STS-123 / 1J / A

FD 15 Execute Package

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137	19 - 21	FD15 Transfer Message **(pdf)**
138	22 - 23	Middeck Bag Layouts **(pdf)**
139	24	FD15 Water Notes **(pdf)**
136	---	FD14 MMT Summary **(pdf - Electronic Only)**

Approved by FAO: *Telisha M. Harris*

Last Updated: Mar 24 2008 2:39PM GMT
JEDI *(**J**oint **E**xecute package **D**evelopment and **I**ntegration), v2.04.0003*

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135	FD15 Mission Summary
136	FD14 MMT Summary
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139	FD15 Water Notes

1. Exercise Constraints

   A. The generic exercise constraints that apply to the entire docked timeframe are listed in the table below.

Exercise Constraints Table A: Entire Docked Timeframe

Exercise Constraints
RED limited to 3 sec (squats and heel raises) and 2 sec (situps) between repetitions
HC-1 limited to 3 sec (torso bending and rowing) and 2 sec (hammer throw and forearm bending) between repetitions
Use of theraband or any other exercise band while exercising on Shuttle Ergometer is prohibited, except during EVA prebreathe, and always on CEVIS
Use of ISS hard-mounted exercise equipment during 1-jet PRCS attitude control and reboost is prohibited

   B. There are no additional exercise constraints for any of the activities on FD15.

2. FCS Checkout

   Later today we will be uplinking some deltas to the FCS CHECKOUT procedure. The changes include the addition of an OPS 3 GPS test and reapplication of the L5L Fuel Injector Temp Limit Update GMEM after returning to OPS 2.

   We'll resend MSG 7 (the GMEM procedure). This message should be kept after FCS CHECKOUT in the event that 6 of 6 verniers are desired in a wave-off situation.

3. Group B PWRDN

   During the PRIORITY PWRDN GRP B after undocking, IMU 2 will be taken to STANDBY. We're swapping IMU 1 (currently in STANDBY) and IMU 2 to get some run time on IMU 1 prior to Entry; all IMUs are performing well.

4. Middeck Bag Layouts

Msg 138 has updated stowage layouts for bags C and D. The bag C layout change is an update to what we sent you on FD 13 and was driven by the need to return the failed MWS components. The bag D layout is an update to what we sent you on FD07. The flexible hose assembly is no longer being returned and in its place we are bringing home the BBA (Item #906).

The 5 MLE bags should be installed for return per the Middeck Descent Locker Layout that we uplinked on FD13.

5. MRK Personal Fans-Return to ISS

As a reminder, you will need to return the ISS MRKs and batteries you borrowed on FD10 to ISS. These fans are required during the stage and must be returned prior to hatch closure. Report when the transfer is complete and give the serial numbers of fans used to MCC.

6. O2 Teardown Procedure Update

Replace Step 6.2 and 6.3 of <u>JOINT OPS: 3.122 PREBREATHE USING SHUTTLE O2 TEARDOWN</u> with the following actions:

6.2 Close GO2 Transfer Flex Hose Assy straight end QD.

GO2 Transfer Flex Hose Assy ←| → Oxygen Recharge QD

Inspect both QDs for debris.
Install cap on Oxygen Recharge QD.
Install plug on GO2 Transfer Flex Hose Assy.

6.3 Close GO2 Transfer Flex Hose Assy bent-end QD.

GO2 Transfer Flex Hose Assy ←| → GO2 Xfer Panel QD

Inspect both QDs for debris.
Install cap on GO2 Xfer Panel QD.
Install plug on GO2 Transfer Flex Hose Assy QD.

7. Hardware C&W for PCS Activation

After configuring PCS 2, the lower limits of the following parameters should be raised to the nominal values:

R13U	PARAMETER	C/W CH	LOWER LIMIT
	CABIN PRESS	04	3.40 V /13.62 psia
	PPO2A	34	2.70 V / 2.70 psia
	PPO2B	44	2.70 V / 2.70 psia

Notify MCC when H/W C&W limits have been updated. MCC will TMBU associated S/W limits.

8. Leo's Outlook

Leo, please use the MS6 account for Outlook.

9. P/TV05 ISS Internal Ops

We understand that Peggy performed most of the P/TV05 ISS INTERNAL OPS, DEACT STEP 2 (PTV C/L FS, page 1-39) yesterday. After performing deactivation of the remaining items per the time line call out at MET 013:14:15 for Foreman, please let MCC know of any changes to the planned stowage and please verify that both of the BPSMU audio cables (4ft and 22 ft) are stowed on ISS.

10. REPLACE PAGES 2-52, 2-54, 2-56, 3-162 THROUGH 3-171.

No Exercise, period !
(RIGEX OPS)

03/24/08 09:28:55 **REPLANNED**

GMT 03/24/08 (084) 07 08 09 10 11 12 13 14 15 16 17 18

MET β=53 Day 013 013/00 01 02 03 04 05 06 07 08 09 10 11 12

		FD14		FD15	
STS-123	CDR GORIE	*PRE SLEEP	SLEEP	POST SLEEP	N2-I
STS-123	PLT JOHNSON	PRE SLEEP*	SLEEP	SLEEP / POST SLEEP	
STS-123	MS1 BEHNKEN	PRE SLEEP	SLEEP	SLEEP / POST SLEEP	
STS-123	MS2 FOREMAN	PRE SLEEP	SLEEP	SLEEP / POST SLEEP	
STS-123	MS3 DOI	PRE SLEEP — RIGEX OPS —	SLEEP	POST SLEEP	RIGX* / POST SLEEP
STS-123	MS4 LINNEHAN	PRE SLEEP	SLEEP	POST SLEEP	
DN	FE-2 EYHARTS	PS-ISS / PMC / PS ISS	SLEEP (8.5)	POST SLEEP	PREP WORK / DCB FAM
EXP	ISS CDR WHITSON	PRE SLEEP-ISS	SLEEP (8.5)	POST SLEEP	PREP WORK / RSU^ / DCB FAM
EXP	FE-1 MALENCHENKO	PS ISS / TEX*	SLEEP (8.5)	TEX* / POST SLEEP	PREP WORK / РОДНИК БВ2 TRANSF
UP	FE-2 EXP16 REISMAN	PRE SLEEP-ISS	SLEEP (8.5)	SALV / POST SLEEP	PREP WORK / IMMN* / IWIS

