STS-126 / ULF2

FD 13 Execute Package

MSG	Page(s)	Title
133	1 - 11	FD13 Flight Plan Revision **(pdf)**
134	12 - 13	FD13 Mission Summary **(pdf)**
130A	14 - 15	FD13 Transfer Message **(pdf)**
135	16	FD12 MMT Summary **(pdf)**
136	17 - 25	ULF2 EVA Tool Restow **(pdf)**
137	26 - 27	UPDATED LAYOUTS FOR BAGS B AND I **(pdf)**
138	---	Stowage Locations for FD13 (GMT 331) **(pdf - Electronic Only)**
139	28	FD13 EVA Deltas **(pdf)**
140	29	EVA Transfer to Shuttle **(pdf)**
141	30 - 31	LiOH Cue Card Update **(pdf)**
142	32	CWC Fill CC Updates **(pdf)**
143A	33 - 40	CBM Center Disk Cover Installation **(pdf)**
144	41	FD13 Crew Choice Video Downlink Options **(pdf)**

Jelisha M. Harris

Approved

Last Updated: Nov 26 2008 12:23PM GMT
JEDI *(**J**oint **E**xecute package **D**evelopment and **I**ntegration), v2.04.0003*

THIS PAGE INTENTIONALLY BLANK

MSG INDEX

MSG NO.	TITLE
130	FD13 Transfer Message (18-0345)
133	FD13 Flight Plan Revision
134	FD13 Mission Summary
135	MMT Summary
136	ULF2 EVA Tool Restow (18-0349)
137	Updated Layouts For Bags B And I
138	Stowage Locations for FD13 (GMT 331) (18-0350)
139	FD13 EVA Deltas (18-0353)
140	EVA Transfer to Shuttle (18-0354)
141	LiOH Cue Card Update
142	CWC Fill CC Updates
143	CBM Center Disk Cover Installation (18-0335A)
144	FD13 Crew Choice Video Downlink Options

1. For today's cryo config, O2 and H2 Tanks 1 and 2 will be active with dual heaters.

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

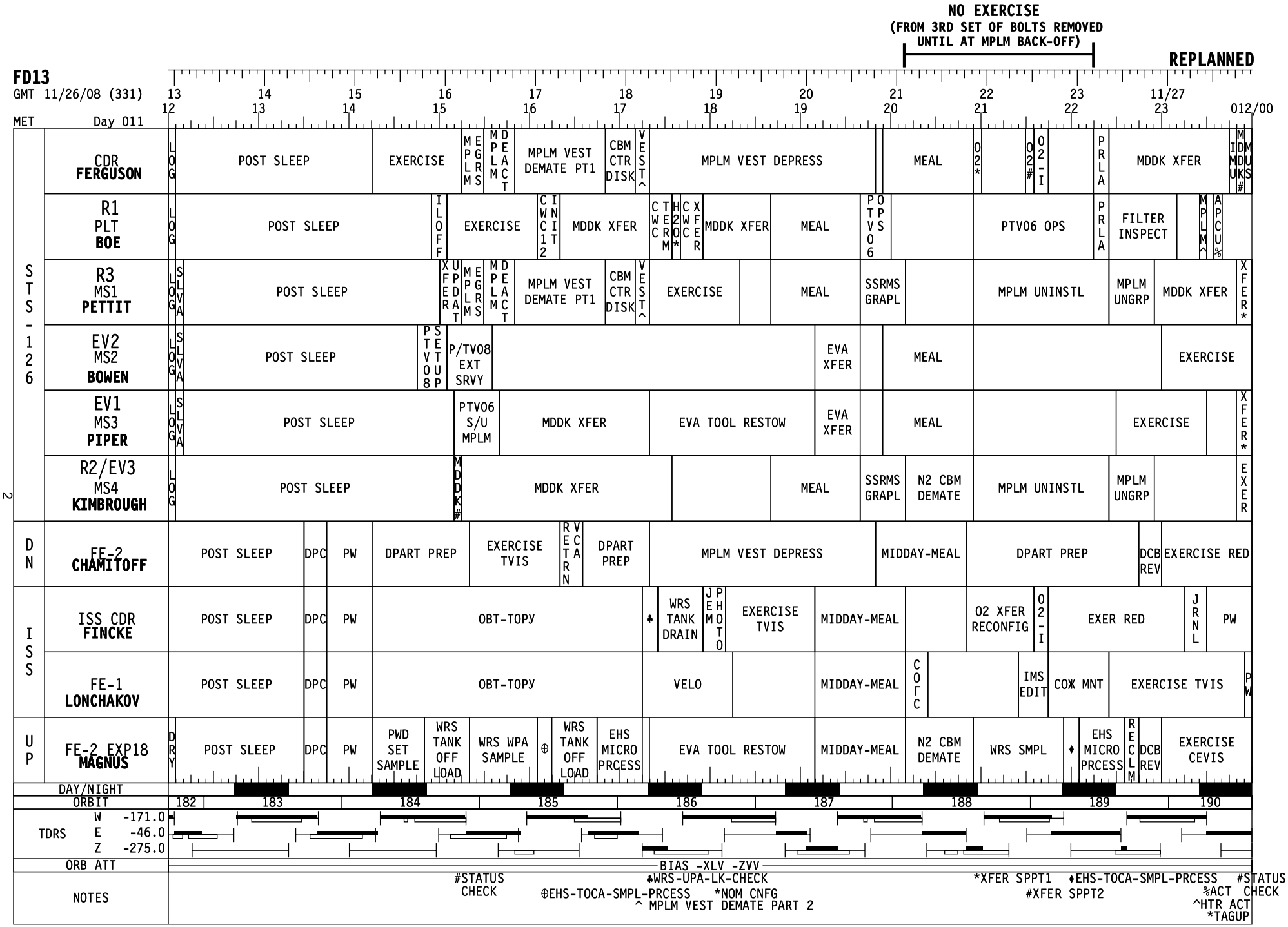
   A11 CRYO TK4 HTR O2 A - OFF
   HTRS H2 A,B (two) - OFF

2. The H2O Ops Cue Card uplinked today contains details for CWC Fills #12, #13, and #14. In this latest plan, CWC Fill #12 will be completed on FD13 and CWC Fill #13 will be completed on FD14. CWC #14 is included in the cue card as a placeholder only and will not be performed.
   Note that Ag Biocide Kit S/N 1003 will be needed for both of the planned fills. Do not transfer this item until both fills are complete. Reference Transfer List Item #32

3. OSO completed the Node 2 Nadir CBM Prep for Demate nominally last night. The CBM is healthy and in a good configuration for today's MPLM demate. The CBM CPAs will remain powered while you are closing out the MPLM vestibule. Care should be taken when working in vicinity of CBM Controllers to avoid snagging any powered CPA cables.

4. We have uplinked a new CBM Center Disk Cover installation procedure as MSG 143. During Node 3 fitchecks, we have seen CPA damage during Center Disk Cover removal due to extremely tight clearances, and we think we might have had the same issue on-orbit. The updated procedure contains steps to change the way the Center Disk Standoff Bars are installed. If Standoff Bars can not be installed in such a way to avoid contact with the connectors on the short side of the CPA, there are steps in the procedure to safe and demate the CPA wire harnesses.
   Thanks again for the repair you did on the MPL1A4 RSP lower left locking screw. We have confirmed that the RSP is in a good configuration for return. Can you confirm that you were able to complete the rest of the Configure MPLM Racks for Entry procedure

5. REPLACE PAGES 3-140 THROUGH 3-147.


NO EXERCISE
(FROM 3RD SET OF BOLTS REMOVED UNTIL AT MPLM BACK-OFF)
REPLANNED
FD13
GMT 11/26/08 (331)
MET Day 011
13 14 15 16 17 18 19 20 21 22 23 11/27
12 13 14 15 16 17 18 19 20 21 22 23 012/00
STS-126
CDR FERGUSON
POST SLEEP
EXERCISE
MPLM VEST DEMATE PT1
MPLM VEST DEPRESS
MEAL
MDDK XFER
R1 PLT BOE
POST SLEEP
EXERCISE
MDDK XFER
MEAL
PTV06 OPS
FILTER INSPECT
R3 MS1 PETTIT
POST SLEEP
MPLM VEST DEMATE PT1
EXERCISE
MEAL
SSRMS GRAPL
MPLM UNINSTL
MPLM UNGRP
MDDK XFER
EV2 MS2 BOWEN
POST SLEEP
P/TV08 EXT SRVY
EVA XFER
MEAL
EXERCISE
EV1 MS3 PIPER
POST SLEEP
PTV06 S/U MPLM
MDDK XFER
EVA TOOL RESTOW
EVA XFER
MEAL
EXERCISE
R2/EV3 MS4 KIMBROUGH
POST SLEEP
MDDK XFER
MEAL
SSRMS GRAPL
N2 CBM DEMATE
MPLM UNINSTL
MPLM UNGRP
DN
FE-2 CHAMITOFF
POST SLEEP
DPART PREP
EXERCISE TVIS
DPART PREP
MPLM VEST DEPRESS
MIDDAY-MEAL
DPART PREP
EXERCISE RED
ISS
ISS CDR FINCKE
POST SLEEP
OBT-TOPY
WRS TANK DRAIN
EXERCISE TVIS
MIDDAY-MEAL
O2 XFER RECONFIG
EXER RED
PW
FE-1 LONCHAKOV
POST SLEEP
OBT-TOPY
VELO
MIDDAY-MEAL
IMS EDIT
EXERCISE TVIS
UP
FE-2 EXP18 MAGNUS
POST SLEEP
PWD SET SAMPLE
WRS TANK OFF LOAD
WRS WPA SAMPLE
WRS TANK OFF LOAD
EHS MICRO PRCESS
EVA TOOL RESTOW
MIDDAY-MEAL
N2 CBM DEMATE
WRS SMPL
EHS MICRO PRCESS
EXERCISE CEVIS
DAY/NIGHT
ORBIT 182 183 184 185 186 187 188 189 190
TDRS W -171.0 E -46.0 Z -275.0
ORB ATT
BIAS -XLV -ZVV
NOTES
#STATUS CHECK
⊕EHS-TOCA-SMPL-PRCESS
♣WRS-UPA-LK-CHECK
*NOM CNFG
^ MPLM VEST DEMATE PART 2
*XFER SPPT1
#XFER SPPT2
♦EHS-TOCA-SMPL-PRCESS
%ACT CHECK
^HTR ACT
*TAGUP
#STATUS CHECK

