STS-124 / 1J

FD 03 Execute Package

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009	19 - 44	FD03 Transfer Message **(pdf)**
010	45 - 49	Stowage Locations for FD03 Plan (GMT 154/155) **(pdf)**
011A	50	FD03 EVA Deltas **(pdf)**
012A	51 - 59	1J SSRMS and JEM RMS DOUG Setup Notes **(pdf)**
015	60	H2O Ops Cue Card, Rev B **(pdf)**
014	---	OSTPV Reference and Troubleshooting **(pdf - Electronic Only)**

Approved by FAO: *Jaime Marshik*

Last Updated: Jun 2 2008 9:07AM GMT
JEDI *(**J**oint **E**xecute package **D**evelopment and **I**ntegration), v2.04.0003*

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MSG NO.	TITLE
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015	H2O OPS CUE CARD, REV B

1. Cryo Config
   For today's cryo config, O2 and H2 tank 4 will be active with dual heaters.

   R1 O2, H2 MANF VLV TK2 (two) - OP (tb-OP)

2. Simo Dump Details
   At MET 1/14:10 perform a simo dump using SUPPLY/WASTE WATER DUMP (ORB OPS, ECLS) p. 5-2. MCC will TMBU FDA in steps B and K. Waste dump valve open time will be ~ 15 minutes and will dump the waste tank to 5%. Supply dump valve open time will be 60 minutes.

3. Shuttle Condensate Collection Details
   At MET 1/18:00 perform SETUP of SHUTTLE CONDENSATE COLLECTION (ORB OPS, ECLS) p. 5-36. The Y-Y Condensate Hose and CWC are located in MF71M. Report CWC serial number to MCC.

4. ADI Pointer Oscillations
   After reviewing rate data from NC1 and NC2, the ADI is working as expected. Oscillations in IMU body rates were observed during the NC1 and NC2 burns that would register and in some cases exceed the rate scale of the ADI in LOW for OPS 2 (+/- 0.2 deg/s). These oscillations have been seen in the data from previous flights, and the update rate of the ADI is fast enough that it would be displayed.

   The OPS 2 ADI rate scales were changed with OI-32 (scales are now LOW: +/- 0.2 deg/s, MED: +/- 1, HIGH: +/- 5) to aid crew monitoring of more quiescent on-orbit rates. OPS 1 and 3 ADI rate scales remain the same as OI-30 (scales are LOW: +/-1 deg/s, MED: +/- 5, HIGH: +/- 10). MCC recommends placing the ADI rate switch in MED or HIGH for future orbit OMS burns.

5. DOUG Setup Notes
   MSG012 (17-0279A) was uplinked to the ISS pre-launch. It has been uplinked to the Shuttle for your reference.

6. OSTPV Notes
   MSG014 has some reference material and troubleshooting tips for OSTPV. We did not print this message due to the number of images in it.