STS

DAY/NIGHT

ORBIT 206 207 208 209 210 211 212 213 214

TDRS W -171 E -46 Z -275

ORB ATT BIAS -XLV -ZVV

NOTES

*LEB TOWEL CHECK
*HUM SEP CHECK
*20 PUMP OFF
*20 PUMP ON
*RIGEX DEACT
^STOW
*STOW

03/24/08 09:28:55 **REPLANNED**

GMT 03/24/08 (084) 19 20 21 22 23 03/25 01 02 03 04 05 06

MET β=53 Day 013 12 13 14 15 16 17 18 19 20 21 22 23 014/00

FD15

STS-123	CDR GORIE	POST SLEEP; EXERCISE; N2-T; SHUTTLE 02 T/D; FARE WELL; OPCU*; GRPB PWRUP; H/O; HATCH LEAK CHECK; MNVR UNDK; UNDOCK OPS; FLYAROUND & SEP; Δ SEP1 Δ SEP2; MNVR SIMO; SPLY INIT; GRPB PWRDN; SPLY TERM; RMS PWRDN; COMM1; GAP-T; PMC OCA; PRE SLEEP; -ZLV -XVV; PRE SLEEP
STS-123	PLT JOHNSON	POST SLEEP; FES*; EXERCISE; FARE WELL; GRPB PWRUP; HATCH LEAK CHECK; PCS CNFG; EQUIP GATHR; UNDOCK OPS; FLYAROUND & SEP; COND T/D; WASTE INIT; GRPB PWRDN; WST-T CND-I; HTR B; PRE SLEEP; IMU; COND TERM; PRE SLEEP*
STS-123	MS1 BEHNKEN	POST SLEEP; UPDAT; EVA XFER TO STS; PCS /PGSC DEACT XFER; FARE WELL; EGRS HATCH CLOSE; SSV-3; SETUP C/L CAMR; UNDOCK OPS; FLYAROUND & SEP; POST UNDK PGSC CNFG; WLES A&C/O; PLBK UNDK OPS; EXERCISE; PRE SLEEP
STS-123	MS2 FOREMAN	POST SLEEP; EVA XFER TO STS; EXERCISE; PTV05 DEACT; FARE WELL; EGRS HATCH CLOSE; LEH^; P/TV 03 S/U; SETUP C/L CAMR; P/TV03 UNDOCK; SSOR DEACT; OIU#; PTV03 DEACT; SSV-D; EMU INSTL; EVA UNPACK & STOW; PST ISS EVA ENT PREP; PRE SLEEP
STS-123	MS3 DOI	POST SLEEP; MRLN; 3DPCU; BATT XFER OPS; XFER BRIEF; FARE WELL; UNDOCK OPS; FLYAROUND & SEP; MCIU^; EXERCISE; RMS PWRDN; PRE SLEEP
STS-123	MS4 LINNEHAN	POST SLEEP; DRACULA; MTX-T; P/TV 08 S/U; PTV08 EXT SRVY; FARE WELL; EXERCISE; UNDOCK OPS; FLYAROUND & SEP; EMU INSTL; EVA UNPACK & STOW; PST ISS EVA ENT PREP; PRE SLEEP
DN	FE-2 EYHARTS	DCB PACK; DCB XFER; HANDOVER; FARE WELL; EXERCISE; FLYAROUND & SEP; EXERCISE; MRLN; PRE SLEEP
EXP	ISS CDR WHITSON	DCB PACK; CEVIS MNT; BPSMU STOW; SHUTTLE 02 T/D; FARE WELL; EGRS HATCH CLOSE; EXERCISE CEVIS; PMA2 DPRS; PS; FAN1 PBA; FAN0 CAP; EXER; PMA2 LK CK INIT; PS; PMA2 LK CK TERM; PS; SLEEP (8.5)
EXP	FE-1 MALENCHENKO	РОДНИК БВ2 TRANSF; TEX-20 EXP INIT; TEX-20-EXP; ♣; FARE WELL; TEX-20 COPY; TEX-20 RMV; СОЖ; PMA2 DEPART CONFIG; VELO+RED; ИП-1 MNT; CTTC; PRE SLEEP-ISS; SLEEP (8.5)
UP	FE-2 EXP16 REISMAN	IWIS; BLOOD S/U; BLOOD DRAW; STOW; VTR CBL; HANDOVER; FARE WELL; TVIS; ELITE CBL RMV; ⊕; UNDK; BKAWY; IMU XFER; ELITE IMU S/U; RWS; PRE SLEEP-ISS; SLEEP (8.5)

UNDOCK*

STS

DAY/NIGHT

ORBIT 214 215 216 217 218 219 220 221 222

TDRS W -171 E -46 Z -275

ORB ATT: BIAS -XLV -ZVV; UNDK/FLYARND; -ZLV +YVV; -ZLV -XVV

NOTES: *ACT; ♣TEX20 DCNCT *OFF; ^VALVE OPEN; ⊕ER5-EXP-VID-CBL-MOVE; #OIU DEACT; ^MCIU FILTER CK; *PWRDN; *HUM SEP CHECK

2-54 ***UNDOCK 13/17:28** FLT PLN/123/FLIGHT

03/24/08 09:28:55 **REPLANNED**

GMT 03/25/08 (085) 07 08 09 10 11 12 13 14 15 16 17 18

MET β=53 Day 014 014/00 01 02 03 04 05 06 07 08 09 10 11 12

STS-123	FD15		FD16					
CDR GORIE	PRE SLEEP	SLEEP	POST SLEEP	OA BURN	-ZLV -XVV	CABIN STOW		
PLT JOHNSON	PRE SLEEP*	SLEEP	SLEEP	POST SLEEP	APU*	OA BURN	FLTR CLEAN	
MS1 BEHNKEN	PRE SLEEP	SLEEP	SALOG	POST SLEEP	DRY	POST SLEEP	CABIN STOW	
MS2 FOREMAN	PRE SLEEP	SLEEP	SALOG	POST SLEEP	DRY	POST SLEEP	CABIN STOW	♣
MS3 DOI	PRE SLEEP	SLEEP	POST SLEEP	MRLN	CABIN STOW			
MS4 LINNEHAN	PRE SLEEP	SLEEP	POST SLEEP	BLOOD	SETUP	DRACULA	DRAC	
MS5 EYHARTS	PRE SLEEP	SLEEP	DRY	SLVA	POST SLEEP	DRY	POST SLEEP	BLOOD DRAW SUBJ

STS									
DAY/NIGHT									
ORBIT	222	223	224	225	226	227	228	229	230
GND		-DFR ·MLA	—WSS —DFR —MLA	—WSS —DFR ·MLA	—DFR				
TDRS W -171 E -46 Z -275									
ORB ATT	-ZLV -XVV							OA	

NOTES

*HUM SEP CHECK

*HEATER ACT ♣BLOOD DRA

STS-123 (FD15)

GMT Date 03/24 (084) | W | TDRSE | Z | DORB 15 | DORB 16 | DORB 1 | ORB 212 | ORB 213 | ORB 214 | MET Day 013 | STS ATI

CDR GORIE | PLT JOHNSON | MS3 DOI | MCC | NOTES

08:00 — 09:00 — 10:00 — 11:00 — 12:00 — 15:00 — 16:00 — 17:00 — 18:00

SLEEP (CDR GORIE)

SLEEP (PLT JOHNSON)

SLEEP (MS3 DOI)

FD15 EZ ACTIVITES
- Check TEPC Status
- OCAC Filter Inspect
- Hard Reboot PGSCs (Except KFX)

FLIGHT SLEEP LOG (ORB OPS, SDBI)

BIAS-XLV-ZVV

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS) (MS3 DOI)

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS) (CDR GORIE)

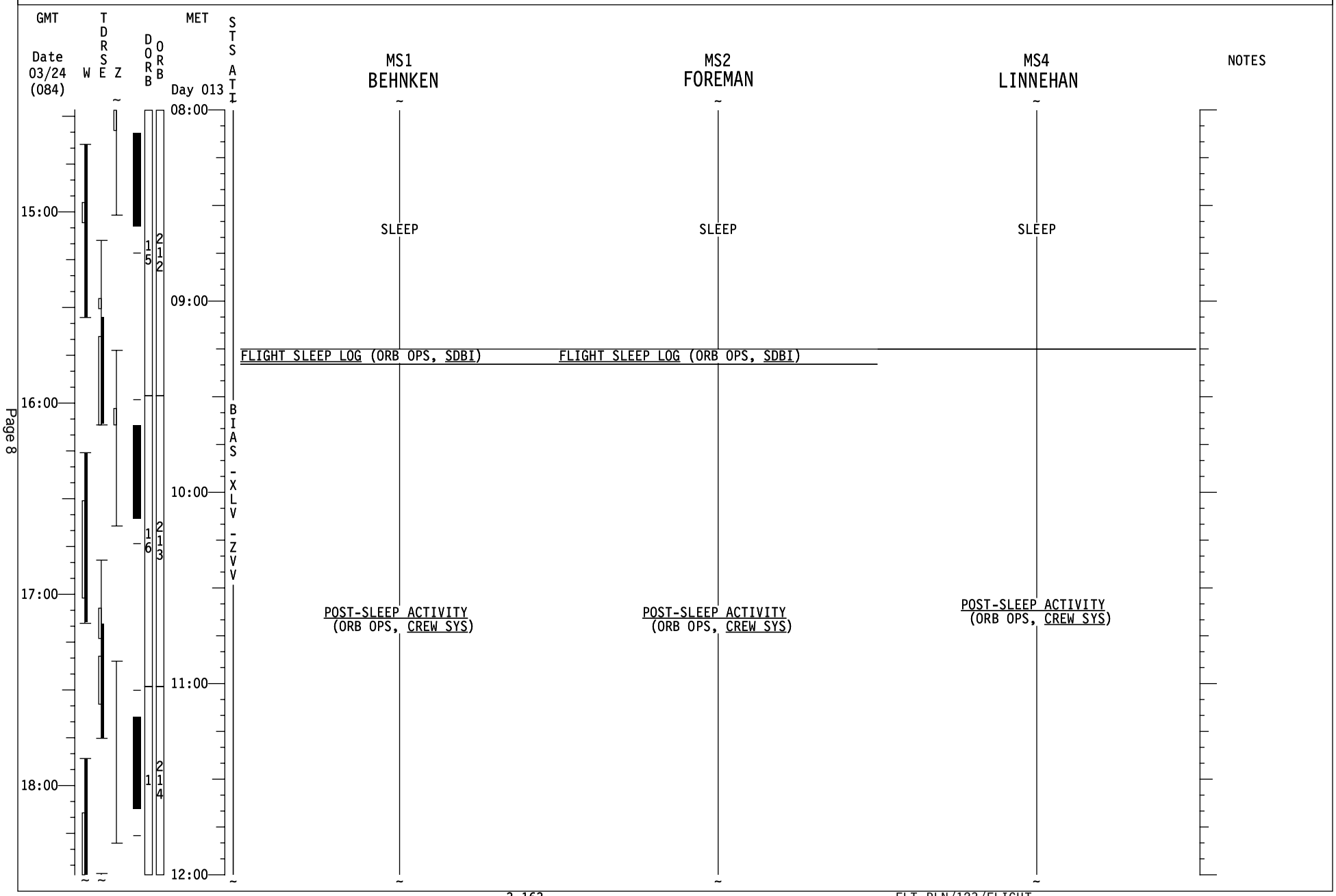
POST-SLEEP ACTIVITY (ORB OPS, CREW SYS) (PLT JOHNSON)

