

STS-126/ULF2

FD 12 Execute Package



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| 113 | --- | 1.200 Potable Water Bus Purge and Vacuum Backfill (pdf - Electronic Only) |
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Approved by FAO: T. Harris

Jelisha M. Harris

Last Updated: Nov 25 2008 2:14PM GMT

JEDI (Joint Execute package Development and Integration), v2.04.0003

MSG 118A - FD12 FLIGHT PLAN REVISION

1 MSG INDEX

2

| 3 <u>MSG NO.</u> | <u>TITLE</u> |
|------------------|---|
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| 5 117 | Stowage Locations for FD12 (GMT 329) (18-0332) |
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| 12 124 | FD12 Combo Water Dump |
| 13 125 | FD12 EVA Deltas (18-0338) |
| 14 126 | MPLM RSP Locking Screw Replacement (18-0339) |

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16

- 17 1. For today's cryo config, O2 tanks 2, 3, 4, and 5 and H2 tanks 2 and 5 will be active. All
18 active tanks will have dual heaters except O2 tanks 3, 4, and 5. H2 tank 5 is expected to
19 be depleted late in the crew day.

20
21 R1 O2,H2 MANF VLV TK2 (two) - OP (tb-OP)
22 O2 TK3 HTR A – AUTO

23
24 A11 CRYO TK4 HTR O2 A - AUTO
25 HTRS H2 A,B (two) - OFF

26
27 A15 CRYO TK5 HTRS H2 A,B (two) - AUTO

- 28
29
30 2. Please execute the following steps to OPEN the –Z Star Tracker Door at MET 10/18:45:

31
32 MA73C:C cb MCA PWR AC2 3Ø FWD 2 - op

33
34 O6 S TRK PWR -Z - ON

35
36 S TRK DR CNTL SYS 2 - OP

37
38 √S TRK DR POS -Z tb - bp (start timer)

39
40 When tb - OP (8-24 sec), or tb - bp for > 24 sec,
41 S TRK DR CNTL SYS 2 - OFF

42
43 S TRK PWR -Z - OFF

44
45 MA73C:C cb MCA PWR AC2 3Ø FWD 2 - cl

MSG 118A - FD12 FLIGHT PLAN REVISION

- 1 3. During the High Definition playbacks and downlinks with the Canon G1
2 camcorder connected to the DTV MUX Taxi 2 input, MCC receives your video signal
3 with a dropout occurring approximately every 30 seconds. With limited telemetry and
4 time needed to troubleshoot, we request you configure the camcorder V2 output per
5 CANON G1 (ANALOG CC REC, DNLK), P/TV FS 2-12. In this configuration, you will be
6 recording your events in High Definition, but live G1 analog downlink will be cropped 4:3
7 and routed via the flight deck O19 port. Keep all of the important information between
8 the 4:3 bars on the display. Additionally in this configuration, you will not need to
9 perform the black screen and color bar checks prior to use.
10
- 11 4. **Don:** We have uplinked MSG 126 (18-0339) MPLM RSP Locking Screw Replacement
12 with a repair plan for the damaged MPLM RSP locking screw and insert. We added an
13 activity to the plan today for you to scavenge a locking screw from the LAB1D2 (AV-3)
14 rack lower launch restraint, cover the threads with Gray Tape, insert the locking screw
15 into the rack lower launch restraint assembly, and then tape it in place.
16
- 17 5. **Don:** We've added the Water Vent Imagery SDTO back into your timeline today. Here's
18 the SR/SS times for the photo ops: 10/15:58 - 10/16:52
19
- 20 6. REPLACE PAGES 3-128 THROUGH 3-135.
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REPLANNED

FD12

GMT 11/25/08 (330)

MET Day_010

11/26 23 22 21 20 19 18 17 16 15 14 13 12

011/00

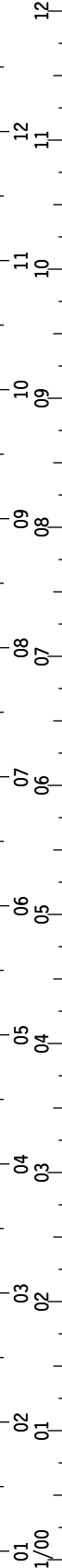
| DAY/NIGHT | ORBIT | 167 | 168 | 169 | 170 | 171 | 172 | 173 | 174 | | | | | | |
|-----------------|-------------------|--|------------|----------|---------------------|---------------------|----------|------------|------------|-------------|---------------------|-------------|----------------|-------------|-------------|
| D N | FE-2 CHAMITOFF | SLEEP | POST SLEEP | PW | TVIS | IMC | EXER RED | PRINT SWAP | DPART PREP | MIDDAY-MEAL | N2N-CBM-CPA-INSTALL | MDDK XFER | WRS CMC I FILL | MIDDAY-MEAL | MDDK XFER |
| | | SLEEP | POST SLEEP | PDPN | WRS UPA LK CHK FILL | WRS UPA LK CHK FILL | CEVIS | RED | PMC SAMPLE | MIDDAY-MEAL | MIDDAY-MEAL | MIDDAY-MEAL | MIDDAY-MEAL | MIDDAY-MEAL | MIDDAY-MEAL |
| I S S | ISS CDR FENCKE | SLEEP | POST SLEEP | PDPN | PDPN | PDPN | PDPN | PDPN | PDPN | PDPN | PDPN | PDPN | PDPN | PDPN | PDPN |
| | | SLEEP | POST SLEEP | PDPN | PDPN | PDPN | PDPN | PDPN | PDPN | PDPN | PDPN | PDPN | PDPN | PDPN | PDPN |
| U P | FE-1 LONCHAKOV | SLEEP | POST SLEEP | PDPN | PDPN | PDPN | PDPN | PDPN | PDPN | PDPN | PDPN | PDPN | PDPN | PDPN | PDPN |
| | | SLEEP | POST SLEEP | PDPN | PDPN | PDPN | PDPN | PDPN | PDPN | PDPN | PDPN | PDPN | PDPN | PDPN | PDPN |
| U P | FE-2 EXP18 MAGNUS | SLEEP | POST SLEEP | PDPN | PDPN | PDPN | PDPN | PDPN | PDPN | PDPN | PDPN | PDPN | PDPN | PDPN | PDPN |
| | | SLEEP | POST SLEEP | PDPN | PDPN | PDPN | PDPN | PDPN | PDPN | PDPN | PDPN | PDPN | PDPN | PDPN | PDPN |
| DAY/NIGHT ORBIT | | W -171.0 | E -46.0 | Z -275.0 | | | | | | | | | | | |
| ORB ATT | | BIAS -XLV -ZVV | | | | | | | | | | | | | |
| TDRS | | BIAS -XLV -ZVV | | | | | | | | | | | | | |
| ORB ATT | | BIAS -XLV -ZVV | | | | | | | | | | | | | |
| NOTES | | @MNRV TO MPLM VIEW @MNT *FILTER CHECK #STATUS CHECK #MRS-YELLOW-TAG #FHS-TOCA-SMPL-PRCS @EHS-TOCA-SOFTWARE-UPD@PMD SET | | | | | | | | | | | | | |

REPLANNED

FD12

GMT 11/26/08 (331)

