STS-135/ULF7

FD 11 Execute Package

MSG	Page(s)	Title
088A	1 - 18	FD11 Flight Plan Revision
089	19 - 20	FD11 Mission Summary
090	21 - 22	The Final Transfer Message
091	23	LiOH Changeout Cue Card
092	24 - 26	A/L PBA Stowage
093	27 - 32	FD11 Crew Stowage Notes

Approved by FAO:
J. Mintz

Approved by OpsPlan:
K. Howell

Last Updated: Jul 18 2011 12:16 AM GMT
JEDI *(**J**oint **E**xecute package **D**evelopment and **I**ntegration), v3.0*

The ISS Crew decide there is one more item on the Transfer list…

MSG INDEX

MSG NO.	TITLE
088	FD11 Flight Plan Revision
089	FD11 Mission Summary
090	The Final Transfer Message
091	LiOH Changeout Cue Card
092	A/L PBA Stowage
093	FD11 Crew Stowage Notes

1. Mission margin increased to 13 hours due to running ~500 watts under the predicted power level and performing good tank depletions yesterday.

   For today's cryo config, O2 and H2 tanks 1 & 2 will be active. After the stack repress is complete, we will reconfigure to deplete O2 tank 4. This will be the last of four tank depletions planned for the mission.

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

2. **Sandy and Doug:** We noted for MPLM unberth on FD04 that the X value at the fully berthed position was approximately +5 cm. Small differences in digital values are expected due to stack bending from pressure and thermal effects. The FOR OCAS maneuver in step 9 of 1.210 MPLM Demate and Berth will fly to an X value of zero. This could bias the MPLM slightly aft in the payload bay if the same variations exist. You may need to correct for this small bias during your manual maneuvering, but we are sure you will have an eye on the clearance to the Pump Module.

3. **Fergy and Sandy:** Please incorporate the following pen-and-ink changes in your hardcopy of S&M 1.109 MPLM Vestibule - Configure For Demate (flown in the supplemental section of the MPLM Book). In step 6.3 add two check marks to make the end of the step as follows:
   ✓Coiled cable will not obstruct CBM mechanisms.
   ✓Coiled cable does not put stress on any other cables, due to coil or tie-down method.
   The electronic copy in iPV has already been updated.

4. **Fergy and Sandy:** CBM prep for demate went well last night! We aren't tracking any issues for the MPLM demate today. Just a reminder that the CPAs are powered and activated and will remain so during the vestibule work this morning.

5. **LiOH Changeouts:** Today you will resume LiOH changeouts at hatch close using the new LiOH cue card in MSG091. Report STS-133 can numbers to MCC as they are installed. Donning PPE is recommended for changeouts using STS-132 or STS-133 cans.

6. **Fergy and Rex:** Due to the failure of the PRLA 3 REL A microswitch, the associated talkback will read bp when PL SEL 1 is selected. Therefore, in ROBO 1.210 MPLM DEMATE AND BERTH, Steps 11 and 14, the checks of the LAT talkbacks will now be:
   √PL RETEN LAT 1,2,4 tb (three) – REL
   The LAT 3 tb will indicate correctly when latched.

7. Please turn on the RPOP machine this morning to verify network connection prior to RNDZ Tools Checkout later in the day, and also to allow for SpOC updates to that PGSC.

8. Crew Choice Downlink KU Opportunities:

   Please allow 1-2 minutes to lock up on Ku-band. Check with MCC before starting playback.

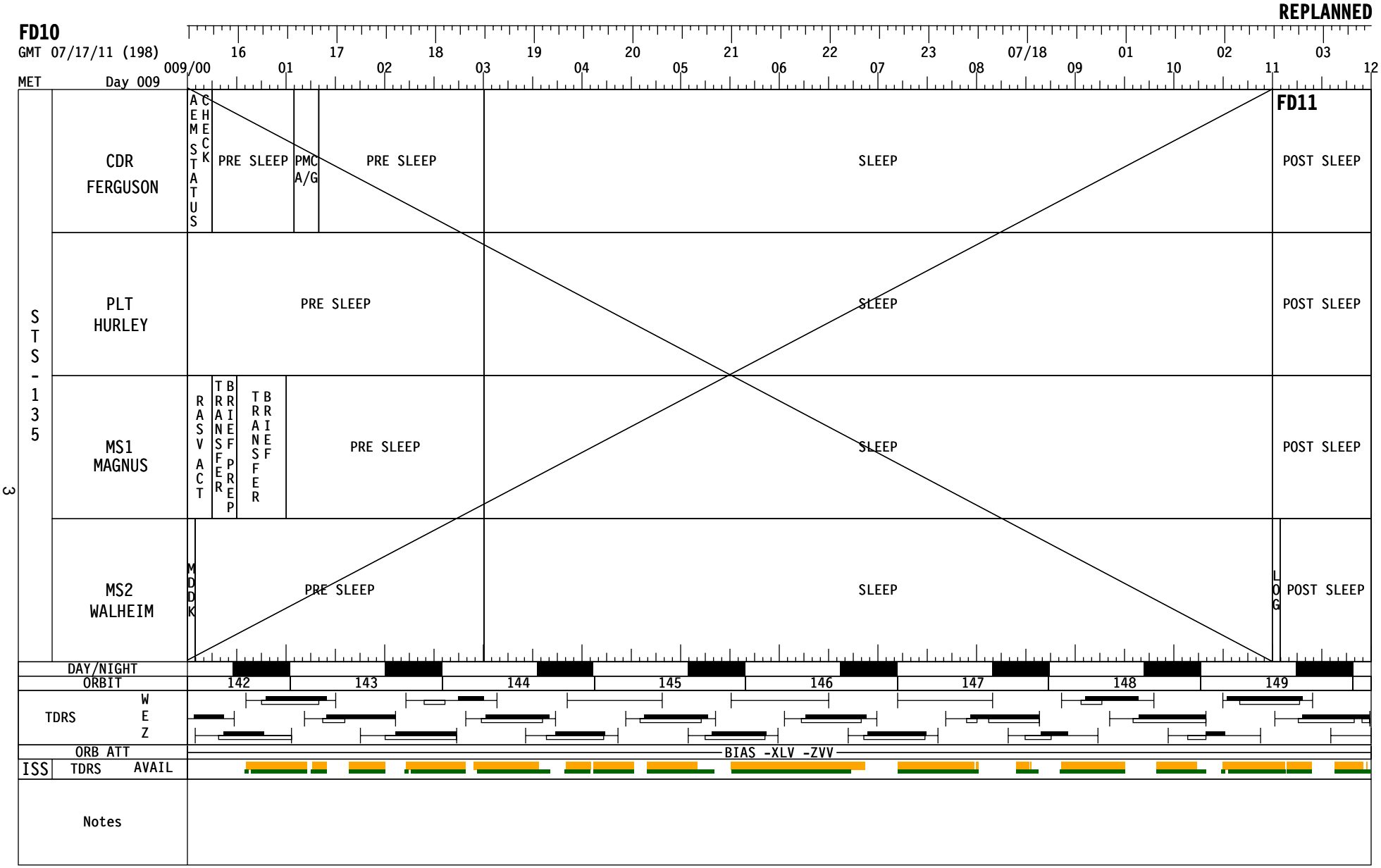
   Post-Sleep Morning of FD11 (for tribute to Houston downlink)

TDRS	AOS	LOS	Delta (min)	Notes
E-TDS	9/11:19	9/11:49	30	
W-171	9/12:17	9/12:52	35	

   Pre-Sleep Evening of FD11

TDRS	AOS	LOS	Delta (min)	Notes
W-171	9/23:49	10/00:24	35	
E-TDS	10/02:11	10/02:37	26	