REPLANNED

FD13

GMT 11/27/08 (332) 01 02 03 04 05 06 07 08 09 10 11 12

MET Day 012 00 01 02 03 04 05 06 07 08 09 10 11 12

FD14

STS-126	CDR **FERGUSON**	PRE SLEEP	PMC A/G	PRE SLEEP	SLEEP	LOG	POST SLEEP
	R1 PLT **BOE**	A# PM CU US	PRE SLEEP	SLEEP	LOG	POST SLEEP
	R3 **M1** MS1 **PETTIT**	X FM EU RS*	PRE SLEEP	XFER	BREF	PRE SLEEP	SLEEP	LOG	POST SLEEP
	EV2 MS2 **BOWEN**	MUS	PRE SLEEP	SLEEP	LOG	POST SLEEP
	EV1 MS3 **PIPER**	X FM EU RS*	PRE SLEEP	SLEEP	POST SLEEP
	R2/EV3 MS4 **KIMBROUGH**	EXER	MUS	PRE SLEEP	SLEEP	POST SLEEP
DN	FE-2 **CHAMITOFF**	PW	DPC	PRE SLEEP-ISS	PFC	♣	JRNL	SLEEP	IMMN	POST SLEEP
ISS	**M2** ISS CDR **FINCKE**	PW	DPC	⊕	PFC	XFER	PRE SLEEP-ISS	SLEEP	POST SLEEP
	FE-1 **LONCHAKOV**	PW	DPC	PRE SLEEP-ISS	SLEEP	POST SLEEP
UP	FE-2 EXP18 **MAGNUS**	PW	DPC	PRE SLEEP-ISS	SLEEP	IMMN	POST SLEEP

DAY/NIGHT

ORBIT 190 191 192 193 194 195 196 197 198

TDRS W -171.0 E -46.0 Z -275.0

ORB ATT BIAS -XLV -ZVV

NOTES
#DEACT ⊕PRE SLEEP-ISS ♣PRE SLEEP-ISS
*TAGUP

STS-126 FD (13)

REPLANNED

GMT Date 11/26 (331) | W | TDRSE | Z | D/N | DORB | ORB | MET Day 011 | STS ATT

CDR FERGUSON	PLT BOE	MS1 PETTIT	NOTES
FLIGHT SLEEP LOG (ORB OPS, SDBI)	FLIGHT SLEEP LOG (ORB OPS, SDBI)	FLIGHT SLEEP LOG (ORB OPS, SDBI)	
POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	LIQUID SLVA SAMPLE(ORB OPS, SDBI)	
		POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
EXERCISE	TV (ILLUMINATOR OPS)(PHOTO/TV, CC) ILLUMINATORS OFF - ALL	TRANSFER UPDATE Ref. MSG 130	
MPLM: 1.105 MPLM EGRESS [A] Steps 1-4	EXERCISE	MPLM: 1.105 MPLM EGRESS [A] Steps 1-4	
MPLM: 1.106 MPLM DEACTIVATION Steps 1-2,4-6		MPLM: 1.106 MPLM DEACTIVATION Steps 1-2,4-6	
S&M: 1.109 MPLM VESTIBULE-CNFG FOR DEMATE Steps 1-9		S&M: 1.109 MPLM VESTIBULE-CNFG FOR DEMATE Steps 1-9	

FD13 EZ ACTIVITIES:
TEPC (ORB OPS, CREW SYS)
CHECK STATUS
√OCAC FILTER & MDDK DUCT SCREEN
HARD REBOOT ALL PGSCs EXCEPT:
STS-6(WLES),STS-3(KFX),
& OCA ROUTER.

[A] Remove PFE and PBA from MPLM and stow in the following locations:
PFE: NOD1P2-12 PEPS Locker (If blocked, stow in NOD1OP2 behind footbridge with the PFE nozzle not exposed
PBA: NOD2P2 PEPS Locker
Ref. MPLM Return Transfer List: Items 851, 852

Time scale: 13:00, 14:00, 15:00, 16:00 (GMT); 12:00, 13:00, 14:00, 15:00, 16:00 (MET)

STS ATT: BIAS-XLV-ZVV

4

STS-126 FD (13)

REPLANNED

GMT Date 11/26 (331) | W | TDRSE | Z | D/N | DORB | ORB | MET Day 011 | STS ATT

MS2 **BOWEN**

FLIGHT SLEEP LOG (ORB OPS, SDBI)
LIQUID SLVA SAMPLE(ORB OPS, SDBI)
POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

P/TV08 EXTERNAL SURVEY
(P/TV FS, SCENES)
Perform Setup Step 2

P/TV08 EXTERNAL SURVEY
(P/TV FS, SCENES)
When SETUP, Step 2 complete,
Perform OPS, Item 2

MS3 **PIPER**

FLIGHT SLEEP LOG (ORB OPS, SDBI)
LIQUID SLVA SAMPLE(ORB OPS, SDBI)
POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

P/TV06 ROBOTICS OPS
(PHOTO/TV, SCENES)
Perform SETUP

MIDDECK XFER
Ref. Middeck Transfer List

MS4 **KIMBROUGH**

FLIGHT SLEEP LOG (ORB OPS, SDBI)
POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

MDDK STATUS CHECK (ASSY OPS, P/L)
MIDDECK XFER
Ref. Middeck Transfer List

NOTES

13:00 14:00 15:00 16:00

12:00 13:00 14:00 15:00 16:00

16 182 183 184 185

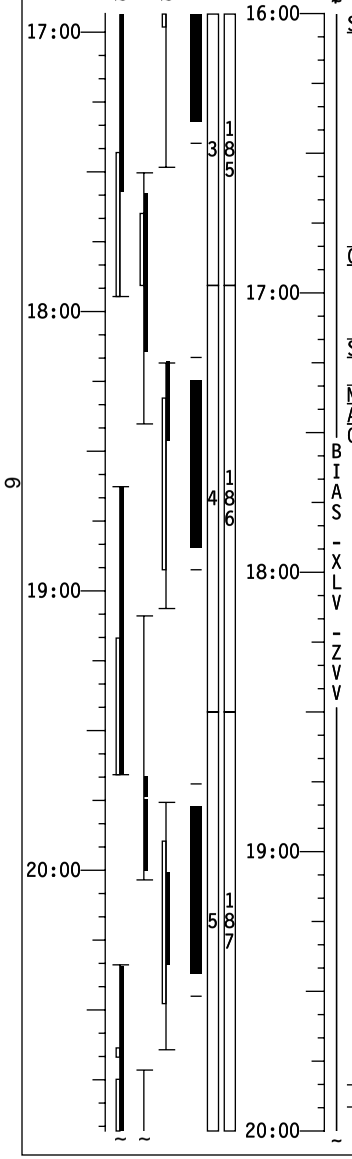
BIAS-XLV-ZVV

5

STS-126 FD (13)

REPLANNED

GMT Date 11/26 (331) | W | TDRSE | Z | D/N | DORB | ORB | MET Day 011 | STS ATT



BIAS - XLV - ZVV

CDR FERGUSON

S&M: 1.109 MPLM VESTIBULE-CNFG FOR DEMATE
Steps 1-9

CBM CENTER DISK COVER INSTALLATION
Ref. MSG 143

S&M: 1.109 MPLM VESTIBULE-CONFIG FOR DEMATE
Steps 10.2-13

MPLM: 1.110 NODE2 TO MPLM VESTIBULE DEPRESS AND LEACK CHECK
Ground will perform steps 5.1 and 10.2

MEAL

PLT BOE

EXERCISE

SHUTTLE/ISS H2O CNTR FILL
(ORB OPS, ECLS) INIT FILL #12
Ref. MSG 142

MIDDECK XFER
Ref. Middeck Transfer List:
Items 27, 998
Ref. MPLM Return Transfer List:
Items 851, 852, 855

SHUTTLE/ISS H2O CNTR FILL
(ORB OPS, ECLS)
Perform FILL TERMINATION

NOMINAL H2O CONFIG (ORB OPS, ECLS)
FES PRI A req'd

CWC TRANSFER
Transfer 1 CWC to ISS

MIDDECK XFER
Ref. Middeck Transfer List

MEAL

P/TV06 ROBOTICS OPS
(PHOTO/TV, SCENES)
Perform OPS ITEM 3

MS1 PETTIT

S&M: 1.109 MPLM VESTIBULE-CNFG FOR DEMATE
Steps 1-9

CBM CENTER DISK COVER INSTALLATION
Ref. MSG 143

S&M: 1.109 MPLM VESTIBULE-CONFIG FOR DEMATE
Steps 10.2-13

EXERCISE

MEAL

ROBO: 1.240 NODE 2 MATED MPLM GRAPPLE

NOTES

STS-126 FD (13)

REPLANNED

GMT Date 11/26 (331) | W | TDRS E | Z | D/N | DORB 3 4 5 | ORB 185 186 187 | MET Day 011 | STS ATT

BIAS -XLV -ZVV

MS2 **BOWEN**	MS3 **PIPER**	MS4 **KIMBROUGH**	NOTES
	MIDDECK XFER Ref. Middeck Transfer List	MIDDECK XFER Ref. Middeck Transfer List	
	EVA TOOL RESTOW Ref. MSG 136		
EVA TRANSFER TO STS Ref. MSGs 139 and 140	EVA TRANSFER TO STS Ref. MSGs 139 and 140	MEAL	
		ROBO: 1.240 NODE 2 MATED MPLM GRAPPLE	
MEAL	MEAL		

STS-126 FD (13)

REPLANNED

GMT Date 11/26 (331) | W | TDRSE | Z | D/N | DORB | ORB | MET Day 011 | STS ATT

21:00 22:00 23:00 00:00

20:00 21:00 22:00 23:00 00:00

6 188 7 189 8 190

BIAS-XLV-ZVV

CDR FERGUSON

MEAL

JOINT OPS: 3.123 O2 TRANSFER SETUP (POST PREBREATHE USING SHUTTLE O2) Step 3

JOINT OPS: 3.123 O2 Transfer Setup (PST PREBREATHE USING SHUTTLE O2) Steps 5.1-5.3

JOINT OPS: 3.116 HIGH PRESS TNK O2 TRNSFER Step 2

A6U √PL RETEN LAT (five) - OFF, then ROBO: 1.250 MPLM DEMATE TO BERTH Steps 9-15

MIDDECK XFER Ref. Middeck Transfer List

IMU STAR OF OPPTY ALIGN (ORB OPS, GNC)

MDDK STATUS CHECK (ASSY OPS, P/L)

MUS LOG (ASSY OPS, PAYLOADS)

PLT BOE

P/TV06 ROBOTICS OPS (PHOTO/TV, SCENES) OPS

A6U √PL RETEN LAT (five) - OFF, then ROBO: 1.250 MPLM DEMATE TO BERTH Steps 9-15

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

R1 PL PRI MN C - ON (tb-ON)
SSP1 MPLM CHAN 1,2 HTR PWR (two) - ON (tb-gray)
A15 APCU 1 OUTPUT - ON

MS1 PETTIT

ROBO: 1.240 NODE 2 MATED MPLM GRAPPLE

ROBO: 1.250 MPLM DEMATE TO BERTH

ROBO: 1.260 BERTHED MPLM RELEASE

MIDDECK XFER Ref. Middeck Transfer List

TRANSFER TAGUP Coordinate with xfer counterpart

NOTES

NO EXERCISE FROM 3RD SET OF BOLTS REMOVED UNTIL AT MPLM BACK-OFF

UPDATE TFL 199

MPLM PRESSURE CHECK

STS-126 FD (13)