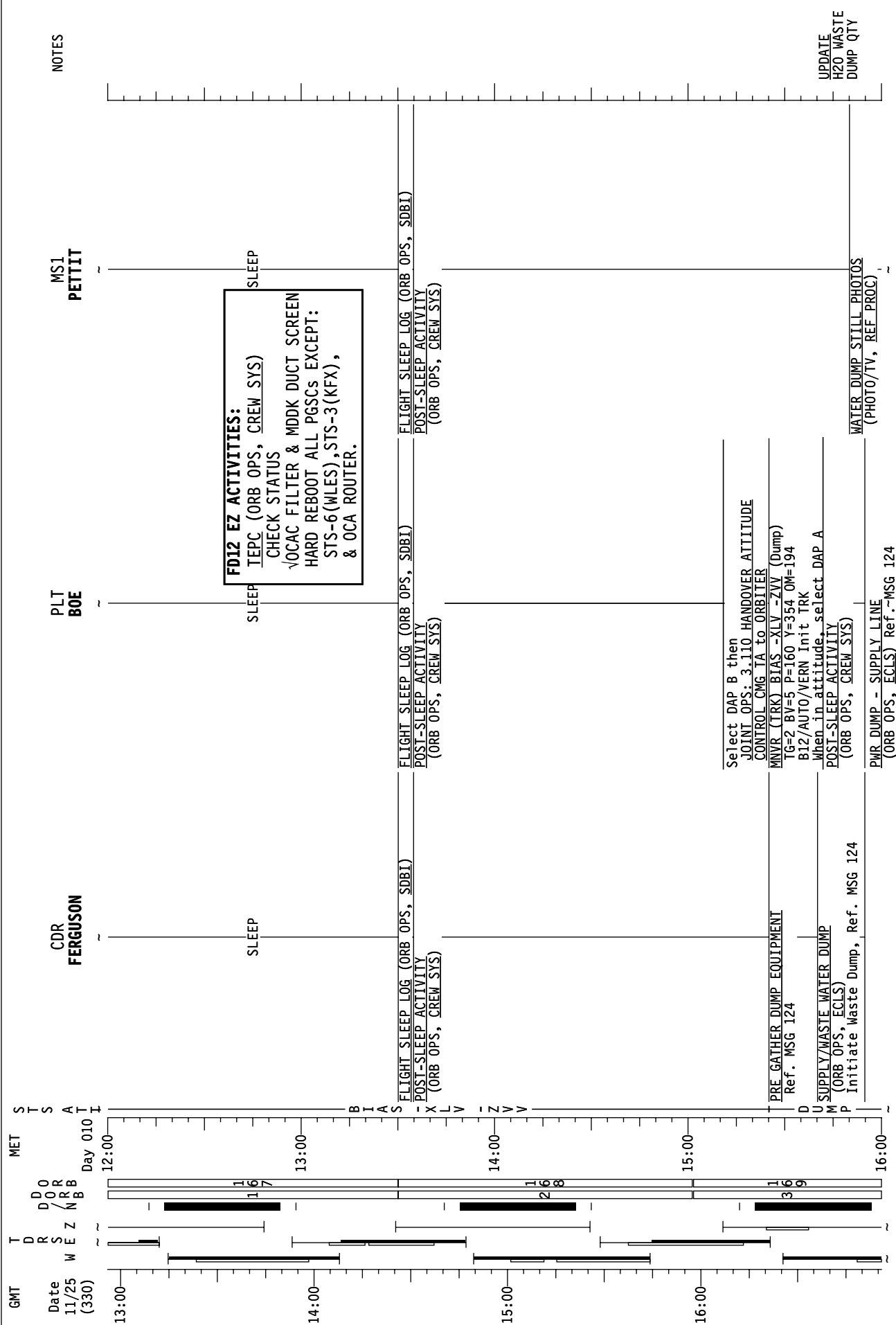
MET Day 011



| | | | | | | | | | | |
|-----------------|-------------------------------|---|-----------|------------|---------------|-------|-----|-----|-----|--|
| D N | CDR FERGUSON | M U S | PRE SLEEP | PMC A/G | PRE SLEEP | SLEEP | | | | |
| | | MDDK XFERILLIONS | PRE SLEEP | | | | | | | |
| I S S | R1 PLT BOE | M U S | PRE SLEEP | | PRE SLEEP | SLEEP | | | | |
| | | MDDK XFERILLIONS | PRE SLEEP | | | | | | | |
| U P | R3/M1 MS1 PETTIT | M U S | PRE SLEEP | | PRE SLEEP | SLEEP | | | | |
| | | MDDK XFERILLIONS | PRE SLEEP | | | | | | | |
| U P | EV2 MS2 BOWEN | M U S | PRE SLEEP | | PRE SLEEP | SLEEP | | | | |
| | | MDDK XFERILLIONS | PRE SLEEP | | | | | | | |
| U P | EV1 MS3 PIPER | M U S | PRE SLEEP | | PRE SLEEP | SLEEP | | | | |
| | | MDDK XFERILLIONS | PRE SLEEP | | | | | | | |
| U P | R2/EV3/M2 MS4 KIMBROUGH | M U S | PRE SLEEP | | PRE SLEEP | SLEEP | | | | |
| | | MDDK XFERILLIONS | PRE SLEEP | | | | | | | |
| U P | FE-2 CHAMITOFF | M U S | PRE SLEEP | | PRE SLEEP-ISS | SLEEP | | | | |
| | | MDDK XFERILLIONS | PRE SLEEP | | | | | | | |
| U P | ISS CDR FINCKE | M U S | PRE SLEEP | | PRE SLEEP-ISS | SLEEP | | | | |
| | | MDDK XFERILLIONS | PRE SLEEP | | | | | | | |
| U P | FE-1 LONCHAKOV | M U S | PRE SLEEP | | PRE SLEEP-ISS | SLEEP | | | | |
| | | MDDK XFERILLIONS | PRE SLEEP | | | | | | | |
| U P | FE-2 EXP18 MAGNUS | M U S | PRE SLEEP | | PRE SLEEP-ISS | SLEEP | | | | |
| | | MDDK XFERILLIONS | PRE SLEEP | | | | | | | |
| DAY/NIGHT ORBIT | | 175 | 176 | 177 | 178 | 179 | 180 | 181 | 182 | |
| TDRS | | W -171.0 | E -46.0 | Z -275.0 | | | | | | |
| ORB ATT | | BIAS -XLV -ZV | | | | | | | | |
| NOTES | | *PRE SLEEP-ISS @HAM S/U #STATUS CHECK | | | | | | | | |