9. Replace Pages 2-36 through 2-41 and 3-114 through 3-123.


REPLANNED
FD10
GMT 07/17/11 (198)
MET Day 009
009/00 16 17 18 19 20 21 22 23 07/18 01 02 03
01 02 03 04 05 06 07 08 09 10 11 12
FD11
STS-135
CDR FERGUSON
AEMSTATUS
CHECK
PRE SLEEP
PMC A/G
PRE SLEEP
SLEEP
POST SLEEP
PLT HURLEY
PRE SLEEP
SLEEP
POST SLEEP
MS1 MAGNUS
RASV ACT
TRANSFER
BRIEF PREP
TRANSFER
BRIEF
PRE SLEEP
SLEEP
POST SLEEP
MS2 WALHEIM
MDK
PRE SLEEP
SLEEP
LOG
POST SLEEP
DAY/NIGHT
ORBIT
142 143 144 145 146 147 148 149
TDRS
W
E
Z
ORB ATT
BIAS -XLV -ZVV
ISS
TDRS AVAIL
Notes

REPLANNED

FD10

GMT 07/17/11 (198) 009/00 16 17 18 19 20 21 22 23 07/18 01 02 03

MET Day 009 01 02 03 04 05 06 07 08 09 10 11 12

FD11

ISS	ISS CDR BORISENKO	PW DPC	PRE SLEEP-ISS		SLEEP		POST SLEEP
	FE-1 SAMOKUTYAEV	PW DPC	PRE SLEEP-ISS		SLEEP		POST SLEEP
	FE-3 GARAN	T2 DPC	MPCON PRE SLEEP-ISS	DRY MPCDN	SLEEP	SALIVA	POST SLEEP
	FE-4 VOLKOV	PW DPC	PRE SLEEP-ISS		SLEEP		POST SLEEP
	FE-5 FURUKAWA	PW DPC	PRE SLEEP-ISS	DRY	SLEEP	SALIVA BISP	POST SLEEP
	FE-6 FOSSUM	ARED DPC	PRE SLEEP-ISS	DRY	SLEEP	SALIVA BISP	POST SLEEP

DAY/NIGHT									
DAILY ORBIT	8	9	10	11	12	13	14	15	1
TDRS AVAIL									
ISS TLM	122	112	122					112	
ORBIT	142	143	144	145	146	147	148	149	

NOTES

4

REPLANNED

FD11

GMT 07/18/11 (199) — 12 13 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 010/00

MET Day 009

STS-135

CDR FERGUSON	POST SLEEP	IMU	MPLM EGRS	MPLM DEACT	MPLM VEST DEMATE	MPLM VEST DEPRESS	MEAL	MDDK XFER	PRLA	EXERCISE	SO LONG	AEM STATUS	CHECK	C/L CAMR INST	OBSS*	H2O#	PCS CONFIG	OMS^	PRE SLEEP
PLT HURLEY	POST SLEEP	MCIU	MDDK XFER	EXERCISE	STS O2 P/B TEARDOWN	MEAL	SSRMS MPLM GRAPL	SSRMS MPLM UNINSTL	MPLM UNGRPL	PTV05 DACT	PTV04 SETUP	FAREWELL	PTV04 OPS	PTV04%	C/L CAMR INST	OBSS*	RNDZ TOOLS
MS1 MAGNUS	POST SLEEP	MPLM PBA*	MPLM EGRS	MPLM DEACT	MPLM VEST DEMATE	EXERCISE	MEAL	DOUG SETUP	SSRMS MPLM GRAPL	CBM DEMATE	SSRMS MPLM UNINSTL	MPLM UNGRPL	TRANSFER	BRIEF	AUFWIE-	DERSEHEN	HATCH CLOSE	HATCH LEAK CHECK	MDK	PRE SLEEP
MS2 WALHEIM	POST SLEEP	MDK	TRANSFER	UPDATE	CWCI FILL #2	CWCI FILL #3	CWCI FILL #4	CWC-I XFER	MDDK XFER	SSC-RETURN	EXERCISE	MEAL	COND CWC	TEARDOWN	CWCI FILL #5	CWCI FILL #6	CWC-I XFER	PRLA	MDDK XFER	TRANSFER	BRIEF PREP	TRANSFER	BRIEF	ADIEU	HATCH CLOSE	HATCH LEAK CHECK	RNDZ TOOLS

DAY/NIGHT

ORBIT: 150 151 152 153 154 155 156 157

TDRS W E Z

ORB ATT: BIAS -XLV -ZVV

ISS TDRS AVAIL

Notes

*RELOCATE

NO EXER MPLM UNINSTL/ BOLT UNLOAD

NO T2 BACK-OFF TO BERTH

%DEACT #NOMINAL CONFIG ^POD HTR RECONFIG *MNVR TO UNDOCK

REPLANNED

FD11

GMT 07/18/11 (199) — 04 05 06 07 08 09 10 11 12 13 14 15

MET Day 009 — 12 13 14 15 16 17 18 19 20 21 22 23 010/00

ISS	ISS CDR BORISENKO	POST SLEEP	PW	DPC	T2		ИП 1 MON	DAK-VFY	SE-CM-PHOTO	DAKON DNLD		MEAL		♣	COЖ	FAREWELL	ARED	PW	DPC
ISS	FE-1 SAMOKUTYAEV	POST SLEEP	PW	DPC	⊕	ТГК-43Р-IMS-STOW	T2	ТГК-43Р-IMS-STOW			MEAL	ТГК-43Р-IMS-STOW				FAREWELL	VELO	PW	DPC
ISS	FE-3 GARAN	POST SLEEP	PW	DPC	DCB RVW	DCB PACK	DCB XFR	ARED	STS 02 P/B TEARDOWN	MPLM BPSMU T/D	MEAL	MDDK XFER	RTR T/D	SSC S/U	CSI SHAB RMV	BLOOD	BLOOD	MDDK XFER	FAREWELL	HATCH CLOSE	T2	PW	DPC
ISS	FE-4 VOLKOV	POST SLEEP	PW	DPC	♦	IMS-СУБА-PLUG-INV		T2		M1 CCBП 3B MNT	MEAL			СОГС^	VELO	FAREWELL		PW	DPC
ISS	FE-5 FURUKAWA	POST SLEEP	PW	DPC	ARED	MDDK XFER	MPLM VEST DEPRESS			MEAL	MDDK XFER	BS/UOD	BLOOD	BLOOD	BLOOD	BLOOD	CEVIS	FAREWELL	RSNTR	VSTR	VTR STAPE	PW	N2 CAP	DPC
ISS	FE-6 FOSSUM	POST SLEEP	PW	DPC	DCB RVW	DCB PACK	WNDW CLS	MDDK XFER	RSNT-I	®	VSW	ARED	MEAL	CBM DEMATE	MDDK XFER	BLOOD	SLV STW	BLD STW	♥	FAREWELL	HATCH CLOSE	CEVIS	PW	DPC