7. REPLACE PAGES 2-6, 2-8 and 3-20 THROUGH 3-29.

06/02/08 03:33:37 **REPLANNED**

GMT 06/02/08 (154) 12 10/13 11/14 12/15 13/16 14/17 15/18 16/19 17/20 18/21 19/22 20/23 21/002/00

MET Day 001

FD03

| | | |

06/02/08 03:33:37 **REPLANNED**

GMT 06/02/08 (154) 002/00 22 01 23 02 06/03 03 01 04 02 05 03 06 04 07 05 08 06 09 07 10 08 11 09 12

MET Day 002

FD03

STS-124	CDR KELLY	O2 P/B CONFG	EXERCISE			EVA 1 PROC REVIEW		BLEED	PRE SLEEP	PMC A/G	PRE SLEEP		MASK PB/TOOL CONFG		PRE SLEEP	SLEEP							
	PLT HAM	EVA XFER TO ISS			OPCU@	EVA 1 PROC REVIEW		EXERCISE			PRE SLEEP					SLEEP							
	MS1 NYBERG	EXER		MDDK XFER		EVA 1 PROC REVIEW		IWIS ACCEL INSTL			PRE SLEEP					SLEEP							
	MS2 GARAN	REBA*	REBA C/O	E_LK PREP		EVA 1 PROC REVIEW		PRE SLEEP					MASK PB/TOOL CONFG		PRE SLEEP	SLEEP							
													10.2 DPRS			ISS A/L Campout @ 10.2 psi							
	MS3 FOSSUM	REBA*	REBA C/O	E_LK PREP		EVA 1 PROC REVIEW		PRE SLEEP					MASK PB/TOOL CONFG		PRE SLEEP	SLEEP							
	MS4 HOSHIDE	PLYBK OPS		MDDK XFER		EVA 1 PROC REVIEW		PRE	SLEEP	XFER TAGUP		XFER	BREF	PRE SLEEP		SLEEP							
UP	FE-2 CHAMITOFF	IELK INST & C/O				EVA 1 PROC REVIEW		PS	DPC	PW	PS		MASK PB/TOOL CONFG		PS	SLEEP (8.5)							
EXP 17	ISS CDR VOLKOV	IELK INST & C/O				IELK RMVL & XFER	EVA 1 PROC REVIEW	PW	DPC	PW	PS					SLEEP (8.5)							
	FE-1 KONONENKO	EVA DCS CNFG		SSC	PW	EVA 1 PROC REVIEW		CVIU	PW	DPC	PW	PS				SLEEP (8.5)							
DN	FE-2 REISMAN	O2 P/B CONFG	RED			EVA 1 PROC REVIEW		EXERT	BTW	APW	DPC	PW	PS			SLEEP (8.5)							

STS

DAY/NIGHT

ORBIT 32 33 34 35 36 37 38 39 40

TDRS W -171 E -46 Z 275

ORB ATT BIAS -XLV -ZVV

NOTES *INSTALL @ACT

STS-124 FD03

GMT Date 06/02 (154) | W | T D R S E | Z | D/N | O R B | MET Day 001 | STS ATI

CDR KELLY | PLT HAM | MS1 NYBERG | Notes

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

10:00 11:00 12:00 13:00

24 25 26 27

-ZLV -XVV -BIAS -ZLV -YVV

SLEEP (CDR KELLY)

SLEEP (PLT HAM)

SLEEP (MS1 NYBERG)

FD03 EZ ACTIVITIES:
√OCAC FILTER & MDDK DUCT SCREEN
HARD REBOOT ALL PGSCs EXCEPT:
STS-7(WLES),STS-6(RPOP2),&
OCA ROUTER.

< MNVR WATER DUMP

FLIGHT SLEEP LOG (ORB OPS, SDBI)

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

TRANSITION TO RNDZ C/L AT MET 01/15:14

A	R13U	PARAMETER NAME	C/W CH	LOWER LIMIT
		CAB PRESS	004	3.35V/13.37psi

IMU STAR OF OPTY ALIGN (ORB OPS, GNC)

BLEEDOWN C&W CONFIG A
PRIORITY PWRUP GRP B (ORB PKT, PRI PWRDN)
Steps 12,10,9,6,5 (In step 12, Recover IMU 3)(In Step 6, Triple G2, NBAT 1223)

RCS/OMS HEATER RCNFG B
PRIORITY PWRUP GRP B (ORB PKT, PRI PWRDN)
Steps 12,10,9,6,5 (In step 12, Recover IMU 3)(In Step 6, Triple G2, NBAT 1223)