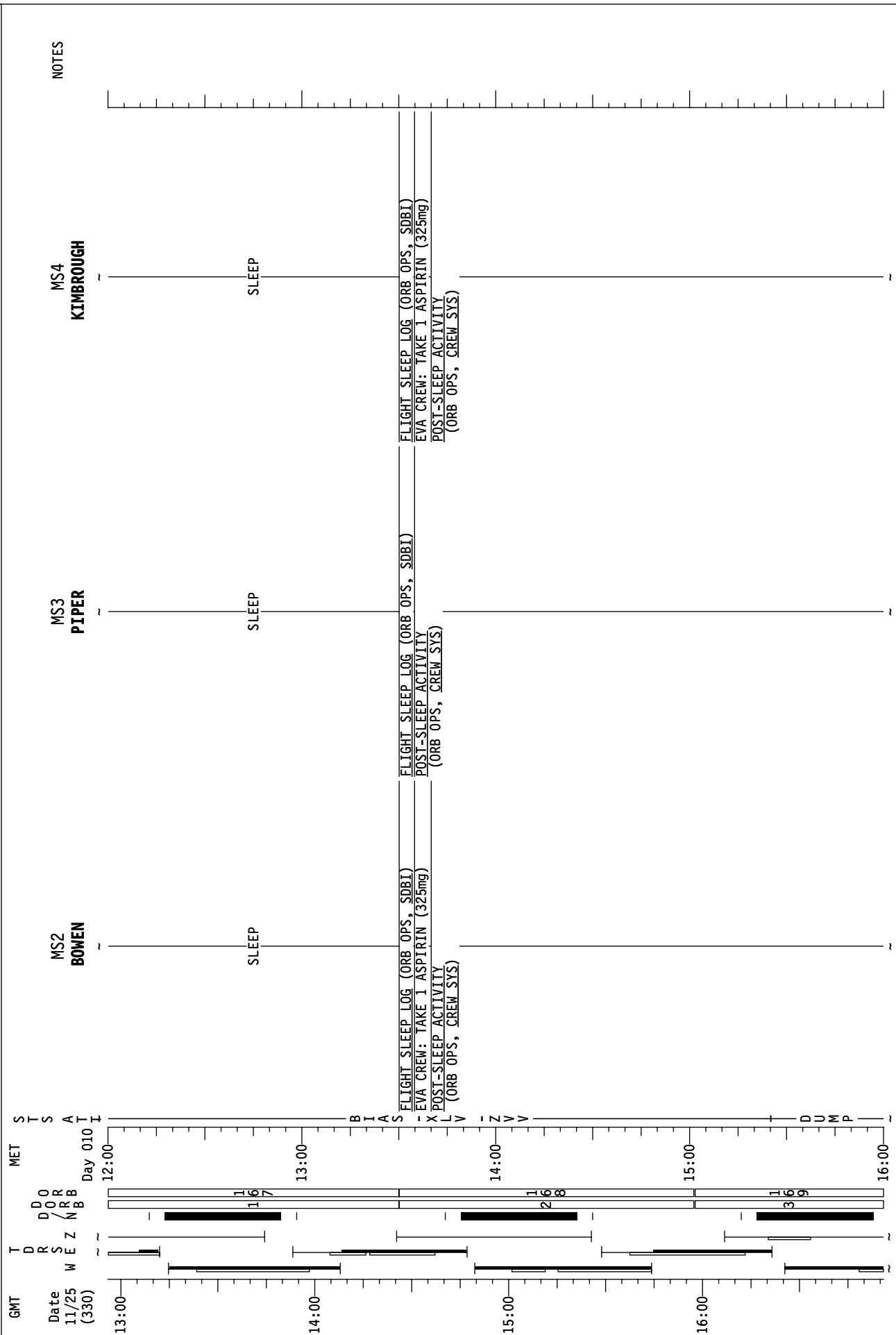
STS-126 FD (12)

REPLANNED



STS-126 FD (12)

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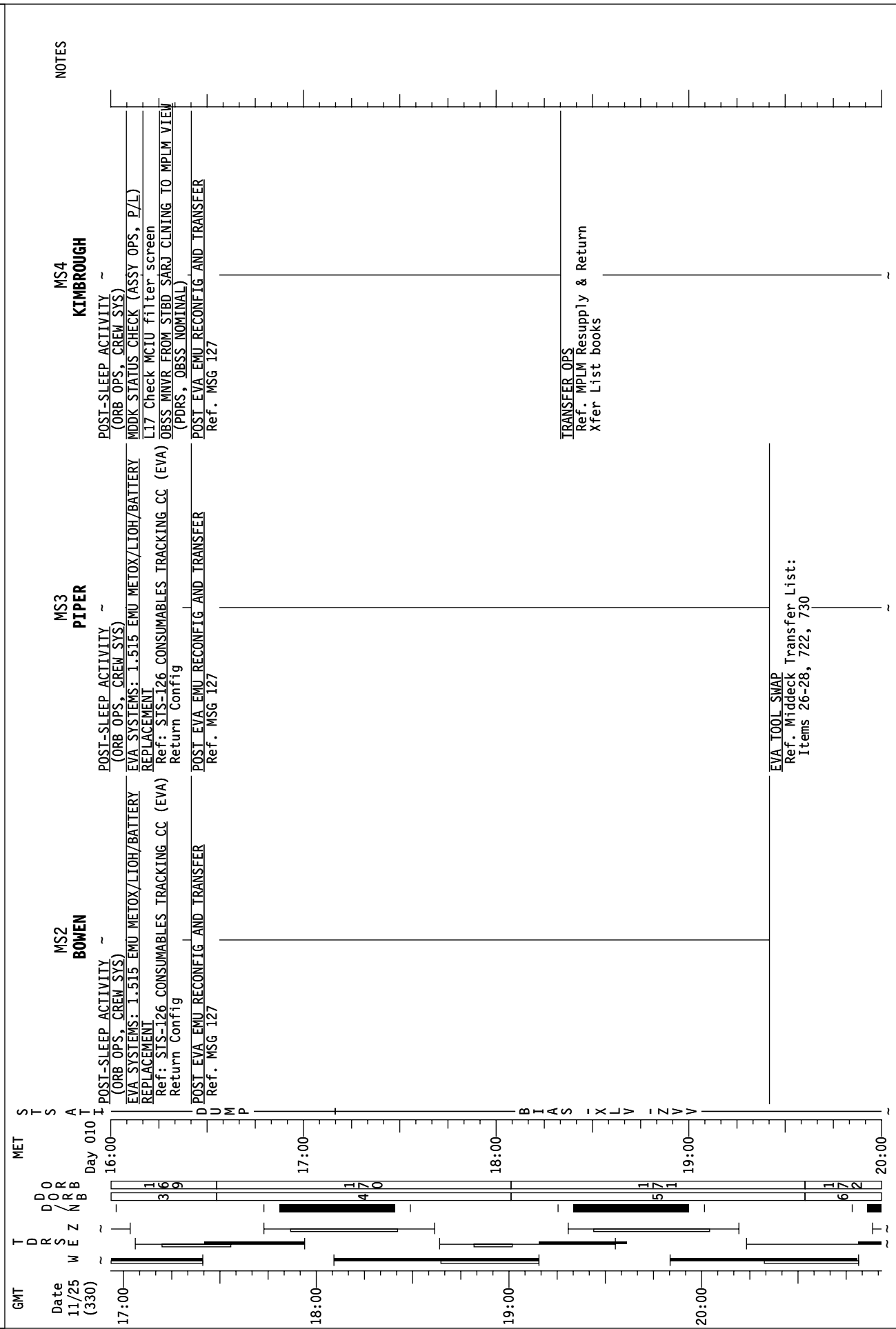
REPLANNED