DAY/NIGHT

DAILY ORBIT: 1 2 3 4 5 6 7 8

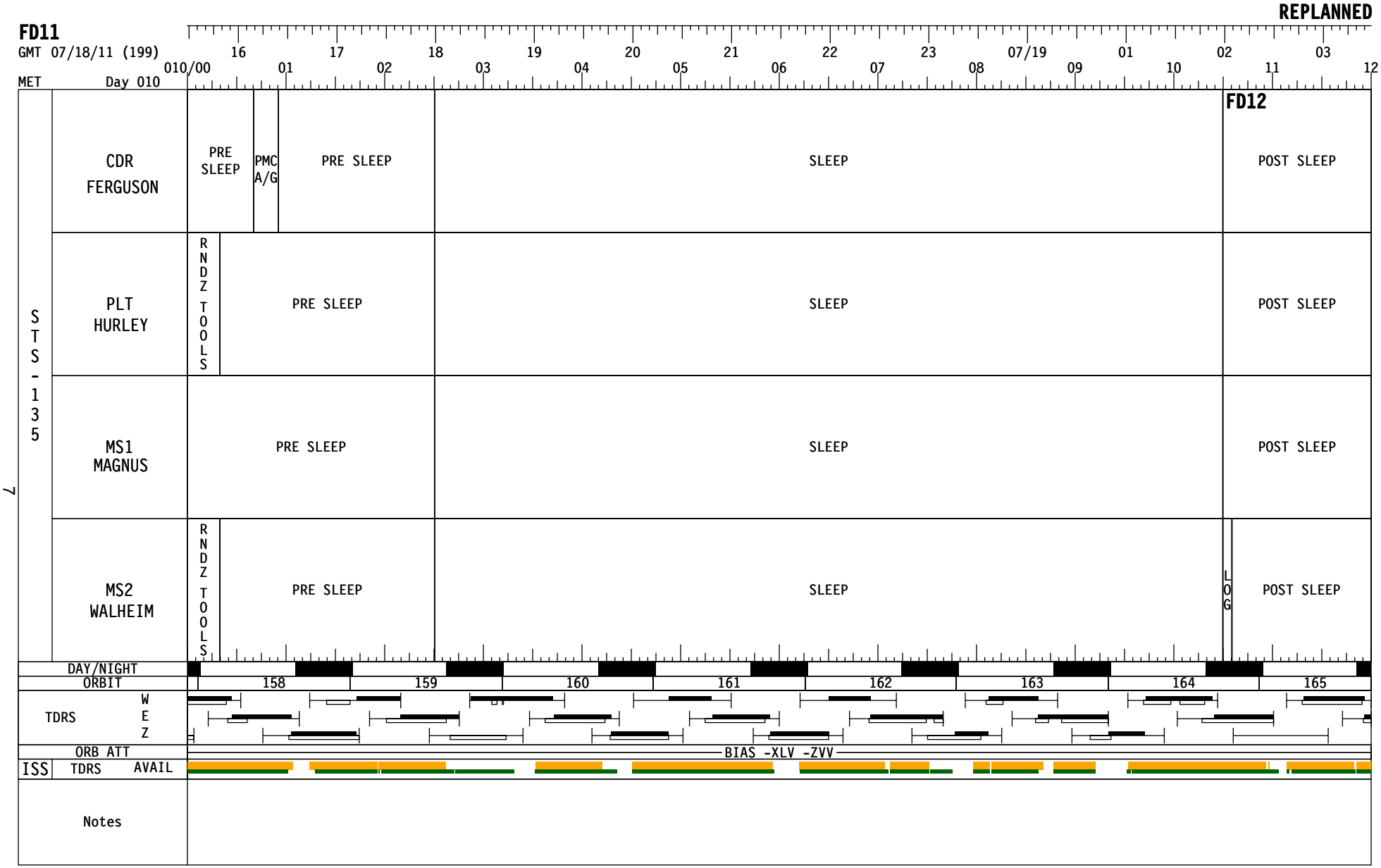
TDRS AVAIL

ISS TLM: 112 122 142 122

ORBIT: 150 151 152 153 154 155 156 157

NOTES

⊕КПТ-2-ПИРЕН-CHAR-END
♦МБИ-21-FE4-EXE
®SSC18-WIRED-SETUP
*CAMCORDER CONFIG
*CAMCORDER CONFIG
NO EXER MPLM UNINSTL/ BOLT UNLOAD
NO T2 BACK-OFF TO BERTH
♣СВО-Э ЕДВ-FILL
♥P̄/TV-FAREWELL-VIDEO
^CT-64-PREP
*CAMCORDER CONFIG


REPLANNED
FD11
GMT 07/18/11 (199)
MET Day 010
16 17 18 19 20 21 22 23 07/19 01 02 03
010/00 01 02 03 04 05 06 07 08 09 10 11 12
FD12
STS-135
CDR FERGUSON
PRE SLEEP
PMC A/G
PRE SLEEP
SLEEP
POST SLEEP
PLT HURLEY
RNDZ TOOLS
PRE SLEEP
SLEEP
POST SLEEP
MS1 MAGNUS
PRE SLEEP
SLEEP
POST SLEEP
MS2 WALHEIM
RNDZ TOOLS
PRE SLEEP
SLEEP
LOG
POST SLEEP
DAY/NIGHT
ORBIT
158 159 160 161 162 163 164 165
TDRS
W
E
Z
ORB ATT
BIAS -XLV -ZVV
ISS
TDRS AVAIL
Notes

REPLANNED

FD11

GMT 07/18/11 (199) 16 17 18 19 20 21 22 23 07/19 01 02 03

MET Day 010 010/00 01 02 03 04 05 06 07 08 09 10 11 12

FD12

ISS	ISS CDR BORISENKO	DPC	PRE SLEEP-ISS	SLEEP	POST SLEEP
ISS	FE-1 SAMOKUTYAEV	DPC	PRE SLEEP-ISS	SLEEP	POST SLEEP
ISS	FE-3 GARAN	DPC, MPCON	PRE SLEEP-ISS, MPCDN	SLEEP	RXN, POST SLEEP
ISS	FE-4 VOLKOV	DPC	PRE SLEEP-ISS	SLEEP	POST SLEEP
ISS	FE-5 FURUKAWA	DPC	PRE SLEEP-ISS	SLEEP	RXN, POST SLEEP
ISS	FE-6 FOSSUM	DPC, PFC	PRE SLEEP-ISS	SLEEP	RXN, POST SLEEP

DAY/NIGHT									
DAILY ORBIT	8	9	10	11	12	13	14	15	16
TDRS AVAIL									
ISS TLM	122	112	122					132	142
ORBIT		158	159	160	161	162	163	164	165

