3 used cans from Mddk to ISS) and items 810 and 811 (3 unused cans from ISS to Mddk LiOH box). This is reflected on your new LiOH cue card.
- We show the following remaining open TL items:
    - Resupply: 20, 27, 28, 29, 205, 206, 209-213.
    - Return: 503-507, 708, 709, 711, 729, 804-812

Please incorporate uplink pages as follows (call us with any questions):

In the MDDK Transfer List '**RESUPPLY'** tab
Add Page: Page Resupply 19

In the MDDK Transfer List '**RETURN'** tab
Make Pen & Ink change on Page Return 8: Delete Item 718
Replace Page: Page Return 13
Add Page: Page Return 14 and 15

Changes to the Transfer List are detailed below:

MIDDECK RESUPPLY

Item 211-214: New items

MIDDECK RETURN

Item 718: Deleted item
Item 802-803: Updated location
Item 804-812: New Items

STS-115/12A Resupply Transfer List

CHNG	☑	FD	Initials	Item #	Item Name	Qty	Initial Stowage	Temp Stowage	Stowage at Undock	Wt (lbs)	PROCEDURES/**Constraints**/ **Comments
X				211	MWS T-Bar [p/n SEG33110493-305] [s/n 1001]	1	MD CEIL STBD 2 (Bag H)		A/L1O1 {1.0 CTB s/n 1033, b/c 002918J}	9.00	**Swap. Ref. Item 807 on the 'Return' Tab. **Remove from MWS Baseplate, MWS Baseplate does not transfer.** There is a MWS Keystrap is located in Bag H to do this.
X				212	Adjustable Fuse Tether [SED39127200-705] [s/n 1011, 1029]	2	MD CEIL STBD 1 (Bag G)		A/L1D2 Tether Staging Area	5.20	
X				213	LiOH Cartidge Canister [any used cans of cans 1-6]	3	MDDK LIOH BOX		NOD1S4_D2	27.00	**Swap. Ref. Item 810, 811 on the 'Return' Tab. **Report s/n's transferred.** **If all 3 cans will not fit in this location, temp stow one can on the front of this location. Please inform ground if this is required.**
X				214	Disposable Gloves	crew pref	MF43K		LAB1P5_A1 {Gamah Seal Maintenance Kit, s/n 1001}		**Please assess how may gloves are spare and transfer that quantity to ISS. **Inform ground of the quantity of gloves transferred.**

STS-115/12A Return Transfer List

CHNG	☑	FD	Initials	Item #	Item Name	Qty	Initial Stowage	Temp Stowage	Stowage at Undock	Wt (lbs)	PROCEDURES/**Constraints**/ **Comments
Return Realtime Additions											
	☑	8		801	SLD Broken Pieces [Cable Stop Cap, SLD Cable Stop, Ball Shank, Fillister Head Screw]	1 ziplock	NOD1D4_K2 {1.0 CTB s/n 1080, b/c 003970J}		MA9L	0.15	**These pieces were identified last week (GMT 250) when the SLD failed **Ziplock is stowed in 1.0 CTB: Broken/Expired Items, s/n 1080, b/c 003970J.
X	☑	8		802	SARJ LAUNCH RESTRAINT [s/n 3-216, labeled '6B']	1		MDDK	MF71E {in the tray}	5.56	**Item temp stowed in middeck post-EVA 2 for return.
X	☑	8		803	7/16" EVA Socket, 3/8" Drive [aka '6-in. Wobble'] [p/n SEG33106931-301, s/n 1015]	1		MDDK	MF71E {in the tray}	0.50	**Item temp stowed in middeck post-EVA 2 for return.
X				804	8mm Video Tape [VTR 1]	1	LAB1P5 {VTR-1}		MA9G	0.1	**Remove from VTR-1 and Label 'VTR 1'.** **Transfer after Item #20 on the 'Resupply' Tab - this will go in the location vacated by Item #20.**
X				805	8mm Video Tape [VTR 2]	1	LAB1S5 {VTR-2}		MA9G	0.1	**Remove from VTR-2 and Label 'VTR 2'.** **Transfer after Item #20 on the 'Resupply' Tab - this will go in the location vacated by Item #20.**
X				806	MWS T-Bar [p/n SEG33110493-305, s/n 1006]	1	A/L1		MD CEIL STBD 2 (Bag H)	9.00	**Swap. Ref. Item 211 on the 'Resupply' Tab. **Confirm the MWS BASEPLATE is not attached to this item.**