STS-126 FD (12)

| GMT | DATE 11/25 (330) | MET Day 010 T | CDR FERGUSON | PLT BOE | MS1 PETTIT | NOTES |
|-------|------------------------|------------------|--|---|--|--|
| 17:00 | | | <p>SUPPLY/WASTE WATER DUMP (ORB OPS, ECLS) Terminate Waste Dump Ref. MSG 124 CWC OVERBOARD DUMP (ORB OPS, ECLS) Initiate CWC Dump (s/n 1076) Ref. MSG 124</p> | <p>PMR DUMP - SUPPLY LINE (ORB OPS, ECLS) Ref. MSG 124 Dump PWR s/n 1025</p> | <p>WATER DUMP STILL PHOTOS (PHOTO/TV, REF PROC)</p> | |
| 17:00 | | | <p>CMC OVERBOARD DUMP (ORB OPS, ECLS) Terminate CWC Dump (s/n 1076) Ref. MSG 124 MNVR (TRK) BIAS -XLV -ZVV TG-2 BV=5 P=160 Y=354 OM=177 B12/AUTO/VERN Init TRK Wheel alignment select CAP 120 STAR OF OPPORTUNITY ALIGN (ORB OPS, GNC) 1.205 STATION AND SHUTTLE PRINTER EXCHANGE (ASSY OPS, ACT & C/D)</p> | <p>TRANSFER OPS Ref. MPLM Resupply & Return Xfer List books</p> | | |
| 17:00 | | | | | | <p>TRANSFER UPDATE Ref. MSG 120</p> |
| 18:00 | | | | | | |
| 18:00 | | | | | | <p>EXERCISE</p> |
| 19:00 | | | | | | |
| 19:00 | | | | | | <p>MPLM RSP LOCKING SCREW REPLACEMENT Ref. MSG 126</p> |
| 19:00 | | | | | | |
| 19:00 | | | | | | <p>EXERCISE</p> |
| 19:00 | | | <p>JOINT OPS: 3.111 HANDOVER ATTITUDE CONTROL ORBITER to CMGTA -Z STAR TRACKER DOOR OPEN Ref. MSG 118 Item 2</p> | | | |
| 19:00 | | | | | | <p>TRANSFER OPS Ref. MSG 120 Ref. MPLM Resupply Transfer List: Items: 104, 105, 179 Ref. MPLM Return Transfer List: Items: 622, 623, 760, 850, 853, 854, 854.1, 855, 987, 988, 989, 990, 991, 994, 995 Ref. Middeck Transfer List: Items 707, 708, 709, 710, 715, 992, 993, 996</p> |
| 20:00 | | | | | | |
| 20:00 | | | | | | <p>EXERCISE</p> |
| 20:00 | | | | | | |
| 20:00 | | | | | | <p>CBM SPARE CONTROLLER PANEL ASSEMBLY PREP Ref. MSG 110</p> |
| 20:00 | | | | | | <p>FLT PLN/126/FLIGHT</p> |

REPLANNED

STS-126 FD (12)



MS4
KIMBROUGH

MS3
PIPER

MS2
BOWEN

NOTES

POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)
MDDK STATUS CHECK (ASSY OPS, P/L)
LI7 Check MCIU filter screen
OBSS MNVR FROM STBD SARJ CLINING TO MPLM VIEW
(PDRS, OBSS NOMINAL)
POST EVA EMU RECONFIG AND TRANSFER
Ref. MSG 127

POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)
EVA SYSTEMS: 1.515 EMU METOX/LIOH/BATTERY
REPLACEMENT
Ref: STS-126 CONSUMABLES TRACKING_CC (EVA)
Return Config
POST EVA EMU RECONFIG AND TRANSFER
Ref. MSG 127

POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)
EVA SYSTEMS: 1.515 EMU METOX/LIOH/BATTERY
REPLACEMENT
Ref: STS-126 CONSUMABLES TRACKING_CC (EVA)
Return Config
POST EVA EMU RECONFIG AND TRANSFER
Ref. MSG 127

TRANSFER OPS
Ref. MPLM Resupply & Return
Xfer List books

EVA TOOL SWAP
Ref. Middeck Transfer List:
Items 26-28, 722, 730

STS-126 FD (12)

REPLANNED

| GMT | MET | CDR FERGUSON | PLT BOE | MS1 PETTIT | NOTES |
|-------|-------|--|---|---|--|
| 21:00 | 20:00 | TRANSFER OPS Ref. MPLM Resupply & Return Xfer List books | CBM SPARE CONTROLLER PANEL ASSEMBLY PREP Ref. MSG 110 | | |
| 21:00 | 20:00 | MEAL | MEAL | MEAL | |
| 21:00 | 21:00 | PUBLIC AFFAIRS EVENT Ref. MSG 122 ISS KU: 21:07-21:48 | PUBLIC AFFAIRS EVENT Ref. MSG 122 ISS KU: 21:07-21:48 | PUBLIC AFFAIRS EVENT Ref. MSG 122 ISS KU: 21:07-21:48 | |
| 21:00 | 21:00 | SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) INIT FILL #11 Ref. MSG 029 | MIDDECK XFER Ref. Middeck Transfer List | S&M: I.100 CBM Controller Panel Assembly Installation - Generic For all four CPAs, verify no connector damage (perform wiggle test and use magnifying glass and flashlight to inspect for hairline cracks or separation). | |
| 21:00 | 21:00 | SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) Perform FILL TERMINATION | | | |
| 21:00 | 21:00 | CMC TRANSFER Transfer 1 CMC to ISS | | | |
| 21:00 | 21:00 | PWR FILL (ORB OPS, ECLS) Init Fill #7 Fill s/n 1025 | | | |
| 21:00 | 21:00 | PWR TRANSFER Transfer s/n 1025 to A/L1D1_A2 | | | MPLM CLEANUP Ref. MPLM Return Transfer List: Items 850, 851, 852, 853, 854, 854.1, 855 |