REPLANNED

GMT Date 11/26 (331) | W | TDRS E | Z | D/N | DORB 6 7 8 | ORB 188 189 190 | MET Day 011 | STS ATI | BIAS -XLV -ZVV

21:00 22:00 23:00 00:00

20:00 21:00 22:00 23:00 00:00

MS2 BOWEN

MEAL

EXERCISE

MS3 PIPER

MEAL

EXERCISE

TRANSFER TAGUP
Coordinate with xfer counterpart

MS4 KIMBROUGH

ROBO: 1.240 NODE 2 MATED MPLM GRAPPLE

S&M: 1.515 N2 CBM DEMATE
Steps 1-10
Ground may require assistance with Step 13 (verif CBM petals closed).
Note: NO EXERCISE

ROBO: 1.250 MPLM DEMATE TO BERTH

ROBO: 1.260 BERTHED MPLM RELEASE

EXERCISE

NOTES

NO EXERCISE FROM 3RD SET OF BOLTS REMOVED UNTIL AT MPLM BACK-OFF

STS-126 FD (13)

REPLANNED

GMT Date 11/27 (332) | W | TDRSE | Z | D/N | DORB | ORB | MET Day 012 | STS ATT

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

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

8 | 190

9 | 191

10 | 192

11 | 193

BIAS - XLV - ZVV

CDR FERGUSON

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

PRIVATE MEDICAL CONFERENCE (A/G)

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

SLEEP

PLT BOE

ON MCC GO:
A15 APCU1 OUTPUT - OFF

MUS LOG (ASSY OPS, PAYLOADS)

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

SLEEP

MS1 PETTIT

TRANSFER TAGUP
Coordinate with xfer counterpart

MUS LOG (ASSY OPS, PAYLOADS)

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

TRANSFER BRIEF
Call down status to MCC

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

SLEEP

NOTES

UPDATE
TFL 184

STS-126 FD (13)

REPLANNED

GMT Date 11/27 (332) | W | TDRS E | Z | D/N | DORB 8 9 10 11 | ORB 190 191 192 193 | MET Day 012 | STS ATI

MS2 **BOWEN** | MS3 **PIPER** | MS4 **KIMBROUGH** | NOTES

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

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

BIAS -XLV -ZVV

MUS LOG (ASSY OPS, PAYLOADS)
PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

TRANSFER TAGUP
Coordinate with xfer counterpart
MUS LOG (ASSY OPS, PAYLOADS)
PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

EXERCISE

MUS LOG (ASSY OPS, PAYLOADS)
PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

SLEEP

SLEEP

SLEEP

Good Morning Endeavour!!!
The flight continues to be going so well!
Thanks to all of you for doing such a great job!
Have a great day!

YOUR CURRENT ORBIT IS: 196 X 186 NM

NOTAMS:

NOTAMS - THREE CHANGES

DELETED YHZ NOTAM.
DYS – AERODROME CLOSED 26 NOV 2300Z TO 29 NOV 0700Z.
PTN – RWY 14/32 CLOSED.
EDW – EDT IN USE FOR STS-126. EDW ELS DAY / VFR ONLY.
EDW – LAKEBED RUNWAY 15/33 ELS ONLY. OTHER LAKEBED RWYS RED.
NOR – LAKEBED RUNWAYS GREEN.
MRN – RWY 02 THLD DISPL 2,000'. RWY 20 LDA 9,800'.
JTY – AERODROME CLOSED 26 NOV 1300Z TO 28 NOV 2100Z.
NKT – AERODROME CLOSED 25 NOV 2200Z TO 02 DEC 1200Z.
NTU – AERODROME CLOSED 26 NOV 2100Z TO 01 DEC 1500Z.
JDG – AERODROME CLOSED 27 NOV 0000Z TO 01 DEC 0630Z.
DOV – RWY 14/32 CLOSED.
AMB – RWY 15/33 CLOSED.
YYT – RWY 16/34 CLOSED.
IKF – NOT USABLE. NO AGREEMENT.
BEN – NOT RECOMMENDED/NOT SUPPORTED.

NEXT 2 PLS OPPORTUNITIES:

KSC33 ORB 186 – 11/17:47 SKC 7 350/05P07
KSC33 ORB 202 – 12/18:14 FEW150 7 VRB/02P04

OMS TANK FAIL CAPABILITY:

L OMS FAILS: NO
R OMS FAILS: NO

LEAKING OMS PRPLT BURN:

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

OMS QUANTITIES(%):

L OMS OX = 33.6 R OMS OX = 34.0
FU = 33.3 FU = 33.8
Subtract interconnect counter for current OMS quantities.

DELTA V AVAILABLE:

OMS	311 FPS
ARCS (TOTAL ABOVE QTY1)	37 FPS
TOTAL IN THE AFT	348 FPS
ARCS (TOTAL ABOVE QTY2)	68 FPS
FRCS (ABOVE QTY 1)	17 FPS
AFT QTY 1	77 %
AFT QTY 2	39 %

END OF PAGE 2 OF 2, MSG 134

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

Thanks for a great job loading and unloading the MPLM! We know it took a lot of work and long hours to complete the plan, but you made it look easy nonetheless.

You have just two more days of transfer activities! Today you'll be removing the PFE, PBA, and last few handrails from the MPLM before closing the hatch. In addition, you'll also be transferring more water samples to the middeck for return.

The Transfer List Excel file, FD13_Transfer_List_STS126.xls, locations are:

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

Transfer Notes

- **Today's Scopemeter news:** We appreciate your effort to make sure the Scopemeter Pressure Probe configuration is correct, and we do believe you are in a good configuration. To be absolutely sure, we have provided all the ULF2 Pressure Probe details and what we understand the configuration to be based on our previous conversations with you – please let us know if we missed something. **The bottom line is that there needs to be one good pressure probe in the Shuttle IFM Tool Kit at undock.**

Scopemeter	Barcode	Current Location
ISS		
Scopemeter Pressure Probe	004461J	NOD2O2 (in 0.5 CTB, s/n 1280)
ISA Scopemeter Pressure Probe	000010M	NOD2D5 (in 1.0 CTB, s/n 1256)
MPLM		
Scopemeter Pressure Probe	-	MPL1S2_D1 (in 0.5 CTB, item 419)
ISA Scopemeter Pressure Probe	000009M	MPL1S2_D1 (in 0.5 CTB, item 419)
Shuttle		
Scopemeter Pressure Probe	-	Shuttle IFM Tool Kit

FD13 Choreography

- **Item 851:** Return PBA to NOD2P2
- **Item 852:** Return PFE to NOD1P2
- **Item 855:** Transfer remaining handrails from MPLM to ISS.
- **Item 27:** Transfer Eq-Hk RETs from Middeck to ISS.
- **Item 998:** Transfer Microbial Capture Device to MF14G for return.

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

MIDDECK TRANSFER BOOK

In the Middeck Transfer List **MDDK RTN REALTIME ADDITIONS** tab
Replace the following page:
Return 10b

MPLM RETURN TRANSFER BOOK

In the MPLM Return Transfer List **MPLM CLEANUP** tab
Replace the following page:
Return 30

Changes to the Transfer List are detailed below:

MIDDECK RETURN
Item 996 – quantity update
Items 997, 998, 999, 1000, 1001 – new items

MPLM RETURN
Item 851 and 852 – final location update

FD14 Choreography

- **Item 445:** Transfer "new" bag D back to middeck.
- **Item 700:** Transfer Bag A back to middeck.
- **Item 701:** Transfer Bag B back to middeck.
- **Item 702:** Transfer Bag H back to middeck
- **Items 708 and 709:** Return EMUs 3018 and 3003 to middeck.
- **Items 705 and 706:** Transfer Double Coldbags with samples to Middeck for return.
- **Transfer remaining Middeck return items.**
- **Transfer Bag E back to middeck.**

Have a great day!

- The STS-126 Transfer Team

MSG 135 - FD12 MMT SUMMARY

The MMT met briefly today to review vehicle status and mission progress. The ISS team is enthusiastic given the past 24 hours results for the UPA and confidence is growing that you will be able to leave that installed on ISS. Both SARJs are exhibiting lower drive currents during autotrack which is a testament to all your hardwork cleaning and lubricating

Endeavour is performing quite well. A status of the Main Landing Gear heater DTO was presented and compares quite favorably with the predicted temperatures. Successful completion of this DTO will provide another option for maintaining MLG temperatures on future missions.

END OF PAGE 1 OF 1, MSG 135

18-0349 (MSG 136) - ULF2 EVA Tool Restow

OVERVIEW: Each table has been divided into a configure and restow section as appropriate. NOTE: **RESTOW** all tethers to A/L1D2_Tether Staging Area unless otherwise noted. Red Lg-sm and PIP Pin RETs stowed in MPLM on FD 11, 6 Adjustable Equipment Tethers will be transferred on FD 13, 8 Adjustable Equipment Tethers are in the tether staging area. On FD 13 per EVA Transfer procedure all Red Eq-Eq RETs will be stowed in Shuttle. If time is available unpack Blue RETs from NOD2D5, 0.5 CTB S/N 1382, and Stow in tether staging area. **STOW** all used wire ties in a ziplock, **LABEL** ziplock "Used Wire Ties", and **STAGE** for trash in mesh bag with items 54 and 65. **CLEAN** any grease from tools with washcloths and **STAGE** for trash in mesh bag with items 54 and 65..