STS-115/12A Return Transfer List

CHNG	☑	FD	Initials	Item #	Item Name	Qty	Initial Stowage	Temp Stowage	Stowage at Undock	Wt (lbs)	PROCEDURES/**Constraints**/ **Comments
X				807	3/8" Ratchet Wrench [aka 'EVA Ratchet Wrench'] [p/n SEG33106927-303, s/n 1009]	1	A/L Crewlock {Lg ORU Transfer Bag s/n 1002}		MF71E {0.5 CTB}	2.0	**Retrieve 0.5 CTB from behind the tray. Remove contents and replace RCC Pallets on bottom of CTB. Cover RCC Pallets with 1 foam cushion. Stow Items 807, 808, and 809 in CTB, using remaining foam cushions to protect the items. **Any remaining foam can be placed either in a laundry bag or in the EXT A/L FLOOR BAG.
X				808	Eq Hk RET [p/n SEG33106164-381, s/n 4056, b/c 00003187J]	1	A/L1O {MWS T-Bar, s/n 1031}		MF71E {0.5 CTB}	0.57	**Retrieve 0.5 CTB from behind the tray. Remove contents and replace RCC Pallets on bottom of CTB. Cover RCC Pallets with 1 foam cushion. Stow Item's 807, 808, and 809 in CTB, using remaining foam cushions to protect the items. **Any remaining foam can be placed either in a laundry bag or in the EXT A/L FLOOR BAG.
X				809	EXPRESS Rack Data Cable (38") [s/n 005, b/c 00000126M]	1	LAB1O3_M1		MF71E {0.5 CTB}	0.99	**Retrieve 0.5 CTB from behind the tray. Remove contents and replace RCC Pallets on bottom of CTB. Cover RCC Pallets with 1 foam cushion. Stow Items 807, 808, and 809 in CTB, using remaining foam cushions to protect the items. **Any remaining foam can be placed either in a laundry bag or in the EXT A/L FLOOR BAG.

STS-115/12A Return Transfer List

CHNG	☑	FD	Initials	Item #	Item Name	Qty	Initial Stowage	Temp Stowage	Stowage at Undock	Wt (lbs)	PROCEDURES/**Constraints**/ **Comments
X				810	LIOH Cartidge Canister [STS114 can #47, s/n 00387] [STS-114 can #8, s/n 112]	2	NOD1S4_D2		MDDK LIOH BOX	18.00	**Swap. Ref. Item 213 on the 'Return' Tab.
X				811	LIOH Cartidge Canister [STS-114 can #48, s/n 00382]	1	CM1PO_4_417_1 (CO2 Removal System w/ LiOH Adapter)		MDDK LIOH BOX	9.00	**Swap. Ref. Item 213 on the 'Return' Tab.
X				812	PWR [s/n 1001]	1	ISS		Any Empty Food Locker		**Stow in a ziploc from NOD1O4_C1. **Clam shell 2 empty food trays and stow PWR in the the food trays. Place clothing or softgoods within the food trays to isolate the PWR. **Please call down location of locker where this is stowed and inform the ground quantity and size the ziplocs used.**

Today there will be one CWC Fill and Condensate Teardown.

FD9 Shuttle/ISS H2O Container Fill Details - Shuttle Crew

For today's fill, use CWC 1043 located on ISS at the Water Wall (NOD1P2). CWC 1055 will remain on ISS and stowed at NOD1P3.