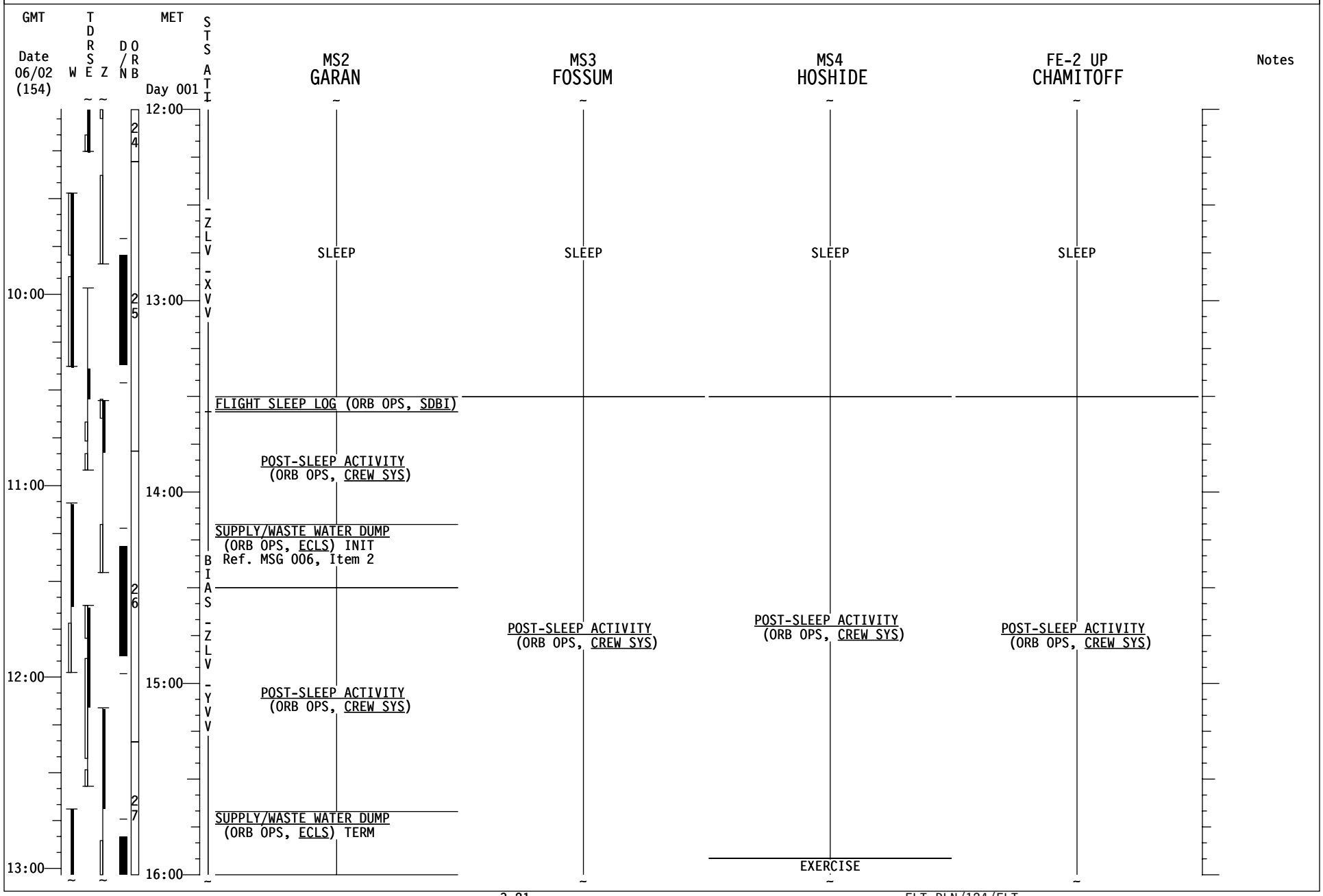
RENDEZVOUS TIMELINE (RNDZ, RENDEZVOUS T/L)

RENDEZVOUS TIMELINE (RNDZ, RENDEZVOUS T/L)

RENDEZVOUS TIMELINE (RNDZ, RENDEZVOUS T/L)

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

STS-124 FD03


GMT
Date 06/02 (154)
W
TDRSE
Z
D/N
ORB
MET
Day 001
STS ATI
MS2 GARAN
MS3 FOSSUM
MS4 HOSHIDE
FE-2 UP CHAMITOFF
Notes
12:00
13:00
14:00
15:00
16:00
10:00
11:00
12:00
13:00
24
25
26
27
-ZLV -XVV
BIAS -ZLV -YVV
SLEEP
SLEEP
SLEEP
SLEEP
FLIGHT SLEEP LOG (ORB OPS, SDBI)
POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
SUPPLY/WASTE WATER DUMP (ORB OPS, ECLS) INIT Ref. MSG 006, Item 2
POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
SUPPLY/WASTE WATER DUMP (ORB OPS, ECLS) TERM
EXERCISE

STS-124 FD03

GMT Date 06/02 (154) | W | T D R S E | Z | D/N | O R B | MET Day 001 | STS ATI

CDR KELLY | PLT HAM | MS1 NYBERG | Notes

16:00 — RENDEZVOUS TIMELINE (RNDZ, RENDEZVOUS T/L)

< NC4 TIG 1/16:42

17:00

14:00

18:00

15:00

< Ti TIG 1/18:14

RNDZ PET 00:00(Ti)
AT MET 1/18:14

19:00

16:00

APPROACH (RNDZ, CUE CARD)

