STS-120 / 10A

FD 08 Execute Package

MSG	Page(s)	Title
073B	1 - 13	FD08 Flight Plan Revision **(pdf)**
074A	14 - 15	FD08 Mission Summary **(pdf)**
075	16	FD07 MMT Summary **(pdf)**
076	17	FD8 EVA DELTAS **(pdf)**
077	18 - 20	10A EVA3 Detailed Timeline - NO MBSU **(pdf)**

Approved by FAO: *Roger Smith*

Last Updated: Oct 30 2007 3:13AM GMT
JEDI *(**J**oint **E**xecute package **D**evelopment and **I**ntegration), v2.04.0003*

MSG INDEX

MSG NO.	TITLE
073	FD08 Flight Plan Revision
074	FD08 Mission Summary (16-0111)
075	FD07 MMT Summary (16-0112)
076	FD8 EVA Deltas (16-0114)
077	10A EVA3 Detailed Timeline – NO MBSU (16-0115)

1. The post sleep cryo config will be broken into two different parts. This is to prepare for possible destratification in O2 Tank 4 during the manuever to the TEA attitude. The switch throws have been added to your timeline.

2. The table below summarizes the Shuttle and ISS exercise constraints for today. These constraints are also denoted in your timelines for your reference.

Activity	Exercise Constraints	
	Shuttle	ISS
P6 Install from SSRMS Mnvr P6 to RTAS Capture Envelope Posn on P5 until 4 bolts at initial torque	No exercise	No exercise
EVA 3 (during APFR operations from a structure-mounted WIF) - P5 to P6 umbilicals - MBSU transfer on ESP-2	No exercise	Station IRED, HC-1, Velo Ergometer not allowed
P6 PVR Deploy (during motion)	No exercise	No exercise
P6 SAW Deploy (during latch operations and motion)	No exercise	No exercise

3. REPLACE PAGES 2-26, 2-28, AND 3-80 THROUGH 3-89.

END OF PAGE 1 OF 13, MSG 073B

10/29/07 22:01:47 **REPLANNED**

GMT 10/30/07 (303)
β = -65
MET Day 006

04 05 06 07 08 09 10 11 12 13 14 15
12 13 14 15 16 17 18 19 20 21 22 23 007/00

STS-120	FD08 R2 CDR MELROY	SLEEP	LOG; POST SLEEP; PMC A/G; H/O; MNVR TEA*; POST SLEEP; HOATT; IMU; POST SLEEP; P6 VIEW; INHBT PAD; EXERCISE; P/TV EVA; MEAL; P/TV EVA SSRMS; DAP; P/TV EVA; P6 PVR VIEW; P/TV EVA
	R1 PLT ZAMKA	SLEEP	LOG; POST SLEEP; ILLUM; P/TV SSRMS; P6 VIEW; P/TV SSRMS; EXERCISE; P/TV EVA/SSRMS; MEAL; SRMS; SRMS MBSU SPT
	EV1 MS1 PARAZYNSKI	SLEEP (A/L)	HYGN BREAK/ PREBRTHE; CAMPOUT EVA PREP; EMU PURGE; EMU PBRTHE; C/L DPRS; PDPR; EGRSS; ATTACH P6 TO P5; EVA 3 (7:00) P5/P6 UMB; SSU SHRD; O/B RAD CINCH RELEAS; PORT SARJ INSPECT; SFU; MBSU TRANS; INGRS
	M2,R2 MS2 WILSON	SLEEP	LOG; POST SLEEP; MNVR INTR POSN; MCIU*; MNVR PRE INSTL S/U; P/TV 07 S/U; P6 INSTL; P6 UNGRP; MEAL; SRMS; SRMS MBSU SPT
	EV2 MS3 WHEELOCK	SLEEP (A/L)	HYGN BREAK/ PREBRTHE; CAMPOUT EVA PREP; EMU PURGE; EMU PBRTHE; C/L DPRS; PDPR; EGRSS; ATTACH P6 TO P5; P5/P6 UMB; SSU SHROUD REMOVE; MBSU TRANS
	IV MS4 NESPOLI	SLEEP	POST SLEEP; HYG BRK/ HATCH CLS; CAMPOUT EVA PREP; EMU PURGE; EMU PBRTHE; C/L DPRS; PDPR; IV SUPPORT
	FE-2 DN ANDERSON	SLEEP (8.5)	POST SLEEP; AMIA INSTALL; EXERCISE CEVIS; EXERCISE RED; MIDDAY-MEAL; N2-C/O PNL BOLT-RMVL; MNVR SAW VIEW; OGS; HANDOVER
EXP 16	IV2 ISS CDR WHITSON	SLEEP (8.5)	IMMN*; POST SLEEP; HYG BRK/ HATCH CLS; CAMPOUT EVA PREP; EMU PURGE; EMU PBRTHE; C/L DPRS; PDPR; MIDDAY-MEAL; IV-CPDS; ND2 RSR KBAR; EXERCISE CEVIS; CWC FILL INIT; CWC TERM
	FE-1 MALENCHENKO	SLEEP (8.5)	POST SLEEP; БМП INIT; DPC; HAM; POST SLEEP; PREP WORK; ORENT; EXERCISE VELO; ORENT; MIDDAY-MEAL; N2-C/O PNL BOLT-RMVL; EXERCISE RED; ORENT; MOTO CHRG; ИП-1 MNT; CHECK; ORENT; CHECK; ORENT; CHECK; MOTO; TERM*; COX MNT
UP	M1 FE-2 UP TANI	SLEEP (8.5)	IMMN*; POST SLEEP; WNDW; MNVR INTR POSN; PREP WORK; MNVR PRE INSTL S/U; EXERCISE CEVIS; P6 INSTL; P6 UNGRP; MNVR SAW VIEW; MIDDAY-MEAL; CWC FILL INIT; HANDOVER; CWC TERM