SHUTTLE/ISS H2O CONT FILL
(ORB OPS, ECLS)

For CWC Fill #11:
Ag Biocide is req'd. (Use syringe from Ag biocide kit s/n 1001)
Sample is not req'd.
Fill duration: ~50 minutes

After the fill is complete, report Serial Number and Barcode to MCC; insert green label in CWC window; apply decals to CWC end; and mark CWC serial number on the end decals. Transfer the filled CWC to NOD1P3. If there is insufficient room for the bag at this ISS location, stow CWC at NOD1P1 and report to MCC. Stow Ag biocide kit s/n 1001 in MD Floor (port 1) bag A.

Shuttle Condensate Collection Details
Perform TEARDOWN of SHUTTLE CONDENSATE COLLECTION (ORB OPS, ECLS) p5-36, steps 1-2. Stow all hardware in MF71O. Condensate CWC can be temp stowed for dump on FD10.

115

FLIGHT DAY 3 DOCKING
ORBITER with ISS
CO2 ABSORBER REPLACEMENT

(6 crewmembers/Single Shift/FD 1-15)

FLIGHT DAY	POS A	POS B	CK CMPLT
LAUNCH	STS-115 1	STS-115 2	
PRE FD01	"	"	
POST FD02	STS-115 3	STS-115 4*	
PRE FD02	"	STS-115 5*	
POST FD03	STS-115 6	"	Docking
PRE FD03	"	STS-115 8	
POST FD04	"	"	
PRE FD04	"	STS-115 9	
POST FD05	"	"	
PRE FD05	STS-115 10	"	
POST FD06	"	"	
PRE FD06	"	STS-115 11	
POST FD07	"	"	
PRE FD07	STS-115 12	STS115 7	
POST FD08	STS-115 13	"	
PRE FD08	"	STS-115 14	
POST FD09	STS-115 15*	"	
MID FD09	STS-114 47	STS-114 48	ODS Hatch Close
PRE FD09	"	"	
POST FD10	STS-114 8	STS-115 16	
PRE FD10	STS-115 17	"	
POST FD11	STS-115 18	STS-115 19	
PRE FD11	"	STS-115 20	
POST FD12	STS-115 21	STS-115 22	EOM
PRE FD12	STS-115 23	"	
POST FD13	STS-115 24	STS-115 25	EOM+1
PRE FD13	"	STS-115 26	
POST FD14	STS-115 27	STS-115 28	EOM+2
PRE FD14	STS-115 29	"	
POST FD15	STS-115 30	STS-115 31	EOM+3

*Re-bag and seal LiOH cans w/gray tape and stow.

NOTE: This card is specifically used for STS-115 mission, with the orbiter conducting Single shift operations with a crew size of 6. The changeout scheme reflects FD3 docking with ISS; Vozdukh and CDRA on during docked ops and undocking on FD09 (assumes no extra docked days). CDRA deactivated the morning of undocking.

Exchange LiOH cans per the tables below:

From the Middeck

LiOH Can	Initial Location	Final Location
STS-115 (select 3 used cans from cans 1-6)	Orbiter: MD52M (LiOH Box)	Orbiter MF43K or MF28M (if empty) or ISS: NOD1S4_D2

From ISS

LiOH Can (S/N)	Initial Location	Final Location
STS-114 47 (387)	ISS: NOD1S4_D2	Orbiter: MD52M (LiOH Box)
STS-114 8 (112)	ISS: NOD1S4_D2	Orbiter: MD52M (LiOH Box)
STS-114 9 (117)	ISS: NOD1S4_D2	ISS: CM1PO_4_417_1 (CO2 Removal System with LiOH Adapter)
STS-114 48 (382)	ISS: CM1PO_4_417_1 (CO2 Removal System with LiOH Adapter)	Orbiter: MD52M (LiOH Box)

Please remove 3 used LiOH cans from STS-115 (select from cans 1-6) from the LiOH box to make room for the STS-114 cans. If either locker MF43K or MF28M (hygiene) is empty or can be made empty by transfer between the two lockers, perform the necessary transfer between the two lockers and then place the 3 used LiOH cans in the empty locker wrapped in used towels or clothing for protection. Otherwise, transfer the 3 used LiOH cans to ISS. Report the LiOH stowage location (locker location or if on ISS) and the stowed or transferred can numbers to MCC. The STS-114 cans from ISS will be used for the mid-day FD9 LiOH change out and the post-sleep FD10 change out, which is reflected on the new LiOH cue card.