Table A: Configure EV2 MWS

Change Flag	Item #	☑	Current Location	Item	QTY	P/N	S/N	B/C	Final Location	Notes
	1		**EV2 MWS**	MWS Baseplate	1	SEG33110490-303	1002	-	**A/L1O0_Behind Closeout** 1.0 CTB: MUT AND MWS PARTS, S/N 1013, B/C 002308J	
	2			Body Restraint Tether	1	SEG33110400-309	1018	-		**REMOVE** from baseplate
	3			Swing Arm Assy, RH	1	SEG33110491-307	1004	-		**LEAVE** on baseplate.
	4			PGT	1	GE1557000	1008	-	**A/L1O0_Behind Closeout** 1.0 CTB: PGT HARDWARE, S/N 1161, B/C 004155J	#08
	5			7/16 x 6" Wobble	1	SEG33106931-301	1019	-		**REMOVE** from PGT
	6			PGT Battery	1	SEG33110979-305	1005	-	**A/L1O1** M-02 Bag: EVA PREP AND OPS, S/N 1038, B/C 003019J	**STOW** inside mesh bag with other PGT batteries.
	7			EVA Camera	1	-	-	-	**A/L1 Deployed**	If not yet performed, will be reconfigured and stowed on FD 14 per message 18-0344. **REPORT** S/N to MCC-H.
	8			MWS T-Bar	1	SEG33110493-305	1030	-	**A/L1O0_Behind Closeout** 1.0 CTB: MUT AND MWS PARTS, S/N 1013, B/C 002308J	**LEAVE** on baseplate.
	9			Small EVA Trash Bag	1	SEG33106678-301	1004	00001228J	**A/L1O0_Behind Closeout** 1.0 CTB, S/N 1075, B/C 004069J	AKA ISS Small Trash Bag

Table B: Configure EV3 MWS

Change Flag	Item #	☑	Current Location	Item	QTY	P/N	S/N	B/C	Final Location	Notes
	10		**EV3 MWS**	MWS Baseplate	1	SEG33110490-303	1001	-	**A/L1O0_Behind Closeout** 1.0 CTB: MUT AND MWS PARTS, S/N 1013, B/C 002308J	
	11			Body Restraint Tether	1	SEG33110400-309	1017	-		**REMOVE** from baseplate
	12			Swing Arm Assy, RH	1	SEG33110491-307	1003	-		**Leave** on baseplate.
	13			PGT	1	GE1557000	1002	-	**A/L1O0_Behind Closeout** 1.0 CTB: PGT HARDWARE, S/N 1161, B/C 004155J	#02
	14			7/16 x 6" Wobble	1	SEG33106931-301	1018	-		**REMOVE** from PGT
	15			PGT Battery	1	SEG33110979-305	-	-	**A/L1O1** M-02 Bag: EVA PREP AND OPS, S/N 1038, B/C 003019J	**STOW** inside mesh bag with other PGT batteries. **REPORT** S/N to MCC-H.
	16			MWS T-Bar	1	SEG33110493-305	1006	-	**A/L1 Deployed**	**LEAVE** on baseplate.
	17			Small EVA Trash Bag	1	SEG33106678-301	-	-	**A/L1O0_Behind Closeout** 1.0 CTB, S/N 1075, B/C 004069J	AKA ISS Small Trash Bag

Table C: Confirm A/L Staging Bag

Change Flag	Item #	☑	Current Location	Item	QTY	P/N	S/N	B/C	Final Location	Notes
	18		**A/L Staging Bag**	Adjustable Fuse Tether	2	SED39127200-705	1011 1032	-	**A/L Staging Bag**	
	19			PGT	1	GE1557000	1006	-		From MDDK swapped with S/N 1001 on FD 12.
	20			PGT Battery	1	SEG33110979-305	-	-	**A/L1O1** M-02 Bag: EVA PREP AND OPS, S/N 1038, B/C 003019J	**STOW** inside mesh bag with other PGT batteries. From PGT S/N 1001 transferred to MDDK on FD 12. **REPORT** S/N to MCC-H.
	21			Connector Cleaner Tool Kit	1	SJG33111630-301	1010	-	**A/L Staging Bag**	
	22			Pin Straightener Assy	1	SEG33106913-301	1001	001948J		
	23			BRS Tool Sheath	1	SEG33113644-307	1007	-		
	24			PROBE	1	SEG33106923-701	1001	-		
	25			Pry Bar	1	SDG33106924-001	1004	00001199J		
	26			MMWS Key Strap Assembly	1	SEG33110812-301	1008	00008653J		
	27			LDTD Tether	2	SEG33113860-301	-	-		
	28			Needle Nose Pliers	1	SEG33106921-301	1007	-		
	29			Vise Grip Pliers	1	SEG33106922-301	1001	-		AKA Vise Grips
	30			Tape and Velcro Caddy	1	SED33104207-301	-	-		AKA Velcro/Tape Caddy **REPORT** S/N to MCC-H.
	31			Wire Tie Caddy Assy	1	SEG33111586-301	1003	-		**REPORT** number of wire ties, should be QTY: 9.
	32			Worksite Interface Adapter	1	SEG33106863-309	1015	-		AKA WIF Adapter
	33			EVA Ratchet	1	SEG33106927-303	-	-		**REPORT** S/N to MCC-H.
	34			7/16 x 9" Rigid	1	SEG33106930-305	-	-		**REPORT** S/N to MCC-H.

Table D: Confirm A/L IV Bag

Change Flag	Item #	☑	Current Location	Item	QTY	P/N	S/N	B/C	Final Location	Notes
	35		**A/L1_Crewlock** IV Bag	Towel	2	528-40805-3	-	-	**A/L1_Crewlock IV Bag**	
	36			ISS Contamination Detection Ki	1	SJG39136050-302	1001	-		
	37			ISS GP Caddy	2	SEG33113531-301	1008 1010	-		
	38			Adjustable Thermal Mitten	2	0106-811540-03	022 023	-		Left Mittens
	39			Adjustable Thermal Mitten	2	0106-811540-04	022 023	-		Right Mittens
	40			Eq Hk RET	2	SEG33106164-381	-	-		**VERIFY** BLACK. Live in IV Bag. **REPORT** S/N to MCC-H.
	41			SAFER Hand Controller Mount	2	SV1006962-2	00007 00004	00059995J 00051187J		AKA DCM Plug
	42			Socket Caddy Assy	1	SEG33106938-301	1011	-		
	43			1/2 x 8" Wobble	1	SEG33108423-301	-	-		**REPORT** S/N to MCC-H.
	44			7/16 x 6" Wobble	1	SEG33106931-301	-	-		**REPORT** S/N to MCC-H.
	45			Eq Hk RET	1	SEG33106164-381	-	-		**VERIFY** BLACK. Live in IV Bag. **REPORT** S/N to MCC-H.

Table E: Configure Large ORU Transfer Bag

Change Flag	Item #	☑	Current Location	Item	QTY	P/N	S/N	B/C	Final Location	Notes
	46		**A/L1_Crewlock**	ORU Transfer Bag, Large	1	SEG33114494-307	1002	00008707J	**A/L1_Crewlock**	**CLEAN** any remaining grease with washcloths. **STAGE** used washcloths for trash in mesh bag with items 54 and 65.

Table F: Configure Large ORU Transfer Bag

Change Flag	Item #	☑	Current Location	Item	QTY	P/N	S/N	B/C	Final Location	Notes
	47		**A/L1_Crewlock**	ORU Transfer Bag, Large	1	SEG33114494-307	-	-	**A/L1_Crewlock**	**REPORT** S/N to MCC-H.
	48			Dummy Box	1	-	-	-	**A/L1_Deployed** Green Mesh Bag: EVA ISS Temp Stow	**STOW** in mesh bag with item 100 Boom Attach Device. **REPORT** P/N and S/N to MCC-H

Table G: Configure Medium ORU Transfer Bag

Change Flag	Item #	☑	Current Location	Item	QTY	P/N	S/N	B/C	Final Location	Notes
	49		**A/L1_Crewlock**	Medium ORU Transfer Bag	1	SEG33114494-309	-	-	**A/L1_Deployed**	**REPORT** S/N to MCC-H.
	50			Jack Cap	2	NZGL-RPC-N-25-0-MS	-	-	**JPM1D2_B2** EPS1-4 Tray	**STOW** in Ziplock bag. **LABEL** Ziplock Bag " JEM GPS Jack Caps P/N NZGL-RPC-N-25-0-MS"

Table H: Configure Crewlock Bag

Change Flag	Item #	☑	Current Location	Item	QTY	P/N	S/N	B/C	Final Location	Notes
	51		**A/L1_Crewlock**	Crewlock EVA Bag	1	SEG33111751-301	-	-	**A/L1_Crewlock**	
	52			IR Camera	1	-	-	-	**NOD1O4_A2** 0.5 CTB S/N 1141.	If not yet performed, **STOW** per message 18-0317. **REPORT** S/N to MCC-H.

Table I: Configure A/L Crewlock Bag (Starboard SARJ)

Change Flag	Item #	☑	Current Location	Item	QTY	P/N	S/N	B/C	Final Location	Notes
	53		**A/L Deployed** Crewlock Bag	Crewlock EVA Bag	1	SEG33111751-301	-	-	**A/L1_Crewlock**	
	54			Trash Bag Large	1	SEG33106937-301	-	-	**A/L1_Deployed** Mesh Bag	**REMOVE** any EVA Wipes from bag and **STOW** in a large ziplock and stage for future trash in mesh bag. **REPORT** quantities and S/Ns to MCC H. **INSPECT** Trash Bag Large frame, metallic areas and **VERIFY** soft goods are clean. If bag is not clean photograph suspect areas and provide details to MCC-H.
	55			SARJ Scraper	1	SEG33120805-301	-	-	**NOD1_Deployed** 3.0 CTB: SARJ Hardware, S/N 1061, B/C 004246J	**REPORT** S/N to MCC-H.
	56			Wipe Caddy	1	SEG33120807-301	-	-		**REPORT** S/N to MCC-H.
	57			TBA Stowage Bag	1	SEG33120834-301	-	-		**REPORT** S/N to MCC-H.

Table J: Configure A/L Crewlock Bag (Port SARJ)

Change Flag	Item #	☑	Current Location	Item	QTY	P/N	S/N	B/C	Final Location	Notes
	58		**A/L Deployed**	Crewlock EVA Bag	1	SEG33111751-301	-	-	**A/L1_Crewlock**	
	59		Crewlock Bag # 4	Manual Crack Repair Gun	1	SED33119446-301	-	-	**NOD1_Deployed** 3.0 CTB: SARJ Hardware, S/N 1061, B/C 004246J	**REPORT** S/Ns to MCC-H. **STOW** in ziplock bags. AKA Straight Nozzle Grease Gun NOTE: Shut off valves are easy to bump into flow position. If preferred can remove grease cartridge for separate stowage provided enough Red Caps can be found. Reference EVA Checklist 8-11. Or **TAPE** valve in the closed position. **NOTIFY** MCC-H of final configuration.
	60			VALVE, SHUT-OFF, EVA GREASE GUN	1	SED33120735-301	-	-		**REPORT** S/N to MCC-H.
	61			EVA GREASE GUN LAUNCH CONFIGURATION	1	-	-	-		**REPORT** S/N to MCC-H. **STOW** in ziplock bags. AKA J Hook Nozzle Grease Gun. NOTE: Shut off valves are easy to bump into flow position. If preferred can remove grease cartridge for separate stowage provided enough Red Caps can be found. Reference EVA Checklist 8-11. Or **TAPE** valve in the closed position. **NOTIFY** MCC-H of final configuration.
	62			J Hook Nozzle	1	-	-	-		**REPORT** S/N to MCC-H.
	63			Round Scoop	1	SEG33107677-301	1004	-	**A/L1O0_Behind Closeout** 1.0 CTB: PGT HARDWARE, S/N 1161, B/C 004155J	
	64			EVA Camera	1	-	-	-	**-**	If not yet performed, will be reconfigured and stowed on FD 14 per message 18-0344.
	65			Trash Bag Large	1	SEG33106937-301	-	-	**A/L1_Deployed** Mesh Bag	**REMOVE** any EVA Wipes from bag and **STOW** in a large ziplock and stage for future trash in mesh bag. **REPORT** quantities and S/N to MCC-H. **INSPECT** Trash Bag Large frame, metallic areas and **VERIFY** soft goods are clean. If bag is not clean photograph suspect areas and provide details to MCC-H.
	66			Wipe Caddy	1	SEG33120807-301	-	-	**NOD1_Deployed** 3.0 CTB: SARJ Hardware, S/N 1061, B/C 004246J	**REPORT** S/N to MCC-H.