DAY/NIGHT

ORBIT: 103 104 105 106 107 108 109 110 111

TDRS: W -171, E -46, Z -275

ORB ATT: BIAS -XLV +ZVV; BIAS -XLV -ZVV

SSRMS: PDGF3 WS8

NOTES: *ISS -XVV; *FILTER CK; No Exercise from MNVR to RTAS Capture to all four bolts driven to initial torque; No STS/RED/VELO Ex P5/P6 Umb APFR; FLT PLN/120/FLIGHT; No Exercise during P6 PVR Deploy; *EMU; No Exercise from SABB Unlatch thru Saw 100%; No STS/RED/VELO Ex MBSU xfer APFR

2-26

10/29/07 22:01:47 **REPLANNED**

GMT 10/30/07 (303) β = −65 MET Day 007

16 17 18 19 20 21 22 23 10/31 01 02 03 007/00 01 02 03 04 05 06 07 08 09 10 11 12

FD08

STS-120	CDR MELROY	MAST 1 DPLY; 2B 100%; 4B 100%; PRE SLEEP; PMC A/G; PRE SLEEP; SLEEP
STS-120	PLT ZAMKA	♣; 2B 100%; 4B 100%; RMS; PWRDN; PRE SLEEP; CREW CHOICE D/L; PRE SLEEP; SLEEP
STS-120	MS1 PARAZYNSKI	INGRS; PRPR; REPRS; POST EVA W/H20; PRE SLEEP; SLEEP
STS-120	MS2 WILSON	⊕; 2B 100%; 4B 100%; RMS; PWRDN; PRE SLEEP; SLEEP
STS-120	MS3 WHEELOCK	♦; INGRS; PRPR; REPRS; POST EVA W/H20; PRE SLEEP; SLEEP
STS-120	MS4 NESPOLI	®; PRPR; REPRS; POST EVA W/H20; PRE SLEEP; CDM*; SLEEP
STS-120	FE-2 DN ANDERSON	JRNL; ENTRY; PRPR; REPRS; POST EVA W/H20; BSA BATT INIT; CHRG; DD//LL; PRE SLEEP; METX*; PRE SLEEP; SLEEP (8.5)
EXP 16	ISS CDR WHITSON	P/TV; PW; 2B 100%; PREP WORK; 4B 100%; PW; DPC; PRE SLEEP; SLEEP (8.5)
EXP 16	FE-1 MALENCHENKO	СОЖ MNT; ALC; EXER; PREP; WORK; PRE SLEEP; DPC; PRE SLEEP; ЭЛЕКТ; Д33-2; БМП END; PRE SLEEP; SLEEP (8.5)
UP	FE-2 UP TANI	MAST 1 DPLY; PREP WORK; 2B 100%; 4B VW; PREP WORK; 4B 100%; PW; DPC; PRE SLEEP; SLEEP (8.5)