RIGEX DEACT (ASSY OPS, RIGEX)

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS) (MS3 DOI)

N2 RPRS USING PL N2 VLVS Init (ORB OPS, ECLS)
Steps 1, 3-7; MCC will TMBU SM FDA

STS-123 (FD15)


GMT
Date 03/24 (084)
W
TDRSE
Z
DORB
ORB
MET
Day 013
STS ATI
MS1 BEHNKEN
MS2 FOREMAN
MS4 LINNEHAN
NOTES
08:00
09:00
10:00
11:00
12:00
15:00
16:00
17:00
18:00
15
16
1
212
213
214
SLEEP
SLEEP
SLEEP
FLIGHT SLEEP LOG (ORB OPS, SDBI)
FLIGHT SLEEP LOG (ORB OPS, SDBI)
BIAS-XLV-ZVV
POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

STS-123 (FD15)

GMT Date 03/24 (084) | W | TDRSE | Z | DORB | ORB | MET Day 013 | STS ATT | CDR GORIE | PLT JOHNSON | MS3 DOI | MCC | NOTES

12:00

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

√MCC for FES activation
L1 FLASH EVAP CNTLR PRI B - ON

ASSY OPS: MERLIN STATUS CK (CC)

19:00

13:00

EXERCISE

VERIFY 3DPCU RETURN POS'N
Ref. Transfer List: Item 700
& Reference Tab, page REF-1

20:00

BIAS-XLV-ZVV

N2 RPRS USING PL N2 VLVS Term (ORB OPS, ECLS)
Steps 8-13; MCC will TMBU SM FDA

JOINT OPS: 3.122 O2 PREBREATHE
USING SHUTTLE O2 TEARDOWN
Steps 1-7, MCC-H will perform
Steps 2.4 & 5.5
Ref. MSG 134, Item 6

BATTERY TRANSFER OPS
Ref. Transfer List: Item 908

14:00

EXERCISE

TRANSFER BRIEF
Call down status to MCC

21:00

FAREWELL

FAREWELL

FAREWELL

15:00

A15 OPCU1,2 CONV(two) - OFF A
O6 S TRK PWR -Z - ON
PRIORITY PWRUP GRP B
(ORB PKT, PRIOR PWRDN)
Steps 12 (IMU 1),6 (triple G2)
JOINT OPS: 3.110 H/O ATT CONTROL
CMG TA to ORB
JOINT OPS: 4.104 ODS VEST/PMA
DPRS & HATCH LEAK CHECK

O6 S TRK PWR -Z - ON
PRIORITY PWRUP GRP B
(ORB PKT, PRIOR PWRDN)
Steps 12 (IMU 1),6 (triple G2)

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

A R1 MN BUS TIE A - OFF (tb-OFF)
C - OFF (tb-OFF)

22:00

16:00

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STS-123 (FD15)

GMT Date 03/24 (084) | W | TDRSE | Z | DORB | ORB | MET Day 013 | STS ATT

MS1 BEHNKEN	MS2 FOREMAN	MS4 LINNEHAN	MS5/FE-2 EYHARTS	NOTES
POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PODF: MELFI 2.006 1JA SAMPLE TRANSFER TO DOUBLE COLDBAG #1	
TRANSFER UPDATE Ref. Transfer List & MSG 137				
EVA TRANSFER TO STS (EVA, AIRLOCK CONFIG) Ref. Transfer List: Items 705-711	EVA TRANSFER TO STS (EVA, AIRLOCK CONFIG) Ref. Transfer List: Items 705-711	SDBI 1900, INTEGRATED IMMUNE BLOOD CLCT (ORB OPS, SDBI) Perform BLOOD SAMPLE COLLECTION (OPR)		
		EVA SYS: 1.510 METOX REGENERATION (Term)		
POC: 2.303 PCS DEACTIVATION For the PGSC (WLES): Ref. Transfer List: Item 802			DCB XFER Ref. Xfer List Items 703 & 704 Xfer DCBs s/n 1004,1005 to MDDK	
	EXERCISE	P/TV08 EXTERNAL SURVEY (P/TV FS, SCENES)		
		P/TV08 EXTERNAL SURVEY (P/TV FS, SCENES) When SETUP, Step 2 complete, Perform OPS, Item 2 for Columbus, ELM, & Node 2 FWD	HANDOVER	
	P/TV05 ISS INTERNAL OPS (P/TV FS, SCENES) DEACT,Step 2 Ref. MSG 134, Item 9	B On MCC-H GO: Steps 1, 4-16. MCC-H can perform Steps 2-3 after Step 1 is complete. In Step 1, AIRLK FAN A,B (two) - OFF In Step 7, AIRLK FAN A - ON Verify MRKs & batts xferred to ISS prior to Hatch Close.		
FAREWELL	FAREWELL	FAREWELL	FAREWELL	
JOINT OPS: 4.102 SHUTTLE/ISS DUCT REMOVAL & HATCH CLOSING B Ref. MSG 134, Item 5	JOINT OPS: 4.102 SHUTTLE/ISS DUCT REMOVAL & HATCH CLOSING B Ref. MSG 134, Item 5			
	M069M LEH O2 8 vlv - OP	EXERCISE		
	A7 PORT RMS CAMERA - ELBOW P/TV03 UNDOCK (P/TV FS, SCENES) Setup		EXERCISE	

Time scale: 19:00, 20:00, 21:00, 22:00; MET: 12:00, 13:00, 14:00, 15:00, 16:00

STS ATT: BIAS - XLV - ZVV

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STS-123 (FD15)