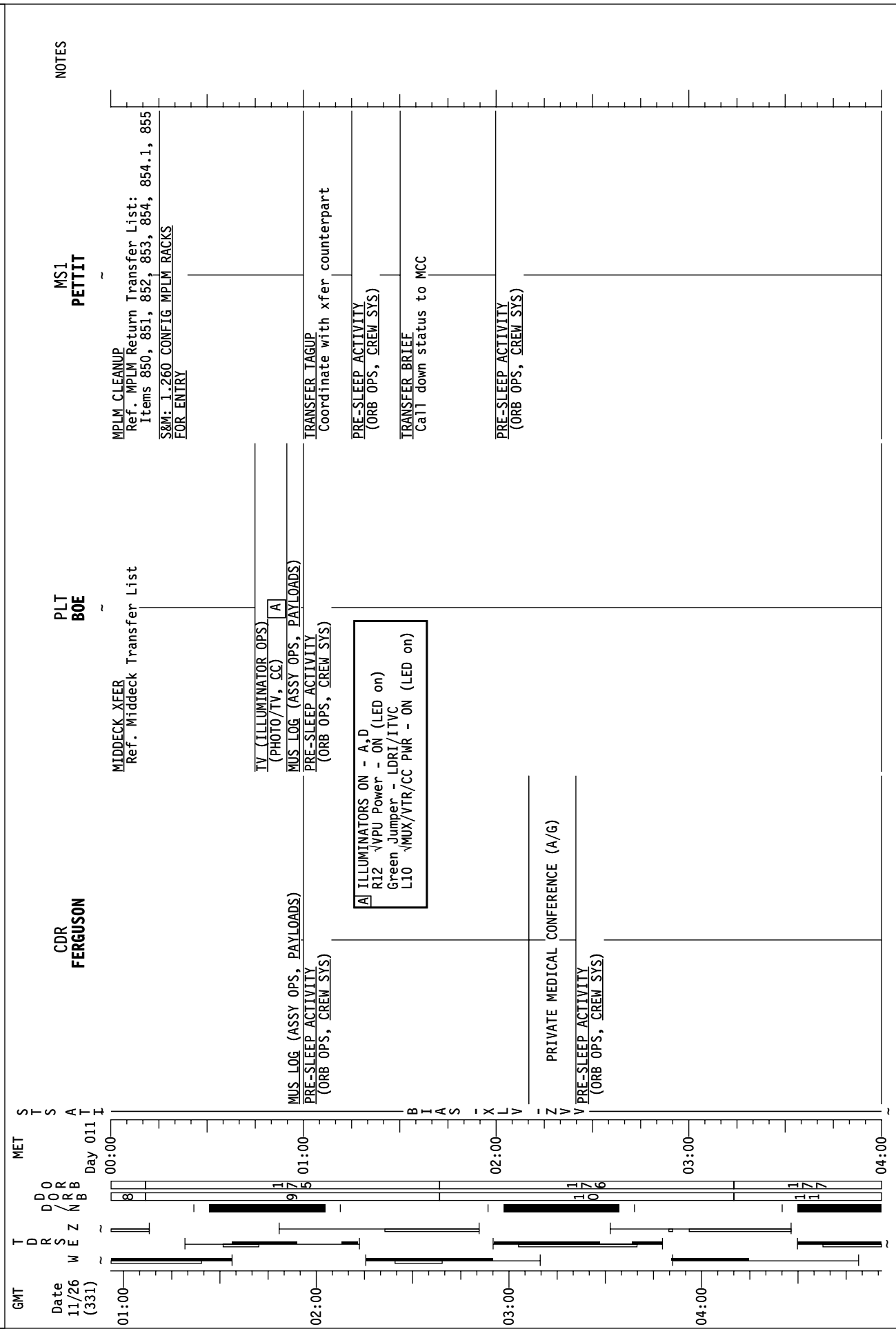
STS-126 FD (12)

REPLANNED

| GMT | MET | TDRS Date 11/25 (330) | DORS ORB W E Z | S A I | Day 010 | MS2 BOWEN | MS3 PIPER | MS4 KIMBROUGH | NOTES |
|-------|-------|--------------------------------|----------------------|-------------|---------|---|---|--|-------|
| 21:00 | 20:00 | | | | | MEAL | EVA TOOL SWAP Ref. Middeck Transfer List: Items 26-28, 722, 730 | TRANSFER OPS Ref. MPLM Resupply & Return Xfer List books | |
| 22:00 | 21:00 | | | | | MEAL | | MEAL | |
| 23:00 | 22:00 | | | | | PUBLIC AFFAIRS EVENT Ref. MSG 122 ISS KU: 21:07-21:48 | PUBLIC AFFAIRS EVENT Ref. MSG 122 ISS KU: 21:07-21:48 | MIDDECK XFER Ref. Middeck Transfer List | |
| 00:00 | 23:00 | | | | | EXERCISE | | | |
| | 00:00 | | | | | | | EXERCISE | |

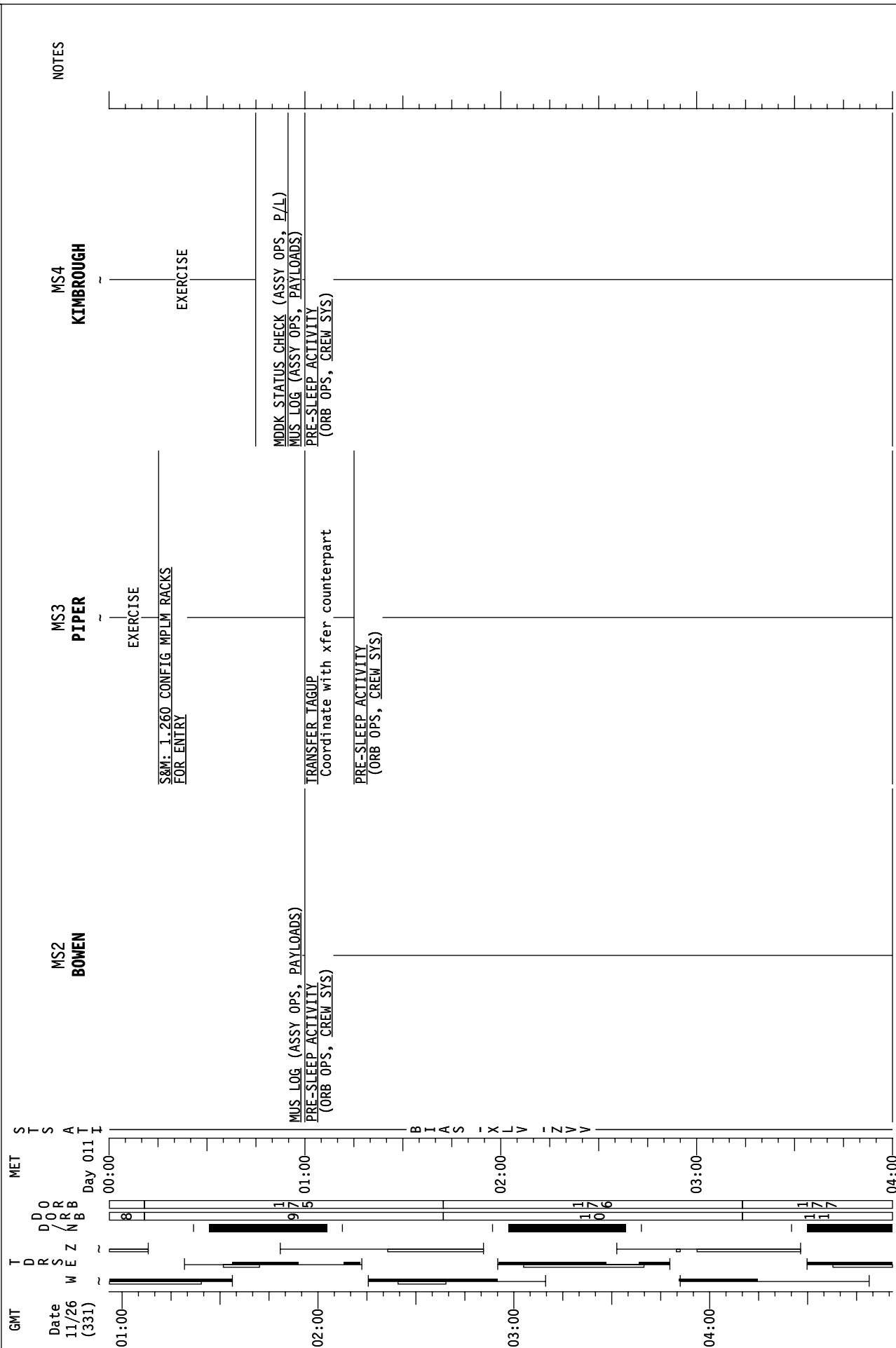
STS-126 FD (12)

REPLANNED



STS-126 FD (12)

REPLANNED



MSG 119 - FD12 MISSION SUMMARY

1 Good Morning Endeavour!

2
3 Great job on EVA-4 yesterday. We're all very proud of you.