DAY/NIGHT

ORBIT: 111 112 113 114 115 116 117 118 119

TDRS: W -171; E -46; Z -275

ORB ATT: BIAS -XLV -ZVV

SSRMS: PDGF3 WS8

NOTES:
♣SRMS MBSU SPT
⊕SRMS MBSU SPT
♦MBSU TRANS
®IV SUPPORT

*INIT *ACT

2-28 FLT PLN/120/FLIGHT

No Exercise from SABB
Unlatch thru Saw Deply 100%

STS-120 FD08

REPLANNED

GMT Date 10/30 (303) | W | TDRSE | Z | ORB | MET Day 006 | STS ATI

R2 CDR MELROY | **R1** PLT ZAMKA | **EV1** MS1 PARAZYNSKI | Notes

12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 04:00 | 05:00 | 06:00 | 07:00

103 | 104 | 105 | 106

BIAS -XLV +ZVV

BIAS -XLV -ZVV

SLEEP | SLEEP | SLEEP (A/L)

FD08 EZ ACTIVITIES
OCAC Filter Inspect
Hard Reboot PGSCs
(Except RPOP & RPOP 2)

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

PRIVATE MEDICAL CONFERENCE

JNT OPS: 3.110 H/O ATT CNTL CMG TO ORB
MNVR (TRK) BIAS -XLV -ZVV (ISS -XVV TEA)
TG=2 BV=5 P=157 Y=352 OM=178
A15/AUTO/VERN (06/13:55) Init TRK

POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

JNT OPS: 3.111 H/O ATT CNTL TO CMGTA:
On MCC GO,DAP:FREE
IMU STAR OF OPPTY ALIGN (ORB OPS, GNC)
POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

P6 INSTALL VIEWING
(PDRS, P6 NOMINAL)

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

R1 CRYO O2, H2 MANF VLV TK2 (two) - OP (tb-OP)
A11 CRYO TK4 HTR O2 B - AUTO

On MCC GO
R1 CRYO O2 TK3 HTR A - AUTO
A11 CRYO TK4 HTR O2 B -OFF

ILLUMINATOR OPS (CUE CARD) ILLUMINATORS OFF
P/TV SUPPORT SSRMS
Config Shuttle Cameras per ROBO 1.420

L 10(MUX) MUX/VTR/CC PWR - on(LED on)
A8L RMS SELECT - PORT
prior to starting SRMS OPS

P6 INSTALL VIEWING
(PDRS, P6 NOMINAL)

EVA SYS: 2.315 HYGIENE BREAK
MCC-H will perform steps 1-4, 16-20, & 23

EVA SYS: 2.320 10.2 PSIA
CAMPOUT EVA PREP
Omit Steps 70-72

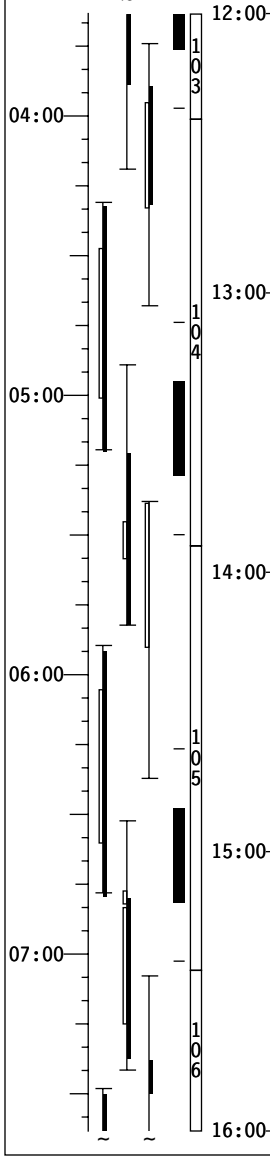
EVA SYS: 1.220 EMU PURGE
Omit Steps 18 & 20