NOTES

STS-135/ULF7 FD11

GMT Date 07/17 (198) | W | TDRSE | Z | D/N | ORB | MET Day 009 | STS ATI

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

00:00 | 01:00 | 02:00 | 03:00

147 | 148 | 149

BIAS -XLV -ZVV

CDR Ferguson: SLEEP

PLT Hurley: SLEEP

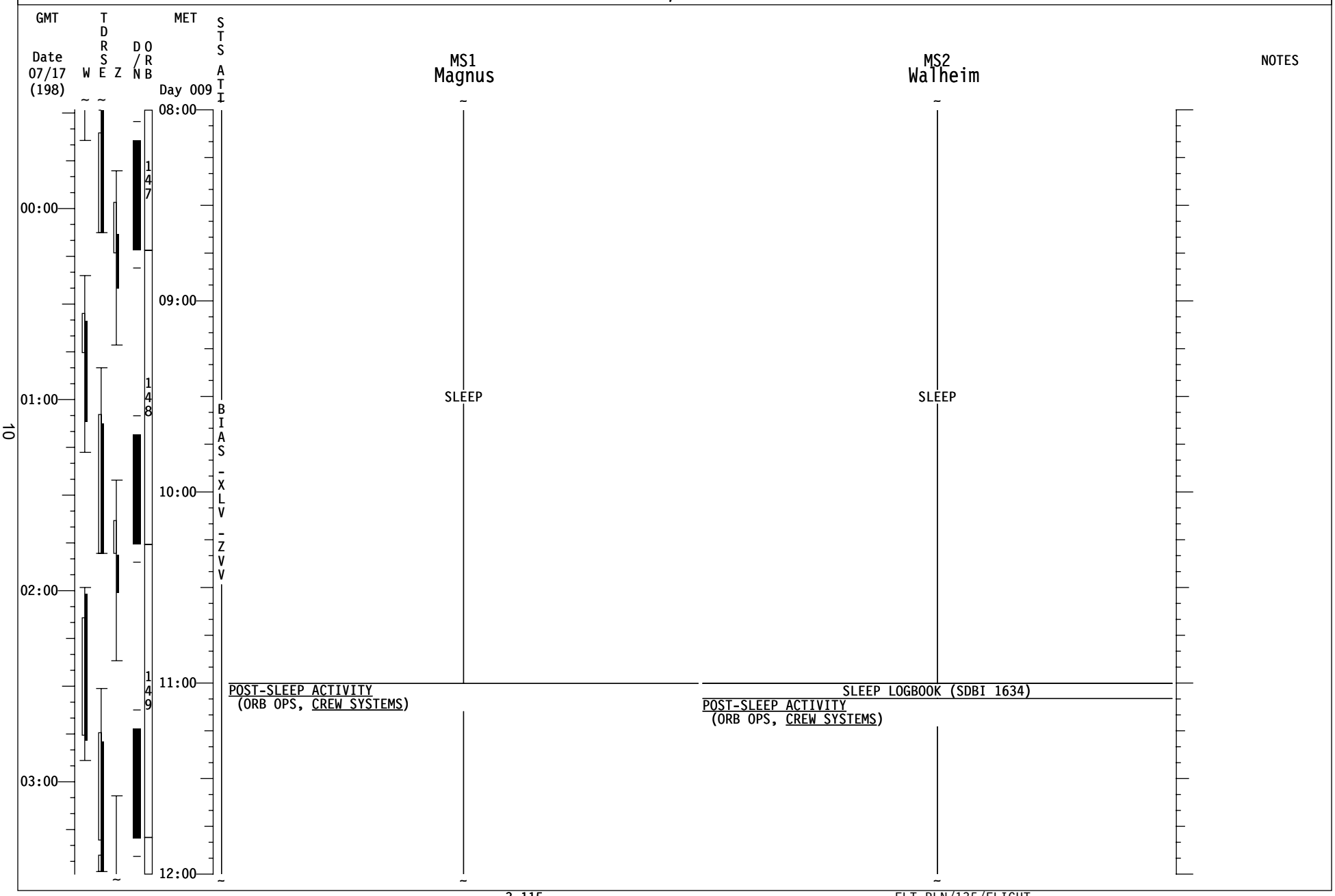
FD11 EZ ACTIVITIES:
- √OCAC FILTER
- TEPC STATUS CHECK
  - Verify display is backlit
- HARD REBOOT STS-3(KFX)

POST-SLEEP ACTIVITY (ORB OPS, CREW SYSTEMS)

POST-SLEEP ACTIVITY (ORB OPS, CREW SYSTEMS)

NOTES

STS-135/ULF7 FD11



STS-135/ULF7 FD11

GMT Date 07/18 (199) | W | TDRS E | Z | D/N | ORB | MET Day 009 | STS ATI

CDR Ferguson | PLT Hurley | NOTES

12:00 — 13:00 — 14:00 — 15:00 — 16:00

04:00 — 05:00 — 06:00 — 07:00

ORB: 150, 151, 152

STS ATI: BIAS-XLV-ZVV

CDR Ferguson

POST-SLEEP ACTIVITY
(ORB OPS, CREW SYSTEMS)

IMU STAR OF OPPTY ALIGN (ORB OPS, GNC)

MPLM: 1.105 MPLM EGRESS [A]

MPLM: 1.106 MPLM DEACTIVATION
Steps 1-2,4-6

S&M: 1.109 MPLM VESTIBULE CONFIGURE FOR DEMATE
Steps 3-end
Ref. MSG 088, Item 3

MPLM: 1.111 NODE 2 TO MPLM VESTIBULE DEPRESS AND LEAK CHECK with MPEV

PLT Hurley

POST-SLEEP ACTIVITY
(ORB OPS, CREW SYSTEMS)

L17 Check MCIU filter screen

TRANSFER OPS
Ref. Middeck Transfer List and MSG 090

EXERCISE

NOTES

[A] Steps 1-6 (Ground can perform steps 4-5 on request). Remove PFE from MPLM and stow per MPLM Transfer List Item 822

STS-135/ULF7 FD11

GMT Date 07/18 (199) | W | TDRS E | Z | D/N | ORB | MET Day 009 | STS ATI

MS1 Magnus | MS2 Walheim | NOTES

12:00

POST-SLEEP ACTIVITY
(ORB OPS, CREW SYSTEMS)

POST-SLEEP ACTIVITY
(ORB OPS, CREW SYSTEMS)

04:00

150

A Steps 1-6 (Ground can perform steps 4-5 on request).
Remove PFE from MPLM and stow per MPLM Transfer List Item 822

13:00

PBA STOW IN A/L Ref. MSG 092
Only one PBA is being transferred, so step 3E is not applicable.
Ref. MPLM Transfer List Item 821

MPLM: 1.105 MPLM EGRESS A

05:00

BIAS-XLV-ZVV

MPLM: 1.106 MPLM DEACTIVATION
Steps 1-2,4-6

CGBA UNIT #1,2 STATUS CK (CC),STL STATUS CK (CC),
GLACIER STATUS CHECK (CC)

14:00

S&M: 1.109 MPLM VESTIBULE CONFIGURE FOR DEMATE
Steps 3-end
Ref. MSG 088, Item 3

151

DAILY TRANSFER LIST UPDATE
Ref. Transfer Lists & MSG 090

CWC-I FILL (ORB OPS, ECLS)
Fill CWC-I #2
Perform Parts D-E
Ref. MSG 082

06:00

CWC-I FILL (ORB OPS, ECLS)
Fill CWC-I #3
Perform Parts D-E
Ref. MSG 082

15:00

CWC-I FILL (ORB OPS, ECLS)
Fill CWC-I #4
Perform Parts D-E
Ref. MSG 082

152

CWC-I TRANSFER
Transfer 3 CWC-Is to ISS

07:00

TRANSFER OPS
Ref. Middeck Transfer List and MSG 090

EXERCISE

16:00

12

STS-135/ULF7 FD11

GMT Date 07/18 (199) | W E Z | T D R S | D/N | O R B | MET Day 009 | STS ATI

CDR Ferguson

16:00 — MPLM: 1.111 NODE 2 TO MPLM VESTIBULE DEPRESS AND LEAK CHECK with MPEV

17:00

18:00

19:00

20:00

MEAL

TRANSFER OPS
Ref. Middeck Transfer List and MSG 090

PLT Hurley

EXERCISE
On MCC Go:
JOINT OPS: 3.122 PREBREATHE USING SHUTTLE O2 TEARDOWN
Steps 2-7; MCC-H will perform steps 2.4 and 5.5

MEAL

ROBO: 1.210 MPLM DEMATE AND BERTH
Steps 1-5

ROBO: 1.210 MPLM DEMATE AND BERTH
Steps 6-17
Ref. MSG 088, Item 2

NOTES

NO EXERCISE
MPLM UNINSTALL/
BOLT UNLOAD

NO T2
MPLM MNVR
BACKOFF TO
BERTH

08:00 09:00 10:00 11:00

152 153 154 155

BIAS-XLV-ZVV

STS-135/ULF7 FD11

GMT Date 07/18 (199) | W | T D R S E | Z | D/N | O R B | MET Day 009 | STS ATI

ORB: 152, 153, 154, 155

STS ATI: BIAS-XLV-ZVV

MS1 Magnus

16:00 EXERCISE

17:00 MEAL

18:00 POC: 2.7.501 DOUG STARTUP PROCEDURE
Start DOUG on SSC 17 and setup in SSRMS real-time support for the MPLM Demate and Berth
Ref. MSG 021, DOUG Setup for MPLM Demate & Berth
ROBO: 1.210 MPLM DEMATE AND BERTH
Steps 1-5

S&M: 1.515 NODE 2 CBM DEMATE
Steps 1-10 for Node 2 Nadir

19:00 ROBO: 1.210 MPLM DEMATE AND BERTH
Steps 6-17
Ref. MSG 088, Item 2

20:00

MS2 Walheim

TRANSFER OPS
Ref. Middeck Transfer List and MSG 090

ORBITER SSC RETURN
Ref. Middeck Transfer List Item 722

EXERCISE

MEAL

SHUTTLE CONDENSATE COLLECTION (ORB OPS, ECLS)
Perform TEARDOWN. Transfer ISS condensate CWC S/N 1094 to NOD202. Stow Y-Y condensate hose in MF71C.