These LiOH cans (with the exception of STS-114 Can 9) correspond to Items 213, 810, and 811 on the Transfer List. STS-114 Can 9 is being relocated on ISS.

P/TV03 UNDOCK (Continued) (MSG 104 - Undocking Camera Change)

SETUP

1. Perform V10 FROM MON 1 FOR DOCK/UNDOCK (SONY V10)
2. Perform V10 FROM MON 2 (SONY V10)
3. Perform ACTIVATION,OPERATION (Cue Card, TV) as reqd
4. Perform CCTV CONFIG FOR DOCKING/UNDOCKING (RNDZ, RNDZ TOOLS)
5. Zero PTU Angles (If not previously set up by MCC)

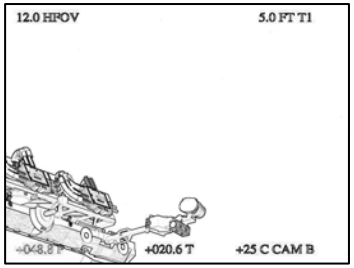
A7

Perform ILLUMINATOR OPS (Cue Card, TV) for Camr B
VID OUT MON 1(2) pb - push
IN B pb - push
CAMR CMD ZOOM - Full zoom out
PAN,TILT - Center Camr A in FOV
ZOOM - Full zoom in
PAN/TILT - LO RATE
PAN,TILT - Refine placement of Camr A in FOV
PAN/TILT - RESET

6. Perform SETUP (DTV)
7. Perform ANALOG PAO CC (SONY PD100)
8. √C/L CAMR INSTALL (CENTERLINE CAMR), steps 1,2
9. Perform F5 PROGRAM w/FLASH (NIKON F5)
10. Perform F5 SHUTTER PRIORITY (DCS 760)
11. Perform 760 PROGRAM w/FLASH (DCS 760)

P/TV03 UNDOCK (Continued) (MSG 104 - Undocking Camera Change)

OPS (Continued)

√	Item # Track #	Rqmts	Still Imagery		Video			Notes
			35mm	DCS	PLB	CC	Dnlk	
	3. 12A-7	P6 Solar Array and SRMS/OBSS Motion During Undock			√B Illuminator on B PAN: 48.8° TILT: 20.6° FOV: 12.0° Actual FOV: _____ • Frame FOV as shown • Focus on SVS targets 			Gnd will set up Camr view if Ku avail Begin recording at least 5 min prior to undock During undock, do not adjust Camr pan(tilt). Allow P6 SAW to leave FOV Record until undock + 8 min. When SAW leaves FOV, recording no longer needed

> **Note**:
> During portions of this procedure, the Big Loop could be down.

MCC – H 1. Perform preliminary audio subsystem commanding.

SHUTTLE CREW 2. (A1R) AUD CTR SPACELAB ICOM A OFF

ALL 3. Perform 2 – way Voice Check on Big Loop

SHUTTLE CREW 4. Ensure MS ATU Configured

(R10) MS ATU

- Power	AUD/TONE
- XMIT/ICOM Mode	PTT/PTT
- A/G 1	T/R
- A/G 2	OFF
- A/A	RCV
- ICOMA	T/R
- ICOMB	OFF
- Volume	As Required

SHUTTLE CREW 5. <u>RECONFIGURE FOR HARDLINE DOCKED AUDIO CONFIGURATION</u>

Perform {6.103 Hardline Audio Config (ISS)} Steps 1, 2, 6 and 7
(SODF: Joint Operations: Comm/Data)