EVA SYS: 1.225 EMU PREBREATHE
Ref. MSG 025

STS-120 FD08

REPLANNED

GMT Date 10/30 (303) | W | TDRSE | Z | ORB | MET Day 006 | STS ATI



Time	M2,R2 MS2 WILSON	EV2 MS3 WHEELOCK	IV MS4 NESPOLI	Notes
12:00	SLEEP	SLEEP (A/L)	SLEEP	
13:00	FLIGHT SLEEP LOG (ORB OPS, SDBI) POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	EVA SYS: 2.315 HYGIENE BREAK MCC-H will perform steps 1-4, 16-20, & 23	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
			EVA SYS: 2.315 HYGIENE BREAK Steps 21-29, MCC-H will perform step 23	
14:00		EVA SYS: 2.320 10.2 PSIA CAMPOUT EVA PREP Omit Steps 70 - 72	EVA SYS: 2.320 10.2 PSIA CAMPOUT EVA PREP Omit Steps 70 - 72	
15:00	ROBO: 1.420 P6 INSTALL Steps 1-5.2			
	L17 Check MCIU filter screen	EVA SYS: 1.220 EMU PURGE Omit Steps 18 & 20	EVA SYS: 1.220 EMU PURGE Omit Steps 18 & 20	
16:00		EVA SYS: 1.225 EMU PREBREATHE Ref. MSG 025	EVA SYS: 1.225 EMU PREBREATHE Ref. MSG 025	

BIAS -XLV +ZVV

BIAS -XLV -ZVV

STS-120 FD08

REPLANNED

GMT Date 10/30 (303) | W | TDRSE | Z | ORB | MET Day 006 | STS ATI

R2 CDR MELROY | **R1** PLT ZAMKA | **EV1** MS1 PARAZYNSKI | Notes

08:00 — 09:00 — 10:00 — 11:00

ORB: 106, 107, 108

16:00 — 17:00 — 18:00 — 19:00 — 20:00

BIAS-XLV-ZVV

R2 (CDR MELROY):
- EVA3 INHIBIT PAD (EVA, TIMELINES)
- EXERCISE
- P/TV SUPPORT EVA
- MEAL

R1 (PLT ZAMKA):
- P/TV SUPPORT SSRMS Config Shuttle Cameras per ROBO 1.420
- EXERCISE
- P/TV SUPPORT EVA
- P/TV SUPPORT SSRMS Config Shuttle Cameras per ROBO 1.420 &1.421

EV1 (MS1 PARAZYNSKI):
- EVA SYS: 1.225 EMU PREBREATHE Ref. MSG 025
- EVA SYS: CREWLOCK DEPRESS (CC)
- EVA SYS: CREWLOCK POST DEPRESS(CC)
- EVA 3 A/L EGRESS AND SETUP
- ATTACH P6 TO P5

Notes:
- UPLINK β0 Only + Boxes C4,C2,C3,E3
- No Exercise from MNVR to RTAS Capture to all four bolts driven to initial torque.

STS-120 FD08

REPLANNED

GMT Date 10/30 (303) | W | TDRSE | Z | ORB | MET Day 006 | STS ATI

M2,R2 MS2 WILSON | **EV2** MS3 WHEELOCK | **IV** MS4 NESPOLI | Notes

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

106 | 107 | 108

16:00 | 17:00 | 18:00 | 19:00 | 20:00

BIAS-XLV-ZVV

ROBO: 1.420 P6 INSTALL
Steps 5.3-7.2

P/TV07 EVA
(PHOTO/TV, SCENES)
Perform SETUP

ROBO 1.420 P6 INSTALL
Steps 7.3 -11

EVA SYS: 1.225 EMU PREBREATHE
Ref. MSG 025

EVA SYS: CREWLOCK DEPRESS (CC)

EVA SYS: CREWLOCK POST DEPRESS(CC)

EVA 3 A/L EGRESS AND SETUP

ATTACH P6 TO P5

EVA SYS: 1.225 EMU PREBREATHE
Ref. MSG 025

EVA SYS: CREWLOCK DEPRESS (CC)

EVA SYS: CREWLOCK POST DEPRESS(CC)

IVA SUPPORT EVA 3

No Exercise from MNVR to RTAS Capture to all four bolts driven to initial torque.