GMT Date 03/24 (084) | W | TDRSE | Z | DORB | ORB | MET Day 013 | STS ATT

CDR GORIE	PLT JOHNSON	MS3 DOI	MCC	NOTES
JOINT OPS: 4.104 ODS VEST/PMA DPRS & HATCH LEAK CHECK	JOINT OPS: 4.104 ODS VEST/PMA DPRS & HATCH LEAK CHECK			
MNVR (TRK) -XLV +ZVV (UNDOCK) TG=2 BV=5 P=180 Y=0 OM=0 A/AUTO/VERN Init TRK	PCS 1(2) CONFIG(ORB OPS, ECLS) [C] Configure for PCS 2 Ref. MSG 134, Item 7	[C] Avoid WCS use during high N2 flow Expect possible "S66 CAB O2, N2 FLO 2" msg		UPLINK TFL 192
	GATHER DUMP EQUIPMENT Ref. MSG 139			
UNDOCKING AND SEPARATION (RNDZ, UNDOCK/SEP T/L)	UNDOCKING AND SEPARATION (RNDZ, UNDOCK/SEP T/L)	UNDOCKING AND SEPARATION (RNDZ, UNDOCK/SEP T/L)		
UNDOCK 13/17:28				
SEP/FLYAROUND (RNDZ, UNDOCK/SEP T/L)	SEP/FLYAROUND & SEP BURNS (RNDZ, UNDOCK/SEP T/L)	SEP/FLYAROUND & SEP BURNS (RNDZ, UNDOCK/SEP T/L)		UPLINK β21 + Mask Box 20
<SEP 1 (13/18:43)				
<SEP 2 (13/19:11)				
MNVR (TRK) -ZLV +YVV (DUMP) TG=2 BV=3 OM=270 A/AUTO/VERN Init TRK	SHUTTLE CONDENSATE COLLECTION (ORB OPS, ECLS)Perform TEARDOWN Ref. MSG 139	L17 Check MCIU filter screen		UPLINK β21 + Mask
SUPPLY/WASTE WATER DUMP (ORB OPS, ECLS) Init Supply Dump Ref. MSG 139	SUPPLY/WASTE WATER DUMP (ORB OPS, ECLS) Init Waste Dump Ref. MSG 139			UPDATE H2O SPLY DUMP QTY TK A & B
PRIORITY PWRDN GRP B (ORB PKT, PRIOR PWRDN) Steps 5,6(Sngl G2),9,10,12(IMU 2) Ref. MSG 134, Item 3	PRIORITY PWRDN GRP B (ORB PKT, PRIOR PWRDN) Steps 5,6(Sngl G2),9,10,12(IMU 2) Ref. MSG 134, Item 3			

Time scale: 23:00, 00:00, 01:00, 02:00; MET: 16:00, 17:00, 18:00, 19:00, 20:00

STS ATT: UNDK/FLYARND; -ZLV +YVV

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STS-123 (FD15)

GMT Date 03/24 (084) | W | TDRSE | Z | DORB | ORB | MET Day 013 | STS ATT | MS1 BEHNKEN | MS2 FOREMAN | MS4 LINNEHAN | MS5/FE-2 EYHARTS | NOTES

16:00 — P/TV03 UNDOCK (P/TV FS, SCENES) Setup

SSV OUTRATE - 3

C/L CAMR INSTALL (PHOTO/TV, C/L CAMR) Perform step 1 only

C/L CAMR INSTALL (PHOTO/TV, C/L CAMR) Perform step 1 only

EXERCISE

23:00 — 4 217

UNDOCKING AND SEPARATION (RNDZ, UNDOCK/SEP T/L)

P/TV03 UNDOCK (P/TV FS, SCENES) Ops

UNDOCKING AND SEPARATION (RNDZ, UNDOCK/SEP T/L)

17:00

UNDK/FLYARND

00:00 — 5 218

SEP/FLYAROUND & SEP BURNS (RNDZ, UNDOCK/SEP T/L)

SEP/FLYAROUND & SEP BURNS (RNDZ, UNDOCK/SEP T/L)

SEP/FLYAROUND & SEP BURNS (RNDZ, UNDOCK/SEP T/L)

18:00

01:00

19:00

6 219

POST UNDOCK PGSC CONFIG Configure PGSCs as reqd

JOINT OPS: 6.106 SSOR DEACTIVATION

-ZLV +YVVI

02:00

SSP1 OIU PWR - OFF (tb-bp) Expect S62 BCE BYP PSP 1

EXERCISE

P/TV03 UNDOCK (P/TV FS, SCENES) Deact Perform Step 2

WLES ACTIVATION & CHECK OUT (ORB OPS, WLE SENSORS) Steps 4,5,7,10; Use STS-3(KFX) as prime & STS-6(RPOP2) for b/u

20:00

STS-123 (FD15)

GMT Date 03/25 (085) | W | TDRSE | Z | DORB | ORB | MET Day 013 | STS ATT

CDR GORIE	PLT JOHNSON	MS3 DOI	MCC	NOTES
SUPPLY/WASTE WATER DUMP (ORB OPS, ECLS) Terminate Supply Dump	SUPPLY/WASTE WATER DUMP(ORB OPS, ECLS) Terminate Waste Dump CWC OVERBOARD DUMP(ORB OPS, ECLS) Initiate Condensate Dump Ref. MSG 139	EXERCISE		
RMS PWRDN (PDRS, RMS PWRDN) Stow PORT & STBD MPMs		RMS PWRDN (PDRS, RMS PWRDN) Stow PORT & STBD MPMs		
COMM STRING 1 C/O (PART A) (ORB OPS, COMM/INST)	HTR RCNFG-CNFG B(ORB OPS, EPS) D			
GAP TERMINATION (ASSY OPS, GAP) GAPs 1,2,3,12 Notify MCC in Step 15 ASAP	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)			
NETMEETING VIDEO CONFERENCING (ORB OPS,PGSC) Private Medical Conference KU TDRE (21:44 - 22:40) E	IMU STAR OF OPPTY ALIGN (ORB OPS, GNC)			OCA-PMC
PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	CWC OVERBOARD DUMP (ORB OPS, ECLS) Terminate Dump			
MNVR (TRK) -ZLV -XVV TG=2 BV=3 OM=0 A/AUTO/VERN Init TRK				
		PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)		
PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS) √ HUM SEP for H2O Accumulation			

D No action req'd for the R POD HTRS. Please leave the Right Pod in its current config (B AUTO).

E Omit VLHS item in Step 1
Omit Step 3
Use A/G2 for Audio and inform MCC which PGSC will be used.