CWC-I FILL (ORB OPS, ECLS)
Fill CWC-I #5
Perform Parts D-E
Ref. MSG 082

CWC-I FILL (ORB OPS, ECLS)
Fill CWC-I #6
Perform Parts D-F
Ref. MSG 082

CWC-I TRANSFER
Transfer 2 CWC-Is to ISS

NOTES

NO EXERCISE
MPLM UNINSTALL/
BOLT UNLOAD

NO T2
MPLM MNVR
BACKOFF TO
BERTH

STS-135/ULF7 FD11

GMT Date 07/18 (199) | W | TDRS E | Z | D/N | ORB | MET Day 009 | STS ATI

CDR Ferguson | PLT Hurley | NOTES

20:00

TRANSFER OPS
Ref. Middeck Transfer List and MSG 090

ROBO: 1.210 MPLM DEMATE AND BERTH
Steps 6-17
Ref. MSG 088, Item 2

NO T2 MPLM MNVR BACKOFF TO BERTH

12:00

ROBO: 1.210 MPLM DEMATE AND BERTH
Steps 10-17
Ref. MSG 088, Item 6

155

ROBO: 1.210 MPLM DEMATE AND BERTH
Steps 18-end

21:00

EXERCISE
ARED if Available

P/TV05 ISS INTERNAL OPS
(PHOTO/TV, SCENES) Perform DEACTIVATION

13:00

P/TV04 ISS INTERNAL OPS (HC)
(PHOTO/TV, SCENES)
SETUP

156

BIAS-XLV-ZVV

SO LONG!

FAREWELL!

22:00

P/TV04 INGRESS/EGRESS
(PHOTO/TV, SCENES)
SETUP

AEM UNIT #1,2,3 CHECK (Cue Card)

14:00

P/TV04 INGRESS/EGRESS (DEACTIVATION) (PHOTO/TV, SCENES)

C/L CAMR INSTALL
(PHOTO/TV, C/L CAMR)
Steps 1 and 4

C/L CAMR INSTALL
(PHOTO/TV, C/L CAMR)
Steps 1 and 4

23:00

OBSS MNVR TO UNDOCK
(PDRS, OBSS NOMINAL)

OBSS MNVR TO UNDOCK
(PDRS, OBSS NOMINAL)

157

NOMINAL H2O CNFG (ORB OPS, ECLS) √MCC for FES PRI A-ON

RNDZ TOOLS CHECKOUT
(RNDZ, RNDZ TOOLS)

UPLINK
TFL 192

15:00

PCS 1(2) CONFIG (ORB OPS, ECLS)
Configure to PCS 1, followed by: MO69M LEH O2 8 vlv - OP

A14 RCS/OMS HTR L POD - B OFF
- A AUTO

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYSTEMS)

00:00

STS-135/ULF7 FD11

GMT Date 07/18 (199) | W | T D R S E | Z | D / N | O R B | MET Day 009 | STS ATI

MS1 Magnus | MS2 Walheim | NOTES

20:00

ROBO: 1.210 MPLM DEMATE AND BERTH
Steps 6-17
Ref. MSG 088, Item 2

CWC-I TRANSFER
Transfer 2 CWC-Is to ISS

NO T2 MPLM MNVR BACKOFF TO BERTH

12:00

155

ROBO: 1.210 MPLM DEMATE AND BERTH
Steps 10-17
Ref. MSG 088, Item 6

ROBO: 1.210 MPLM DEMATE AND BERTH
Steps 18-end

21:00

TRANSFER OPS
Ref. Middeck Transfer List and MSG 090

TRANSFER BRIEF PREP

13:00

BIAS-XLV-ZVV

156

TRANSFER BRIEF
Call down status to MCC

TRANSFER BRIEF
Call down status to MCC

AUF WIEDERSEHEN!

ADIEU!
Adieu, Adieu, To yieu and yieu and yieu!

22:00

JOINT OPS: 4.102 STS/ISS DUCT RMVL & HATCH CLOSING
Open PMA2 ducting grille, if there, remove Kapton tape.
Report to MCC-H if PMA grille cover not present. MCC-H
can perform steps 2 & 3 on crew request. Skip step 18
since PMA2 will remain pressurized post Shuttle undocking.

JOINT OPS: 4.102 STS/ISS DUCT RMVL & HATCH CLOSING
Open PMA2 ducting grille, if there, remove Kapton tape.
Report to MCC-H if PMA grille cover not present. MCC-H
can perform steps 2 & 3 on crew request. Skip step 18
since PMA2 will remain pressurized post Shuttle undocking.

14:00

JOINT OPS: 4.104 ODS VEST/PMA DPRS & HATCH LEAK CHECK

JOINT OPS: 4.104 ODS VEST/PMA DPRS & HATCH LEAK CHECK

23:00

157

RNDZ TOOLS CHECKOUT
(RNDZ, RNDZ TOOLS)

15:00

CGBA UNIT #1,2 STATUS CK (CC),STL STATUS CK (CC),
GLACIER STATUS CHECK (CC)
PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYSTEMS)

00:00

STS-135/ULF7 FD11

GMT Date 07/18 (199) | W | TDRS E | TDRS Z | D/N | ORB | MET Day 010 | STS ATI

CDR Ferguson | PLT Hurley | NOTES

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

RNDZ TOOLS CHECKOUT (RNDZ, RNDZ TOOLS)

PRE-SLEEP ACTIVITY (ORB OPS, CREW SYSTEMS)

UPLINK TFL 184

16:00

CHECK ISS AIRLOCK ATU CONFIG
L9 PAYLOAD STATION A/G (two) - OFF
PRIVATE MEDICAL CONFERENCE VIA A/G 2

158

PRE-SLEEP ACTIVITY (ORB OPS, CREW SYSTEMS)