Table K: Configure Fish Stringer

Change Flag	Item #	☑	Current Location	Item	QTY	P/N	S/N	B/C	Final Location	Notes
	67		**A/L1_Crewlock**	Wipe Caddy	1	SEG33120807-301	-	-	**NOD1_Deployed** 3.0 CTB: SARJ Hardware, S/N 1061, B/C 004246J	**REPORT** S/N to MCC-H.
	68			EVA Wipe	-	SEG33116397-703	-	-		**REPORT** QTY to MCC-H.
	69			EVA Wet Wipe	-	-	-	-		**REPORT** QTY to MCC-H.

Table L: Configure Green Mesh Bag: ULF2 EVA Station Tools

Change Flag	Item #	☑	Current Location	Item	QTY	P/N	S/N	B/C	Final Location	Notes
	70		**Crewlock** Green Mesh Bag "ULF2 EVA Station Tools"	Mesh Bag	1	SKD13101494-305	-	-	**NOD1D4_A1**	
	71			Braycote	-	SED33119444-302	-	-	**NOD1_Deployed** 3.0 CTB: SARJ Hardware, S/N 1061, B/C 004246J	**REPORT** QTY to MCC-H.
	72			EVA Wipe	-	SEG33116397-703	-	-		Unused Wipes **REPORT** QTY to MCC-H.
	73			EVA Wet Wipe	-	-	-	-		Unused Wet Wipes **REPORT** QTY to MCC-H.
	74			Worksite Interface Adapter	1	SEG33106863-309	1013	-	**A/L1O0_Behind Closeout** 1.0 CTB, S/N 1075, B/C 004069J	AKA WIF Adapter

Table M: Configure and Confirm 3.0 CTB

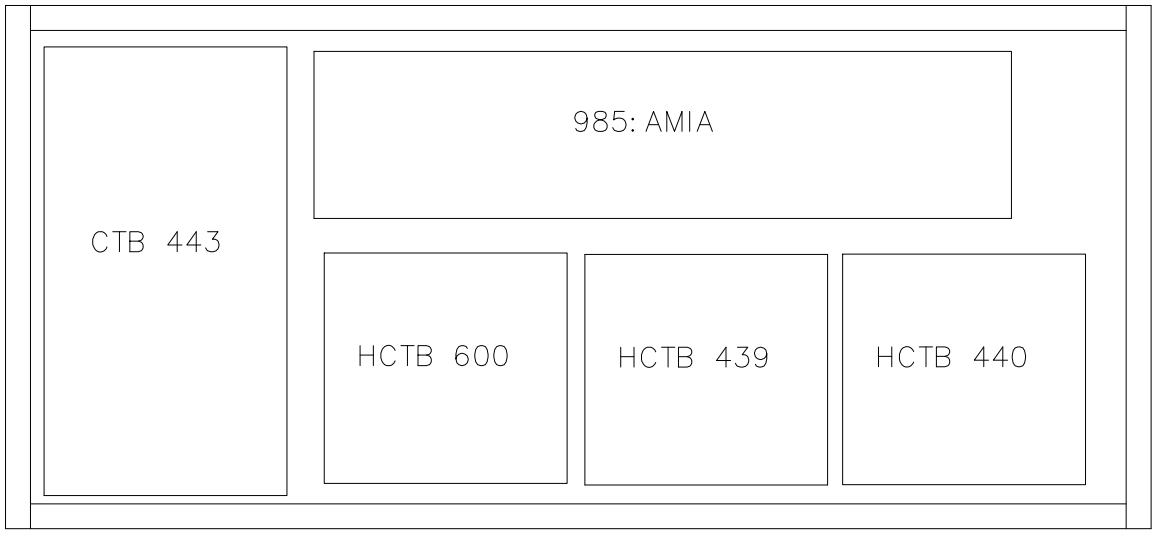
Change Flag	Item #	☑	Current Location	Item	QTY	P/N	S/N	B/C	Final Location	Notes
	75		**NOD1 Deployed**	3.0 CTB: SARJ Hardware	1	SEG33111840-303	1061	004246J	**NOD1_Deployed** 3.0 CTB: SARJ Hardware, S/N 1061, B/C 004246J	If items are not found check Green Mesh Bag: ULF2 EVA Station Tools.
	76			Braycote	-	SED33119444-302	-	-		**REPORT** Qty and S/Ns to MCC-H. AKA Grease Cartridge.
	77			EVA Wet Wipe	5	-	-	-		**REPORT** Qty and S/Ns to MCC-H. Unused EVA Wet Wipes. **Stow** in Ziplock Bag.
	78			EVA Wipe Caddy	3	SEG33120807-301	-	-		**REPORT** S/Ns to MCC-H. Reference items 56, 67 and 68
	79			TBA Stowage Bag	2	SEG33120834-301	-	-		**REPORT** S/Ns to MCC-H. Reference item # 57
	80			Plug Protective Cover w Tether Ring	2	-	-	-		**REPORT** S/Ns if available. AKA TBA Dust Caps. **STOW** in Ziplock Bag. **LABEL** Ziplock Bag "TBA Caps'
	81			Receptacle Protective Cap	2	-	-	-		**REPORT** S/Ns if available. AKA SARJ Dust Caps. **STOW** in Ziplock Bag. **LABEL** Ziplock Bag "TBA Caps'
	82			SARJ Scraper	3	SEG33120805-301	-	-		**REPORT** S/Ns to MCC-H. Reference items 55 and 95
	83			EVA Wipe	-	-	-	-		**REPORT** Qty to MCC-H of Unused EVA Wipes. **NOTE** 10 reserved for item 86. **STOW** up to 18 EVA Wipes into EVA Wipe Caddies. **REPORT** Qty stowed. **STOW** remaining wipes in Ziplock Bag.
Restow										
	84		**NOD1_Deployed** 3.0 CTB: SARJ Hardware, S/N 1061, B/C 004246J	EVA Wipe	10	SEG33116397-703	-	-	**NOD1P4_D** 1.0 CTB: CIPAA, S/N 1074, B/C 004068J	Qty: 10 Reserved for TPS.

Table N: Configure EVA ISS Temp Stow Mesh Bags

Change Flag	Item #	☑	Current Location	Item	QTY	P/N	S/N	B/C	Final Location	Notes
	85		**CO1**	Mesh Bag: EVA ISS Temp Stow	3	SKD13101494-305	-	-	**NOD1D4_A1**	
	86			SARJ Launch Restraint	3	1F83193-1	EFG0003 EFG0004 EFG0006	-	**NOD1_Deployed** 3.0 CTB: SARJ Hardware, S/N 1061, B/C 004246J	SLR from 4A, removed on EVA 1.
	87			SLR 6A rail stub	1	1F85004-1 1F83194-1 1F83195-1	-	-		**REPORT** S/Ns to MCC-H.
	88			EVA Temporary Rail Stop	1	SEG33115053-301	-	-		**STOW** at A/L1O0 behind the close out if it does not fit inside 3.0 CTB: SARJ Hardware. **REPORT** S/Ns to MCC-H
	89			SLR 1A rail stub	1	1F85005-1 1F83194-1 1F83195-1	-	-		**REPORT** S/Ns to MCC-H.
	90			SARJ Scraper	1	SEG33120805-301	-	-		**REPORT** S/N to MCC-H.
	91			EVA Wipe	-	-	-	-		**REPORT** QTY to MCC-H.
	92			7/16" Box End Ratchet Wrench	1	SED39126186-701	1003	-	**A/L1O1** M-02 Bag: EVA PREP AND OPS, S/N 1038, B/C 003019J	
	93			Ballstack	2	SEG33106870-703	1011 1013	-	**A/L1O0_Behind Closeout** 1.0 CTB: MUT AND MWS PARTS, S/N 1013, B/C 002308J	
	94			Round Torque Multiplier	1	SEG33106260-301	1002	00004278J	**A/L1 Deployed** Crewlock Bag # 4	
	95			5/8" Socket Proud Round Torque Multiplier	1	SDG33107088-001	1001	-		
	96			Jettison Stowage bag	1	SEB13100134-304	-	-	**NOD1P1**	**REPORT** S/N to MCC-H.
	97			EVA Overglove	1	0106-813600-03	-	-	**A/L1O1** M-02 Bag: EMU Arms,Legs,Boots,sizing rings,etc, S/N 1010, B/C 003027J	**STOW** Overgloves inside Ziplock with other Overgloves. **REPORT** S/N to MCC-H.
	98			EVA Overglove	1	0106-813600-04	-	-		
	99			P411 Connector Cover	1	-	-	-	**A/L1D2_Behind Closeout** 1.0 CTB: Unique EVA Tools, S/N 1022, B/C 002317J	**REPORT** P/N and S/N to MCC-H
	100			Boom Attach Device	1	-	-	-	**A/L1 Deployed** Green Mesh Bag: EVA ISS Temp Stow	AKA Space Station Boom Attachment Device. **STOW** in Green Mesh Bag: EVA ISS Temp Stow. **REPORT** P/N and S/N to MCC-H

MSG 137 - UPDATED LAYOUTS FOR BAGS B AND I

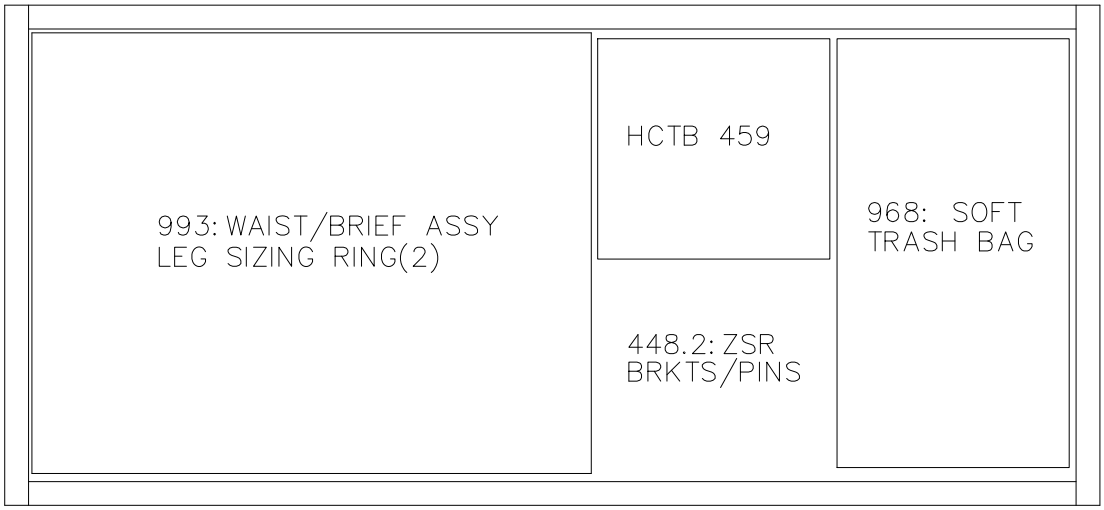
Good morning STS-126 crew. Here are the updated layouts for Bags B and I (A/L floor bag). Also included is an updated locker map.
-The STS-126 Middeck Stowage Team