STS-120 FD08

REPLANNED

GMT Date 10/30 (303) | W | TDRSE | Z | ORB | MET Day 006 | STS ATI

R2 CDR MELROY

R1 PLT ZAMKA

EV1 MS1 PARAZYNSKI

Notes

20:00

12:00

13:00

14:00

15:00

00:00

109

110

111

BIAS - XLV - ZVV

MEAL

P/TV SUPPORT EVA
P/TV SUPPORT SSRMS
Config Shuttle Cameras per ROBO 1.430

Post P6 Install Edit DAPS:
DAP A12 - CNTL ACCL 9
DAP B12 - CNTL ACCL 9
DAP: A12/FREE/VERN

P/TV SUPPORT EVA

P6 PVR DEPLOY
Monitor Cameras

P/TV SUPPORT EVA

P/TV SUPPORT EVA
P/TV SUPPORT SSRMS
Config Shuttle Cameras per ROBO 1.420 &1.421

MEAL

EVA3 SUPPORT
(PDRS, EVA 3)
Steps 1-2

EVA3 SUPPORT
(PDRS, EVA 3)
Steps 3-8

CONNECT P5 TO P6 UMBILICALS

SSU MLI SHROUD REMOVAL

OUTBOARD RADIATOR CINCH RELEASE

PORT SARJ INSPECTION
Ref. MSG 68

P1 SFU CONFIG FOR CINCH FIRING
S1 SFU CONFIG POST DEPLOY

MBSU TRANSFER

EVA 3 CLEANUP AND A/L INGRESS

No Exercise P5/P6 Umbil APFR

No Exercise during P6 PVR Deploy.

No Exercise MBSU Transfer APFR

No Exercise from SABB unlatch thru SAW deploy 100%

STS-120 FD08

REPLANNED

GMT Date 10/30 (303) | W | TDRSE | Z | ORB | MET Day 006 | STS ATI

M2,R2 MS2 WILSON | **EV2** MS3 WHEELOCK | **IV** MS4 NESPOLI | Notes

20:00
- ROBO: 1.421 P6 UNGRAPPLE AT INSTALL
- ATTACH P6 TO P5

12:00
- CONNECT P5 TO P6 UMBILICALS
- SSU MLI SHROUD REMOVAL

109

21:00
- MEAL

13:00
- EVA3 SUPPORT (PDRS, EVA 3) Steps 1-2
- MBSU TRANSFER

BIAS_XLV_ZVV

22:00
- EVA 3 SUPPORT (PDRS, EVA 3) Steps 3-8
- IVA SUPPORT EVA 3

110

14:00

23:00

111

15:00

00:00

Notes:
- No Exercise P5/P6 Umbil APFR
- No Exercise during P6 PVR Deploy.
- No Exercise MBSU Transfer APFR
- No Exercise from SABB unlatch thru SAW deploy 100%

STS-120 FD08

REPLANNED

GMT Date 10/30 (303) | W | TDRSE | Z | ORB | MET Day 007 | STS ATI

R2 CDR MELROY

R1 PLT ZAMKA

EV1 MS1 PARAZYNSKI

Notes

00:00

16:00

01:00

17:00

02:00

18:00

03:00

19:00

04:00

111 112 113 114

BIAS - XLV - ZVV

P6 2B & 4B MAST 1 DEPLOY
Monitor Cameras

1.3.454 P6 SAW 2B RE-DEPLOY
(ASSY OPS, NOMINAL)
Step 18 (2B only)

1.3.454 P6 SAW 4B RE-DEPLOY
(ASSY OPS, NOMINAL)
Step 18 (4B only)

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

PRIVATE MEDICAL CONFERENCE

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

EVA3 SUPPORT
(PDRS, EVA 3)
Steps 3-8

1.3.454 P6 SAW 2B RE-DEPLOY
(ASSY OPS, NOMINAL)
Step 18 (2B only)

1.3.454 P6 SAW 4B RE-DEPLOY
(ASSY OPS, NOMINAL)
Step 18 (4B only)

RMS PWRDWN
(PDRS, RMS PWRDN)
Note: Do not stow MPM's

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

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

EVA 3 CLEANUP AND A/L INGRESS

EVA SYS: CREWLOCK PREREPRESS (CC)

EVA SYS: CREWLOCK REPRESS (CC)

EVA SYS: 1.240 POST EVA
With H2O
MCC-H will perform steps 43 & 68
Omit Steps 37, 39 & 67