If Big Loop via DAG1 checks are successful

Report to MCC “Successful Hardline Audio Config”
Go to Step 14

If Big Loop via DAG1 checks are unsuccessful

Continue through procedure

SHUTTLE CREW 6. (C3) AUDIO CENTER OFF
- Pause 2 Seconds
AUDIO CENTER 2

ALL 7. Perform 2 – way Voice Check on Big Loop

If Big Loop via DAG1 checks are successful

Report to MCC “Successful Hardline Audio Config on Audio Center 2”
Go to Step 14

If Big Loop via DAG1 checks are unsuccessful

Continue through procedure

MCC 8. DAIU POWER-DOWN
Perform {6.104 Hardline Audio Configuration (ISS) Backout} step 5
(SODF: Joint Operations: Comm/Data)

SHUTTLE CREW 9. (A1R) AUD CTR SPACELAB A/G 1 OFF
A/A OFF
ICOM A OFF
PAGE OFF

Advise MCC When Complete

MCC 10. DAIU POWER-UP
Perform {6.103 Hardline Audio Configuration (ISS) } steps 3,4
(SODF: Joint Operations: Comm/Data)

ON MCC GO 11. (A1R) AUD CTR SPACELAB A/G 1 ON

ALL 12. Perform 2 – way Voice Check on Big Loop

If Big Loop via DAG1 checks are successful

Report to MCC "Successful Hardline Audio Config after DAIU Power Cycle"

SHUTTLE CREW 13. (C3) AUDIO CENTER OFF
-Pause 2 Seconds
AUDIO CENTER 1

ON MCC GO 14. RECONFIGURE FOR SSOR/UHF DOCKED AUDIO CONFIGURATION
Perform {6.104 Hardline Audio Configuration (ISS) Backout} steps 1, 3 & 4
(SODF: Joint Operations: Comm/Data)

ALL 15. Perform 2 – way Voice Check on Big Loop via RF Path

FD8 MMT Crew Summary

The MMT convened today for only 30 minutes. All Program elements were polled and all are GO for undocking tomorrow. The ISS Program is extremely pleased with the new station components and is very appreciative of the broader team's effort over many years to make STS-115/12A a tremendous success.

Space Station Status - The P3/P4 truss is now self-sufficient, generating its own power, and providing cooling for its LRUs. A tremendous number of assembly objectives were accomplished during this mission and the ISS Program has been left in a very good posture for the next increment and for the STS-116/12A.1 mission. The next two weeks will be very busy with a Soyuz launch, Progress undock, and Soyuz docking. On behalf of the International Partners and the ISS Program, the ISS Deputy Program Manager thanked the Shuttle Program for the exceptional teamwork between the crew, and the shuttle and ISS ground teams.

LiOH Management - Three LiOH canisters from the ISS stockpile will be transferred to the orbiter to manage CO2 levels for the remainder of the docked mission. This LiOH management strategy still protects for an 11+3 mission. As a result of this plan, three expended LiOH canisters will remain on the ISS to be returned on STS-116/12A.1 if stowage on the orbiter is insufficient.

Leaky PWR - The leaky PWR has been well contained and will be dumped after undocking and there are no other impacts.

WSB 3 N2 Regulator - A small decay of 0.3 psi/day has been observed since the relief valve did not reseat properly on FD1. MOD and the Engineering community are confident that the leak is GN2. A similar signature was observed on STS-112 and no water was found in the aft post landing. WSB 3 will be used nominally for entry and there are no consumables impacts due to this anomaly.

Docked A/G-1 DAIU Channel - The Docked Audio Interface Unit (DAIU) channel that provides A/G-1 comm from the orbiter to the ISS has been declared failed. As you know this has been a problem on other missions as well. A 30 minute troubleshooting procedure is in work to be executed on FD9. The procedure will be performed only if time allows since it is the lowest priority item for the day.

Lower Right Aft (LRA) S-band Antenna- The LRA antenna is still intermittent at times, although some instances are thought to be caused by RFI. There is some discussion of troubleshooting on orbit by going to high frequency on both Comm String 2 and String 1 on a non interference basis. Problems such as these have been difficult to troubleshoot in the OPF post landing so it's wise to take advantage of the opportunity to do so on orbit when possible.