BAG B

ARRANGE AS SHOWN. FILL IN EMPTY AREAS WITH FOAM/CLOTHING

FORWARD

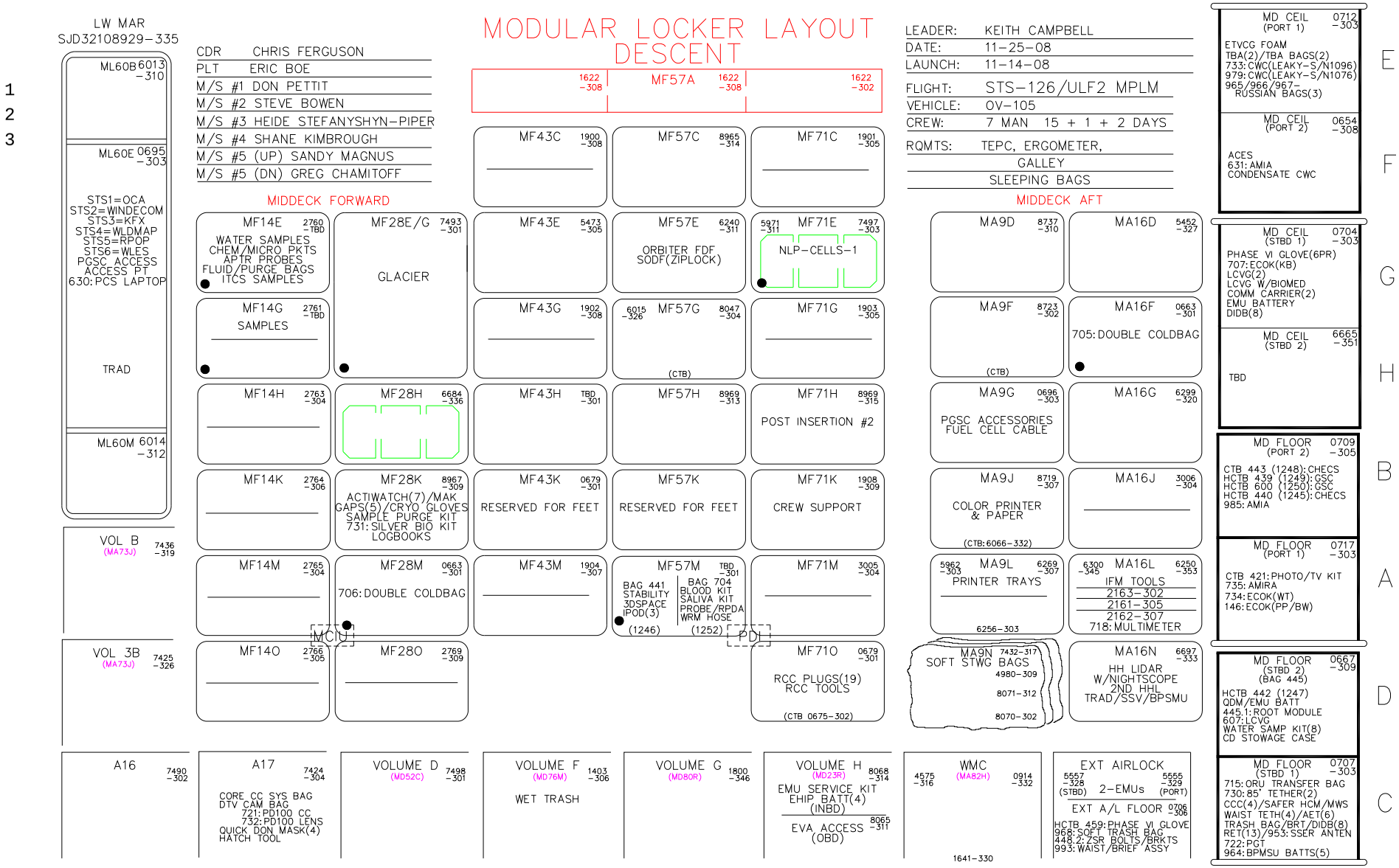


BAG I (A/L FLOOR)

ARRANGE AS SHOWN. FILL IN EMPTY AREA WITH FOAM/CLOTHING.
IF 3 LIOH ARE ADDED THEY CAN BE STOWED FOR BEST FIT, BUT
PLEASE WRAP EACH LIOH CAN IN TOWEL OR CUSHION.

END OF PAGE 1 OF 2, MSG 137

MSG 137 - UPDATED LAYOUTS FOR BAGS B AND I



NOTE: LOCKER LAYOUTS ARE FOR REFERENCE ONLY AND ARE NOT RELEASED DRAWINGS

END OF PAGE 2 OF 2, MSG 137

18-0353 (MSG 139) – FD13 EVA Deltas

Heidi and Steve,

Today, we have you helping to cleanup the ISS airlock and transferring the rest of your EVA hardware to the middeck. We have been working with ISO on the stowage matrix that you will be using, message 18-0349 (MSG 136) ULF2 EVA Tool Restow. Mike and Sandy have requested that one of them be scheduled with you for the stowage so if you get ahead before Sandy is free to help, please save the final stowage of items until they have a chance to work with you. You'll be transferring the EMUs and remaining EVA items per message 18-0354 (MSG 140) EVA Transfer to Shuttle.

EVA TRANSFER TO SHUTTLE (30 min)

1. Configure/verify contents of EVA Large ORU Bag per following table

EVA Large ORU Bag
☐ Adjustable Equipment Tethers (s/n 1010,1013,1014, 1015,1036,1037) (6) ☐ Large ORU Bag (s/n 1016) (1) ☐ Red RETs (all, expect 13). Report Qty to MCC-H.

2. Transfer items in table below to Shuttle; report status to MCC when complete

TRANSFER TO SHUTTLE

Item	Destination	Transfer Status
EMU 3018 (M) with ECOK	Temp stow Middeck	
EMU 3003 (XL) with ECOK	Temp stow Middeck	
Kb ECOK	Temp stow Middeck	
EVA Systems Transfer Bag	Temp stow Middeck	
EVA Large ORU Bag	Temp stow Middeck	

LIOH CHANGEOUT

FLIGHT DAY 3 DOCKING ORBITER WITH ISS

(7 Crewmembers/Single Shift/FD20)

FLIGHT DAY	POS A	POS B	CK CMPLT
LAUNCH	1	2	
PRE FD1	"	"	
POST FD2	3	4	
PRE FD2	5*	6	
POST FD3	7	"	Docking
PRE FD3	"	STS-122 ____	
POST FD4	"	"	
PRE FD4	STS-122 ____	"	
POST FD5	"	"	
PRE FD5	"	STS-122 ____	
POST FD6	"	"	
PRE FD6	STS-122 ____	"	
POST FD7	"	"	
PRE FD7	"	STS-122 ____	
POST FD8	"	"	
PRE FD8	STS-122 ____	"	
POST FD9	"	"	
PRE FD9	"	STS-122 ____	
POST FD10	"	"	
PRE FD10	STS-123 ____	"	
POST FD11	"	"	
PRE FD11	"	STS-123 ____	
POST FD12	"	"	
PRE FD12	STS-123 ____	"	
POST FD13	"	"	
PRE FD13	“	STS-123 ____	
POST FD14	"	"	
MID FD14	STS-123 ____*	STS-123 ____*	Hatch Close
PRE FD14	“	“	
POST FD15	STS-123 ____	STS-123 ____	
PRE FD15	“	STS-123____	
POST FD 16	STS-124 ____	STS-124 ____	
PRE FD16	STS-124 ____*	8*	
POST FD17	9	10	EOM
PRE FD17	11	"	
POST FD18	12	13	EOM+1
PRE FD18	14*	15*	
POST FD19	16	17	EOM+2
PRE FD19	“	STS-126 ____	
POST FD20	STS-126 ____	STS-126 ____	EOM+3

* Reseal LiOH cans w/ Gray Tape and stow
(Location of canisters on back)

NOTE

This card is specifically used for the STS-126 mission with the orbiter conducting single shift operations with a crew size of 7. This changeout scheme reflects FD3 docking with ISS, Vozdukh, and dual bed CDRA operation.

BACK OF 'LIOH CHANGEOUT
FLIGHT DAY 3 DOCKING WITH ISS'

LIOH CANISTER STOWAGE LOCATIONS

Ascent LiOH Locations

Orbiter:
MD52M (LiOH)*: Cans 1-31
MPLM: Cans 32-42

ISS:
STS-122 Cans 14-20
STS-123 Cans 22-31
STS-124 Cans 1-9 (used), 27-31

Entry LiOH Locations

Orbiter:

MD52M (LiOH)*: and A/L floor bag	STS-122 Cans 16-19
	STS-123 Cans 23-31
	STS-124 Cans 29-31
	STS-126 Cans 1-5, 8-17, any 3 of cans 18-42
MPLM:	STS-124 Cans 1-9 (used)
	STS-122 Cans 14-15, 20 (used)
	STS-126 Cans 6-7 (used)

*2 LiOH cans installed in LiOH slots A and B

MSG 142 - CWC Fill CC Updates

CWC FILLS

	CWC No.	Record S/N Used	Sample Kit Ref: Kit Table	Ag Biocide Kit Ref: Kit Table	CWC Label	CWC Launch Location
☐	12		Sample Not Req'd	S/N 1003	Green (Tech)	These can be filled in any order. Located at NOD1D2; Available Technical S/Ns: 1021 ☐ 1051 ☐ 1074 ☐
☐	13		Sample Not Req'd	S/N 1003	Green (Tech)	
☐	14		Sample Not Req'd	S/N 1003	Green (Tech)	

Pre-Fill Checklist:

- Disinfect CWC QD and Transfer Hose QD
  12☐ 13☐ 14☐

Post-Fill Checklist:

- Check correct label is in CWC window
  12☐ 13☐ 14☐
- Check correct decal on CWC end
  12☐ 13☐ 14☐
- Check correct CWC S/N on end decal
  12☐ 13☐ 14☐
- Report S/N to MCC
  12☐ 13☐ 14☐
- Transfer CWC to NOD1D2
  12☐ 13☐ 14☐
- Cap Transfer Hose QD between each fill

CWC Fill Notes:

A. Rough handling may cause leakage
B. Fill each CWC for 52 min or Term CWC Fill on MCC call
C. Prior to filling, report if bag has a significant amount of residual water.

Kit Table

Kit	S/N	Stowage Location	Undock Location
Ag Biocide Kit	1003	MF28K	NOD2D2 (M-02 Bag, S/N 1026)

END OF PAGE 1 of 1, MSG 142

18-0335A (MSG 143A) CBM CENTER DISK COVER INSTALLATION

OBJECTIVE:
Install CBM Center Disk Cover to restore thermal and meteoroid debris protection to a Radial Port.