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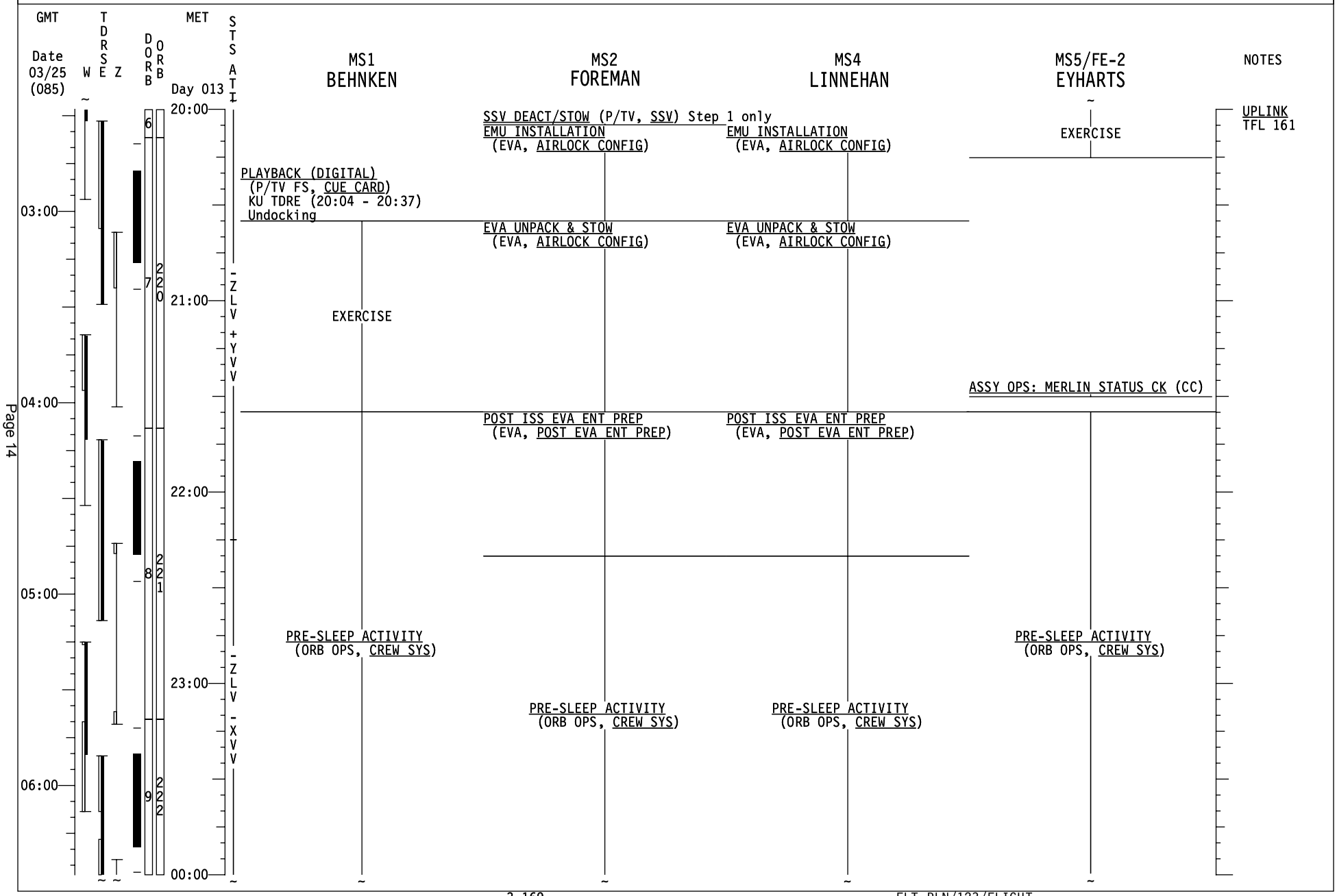
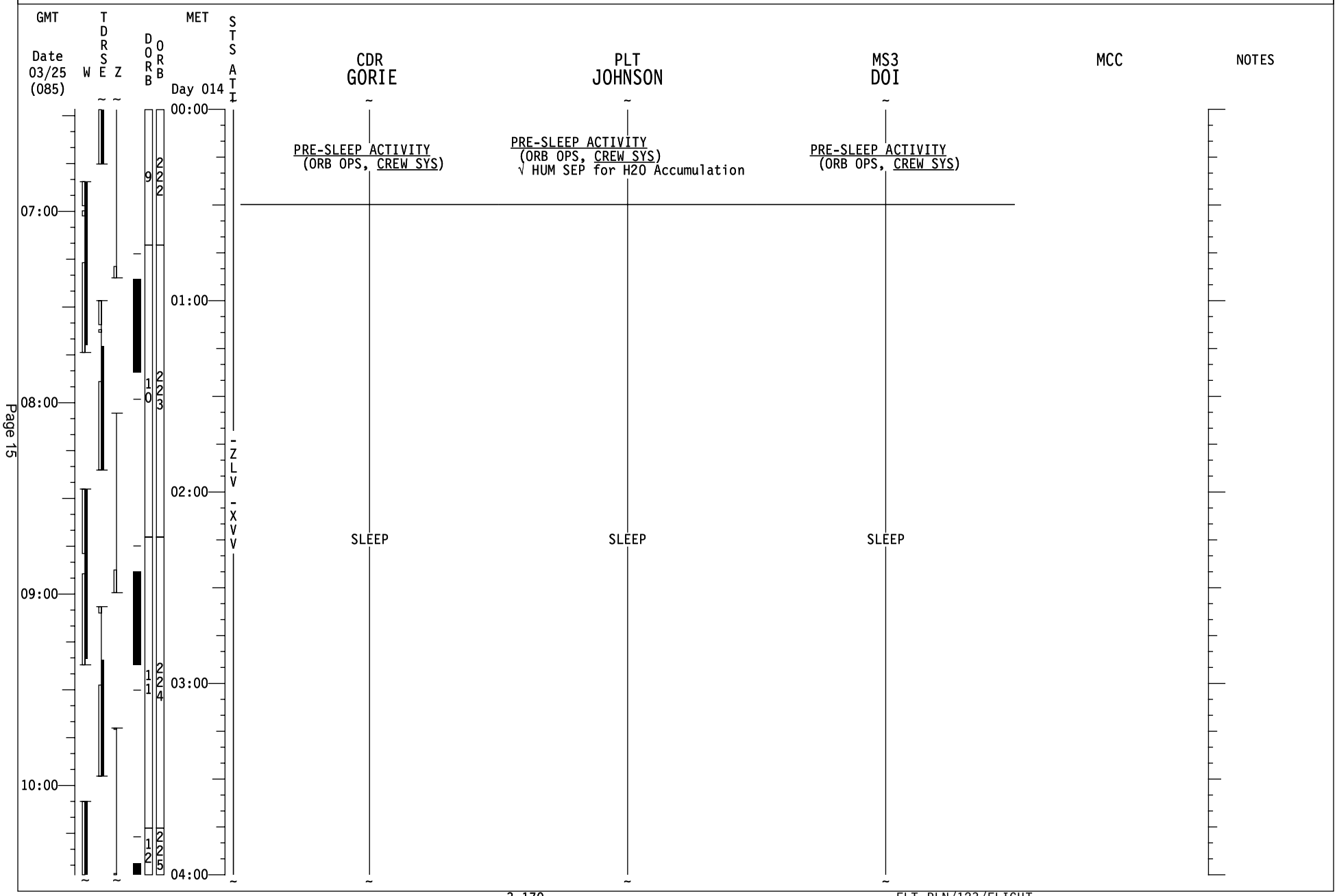
3-168 FLT PLN/123/FLIGHT

STS-123 (FD15)


GMT
Date 03/25 (085)
W
TDRSE
Z
DORB
ORB
MET
Day 013
STS ATT
MS1 BEHNKEN
MS2 FOREMAN
MS4 LINNEHAN
MS5/FE-2 EYHARTS
NOTES
20:00
21:00
22:00
23:00
00:00
03:00
04:00
05:00
06:00
6
7
8
9
220
221
222
-ZLV +YVV
-ZLV -XVV
SSV DEACT/STOW (P/TV, SSV) Step 1 only
EMU INSTALLATION (EVA, AIRLOCK CONFIG)
EMU INSTALLATION (EVA, AIRLOCK CONFIG)
EXERCISE
UPLINK TFL 161
PLAYBACK (DIGITAL) (P/TV FS, CUE CARD) KU TDRE (20:04 - 20:37) Undocking
EVA UNPACK & STOW (EVA, AIRLOCK CONFIG)
EVA UNPACK & STOW (EVA, AIRLOCK CONFIG)
EXERCISE
ASSY OPS: MERLIN STATUS CK (CC)
POST ISS EVA ENT PREP (EVA, POST EVA ENT PREP)
POST ISS EVA ENT PREP (EVA, POST EVA ENT PREP)
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)

STS-123 (FD15)