4
5 Enjoy the extra docked day today!

6
7
8 YOUR CURRENT ORBIT IS: 196 X 186 NM

9
10 NOTAMS:

11
12 **NOTAMS - SIX CHANGES**

13
14 **DELETED ZZA NOTAM.**

15 **MRN – RWY 02 THLD DISPL 2,000'. RWY 20 LDA 9,800'.**

16 **JTY – AERODROME CLOSED 26 NOV 1300Z TO 28 NOV 2100Z.**

17 **NKT – AERODROME CLOSED 25 NOV 2200Z TO 02 DEC 1200Z.**

18 **NTU – AERODROME CLOSED 26 NOV 2100Z TO 01 DEC 1500Z.**

19 **JDG – AERODROME CLOSED 27 NOV 0000Z TO 01 DEC 0630Z.**

20 **EDW – EDT IN USE FOR STS-126. EDW ELS DAY / VFR ONLY.**

21 **EDW – LAKEBED RUNWAY 15/33 ELS ONLY. OTHER LAKEBED RWYS RED.**

22 **NOR – LAKEBED RUNWAYS GREEN.**

23 **YHZ – RWY 05/23 CLOSED 24 NOV 1100Z - 26 NOV 1600Z.**

24 **DOV – RWY 14/32 CLOSED.**

25 **AMB – RWY 15/33 CLOSED.**

26 **YYT – RWY 16/34 CLOSED.**

27 **IKF – NOT USABLE. NO AGREEMENT.**

28 **BEN – NOT RECOMMENDED/NOT SUPPORTED.**

29
30
31 NEXT 2 PLS OPPORTUNITIES:

32
33 NOR17 ORB 172 – 10/20:27 SCT150 BKN250 7 120/04P06

34 KSC33 ORB 186 – 11/17:47 FEW040 SCT250 7 350/10P15

35
36
37 OMS TANK FAIL CAPABILITY:

38
39 L OMS FAILS: NO

40 R OMS FAILS: NO

41
42
43 LEAKING OMS PRPLT BURN:

44
45 L OMS LEAK: ALWAYS BURN RETROGRADE

46 R OMS LEAK: ALWAYS BURN RETROGRADE

MSG 119 - FD12 MISSION SUMMARY

1 OMS QUANTITIES(%):

2
 3 L OMS OX = 33.6 R OMS OX = 34.0
 4 FU = 33.3 FU = 33.8

5 Subtract interconnect counter for current OMS quantities.

6
 7
 8 DELTA V AVAILABLE:

9
 10 OMS 337 FPS
 11 ARCS (TOTAL ABOVE QTY1) 40 FPS
 12
 13 TOTAL IN THE AFT 377 FPS
 14
 15 ARCS (TOTAL ABOVE QTY2) 73 FPS
 16 FRCS (ABOVE QTY 1) 19 FPS
 17
 18 AFT QTY 1 78 %
 19 AFT QTY 2 40 %
 20
 21
 22
 23

| <u>SYSTEM</u> | <u>FAILURE</u> | <u>IMPACT</u> | <u>WORK AROUND</u> |
|---------------|---|---|--|
| APU | APU 1 FUEL OUT P (SPEC 86) is not tracking with decreasing temperature. | Loss of redundancy for APU 1 fuel tank pressure monitoring. | Refer to SPEC 86 (APU 1 FUEL TK P) or MEDS (APU FUEL P 1) for accurate tank pressure. |
| COMM/ INST | Canon G1 camcorder connection to DTV MUX Taxi 2 port. | Dropouts are exhibited in HD TV live and playback video. | Configure camcorder for analog downlink per <u>CANON G1</u> (ANALOG CC REC, DNLK), P/TV FS 2-12. |

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MSG 120B (18-0333B) - FD12 TRANSFER MESSAGE

Page 1 of 8

1 Good morning Don, STS-126 & Increment 18 crews!

2
3 Let's try this again...

4
5 Wow...we can't believe this is the last day of MPLM transfer! You've all been doing an
6 excellent job!

7
8 Today you'll actually be completing all MPLM transfer items. In addition, you'll be
9 transferring EVA hardware back to the middeck and swapping printers and PGTs. And
10 finally we'll have you close out the MPLM and return items borrowed from ISS.

11
12 The Transfer List Excel file, FD12_Transfer_List_STS126.xls, locations are:

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

15 16 17 Transfer Notes

- 18
19 • **MPLM PBA & PFE:** The MPLM Cleanup tab in your MPLM Return Transfer List book
20 lists the MPLM PBA and PFE. We wanted to remind you that these should be
21 transferred back to ISS per the MPLM Egress activities on FD13.
- 22
23 • **Trash Request:** Mike, we've been able to accommodate all the additional trash you've
24 requested for return. Your MPLM Return Transfer List for today has been updated to
25 include the following items for return in the MPLM:
 - 26 • **Item 989:** Used Paper – returns in S4_G1
 - 27 • **Item 990:** Dirty Clothing – returns in F4_H1
 - 28 • **Item 991:** Rubber bag with wet food trash – returns in F2_A1
 - 29 • **Items 994 & 995:** 2 KBO-Ms – return in P4_D1 and P4_G2

30 31 32 FD12 Choreography

- 33
34 • **Items 12 and 713:** Swap SM printer with Shuttle printer (swap printer trays from SM
35 printer with LAB trays).
- 36
37 • **Items 26 and 722:** Swap PGTs.
- 38
39 • **Items 28 and 730:** Swap 85ft Safety Tethers.
- 40
41 • **Item 996:** Transfer water samples to middeck for return
- 42
43 • **Complete all open MPLM Resupply transfer items:**
 - 44 ○ **Item 104:** Transfer 41.5" Handrails to ISS
 - 45 ○ **Item 105:** Transfer remaining 6 MPLM GLAs to ISS
 - 46 ○ **Item 179:** Transfer 8.5" Handrails to ISS

MSG 120B (18-0333B) - FD12 TRANSFER MESSAGE

Page 2 of 8

- 1 • **Complete all open MPLM Return transfer items:**
 - 2 ○ **Item 622:** Strap 3.0 CTB of JAXA foam to P3 rack-front
 - 3 ○ **Item 623:** Strap 3.0 CTB of JAXA foam to P3 rack-front
 - 4 ○ **Item 760:** Transfer Chamitoff crew preference to F2_H1 for return.
 - 5 ○ **Item 987:** Transfer Broken Items Bag 3 to F2_H1 for return.
 - 6 ○ **Item 988:** Transfer the KBO-M with WAICO hardware to F4_H1 for return.
 - 7 ○ **Item 989:** Transfer Used Paper to S4_G1 for return.
 - 8 ○ **Item 990:** Transfer Dirty Clothing to F4_H1 for return.
 - 9 ○ **Item 991:** Transfer rubber bag with food trash to F2_A1 for return.
 - 10 ○ **Item 994:** Transfer crew-requested KBO-M to P4_D1 for return.
 - 11 ○ **Item 995:** Transfer crew-requested KBO-M to P4_G2 for return.
 - 12
- 13 • **MPLM Cleanup:**
 - 14 ○ **Item 850:** Return any bungees and seat track studs borrowed from ISS.
 - 15 ○ **Item 853:** Return Pivot Fittings used to rotate A4 and F4 RSPs to ISS.
 - 16 ○ **Items 854 and 854.1:** Transfer Don's MPLM Kit to ISS.
 - 17 ○ **Item 855:** Remove all handrails from MPLM
 - 18 ○ **NOTE:** Endcone & inter-rack bungee jails can remain deployed for entry.
 - 19
- 20 • **Continue Middeck return packing.**
- 21
- 22 • **Configure MPLM racks and verify rack contents.**
- 23
- 24