REF: CONSUMABLES TRACKING CC

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

UPLINK
β21 Only + Boxes
C4,C2,C3

No Exercise
from SABB
unlatch thru
SAW deploy
100%

STS-120 FD08

REPLANNED

GMT Date 10/30 (303) | W | TDRSE | Z | ORB | MET Day 007 | STS ATI

M2,R2 MS2 WILSON

EV2 MS3 WHEELOCK

IV MS4 NESPOLI

Notes

16:00 17:00 18:00 19:00

111 112 113 114

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

BIAS-XLV-ZVV

EVA 3 SUPPORT
(PDRS, EVA 3)
Steps 3-8

1.3.454 P6 SAW 2B RE-DEPLOY
(ASSY OPS, NOMINAL)
Step 18 (2B only)

1.3.454 P6 SAW 4B RE-DEPLOY
(ASSY OPS, NOMINAL)
Step 18 (4B only)

RMS PWRDWN
(PDRS, RMS PWRDN)
Note: Do not stow MPM's

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

MBSU TRANSFER

EVA 3 CLEANUP AND A/L INGRESS

EVA SYS: CREWLOCK PREREPRESS (CC)

EVA SYS: CREWLOCK REPRESS (CC)

EVA SYS: 1.240 POST EVA
With H2O
MCC-H will perform steps 43 & 68
Omit Steps 37, 39 & 67

REF: CONSUMABLES TRACKING CC

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

IVA SUPPORT EVA 3

EVA SYS: CREWLOCK PREREPRESS (CC)

EVA SYS: CREWLOCK REPRESS (CC)

EVA SYS: 1.240 POST EVA
With H2O
MCC-H will perform steps 43 & 68
Omit Steps 37, 39 & 67

REF: CONSUMABLES TRACKING CC

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

No Exercise from SABB unlatch thru SAW deploy 100%

STS-120 FD08

REPLANNED

GMT Date 10/30 (303) | W | TDRS E | Z | ORB | MET Day 007 | STS ATI

CDR MELROY | PLT ZAMKA | MS1 PARAZYNSKI | Notes

20:00 — 21:00 — 22:00 — 23:00

114 — 115 — 116

04:00 — 05:00 — 06:00 — 07:00 — 08:00

BIAS-XLV-ZVV

CDR MELROY

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

SLEEP

PLT ZAMKA

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

PLAYBACK (ANALOG)
(PHOTO/TV, CUE CARD)
Crew Choice
KU TDRZ (04:05-04:35)

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

SLEEP

MS1 PARAZYNSKI

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

SLEEP

STS-120 FD08

REPLANNED

GMT Date 10/30 (303) | W E Z | TDRS | ORB | MET Day 007 | STS ATI

MS2 WILSON | MS3 WHEELOCK | MS4 NESPOLI | Notes

04:00 — PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)

20:00 — 114

05:00 — CDM ACTIVATION (ORB OPS, CDM DTO)

21:00 — 115

06:00 — BIAS -XLV -ZVV

22:00 — SLEEP

07:00 — 116

23:00

08:00

Good Morning Discovery!!!

Can you believe our good fortune???? An extra day on orbit inserted between EVA 4 and EVA 5! What a great gift! Make the most of it!

Per the conversation you had with Tony last night, all EVA related tasks in the timeline have been moved ahead in anticipation of the EVA crew being ready to go out the door early. It is no problem if they do not go out early. So please, do not feel pressured or rushed! We did this just so all of you would not be waiting on us down here!

Have a great EVA day!!!

YOUR CURRENT ORBIT IS: 188 X 180 NM

<u>NOTAMS:</u>

EDW – RWY 15/33 ELS ONLY. RWY 18L – CLOSED.
NOR – GREEN.
WAL – RWY 04/22 CLOSED.
NTU - RWY 23L CLOSED 1100-2100Z.
NKT - FIRST 1000' OF RWY 23L & 32R CLOSED.
YHZ - RWY 05/23 CLOSED 29 OCT 1100 - 1900Z.
FFA - ASCENT ONLY.
ZZA - RWY 30L CLOSED 30 OCTOBER 0600 - 1800Z**.**
FIRST 600M OF RWY 30L NOT AVAILABLE. 10,200' REMAINING.
WAK – UNUSABLE.
AMB – UNUSABLE.
JDG – DIEGO GARCIA: CLOSED 1800 - 0100Z**.**
IKF – NO AGREEMENT FOR USE.
AWG – NO AGREEMENT FOR USE.
BEN – POLITICALLY NOT RECOMMENDED/NOT SUPPORTED.