GMT
Date 03/25 (085)
W
TDRSE
Z
DORB
ORB
MET
Day 014
STS ATT
CDR GORIE
PLT JOHNSON
MS3 DOI
MCC
NOTES
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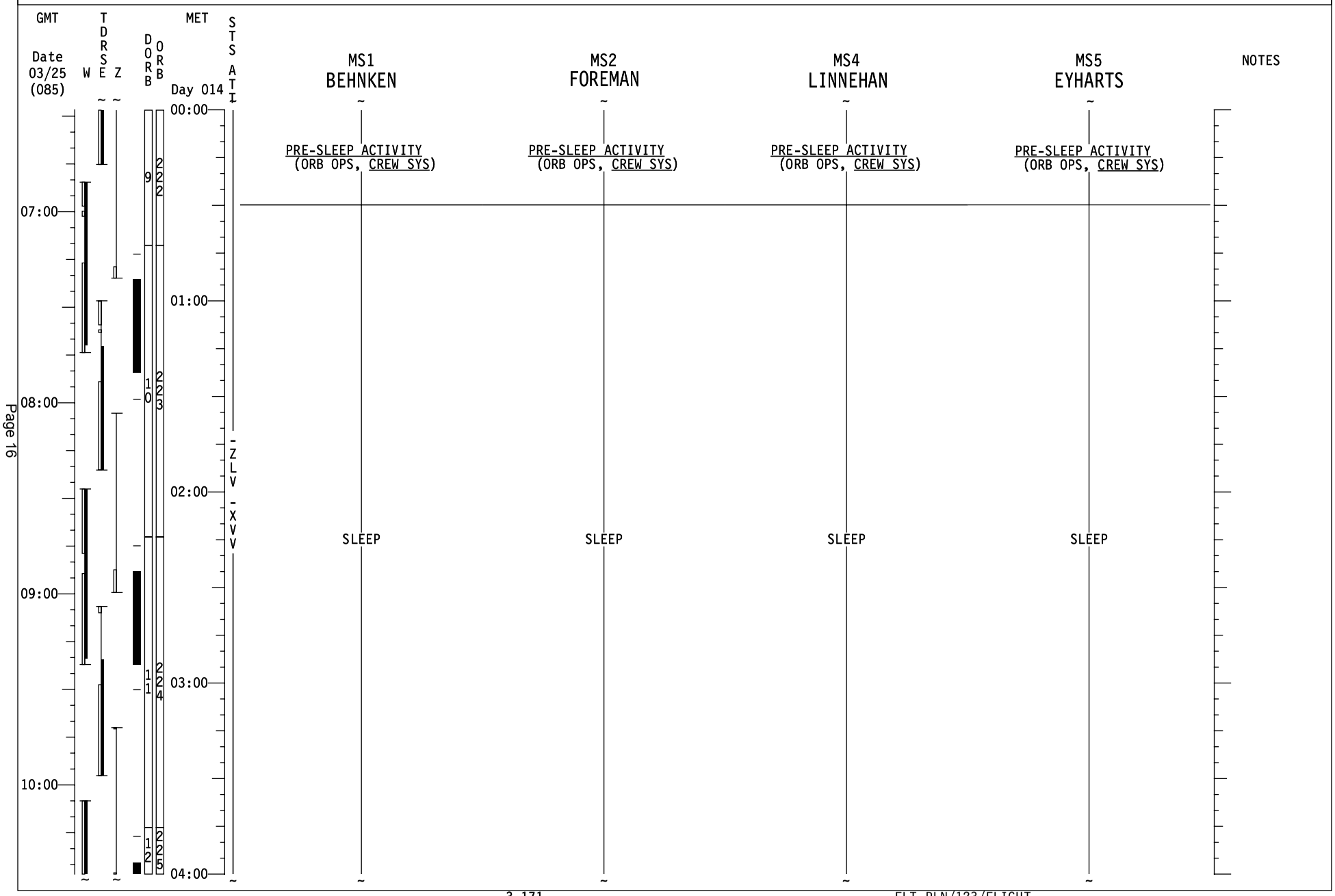
222
223
224
225
-ZLV
-XVV
PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)
PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS) √ HUM SEP for H2O Accumulation
PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)
SLEEP
SLEEP
SLEEP

STS-123 (FD15)


GMT
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225
-ZLV
-XVV
MS1 BEHNKEN
MS2 FOREMAN
MS4 LINNEHAN
MS5 EYHARTS
PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)
SLEEP
NOTES

All good rides come to an end, and you are out of quarters. There's an ATV queued up in the traffic pattern behind you waiting for an approach clearance, and the juice bar in the SM has announced last call. Time to weigh anchor and motor your tails on out of there. You aboard the good ship Endeavour, have left the ISS with food, air, water and supplies, an inspection boom for STS-124, a new robot, and a whole extra module -- all in all, not too shabby. Why don't you take a few victory laps before you bring her into the pits.

YOUR CURRENT ORBIT IS: 186 X 180 NM

NOTAMS:

EDW – LAKEBED RUNWAY 15/33 ELS ONLY. OTHER LAKEBED RWYS RED.
NOR – LAKEBED RUNWAYS GREEN.
HAW – RWY 31 CLOSED. RWY 13 TODA 8,994'.
WAK – CLOSED. NOT USABLE.
IKF – NO AGREEMENT. NOT USABLE.
BEN – POLITICALLY NOT RECOMMENDED/NOT SUPPORTED.
ZZA – FIRST 600M (~2,000') OF RWY 30L NOT AVAILABLE. 10,200' REMAINING.
GUA – RWY 06L/24R NOT USABLE – CONSTRUCTION.

NEXT 2 PLS OPPORTUNITIES:

EDW22 ORB 219 – 13/19:28 (SCT 250 230/10P18)
EDW22 ORB 235 – 14/19:49 (SCT 250 240/12P20)

OMS TANK FAIL CAPABILITY:

L OMS FAIL: NO R OMS FAIL: NO

LEAKING OMS PRPLT BURN:

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

OMS QUANTITIES(%)

L OMS OX = 32.4 R OMS OX = 32.2
FU = 31.9 FU = 32.0

IF PLS REQ'D PRIOR TO NOMINAL UNDOCK

DELTA V AVAILABLE:

OMS	337 FPS
ARCS (TOTAL ABOVE QTY 1)	42 FPS
TOTAL IN THE AFT	379 FPS
ARCS (TOTAL ABOVE QTY 2)	75 FPS
FRCS (ABOVE QTY 1)	16 FPS
AFT QTY 1	76 %
AFT QTY 2	39 %

POST NOMINAL UNDOCK AND SEP

DELTA V AVAILABLE:

OMS	337 FPS
ARCS (TOTAL ABOVE QTY 1)	39 FPS
TOTAL IN THE AFT	376 FPS
ARCS (TOTAL ABOVE QTY 2)	72 FPS
FRCS (ABOVE QTY 1)	0 FPS
AFT QTY 1	66 %
AFT QTY 2	28 %

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

END OF PAGE 2 OF 2, MSG 135

Good Morning Takao and Bob!

And a special bonjour to you Leo – welcome to Endeavour!

You're just about done! It's been a pleasure working with you. We look forward to your last transfer brief and verification that transfer is complete. All remaining transfer items are listed below in the Choreography.

Because you are undocking today, please call us if you run into any problems while transferring items this morning. There is very little time after the Transfer Brief to make any changes or provide any new information for you.

Multimeter Battery
Takao, since the returning multimeter kit does not contain a spare 9V Battery, we've scheduled time for you to retrieve one from ISS. This has been added to the Transfer List as item 908.

Return Orientation
Today Takao is scheduled to verify the return orientation of item 700 (3DPCU). We'd also like you to verify the orientation of another transfer item. Please ensure the return orientation of item 907 is as follows: "LEO ashi kara kudasi".

Bag Swap
As a reminder, some of your 5MLE bags have swapped locations for return. Reference the Middeck Locker Descent Layout (Page L-2) for where to secure the bags during tomorrow's cabin stow activity.

For STS, the Transfer List Excel file, FD15_TransferList_STS123.xls, is located on the KFX machine in **C:\OCA-up\transfer**.

For ISS, the Transfer List Excel file, FD15_TransferList_STS123.xls, is located in **K:\OCA-up\transfer**.