01:00

17:00

BIAS-XLV-ZVV

02:00

CREW WAKE @ 10/10:30

159

18:00

03:00

SLEEP

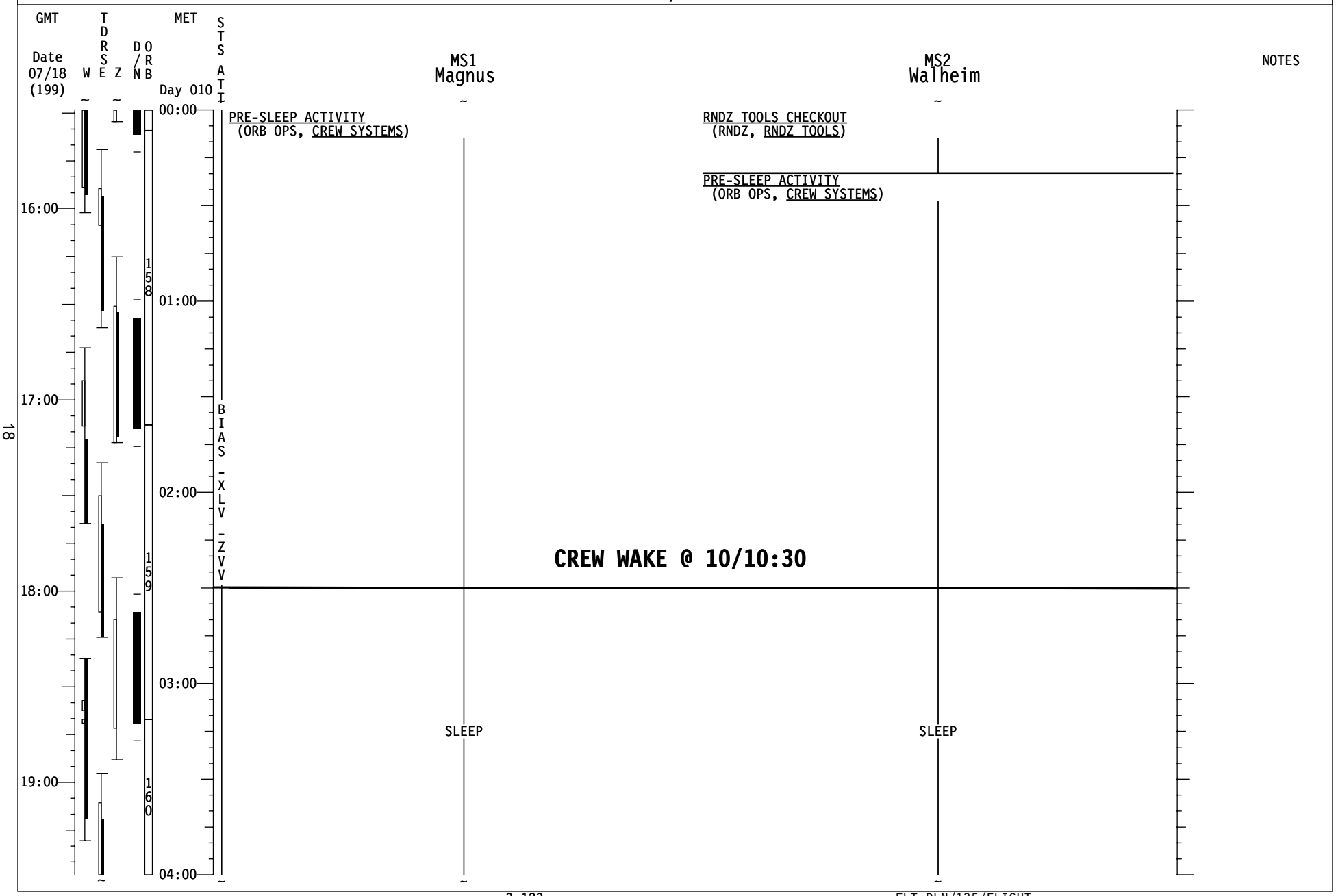
SLEEP

19:00

160

04:00

STS-135/ULF7 FD11



Good morning Atlantis!

Great work on all the transfer operations over the last several days! The MPLM is all packed and ready to be closed up for the trip home. We look forward to getting Raffaello back in the payload bay today. We know you've had a wonderful time with all your friends on ISS and it will be hard to say your goodbyes this evening before hatch closing. Be sure to give them lots of hugs from all of us!

Today's happy words are launch hold, switch tease, erratic sensor, FRP-1, failed microswitch, free-floating latch, FRP-1 again! SM Reassign…. Is it possible that training folks define happy words differently than others?

Have a wonderful (malfunction-free) day!
- STS-135 Training Team

YOUR CURRENT ORBIT IS: 213 X 205 NM

NOTAMS (NO CHANGES)

EDW -	EDW 22L/04R IN USE. EDT 22R/04L EMERGENCY DAY USE ONLY
EDW -	LAKEBED RWYS GREEN
EDW -	RWY 22L MLS AZIMUTH SINGLE STRING
NOR -	LAKEBED RWYS GREEN
NTU -	RWY 05L/23R AND 14R/32L CLSD
MRN -	RWY 20 ALS OUT OF SERVICE
FMI -	TACAN NIM53 DECOMMISSIONED
BEJ -	CLOSED UNTIL 18 JULY
ESN -	RWY 03R/21L CLSD
ESN -	TACAN BAG78 OUT OF SERVICE
GUA -	TACAN UNZ105 OUT OF SERVICE
FFA -	NOT USABLE. IN CARETAKER STATUS
YHZ -	TACAN UAW38 OUT OF SERVICE
YQX -	TACAN YQX74 DME ONLY
YYR -	TACAN UYR40 DME ONLY
YYT -	RWY 11/29 CLOSED
YYT -	TACAN UYT23 DME ONLY
YJT -	TACAN YJT78 DME ONLY
BEN -	NOT USABLE. NOT SUPPORTED
IKF -	NOT USABLE. NO AGREEMENT

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

EDW22	ORB 156 – 9/21:53	SKC	7 220/5P7
EDW22	ORB 171 – 10/20:55	SKC	7 220/5P7

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

NO

LEAKING OMS PRPLT BURN:

ALWAYS BURN RETROGRADE

OMS QUANTITIES(%):

L OMS OX = 37.90 R OMS OX = 37.74
FU = 37.97 FU = 37.32

DELTA V AVAILABLE:

OMS	372 FPS
ARCS (TOTAL ABOVE QTY1)	33 FPS
TOTAL IN THE AFT	405 FPS
ARCS (TOTAL ABOVE QTY2)	64 FPS
FRCS (ABOVE QTY 1)	35 FPS
AFT QTY 1	84 %
AFT QTY 2	46 %

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

Good morning, Rex (and Sandy)!

Wonderful job wrapping up the MPLM yesterday! You're in the homestretch now. Today you'll be transferring the remaining return items to the middeck in preparation for hatch closure. Thank you for all your hard work over the last week!

Transfer Status:

- Middeck: 84% complete
- MPLM: 100% complete
- TOTAL: 96% complete

The Transfer List Excel file, FD11_Transfer_List_STS135.xls, locations are:

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

Transfer Notes

- **Transfer Item 9006:** This newly added transfer item is the final item of the Space Shuttle program. It represents the total number of transfer list line items transferred to/from the International Space Station by Space Shuttle crews and Transfer teams over the last 12 years since STS-88.

- **Remaining Middeck Items:** We are showing the following Middeck items incomplete:

  - **Resupply:** 36, 906, 907, 908

  - **Return:** 401, 435.1, 441, 441.1, 441.2, 443.3, 445, 447, 701, 702, 706, 707, 710, 711, 713, 720, 721, 722, 801, 1059, 1060, 1061

FD11 Choreography

- **MPLM Return Items 821 and 822:** Return MPLM PBA and PFE to ISS
- Return 5 MLE bags to middeck
- **Middeck Return Items 710 and 711:** Return EMUs to middeck
- **Middeck Return Items 441, 441.1, and 441.2:** Tear down MPLM BPSMU hardware and stow for return
- **Middeck Return Items 702 and 713:** Transfer blood and saliva samples to middeck
- **Middeck Return Items 706 and 707:** Pack and transfer double coldbags to middeck
- **Middeck Return Item 722:** Transfer SSC13 back to ISS
- **Middeck Return Item 721:** Transfer Spider Hab to middeck
- **Middeck Return Item 435.1:** Tear down and transfer SSCR A31p (router) to middeck

Please incorporate uplink pages as follows (we've listed the updates in the order they printed out for you):

MIDDECK TRANSFER LIST BOOK

In the Middeck Transfer List **RESUPPLY** tab
Add the following page:
Resupply 10

In the Middeck Transfer List **RETURN** tab
Replace the following page:
Return 12

It has been absolutely wonderful working with you these past 9 days!

- STS-135 Transfer Team

LiOH CHANGEOUT

(4 Crewmembers/Single Shift/ FD 11-17)

FLIGHT DAY	POS A	POS B	CK CMPLT
MID FD11	STS-132 42*	STS-133 ___	Hatch Close
PRE FD11	"	"	
POST FD12	STS-133 ___	"	Undocking
PRE FD12	"	STS-133 ___	
POST FD13	STS-133 ___	"	
PRE FD13	"	STS-133 ___	
POST FD14	STS-133 ___	"	EOM
PRE FD14	"	6	
POST FD15	7	"	EOM +1
PRE FD15	"	8	
POST FD16	9	"	EOM +2
PRE FD16	"	10	
POST FD17	11	"	EOM +3

* Re-bag and seal LiOH cans w/ Gray Tape and stow
(Location of canisters below)

NOTE

This card is specifically used for the STS-135 mission with the Orbiter conducting Single shift operations with a crew size of 4.