LOCATION:
Installed: Radial Port
Stowed: √Inventory Management System (IMS)

DURATION:
20 minutes

CREW:
One

PARTS:
CBM Center Disk Cover P/N 683-14575

MATERIALS:
Gray Tape

TOOLS:
Spotlight

REFERENCE PROCEDURE(S):
None

1. INSTALLING CENTER DISK COVER ONTO MOUNTING BRACKETS

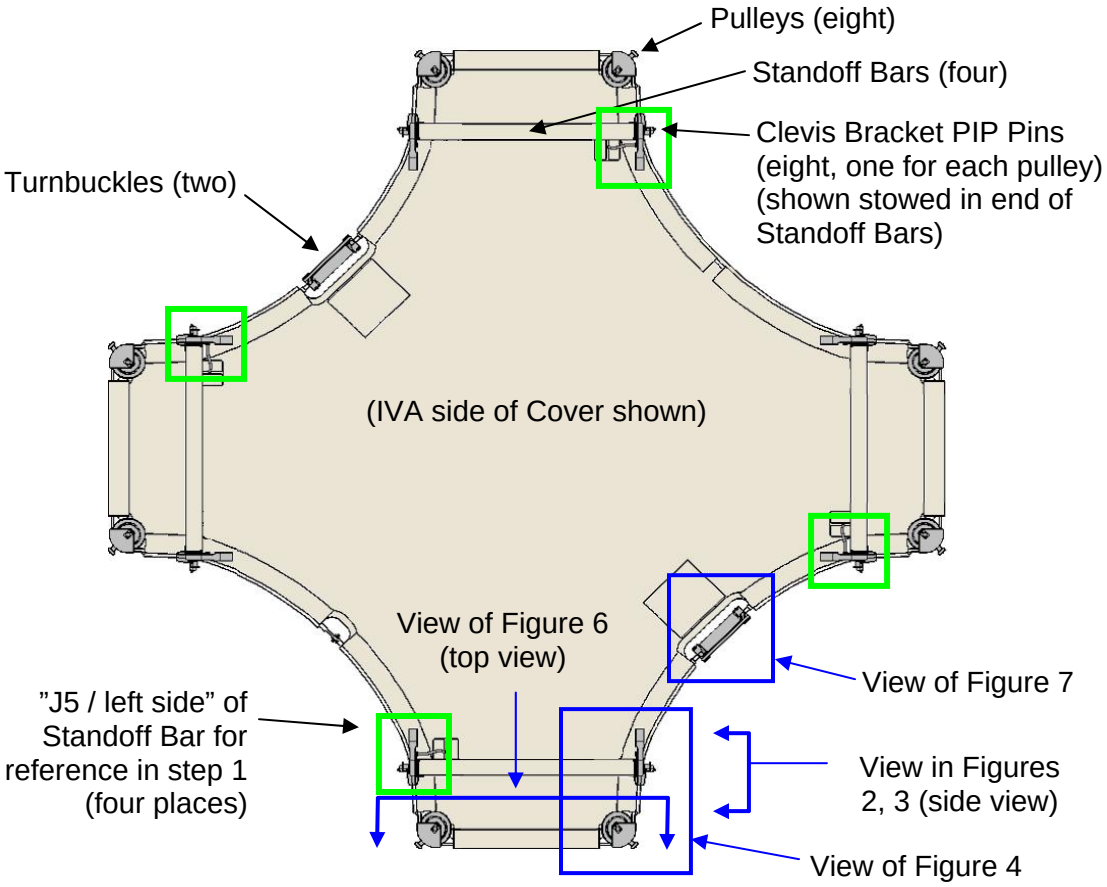


Figure 1.- CBM Center Disk Cover.

CAUTION
This procedure is performed near hatch seals. Care must be taken to avoid seal damage.

1.1 Remove Center Disk Cover from stowage.
Slide Cover into vestibule before unfolding for installation.

NOTE
Center Disk Cover can be installed in any orientation.

1.2 Unfold Cover and Standoff Bars toward Controller Panel Assemblies (CPAs).
Refer to Figure 1.

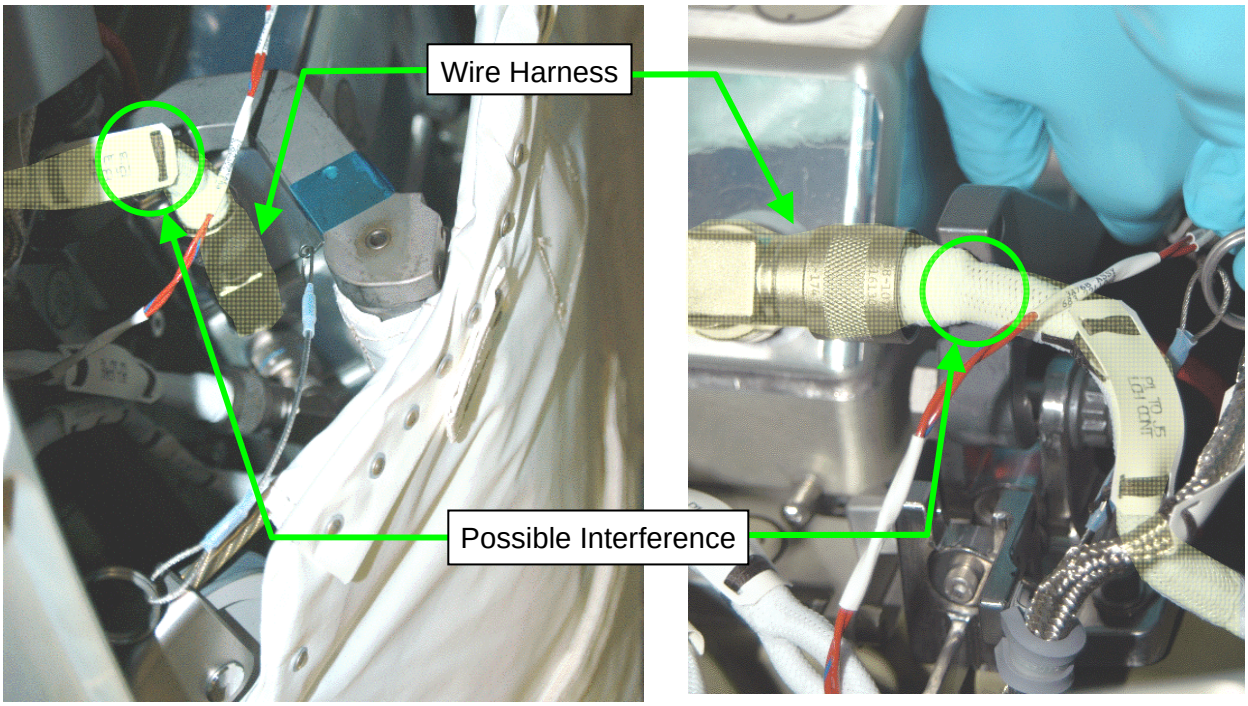


Figure 2.- P5 to J5 Wire Harness Interference with Standoff Bar.

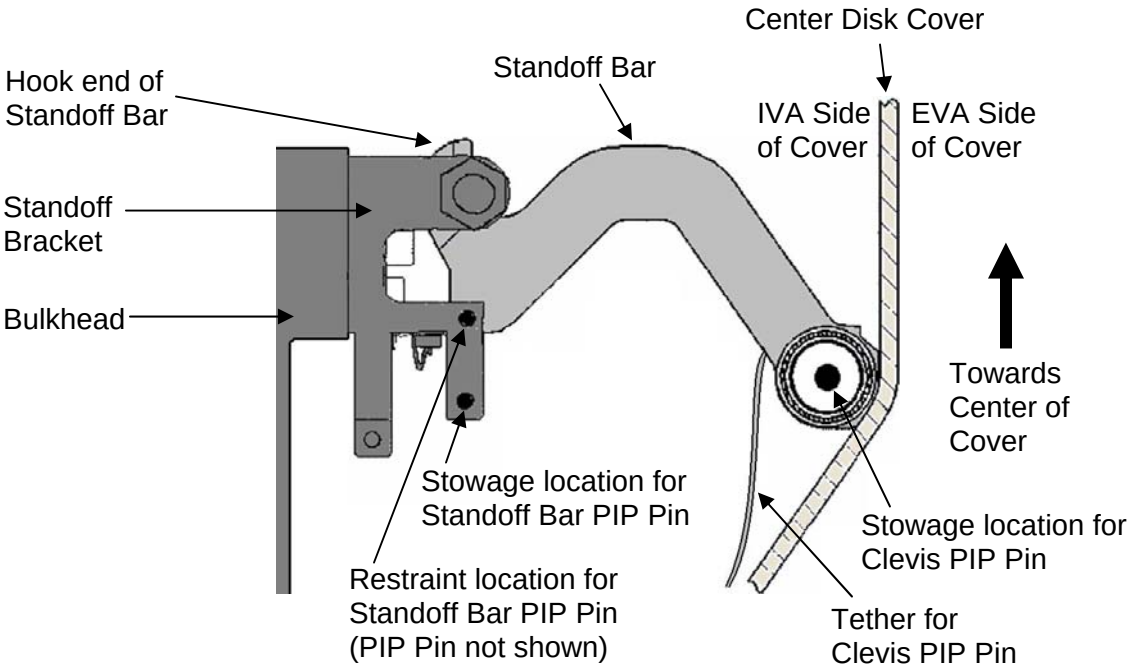


Figure 3.- Side View of Standoff Bar Installed in Standoff Bracket.

CAUTION
Due to tight tolerances between CBM wire harnesses and the Standoff Bar, use care to avoid wire harness damage during Standoff Bar installation.

NOTE

During ground and on-orbit operations in the past, the J5 connector has been damaged during Center Disk Cover installation.

1.3 At an angle to avoid side loads on J5 connector, first slide left (J5) side Standoff Bar Hook into Standoff Bracket, then right (J9) side. Rotate Standoff Bars away from center of Center Disk Cover Refer to Figures 1, 2, 3.

```
*****************************************************************
*  If not able to install Standoff Bar without possible damage
*  | to CBM wire harnesses:
*  |
*  | ⇓MCC-H "Unable to install Standoff Bar without possible
*  |    damage."
*  |
*  |  Perform {2.514 CBM MAINTENANCE POWERDOWN},
*  |    all (SODF: S&M: MALFUNCTION), then:
*  |
*  |  If MCC-H performs safing, √ safing complete, then:
*  |
*  |  Demate J5, any connectors interfering
*  |  Install Standoff Bar per step 1.3
*  |  Remate connector(s)
*  |
*  |  Continue procedure for remaining quadrants, demating
*  |    and remating connectors as necessary
*  |
*  |  NOTE: if safing is performed, MCC-H will need to
*  |    reperform the Prep for Demate procedure on the
*  |    primary power string prior to depressing the vestibule
*  |    and uninstalling the module.
*****************************************************************
```

1.4 Remove Standoff Bar PIP Pins (two each Standoff Bar) from stowage location on Standoff Brackets.
Insert PIP Pins in restraint location on Standoff Brackets.
Refer to Figure 3.