Choreography
Complete remaining transfers:

- Resupply:
  - Item 802 (Bob): A31p Laptop [STS-7 PGSC]
- Return:
  - Items 606 – 606.3 (Leo): Verify crew pref CTB contains dosimeters
  - Items 703 & 704 (Leo): Double Coldbags
  - Item 721 (Leo). Saliva Collection Kit
  - Item 722 (Garrett): Saliva Collection Pouch
  - Item 723 (Garrett): Blood Sample Sleeve
  - Item 725 (Leo): TVIS PCMCIA card s/n 1028
  - Item 904: ESA Media Kit
  - Item 905: ERB Hard Disks
  - Item 907 (Leo): LEO (high priority!)
  - Item 908 (Doi-san): 9V Battery

Crewmembers Scheduled for Generic Xfer Ops
None

Please update the Transfer List as follows:

In **LAYOUTS** tab (from MSG 138):
Replace Page L-4
Replace Page L-10

In **RETURN** tab:
Replace Return Page 15

We appreciate our International Partner's input to the Transfer List. Without them, we would have forgotten the largest transfer items:

X	☑	4		804	JLP	1	Endeavour		installed at NOD2O2	18492
X	☑	3		805	SPDM [aka: Mr. Dextre]	1	Endeavour [SLP]		LAB PDGF	3363

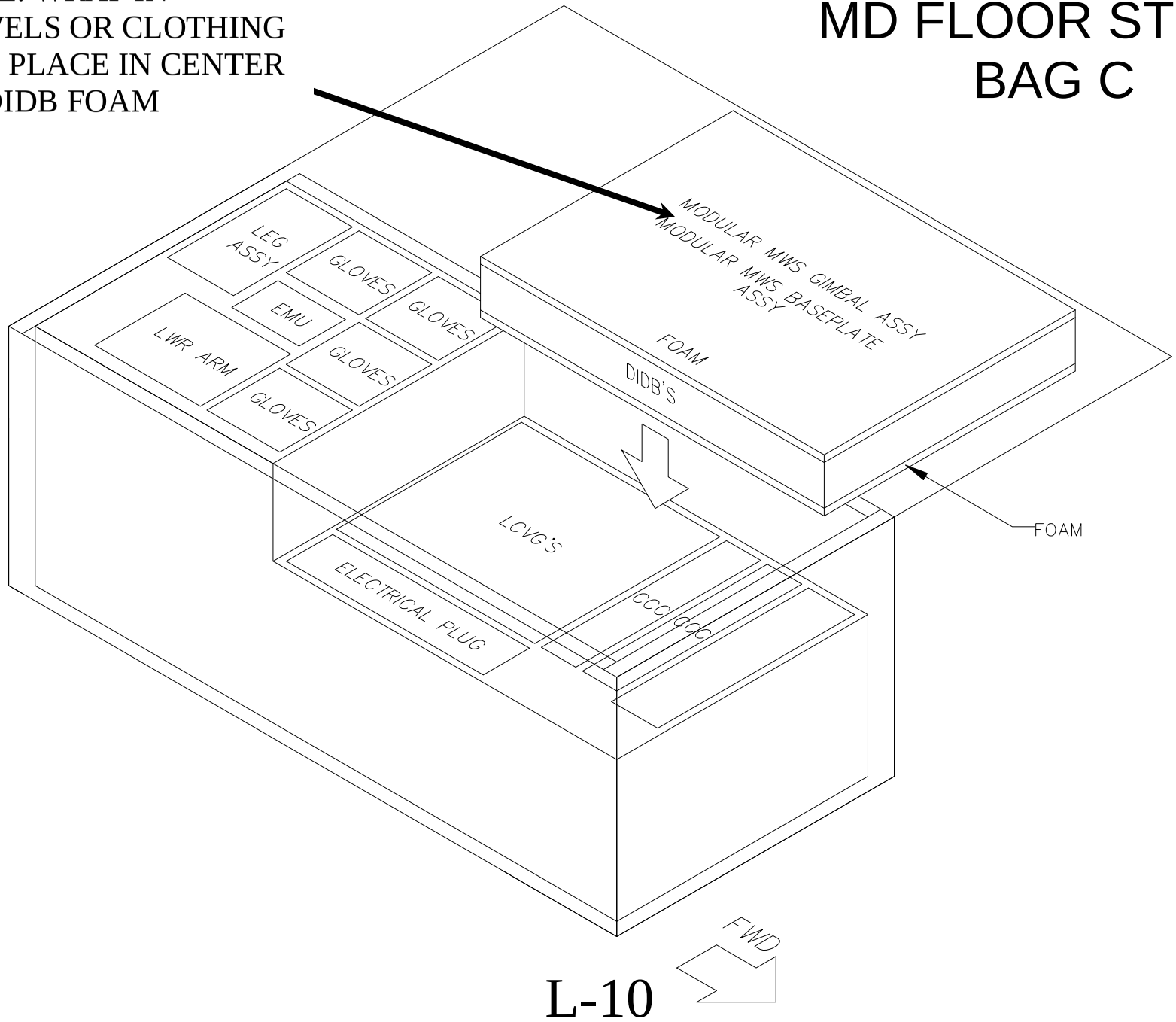
Thanks again for all your great work. Call us with any questions.
- The Transfer Team

STS-123/1JA Return Transfer List

CHNG	☑	FD	Initials	Item #	Item Name	Qty	Initial Stowage	Temp Stowage	Stowage at Undock	Wt (lbs)	PROCEDURES/**Constraints**/ **Comments
	☑	14		906	Baseplate Ballast Assembly (BBA) [s/n: 0073] [b/c: 00002617M]	1	LAB1O5_G		MD CEIL PORT 2 (Bag D)	4.39	**Cushion BBA with up to 2 lbs of ISS Foam. Do not exceed 2 lbs (5MLE bag is weight limited).** **Report part numbers of foam used. **Stow on top of CTBs and in the center of the 5MLE bag.
X				907	LEO	1	Columbus		STS MDDK	UNK	**Do not stow in a 5 MLE bag. LEO must return on a LWSA for re-entry. **Please ensure the return orientation is as follows: "LEO ashi kara kudasi".
X				908	9V Battery	1	FGB 426 (in 1.0 CTB, s/n 1190)		MF28G in IFM Tools Stowage Tray (in Multimeter Kit)		