20:00

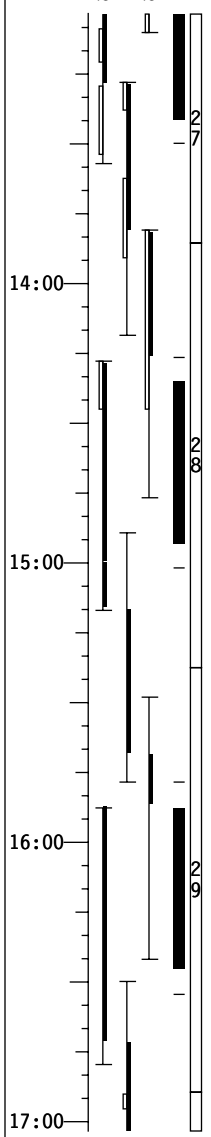
17:00

UPDATE
TFL 192, CFG 763

UPLINK
β21 Only
Box 30,40,41,50

STS-124 FD03

GMT Date 06/02 (154) | W | TDRSE | Z | D/N | ORB | MET Day 001 | STS ATI | MS2 GARAN | MS3 FOSSUM | MS4 HOSHIDE | FE-2 UP CHAMITOFF | Notes



16:00 – 20:00

MS2 GARAN

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

SSP1 OIU PWR - OIU 1 ON (tb-UP)
SSV OUTRATE - 3

EMU REMOVAL (EVA, AIRLOCK CONFIG)

RNDZ

SHUTTLE CONDENSATE COLLECTION (ORB OPS, ECLS) SETUP
Ref. MSG 006, Item 3

EXERCISE

APPROACH (RNDZ, CUE CARD)

MS3 FOSSUM

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

EXERCISE

EMU REMOVAL (EVA, AIRLOCK CONFIG)

P/TV02 DOCK (P/TV, SCENES) SETUP

P/TV02 DOCK (P/TV, SCENES) OPS

MS4 HOSHIDE

EXERCISE

RENDEZVOUS TIMELINE (RNDZ, RENDEZVOUS T/L)

TRANSFER UPDATE
Ref. MSG 009

APPROACH (RNDZ, CUE CARD)

FE-2 UP CHAMITOFF

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

EXERCISE

RENDEZVOUS TIMELINE (RNDZ, RENDEZVOUS T/L)

APPROACH (RNDZ, CUE CARD)

STS-124 FD03

GMT Date 06/02 (154) | W | TDRSE | Z | D/N | ORB | MET Day 001 | STS ATI

CDR KELLY	PLT HAM	MS1 NYBERG	Notes
APPROACH (RNDZ, CUE CARD)	APPROACH (RNDZ, CUE CARD)	APPROACH (RNDZ, CUE CARD)	
DOCKING(1/20:52)			
RETURN TO FLIGHT PLAN			
MNVR BIAS -XLV -ZVV TG=2 BV=5 P=165 Y=354 OM=184 Init TRK, DAP:FREE > 2 sec, then DAP:A12/AUTO/VERN	SSPTS ODS CONNECTOR VERIF A15 ODS MATE X1,X2 (two) - ON √MCC then - OFF	POST DOCKING HATCH LEAK CHECK (RNDZ, APDS)	UPLINK β21 Only Box 40,41,50
PRIORITY PWRDN GRP B(ORB PKT,PRI PWRDN) Steps 6,12 (In Step 6, Single G2) (In Step 12, IMU 3 STBY - ITEM 23 EXEC) 06 S TRK PWR -Z - OFF	PRIORITY PWRDN GRP B(ORB PKT,PRI PWRDN) Steps 6,12 (In Step 6, Single G2) (In Step 12, IMU 3 STBY - ITEM 23 EXEC) 06 S TRK PWR -Z - OFF	POST RNDZ PGSC CONFIG Configure PGSCs per EVA/RMS usage chart	UPDATE TFL 184
When ISS is GO for attitude control, DAP:FREE	SSV OUTRATE - 2 L17 Check MCIU filter screen		
JOINT OPS: 2.104 HATCH OPENING & STS/ISS DUCT INSTALLATION √MCC Step 1 complete, Steps 2-11,14-15. MCC-H will perform steps 12-13,16.	JOINT OPS: 2.104 HATCH OPENING & STS/ISS DUCT INSTALLATION √MCC Step 1 complete, Steps 2-11,14-15. MCC-H will perform steps 12-13,16.	JOINT OPS: 6.107 PCS S/U-SHUTTLE	
KONNICHIWA	KONNICHIWA	KONNICHIWA	
SAFETY BRIEFING	SAFETY BRIEFING	SAFETY BRIEFING	
JOINT OPS: 3.120 PREBREATHE USING SHUTTLE O2 SETUP Step 2-end Ref. MSG 010	EVA TRANSFER TO ISS (EVA, AIRLOCK CONFIG) Ref. Transfer List: Items 1-4 Ref. MSG 011	SODF TRANSFER Ref. Transfer List: Item 28	
		EXERCISE	