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

27 MIDDECK TRANSFER BOOK

28

29 In the Middeck Transfer List **MDDK RTN REALTIME ADDITIONS** tab

30 Add the following page:

31 Return 10b

32 MPLM RETURN TRANSFER BOOK

33

34

35 In the MPLM Return Transfer List **LAYOUTS** tab

36 Replace the following pages:

37 L-23 and L-28

38

39 In the MPLM Return Transfer List **MPLM CLEANUP** tab

40 Replace the following page:

41 Return 30

42

43 In the MPLM Return Transfer List **MPLM RETURN REALTIME ADDITIONS** tab

44 Add the following page:

45 Return 33

46

47

48

49

50

MSG 120B (18-0333B) - FD12 TRANSFER MESSAGE

Page 3 of 8

1 **Changes to the Transfer List are detailed below:**

2
3 **MIDDECK RETURN**

4 Item 992, 993, and 996 – new items

5
6 **MPLM RETURN**

7 Item 855 – note to transfer all handrails to ISS

8 Item 987, 988, 989, 990, 991, 994, and 995 – new items

9
10
11
12 **FD13 Choreography**

- 13 • **Item 32:** Transfer Silver Biocide Syringe Kit (s/n 1003) after all CWC fills are complete.
- 14 • **Item 851:** Return PBA to NOD2D6-01
- 15 • **Item 852:** Return PFE to NOD1P4
- 16 • **Transfer remaining Middeck resupply items.**
- 17 • **Item 445:** Transfer “new” bag D back to middeck
- 18 • **Item 700:** Transfer Bag A back to middeck
- 19 • **Item 701:** Transfer Bag B back to middeck
- 20 • **Item 702:** Transfer Bag H back to middeck
- 21 • **Transfer the following EVA items to the Middeck:**
 - 22 ○ **Item 707:** Kimbrough’s ECOK
 - 23 ○ **Item 708:** EMU 3018
 - 24 ○ **Item 709:** EMU 3003
 - 25 ○ **Item 710:** EVA Sys Transfer bag
 - 26 ○ **Item 715:** Large ORU Bag
 - 27 ○ **Item 992:** Shuttle NOAX Gun
 - 28 ○ **Item 993:** Waistbrief (s/n 2054)
- 29 • **Transfer Bag E back to middeck.**
- 30 • **Transfer Middeck return items.**

31
32
33 Have a great day!

34
35 - The STS-126 Transfer Team

MSG 121 - FD11 MMT SUMMARY

1 The MMT met to review orbiter systems, mission progress and the request to add an extra
2 docked day. EVA 4 was just beginning as the MMT was meeting.

3

4 Endeavour's systems are performing well. The only notable item discussed today was the
5 ding in Window #6 that you reported yesterday. Based on historical data and provided
6 views/descriptions, the team is very comfortable that this ding will pose no issues during
7 entry, but the team is reviewing the data just to be sure.

8

9 The mission is progressing extremely well. The MMT did review the ISSP request to add
10 one docked day to the mission to provide additional time to troubleshoot the UPA and
11 complete sample collections. Endeavour has adequate consumables to support this
12 additional docked day, and the MMT concurred with the ISSP request.

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END OF PAGE 1 OF 1, MSG 121

MSG 123A - FD12 CREW CHOICE VIDEO DOWNLINK OPTIONS

1 Here are the available Ku times for your Crew Choice Video Downlink. Let us know which
2 time works best for you.
3
4

Crew Choice KU FD12

| TDRS | AOS | LOS | DURATION (min) | COMMENT |
|-------------|------------|------------|---------------------------|----------------|
| E-46 | 10/13:21 | 10/13:41 | 20 | |
| W-171 | 10/14:19 | 10/14:48 | 30 | |
| E-46 | 10/14:49 | 10/15:17 | 28 | |
| W-171 | 10/15:59 | 10/16:28 | 30 | |
| W-171 | 10/17:43 | 10/18:13 | 30 | |
| W-171 | 10/19:24 | 10/19:52 | 28 | |
| E-275 | 10/21:55 | 10/22:19 | 24 | No DTV |
| W-171 | 10/22:20 | 10/22:54 | 34 | |
| W-171 | 10/23:54 | 11/00:28 | 34 | |
| E-46 | 11/01:44 | 11/02:06 | 25 | |
| E-46 | 11/03:42 | 11/04:17 | 35 | |

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MSG 124 - FD12 COMBO WATER DUMP

1 Combo Dump Details

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3 Today you will pregather dump equipment and perform a combo dump. You will be
4 dumping the waste tank and PWR s/n 1025 simo. After these dumps are complete, you will
5 dump leaky CWC s/n 1076.

6 7 Pre Gather Dump Equipment

8 Prior to starting the dump, pregather the following equipment and temp stow on the
9 middeck:

10 a. NOD1D2: Leaky CWC s/n 1076

11 b. A/L1D1_A2: PWR s/n 1025

12 c. Break Out Box Locker (MA16D): Waste Water Dump (WWD) Filter

13 d. Contingency Hose and Cable Kit (CHCK) in the window shade bag: SPLY H2O Dumpline
14 Purge Device, B-B hose, R-Y QD adapter, and 8 ft Y-Y hose.

15
16 Prior to opening the waste dump valve or the supply dump valve, verify with MCC-H that the
17 solar arrays are in the proper config, and the stack is in the proper attitude.

18 19 Waste Water Dump

20 Perform a waste dump using SUPPLY/WASTE WATER DUMP (ORB OPS, ECLS) p. 5-2.

21 Perform steps E, G and I. After completing step I-2, ensure the PWR dump is complete, and
22 then proceed to CWC OVERBOARD DUMP (ORB OPS, ECLS). MCC-H will TMBU FDA in
23 steps B and K.

24
25 Waste dump valve open time will be ~10 minutes. Dump the waste tank to 5%.

26 27 PWR Dump

28 Dump PWR s/n 1025 using PWR DUMP – SUPPLY LINE (ORB OPS, ECLS) p. 5-44.

29 Perform steps 1 and 3-6. MCC-H will TMBU FDA in steps 2 and 7.

30
31 In Step 6, re-stow hardware in ziplock bags and place in CHCK.

32 Temp stow PWR s/n 1025 on middeck for future fill.

33 34 CWC Dump

35 After performing the waste dump step I-2, and verifying the PWR dump is complete, perform

36 CWC OVERBOARD DUMP (ORB OPS, ECLS) p. 5-36. Perform steps A, D, E, F, and G.

37 MCC-H will TMBU FDA in steps B and H. Dump CWC s/n 1076.

38
39 Waste dump valve open time for CWC s/n 1076 will be ~15 minutes.