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

EDW22 ORB 110 – 6/22:20 (FEW040 FEW250 240/06P10)
EDW22 ORB 126 – 7/22:43 (FEW250 250/05P08)

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

L OMS FAIL: NO R OMS FAIL: NO

<u>LEAKING OMS PRPLT BURN:</u>

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

OMS QUANTITIES(%)

L OMS OX = 33.5 R OMS OX = 33.5
FU = 33.1 FU = 33.4

SUBTRACT I'CNCT COUNTER FOR CURRENT OMS QUANTITIES

DELTA V AVAILABLE:

OMS	338 FPS
ARCS (TOTAL ABOVE QTY1)	45 FPS
TOTAL IN THE AFT	383 FPS
ARCS (TOTAL ABOVE QTY2)	78 FPS
FRCS (ABOVE QTY 1)	24 FPS
AFT QTY 1	79 %
AFT QTY 2	41 %

SYSTEM	FAILURE	IMPACT	WORK AROUND
COMM	HARDLINE ICOM A	ICOM A not audible in ISS via hardline path from Shuttle	Use BPSMU configured for ICOM B in ISS

The MMT met to review mission priorities, mission progress and orbiter status. The MMT concurred with the request to perform SARJ troubleshooting on EVA 4 in place of the TRAD DTO. In addition, the MMT agreed to insert an extra docked day between EVAs 4 & 5 if the content of EVA 4 exceeds 4.5 hours. As always, the on-console team will keep you updated as decisions are made and the details will be included in your Execute Package.

Overall, Discovery continues to perform well. The minor issues associated with EVA cameras and onboard networks were briefed, but the MMT is confident the team will work around these issues. The team is looking forward to tomorrow's EVA and the reactivation of P6 in its permanent location.

SARJ Troubleshooting - The MMT had a lengthy discussion about the mission priorities. While the importance of the TRAD DTO was fully acknowledged, it was determined that the SARJ anomaly needed to be resolved promptly in order to fully support subsequent assembly missions. The TRAD DTO will be replanned for a subsequent shuttle flight. The MMT also concurred with the addition of the Port SARJ inspection to EVA 3.

The MMT received another informational brief on the SARJ, the findings from EVA 2, and the tasks being considered for EVA 4. The team will work the priority of these tasks overnight. The prioritized tasks will be reviewed and finalized at tomorrow morning's IMMT. It is fully expected that these tasks will amount to a full EVA which will necessitate the additional docked day.

It is a great day to be in ISS and an even better day to be outside. Here are details about EVA items today.

Delta to 1.240 POST EVA
We would like you to skip the METOX Regeneration step 39 in Post EVA today. That activity will be timelined later for FE-2 at GMT 303/19:20. The delay is due to the Regeneration of Micropurification unit (БМП) Ф1 cartridge. That has to be complete before we start the regeneration process of our Metox canisters.

EVA 3 Deltas in the event of MBSU deferral (hopefully not needed)
reference MSG 77 (ISS 16-0115) 10A EVA 3 Detailed Timeline - No MBSU

Pointers for EVA camera usage prior to, and during EVA

1. Prior to EVA 3, 4 and 5, after the thermal blanket is put on the cameras, take a picture and wait 10 seconds. Look into the viewfinder to verify that the camera has gone into standby mode. There should be no lights or camera data visible in the viewfinder. If the camera does not go into standby mode, readjust the blanket to seat the grommet over the shutter release so that it is loose and not partially depressing the shutter release. This condition can drain the battery. The same verification of standby mode can be made after taking pictures EVA.

2. The EVA Thermal Lens cap should always be installed on the lens when not taking pictures.

3. When using the camera with flash, if the flash fails to fire while acquiring imagery push the EVA viewfinder forward towards the lens. This should re-establish contact between viewfinder and camera, allowing the camera to communicate with the flash.

4. FYI, the ISS cameras and batteries you are using are new and were brought up on 120.

If consumables limitations require the MBSU Transfer task to be deferred from EVA 3, the following changes would be made to the EVA Timeline. You have already seen the overview of this in MSG 071 (16-0110); we just thought this detail might help Paolo as he jumps between procedures in the checklist.