LiOH CANISTER STOWAGE LOCATIONS

Entry Stowage Locations

Orbiter:

MD52M (LiOH Box): STS-135 Cans 1-11
STS-132 Can 42
STS-133 Cans 8-13
STS-134 Cans 1-6 (Used)

ISS:

STS-135 Cans 12-31
STS-133 Cans 14-18
STS-134 Cans 11-22

28-0556 (MSG 092) A/L PBA STOWAGE

OBJECTIVE:

Stow PBAs in the A/L's newly approved stowage config.

CAUTION
PBAs are certified to be stowed in the Airlock in a specific fashion. Stowing them in a method other than that described in this procedure will put the PBAs at risk of kickloads and potential leakage, resulting in lack of O2 when needed.

1. SETTING UP A/L STRAP

E/L Ovhd

If Single Strap is not already setup,

- Set up Single Strap across the port side of the airlock as shown in Figure 1

2. REMOVING MPLM PBA

MPLM Fwd Alcove

Remove PBA

3. STOWING PBA IN E/L

Stow PBA on Single Strap.
Refer to Figures 1 and 2.

Stowage Guidelines:

A. Clip PBA to thicker part of Single Strap to help avoid slippage.

B. PBA should be located out of crew translation path

C. PBA should not be located in front of the Port hatch Ovhd handrail

D. Verify QDMA hoses are not tangled or kinked.

E. If more than 1 PBA to be stowed here, a QDMA should be located between each cylinder.

4. PHOTO-DOCUMENT

Photo-document PBAs on Single Strap.

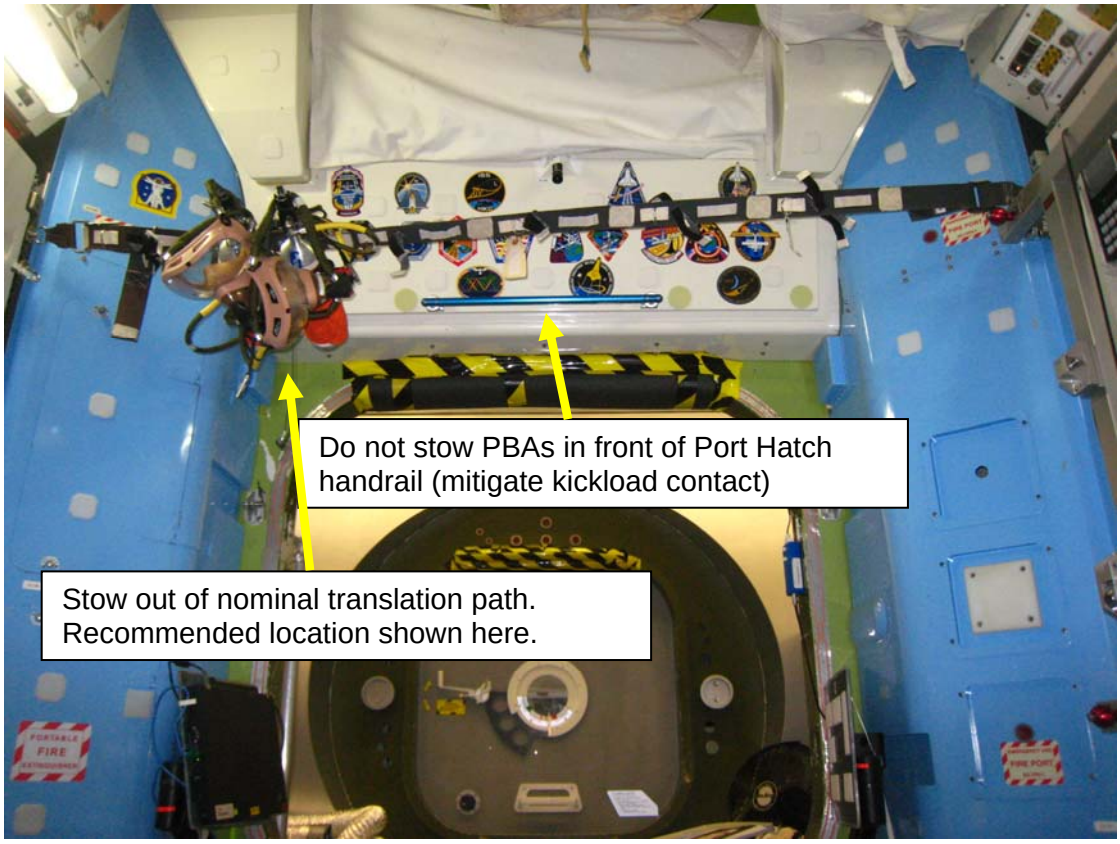


Figure 1. - Single Strap across A/L.

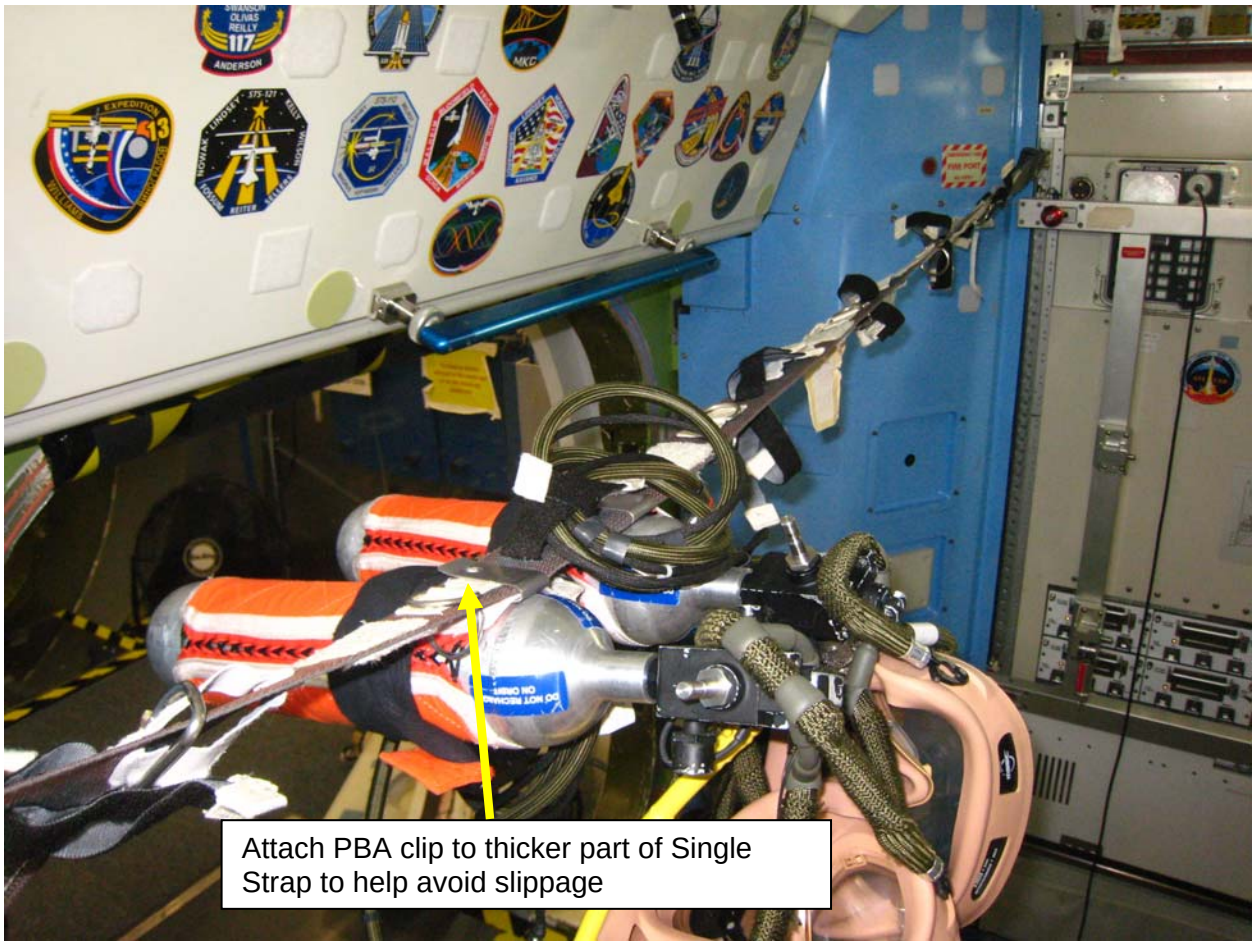


Figure 2. - PBAs located on Single Strap.