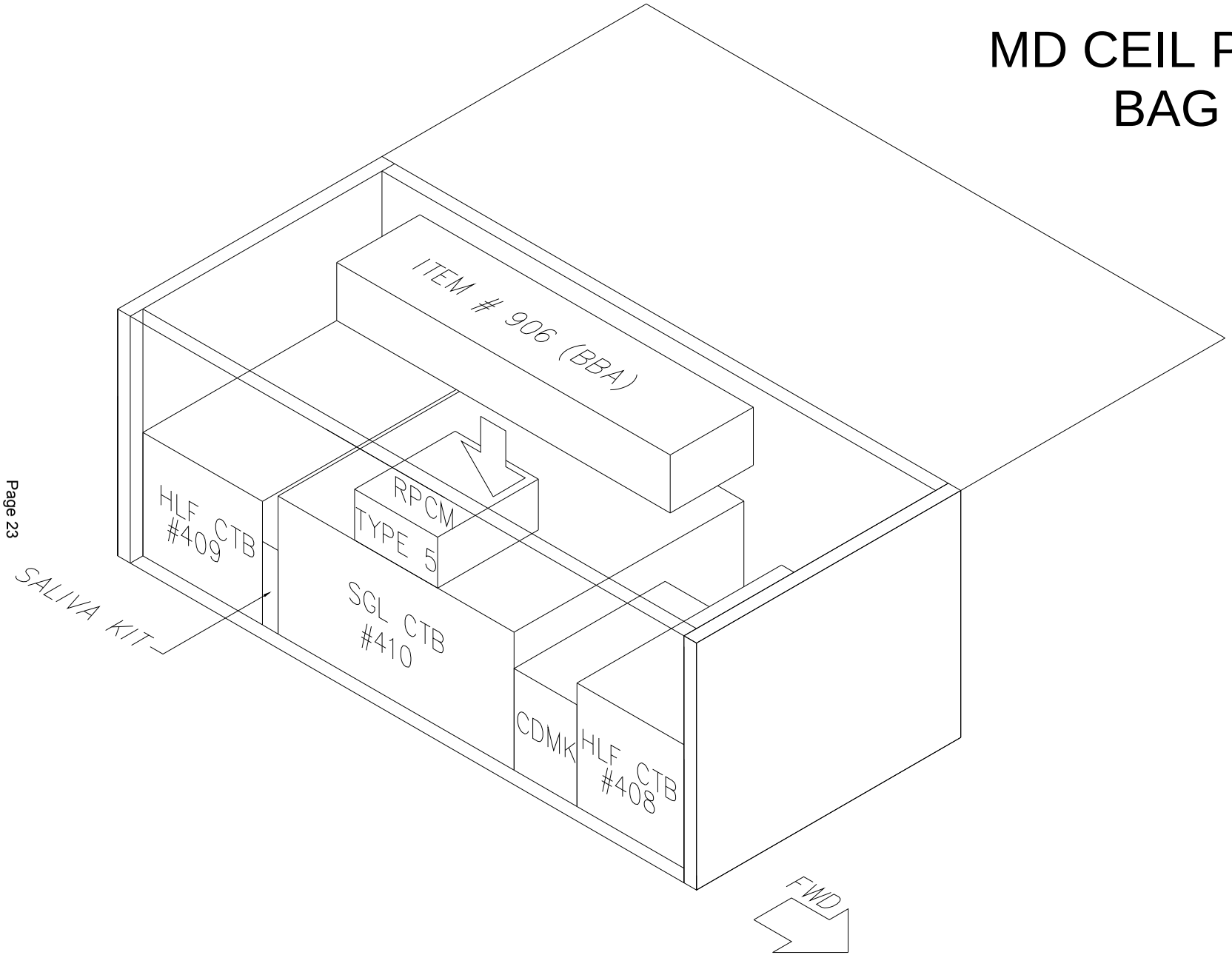
NOTE: WRAP IN TOWELS OR CLOTHING AND PLACE IN CENTER OF DIDB FOAM

MD FLOOR STBD 1 BAG C



L-10

MD CEIL PORT 2
BAG D



Gather Dump Equipment

In preparation for the upcoming dump activities, pregather the following equipment:

a) Middeck: Condensate CWC 5093 temp stowed on FD14

b) Contingency Hose and Cable Kit (CHCK): Y-Y hose (same used on FD10) and SPLY H2O Dumpline Purge Device

c) Break out box (BOB) locker (MF28O): Waste Water Dump (WWD) Filter (used FD10)

Condensate Teardown Details

At MET 13/19:15, perform TEARDOWN of SHUTTLE CONDENSATE COLLECTION (ORB OPS, ECLS) p. 5-36. Temp stow S/N 5075 for dumping FD16. Stow the Y-Y hose in MA9G.

Simo Dump Details

At MET 13/19:30, perform a simo dump using SUPPLY/WASTE WATER DUMP (ORB OPS, ECLS) p. 5-2. MCC will TMBU FDA in steps B and K.

Supply dump valve open time will be ~20 minutes.

Dump the waste tank to 5%. Waste dump valve open time will be ~45 minutes.

Condensate Dump Details

After the waste dump is complete, dump Condensate CWC S/N 5093, using CWC OVERBOARD DUMP (ORB OPS, ECLS) p. 5-32. MCC will TMBU FDA in steps B and H.

Waste dump valve open time will be ~65 minutes.

Stow the Y-Y hose in the CHCK and the WWD filter in the BOB. Stow empty Condensate CWC S/N 5093 in MA9G.

FD14 MMT Summary

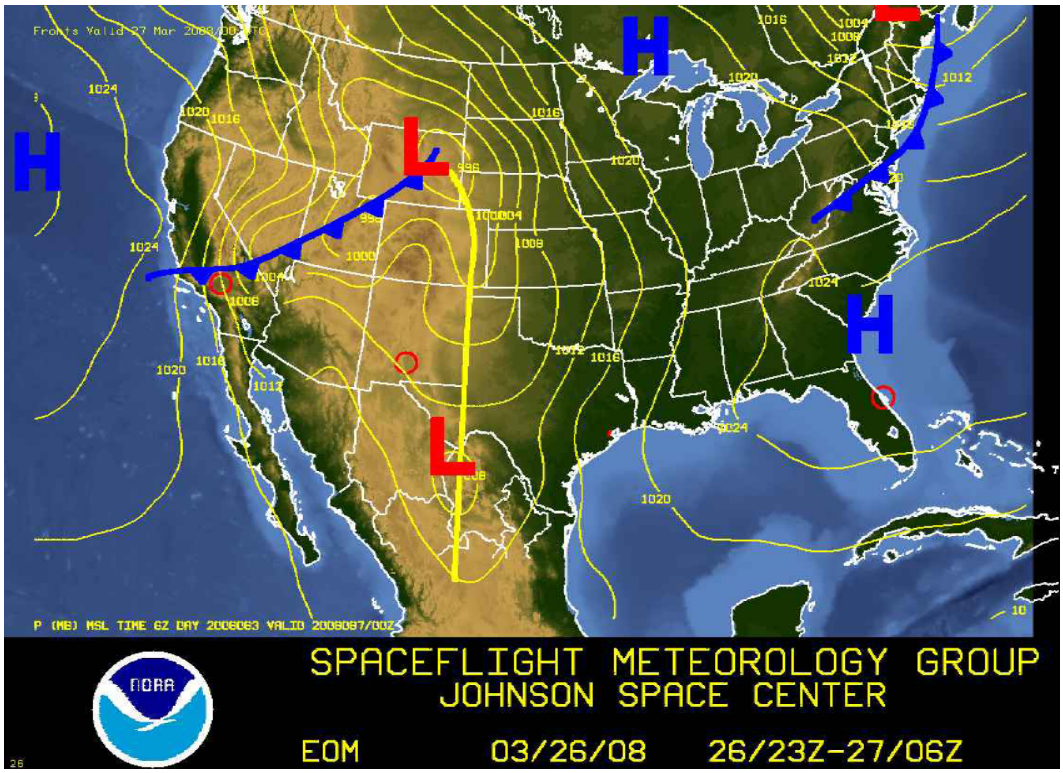
The FD14 MMT met to discuss mission progress. The team is continuing to monitor the PPCO2 readings on the mated stack. A duct reconfiguration is planned today that will better transfer shuttle return air to the ISS. This problem will require further study during increment operations and will be worked in the long term. The team is looking forward to undocking on FD15.

EVA Status: EVA #5 went very well with the installation of the OBSS on the ISS, the starboard SARJ inspection, and the installation of the MISSE PECs. A plan is in place for retrieving a single pair of overgloves from the ISS to supplement a shuttle contingency EVA if it is required and downlinked photos of Mike Foreman's right glove (2nd pair) are under review. The team is assessing the need to return the Modified Mini Work Station that suffered a failure during EVA #5.

Late Inspection Results: The Leading Edge Sub System/RCC team has completed their review of the late inspection data. All of the regions of interest were cleared and the team is "GO for Entry".

Wing Leading Edge Sensors: Two sensor readings were collected at MET 11/09:06:47 and at 11/14:54:34 on the upper surface between panels 11 and 12 on the port wing and on the upper surface of the starboard chine area, respectively. The reading on the port wing was 0.75 grms and the reading on the starboard chine was 0.50 grms. Despite the low sensor readings, the review process for these items was rigorously followed and the team does not require any further action and do not consider either of these readings as a concern.

End of Mission Weather: The Spaceflight Meteorology Group presented their long range forecast for EOM and EOM+1. The weather at the Cape was characterized as favorable for landing on both days. The following are the charts that were presented for EOM:



KSC	Valid: Wednesday Mar 26 2304 UTC Valid: Wednesday Mar 26 1804 CDT SCT035	7 SM	09008P12 KT RWY 15/33 X=11 H/T=5
KSC	Valid: Thursday Mar 27 0039 UTC Valid: Wednesday Mar 26 1939 CDT FEW035	7 SM	09007P10 KT RWY 15/33 X=9 H/T=4
EDW	Valid: Thursday Mar 27 0209 UTC Valid: Wednesday Mar 26 2109 CDT FEW050 SCT250	7 SM	24018P28 KT RWY 22/04 X=7 H/T=27
EDW	Valid: Thursday Mar 27 0344 UTC – 0520 UTC Wednesday Mar 26 2244 CDT – Thursday Mar 27 0020 CDT FEW050 SCT250	7 SM	26016P24 KT RWY 22/04 X=14 H/T=20
NOR	Valid: Thursday Mar 27 0210 UTC – 0346 UTC Wednesday Mar 26 2110 CDT – 2246 CDT SCT250	7 SM	21014P22 KT RWY 17/35 X=12 H/T=18

END OF PAGE 2 OF 2, MSG 136