Timeline Deltas for EV1/Parazynski:

Perform the following after completing MSG 068 (16-0103) PORT SARJ INSPECTION:

EVA, TIMELINES, FS 7-124, P1 SFU CONFIG FOR CINCH FIRING
Perform as written

EVA, TIMELINES, FS 7-125, S1 SFU CONFIG POST DEPLOY
Before Step 1 add Warning:

> WARNING
> Avoid contact with shiny spots on CETA HR 3203 near markers 6415 and 6450. Potential sharp edges exist

In step 7, delete "(remain on tether shuttle)"
Insert the following after Step 7.

7a. Swap to airlock safety tether
- √Gate closed
- √Hook locked
- √Reel unlocked

7b. Stow tether shuttle
- √Locked

7c. Translate to airlock
7d. Temp stow C/L Bag and EVA Camera
7e. Ingress Airlock
7f. Retrieve Node 2 OIH 0371 from Staging Bag
7g. Egress Airlock, close hatch thermal cover
7h. Verify SAFER Config:
- √Handle down (MAN ISO Vlv – Open)

7i. Perform glove inspection
7j. Perform HORSESHOE CONNECTOR INSTALL on next page

Delete Steps 8-10 on FS 7-125

Following Connector Install, return to EVA Checklist, FS 7-134

HORSESHOE CONNECTOR INSTALL (00:30)

IV

Handrail Install

1. √Handrail soft dock armed (push both buttons)
2. Install and soft dock handrail (arrow on bottom, align HR# to structure #, push in to soft dock)
3. Tighten **handrail bolts** (two)
   PGT, 7/16-6 in ext: A2, CW2; ~8 turns
4. Report turns and torque

	Bolt 1 (left)		Bolt 2 (right)	
HR	Turns	Torque	Turns	Torque
0371				

NOTE: Horseshoe connector task data available on FS 7-87 to 7-88

HORSESHOE CONNECTOR		
Connector	Turns	Torque
P6/P8 (inboard)		
P7/P5 (outboard)		

EV1 – Pz (FF)

NODE 2 OIH INSTALLATION

1. Translate to Node 2 inboard endcone
2. Install:
   ☐ ☐ HR 0371 inbrd end cone near WIF 07
3. Translate to Node 2 PDGF worksite

HORSESHOE CONNECTOR INSTALL

1. Translate to Node 2 PDGF worksite
2. Release horseshoe connector receptacle MLI cover
3. Release **horseshoe connector receptacle engagement bolt (two)**
   PGT, 7/16-6 in ext: A6, CCW2; 17 turns

☐ √Yellow band visible on both receptacles

4. Translate to horseshoe connector launch bracket
5. Release TA clamps as reqd (expecting 3)
6. Open MLI cover
7. Rotate sq microfixtures (two) 60 deg ccw
8. Remove horseshoe connectors (P6/P8 first due to cable interference)
9. Reinstall MLI cover over launch bracket
10. Translate to PDGF with cables
11. Install horseshoe connector onto PDGF
12. P6/P8 → J6/J8 (inboard)
13. Rotate square microfixture – LOCK, 60 deg cw
14. P7/P5 → J7/J5 (outboard)
15. Rotate square microfixture – LOCK, 60 deg cw
16. Drive **horseshoe connector receptacle engagement bolt (two)**
    PGT, 7/16-6 in ext: A6, CW2; 15-17 turns to HS
17. Reinstall MLI cover, feeding horseshoe connector cables through opening created by flap in cover
18. Route cable through wire-tie on HR 0335
19. Install cable into empty TA clamps as reqd for appropriate cable length
20. Close any remaining open TA clamps
21. Translate to airlock

Timeline Deltas for EV2/Wheels:

Perform the following after step 21 of SSU Shroud Removal:

EVA, TIMELINES, FS 7-82, RPCM S04B-C R&R
EV3, Prior to step 1, Insert Step 0a. Stow Med ORU bag
Insert Step 0b. Retrieve Sm ORU bag containing RPCM
Delete the following:
Step 3 reference to the T-handle tool
Step 14 and the Warning about floating cables
Step 20

EVA, TIMELINES, FS 7-137, N2 VENT TOOL RETRIEVE AND VENT TOOL ADAPTER RELOCATE

EVA, TIMELINES, FS 7-137, VTE BAG RELOCATE

EVA, TIMELINES, FS 7-138, GAP SPANNER INSTALLATION

Following Gap Spanner Installation, return to EVA Checklist, FS 7-134