MPLM-EGRESS - 199/04:49

#	Location	Item Name	P/N	S/N	B/C	Notes
Type: Restow						
1	**Ref. ULF7 Transfer List Item #822**	PFE	683-10050-1	00009		NOD1P2-14: PEP LOCKER, S/N NOD1P2

MPLM/N2-VEST-DEMATE - 199/05:24

#	Location	Item Name	P/N	S/N	B/C	Notes
Type: Standard						
1	**NOD2O1 or NOD2S1**	CBM Center Disk Cover	683-14575			Temp stowed on GMT 192
2		PTCS MPLM Thermal Blanket	3110P371-403			
3	**NOD2D2** MPLM VOK, 1.0 CTB 1267	Ziplock: "Node 2 IMV Cap"				
4		IMV Cap	683-15016-6			
5		Ziplock: "MPLM IMV Cap"				
6		IMV Cap	683-15016-6			
7		MPLM Power Feedthrough Cap	NATC-RPC-N-25			
8		MPLM Power Jumper Cap	NATC-PPC-N-25			
9		1553B, LB-A Jumper Caps [QTY: 2]	NATC-PPC-N-25			
10		1553B, LB-B Jumper Caps [QTY: 2]	NATC-PPC-N-25			
11		1553B, LB-A Feedthrough Terminator	1F46388			
12		1553B, LB-B Feedthrough Terminator	1F46388			

13	**Ref ULF7 Transfer List Item #44**	IMV O-Ring Kit				
14		Braycote	601-EF			
15		Bore O-Ring [QTY: 1]	2-248S0604			Gather 1 of 2 new Bore O-Rings for Node 2 Deck IMV Cap
16		Face O-Ring [QTY: 1]	2-255S0604			Gather 1 of 2 new Face O-Rings for Node 2 Deck IMV Cap
17	**NOD1D4_G2** Drawer 2	(10-50 in-lbs) Trq Wrench, 1/4" Drive	SEG33112395-301	M234492		
18	**MPLM Tool Page**	1/4" to 3/8" Adapter	SEG33117595-303			
19		Ratchet, 1/4" Drive	SKG33117562-939			
20		7/16" Deep Socket, 1/4" Drive	SKG33117562-681			
21		#6 Long Torq Driver, 3/8" Drive	SKG33117562-332			
22		WIRE CUTTERS	184CCP			
23		Static Wrist Tether	SKG33117562-335			
24	**NOD2O1 or Crew Preference** 1.0 CTB: Ziplock Pantry, S/N 1104, B/C 004098J	Ziplock [QTY:1]				Gathered for restow of Used O-Rings

Type: Restow						
25	**NOD2O4 Behind Closeout Panel 01**	Radial Port Closeout	683-60461-11			Closeout panel will need to be removed to access stowage area.
26		MPLM Vestibule Outfitting Kit (VOK) CTB 1267:				
27		Node 2 - MPLM 1553B LB-A (W6001)	1F46380-1			
28		Node 2 - MPLM 1553B LB-B (W6002)	1F46382-1			
29		IMV Supply Duct Jumper	683-13870-16			
30		Ziplock				
31		Used 2-161S0604-70 [QTY: 2]	2-161S0604-70			
32		IMV O-Ring Kit				
33		Braycote	601-EF			

MPLM/N2-VEST-DEPRESS - 199/06:54

#	Location	Item Name	P/N	S/N	B/C	Notes
Type: Standard						
1	**NOD1P4_A2** 1.0 CTB: ISA and VAJ CTB, S/N 1256, B/C 010592J	VAJ-83-1 35ft	683-17111-2		00002676J	
2		VAJ-78-1 5ft	683-17111-1		00002677J	Alternate location: NOD2_Deployed
3		MPEV Internal Sampling Adapter	97M55830-1	2	000002M	
4		ISA Scopemeter Pressure Probe	1525,760MMHGA/30PSIA	004003539494	000010M	
5		Multimeter	87		00072531K	Sleepy
Type: Restow						
6	**NOD1P4_A2** 1.0 CTB: ISA and VAJ CTB, S/N 1256, B/C 010592J	VAJ-83-1 35ft	683-17111-2		00002676J	
7		VAJ-78-1 5ft	683-17111-1		00002677J	
8		MPEV Internal Sampling Adapter	97M55830-1	2	000002M	
9		ISA Scopemeter Pressure Probe	1525,760MMHGA/30PSIA	004003539494	000010M	
10		Multimeter Kit	10118-10018-04	1017		
11		Multimeter	87		00072531K	Sleepy

O2 P/B TEARDOWN - 199/07:34

#	Location	Item Name	P/N	S/N	B/C	Notes
Type: Standard						
1	**Crew Preference**	Flashlight				
2		Earplugs				
3	**LAB1P5_C1**	Clean Room Vinyl Tape	3M/1251			
4	**NOD1D4_G2** Drawer 2	5/32" Hex Head, 1/4" Drive	SKG33117562-742			
5		Driver Handle, 1/4" Drive	SKG33117562-941			
6	**NOD1D4_G2** Drawer 3	Inspection Mirror	SKG33117562-923			
7	**NOD1O2**	AL1OA2 Closeout Panel				
8	**NOD1O4_C1** 0.5 CTB: Rubber Gloves, S/N 1159, B/C 006608J	Clean Room Gloves	SEG33116979-301			
9	**NOD1P4_A2** 1.0 CTB: ISA and VAJ CTB, S/N 1256, B/C 010592J	Teflon Bags	LB602:0404		00131043K	
Type: Restow						
10	**NOD1P4_D** In-Flight Stowage Restraint Bag	G02 Transfer Flex Hose Assy	V857-643003-002	AA0873793	002668-1J	

HATCH CLOSE - 199/13:34

#	Location	Item Name	P/N	S/N	B/C	Notes
Type: Standard						
1	**NOD2D0** Deployed near Fwd Hatch	Hatch Enclosure Assembly	683-60425			
2	**Temp Stowed in NOD2D0** Docking Mechanism Accessory Kit, P/N 33У.9962.003	APAS Hatch Tool (Ручка)	11Ф732.Г1021-ОА			APAS Hatch Tool
3		Cleaning Pads	33У.9938.002			
4		1 1/2 Inch Wrench	528-20942-1			Open End Wrench
5		Standoff Cover Bag Assy	SEM39125998-301			
6		Target Base Cover Assy	SEM39125997-301			
7	**NOD1D4_G2** Drawer 1	10" Long Adjustable Wrench	SKG33117562-913			
8	**NOD1D4_G2** Drawer 2	3/32" Hex Head, 1/4" Drive	SKG33117562-738			
9		(5-35 in-lbs) Trq Driver, 1/4" Drive	SEG33117289-301	M204715		
Type: Restow						
10	**NOD2D0** Docking Mechanism Accessory Kit, P/N 33У.9962.003	Target Base Cover Assy	SEM39125997-301			Docking Target Base Plate Cover
11		Standoff Cover Bag Assy	SEM39125998-301			Docking Target Standoff Cross Bag
12		Hatch Cover	33У.9936.021			APAS Hatch Cover