40
41 Double bag CWC s/n 1076 w/ unused 24"x24" ziplock bags from MF28K and stow in Bag E
42 (Middeck Ceiling Port 1) for return.

43 Stow the WWD in a separate ziplock bag in the BOB.

44 Stow the Y-Y hose in a separate ziplock bag in the CHCK.

18-0338 (MSG 125) – FD12 EVA Deltas

Page 1 of 1

Heidi, Steve, Shane, and Eric,

Great job on all the EVAs this mission!! It has been a joy and privilege to work with you through 4 outstanding EVAs!!

It's time to pack up to come home. Today's Post EVA EMU Reconfiguration and Transfer will pack up your EMU equipment for return. In order to return the faulty waist brief without using it on one of your Orbiter contingency EMUs, we will be uplinking you 18-0340 (MSG 127) to replace that procedure in your book. We are still working out the details so we will uplink the message later today prior to the activity. The NOAX gun will transfer today via the Transfer list item 992. Please refer to the Transfer list notes column for comments on how to stow the NOAX gun for transfer. You will transfer some EVA tools today per the Transfer List and there is also an activity tomorrow to gather the remaining tools that will come home in the middeck.

18-0339 (MSG126) MPLM RSP LOCKING SCREW REPLACEMENT

Page 1 of 2 pages

OBJECTIVE:

Provide secondary locking feature for RSP Lower Launch Restraint with damaged Locking Screw. A Locking Screw will be scavenged from the LAB1D2 Rack Lower Launch Restraint.

LOCATION:

LAB1D2 (AV-3) UIP
MPLMA4

DURATION:

20 minutes

CREW:

One

MATERIALS:

Gray Tape

TOOLS:

Digital Camera
Scissors

Node 2 Tool Page

Ratchet, 3/8" Drive
6" Long, 3/8" Hex Head, 3/8" Drive

ISS IVA TOOLBOX:

Drawer 2:

(40-200 in-lbs) Trq Wrench, 3/8" Drive

1. SCAVENGING SPARE LOCKING SCREW

- LAB1D2
- 1.1 Open LAB1D2 UIP Closeout Beta cloth cover, 1/4 fasteners (two).
 - 1.2 Remove left Rack Lower Launch Restraint non-captive Locking Screw (Ratchet, 3/8" Drive; 6" Long, 3/8" Hex Head)
 - 1.3 Prepare 0.5 inch wide, 8 inch long strip of Gray Tape. (Gray Tape, Scissors).
 - 1.4 Apply tape to threads of scavenged Locking Screw. Tape should cover only threads. Do not tape over narrow, unthreaded diameter of fastener as this will interfere with installation of Locking Screw.
 - 1.5 Photo document prepared Locking Screw (Digital Camera). Temporarily stow Locking Screw.

2. TORQUING RACK LOWER LAUNCH RESTRAINT

- MPLMA4
- 2.1 Torque MPLMA4 left Rack Lower Launch Restraint to 120 in-lbs. [6" Long, 3/8" Hex Head; (40-200 in-lbs) Trq Wrench, 3/8" Drive].

18-0339 (MSG126) MPLM RSP LOCKING SCREW REPLACEMENT

Page 2 of 2 pages

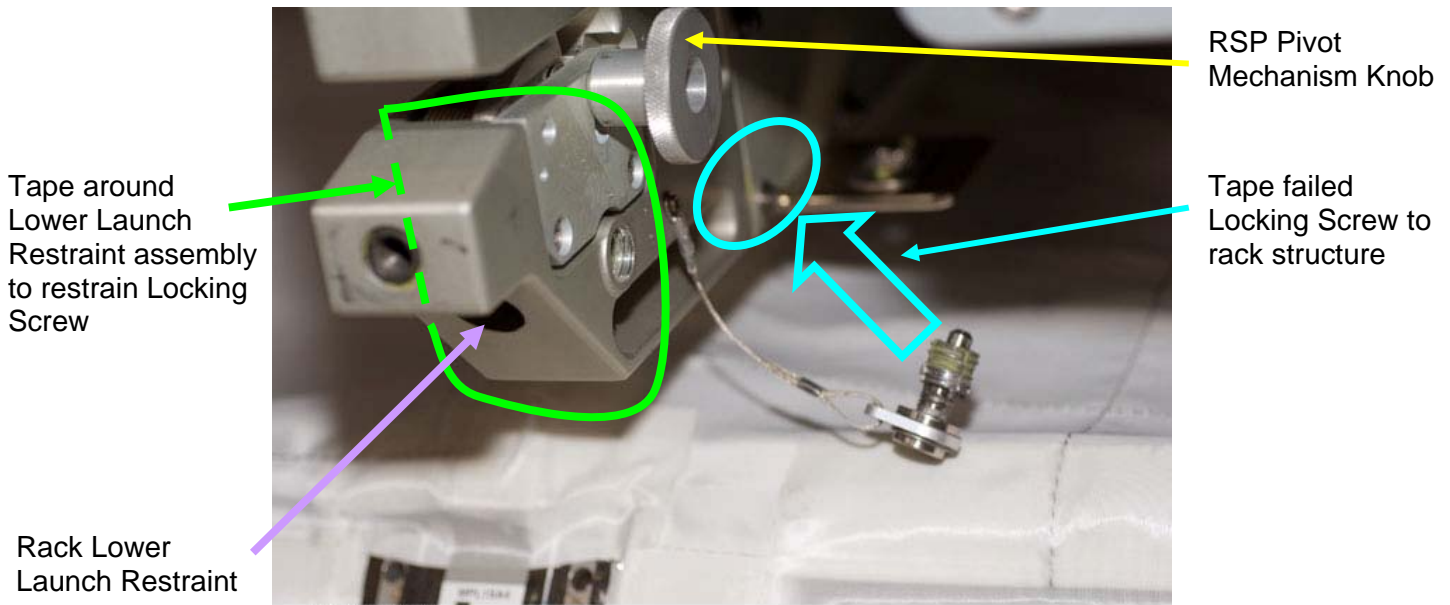


Figure 1. - RSP left Lower Launch Restraint assembly.

3. INSTALLING SCAVENGED LOCKING SCREW IN RSP

3.1 Restrain failed Locking Screw and Insert to rack structure (Gray Tape).

Refer to Figure 1.

3.2 Loosen RSP Pivot Mechanism Knob one turn.

Hand tighten RSP Pivot Mechanism Knob in down, unlatched position.

3.3 Insert scavenged Locking Screw into left Rack Lower Launch Restraint assembly.

Incrementally add/remove tape from bolt as required to ensure snug fit (Scissors).

3.4 ✓ Locking Screw head is flush against rack structure.

✓ Locking Screw blocking Rack Lower Launch Restraint.

3.5 Wrap tape over head of Locking Screw, circling Lower Launch Restraint Assembly a minimum of three times (Gray Tape).

Refer to Figure 1.

3.6 Photo document final RSP configuration (Digital Camera).

3.7 Notify **MCC-H** of task completion.

Stow tools, equipment.