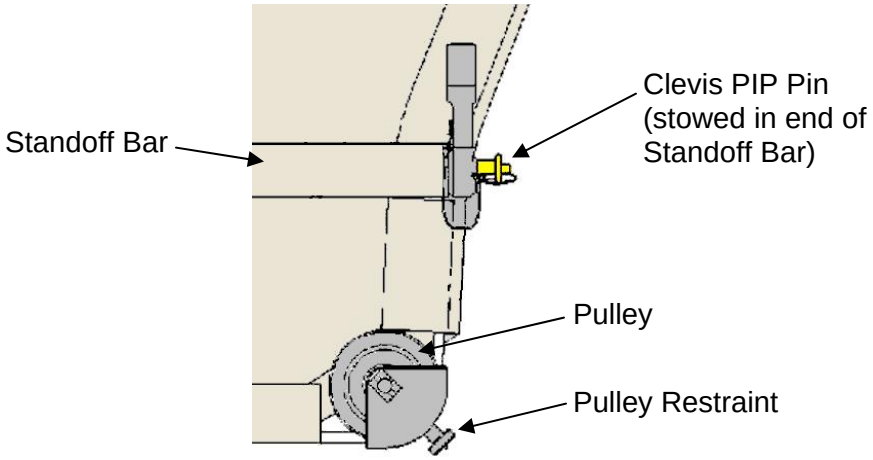


Figure 4.- Clevis PIP Pin Stowed in End of Standoff Bar (View from IVA Side).

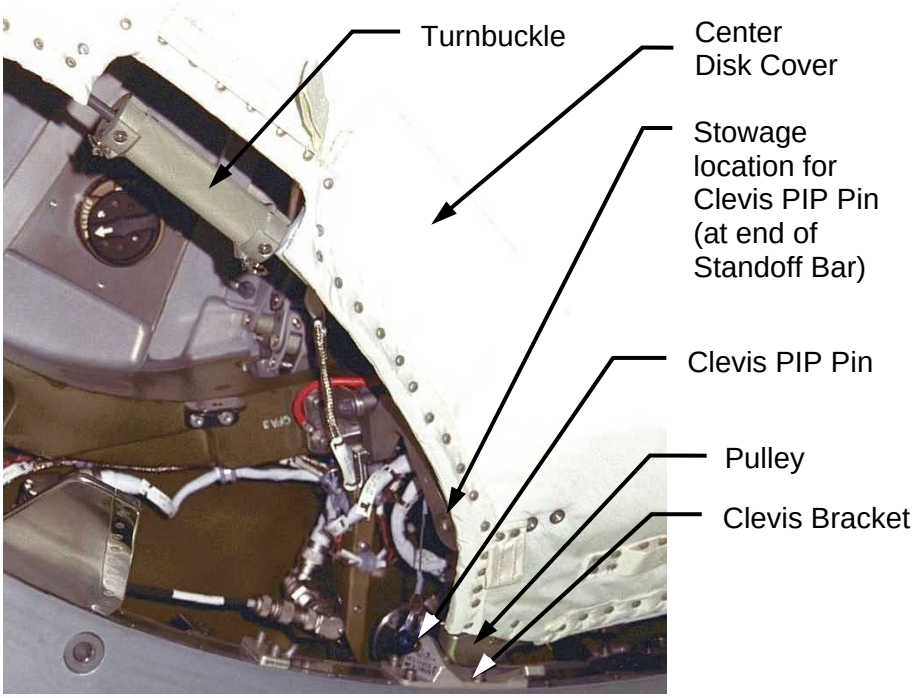


Figure 5.- Pulley Restrained by Clevis PIP Pin (View from EVA Side).

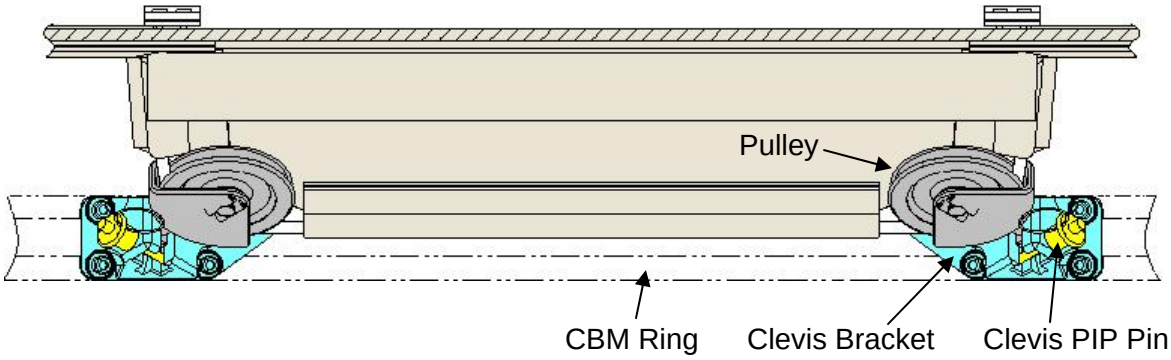


Figure 6.- Pulley Restrained by Clevis PIP Pin (View from IVA Side).

1.5 Slide Pulley Restraints (eight) into Clevis Brackets until pulley snaps into place (sliding towards EVA side).
Refer to Figures 4 to 6.

1.6 Remove Clevis PIP Pins (eight) from stowage location at end of Standoff Bars.
Insert PIP Pins in Clevis Brackets.
Refer to Figures 4 to 6.

2. RESTORING TENSION TO CENTER DISK COVER

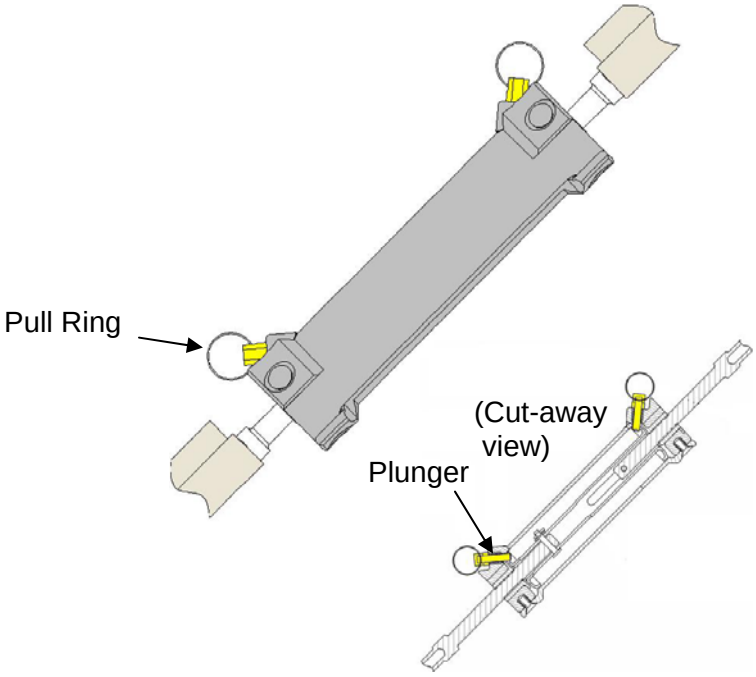


Figure 7.- Turnbuckle.

2.1 Pull out pull rings (two each turnbuckle), then turn 90 degrees and release so that pull rings remain out on top of plungers.
If pull rings do not remain on top of plungers, restrain pull rings on top of plungers with Gray Tape.
Refer to Figure 7.

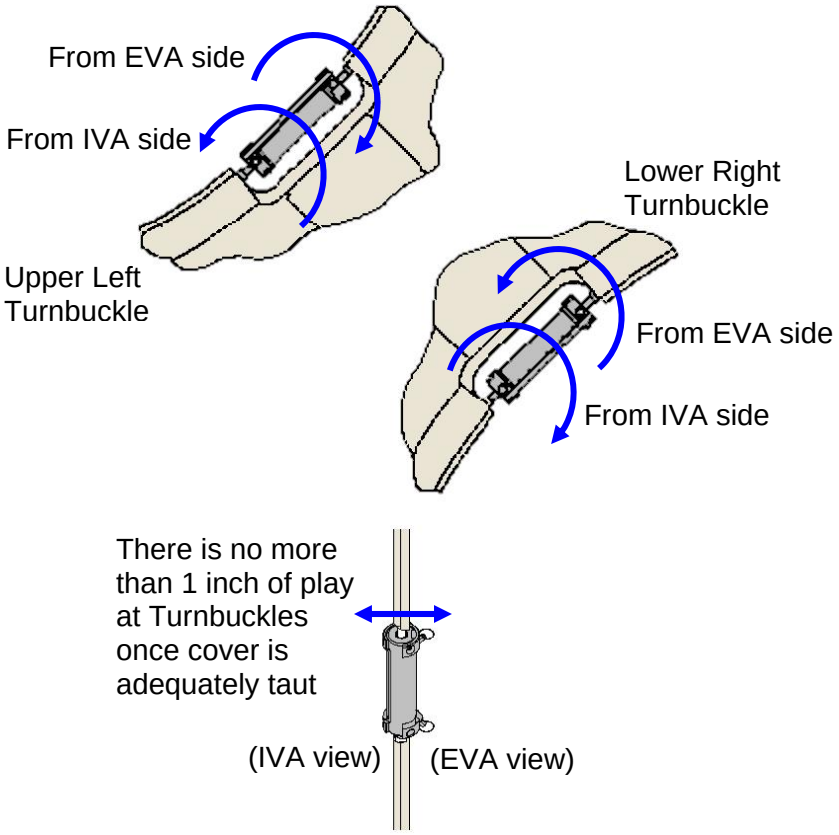


Figure 8.- Tightening Turnbuckles.

2.2 If on IVA side
Tighten turnbuckles (two) by rotating away from center of Center Disk Cover (shaking every five turns until cable is taut; cover should have less than 1 inch of play once cover is adequately taut).
If on EVA side
Tighten turnbuckles (two) by rotating toward center of Center Disk Cover (shaking every five turns until cable is taut; cover should have less than 1 inch of play once cover is adequately taut).

Refer to Figure 8.

2.3 If required, remove securing tape on pull rings.
Rotate pull rings so plungers fall back into place.
Refer to Figure 7.

3. CLOSEOUT
3.1 Notify **MCC-H** of task completion.

3.2 Stow tools, equipment.

Crew Choice KU FD13

TDRS	AOS	LOS	DURATION (min)	COMMENT
West	11/12:55	11/13:28	33	
East	11/13:39	11/14:10	31	
West	11/14:44	11/15:17	33	
West	11/18:15	11/18:43	28	
Z	11/19:05	11/19:25	20	No DTV
West	11/19:49	11/20:20	31	
West	11/21:13	11/21:45	32	
West	11/22:46	11/23:21	35	
East	12/02:34	12/03:10	36	