Time scale: 18:00, 19:00, 20:00, 21:00; 20:00, 21:00, 22:00, 23:00, 00:00

APPROACH | DK | BIAS -XLV -ZVV

30 | 31 | 32

STS-124 FD03

GMT Date 06/02 (154) | W | TDRSE | Z | D/N | ORB | MET Day 001 | STS ATI | MS2 GARAN | MS3 FOSSUM | MS4 HOSHIDE | FE-2 UP CHAMITOFF | Notes

20:00 — APPROACH (RNDZ, CUE CARD)

APPROACH

DOCKING(1/20:52)

18:00 — 21:00 — DK

RETURN TO FLIGHT PLAN

POST RNDZ PGSC CONFIG
Configure PGSCs per EVA/RMS usage chart

JOINT OPS: 6.107 PCS S/U-SHUTTLE

P/TV02 DOCK
(P/TV, SCENES) OPS

P/TV04 INGRESS/EGRESS (S/U)
(PHOTO/TV, SCENES)

AIRLOCK PREP FOR INGRESS BOOSTER FAN ACTIVE
(RNDZ, APDS)

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

APPROACH
(RNDZ, CUE CARD)

POST DOCKING HATCH LEAK CHECK
(RNDZ, APDS)

AIRLOCK PREP FOR INGRESS BOOSTER FAN ACTIVE
(RNDZ, APDS)

JOINT OPS: 2.104 HATCH OPENING & STS/ISS DUCT INSTALLATION
√MCC Step 1 complete, Steps 2-11,14-15. MCC-H will perform steps 12-13,16.

APPROACH
(RNDZ, CUE CARD)

JOINT OPS: 6.109 H/L ICOM AUDIO
Perform Steps 1,5,6. In Step 5, do 2-way voice ck on PAGE loop.

JOINT OPS: 2.104 HATCH OPENING & STS/ISS DUCT INSTALLATION
√MCC Step 1 complete, Steps 2-11,14-15. MCC-H will perform steps 12-13,16.

19:00 — 22:00 — BIAS-XLV-ZVV

20:00 — 23:00 — KONNICHIWA

SAFETY BRIEFING

EVA TRANSFER TO ISS
(EVA, AIRLOCK CONFIG)
Ref. Transfer List: Items 1-4
Ref. MSG 011

C Ref:STS-124/1J EMU CONSUMABLES TRACKING CC

EVA SYS: 1.307 REBA INSTL/RMVL
INSTALL C

EVA TRANSFER TO ISS
(EVA, AIRLOCK CONFIG)
Ref. Transfer List: Items 1-4
Ref. MSG 011

EVA SYS: 1.307 REBA INSTL/RMVL
INSTALL C

P/TV05 ISS INTERNAL OPS
(PHOTO/TV, SCENES)
Perform BPSMU and RWS Setup

MIDDECK TRANSFER
Ref. Transfer List: Items 6,25,& 7.1

IELK REMOVAL & TRANSFER
Ref. Transfer List: Item 14.2

IELK INSTALL & C/O
Ref. RODF

21:00 — 00:00

30 31 32

STS-124 FD03

GMT Date 06/02 (154) | W | TDRSE | Z | D/N | ORB | MET Day 002 | STS ATI | CDR KELLY | PLT HAM | MS1 NYBERG | Notes

22:00 | 23:00 | 00:00 | 01:00

32 | 33 | 34 | 35

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

BIAS - XLV - ZVV

CDR KELLY

JOINT OPS: 3.120 PREBREATHE USING SHUTTLE O2 SETUP
Step 2-end
Ref. MSG 010

EXERCISE

EVA PROCEDURE REVIEW
Ref: EVA 1 BRIEFING CARD (EVA, TIMELINES)

M069M LEH O2 8 vlv - CL

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)
√Hum Seps for H2O Accumulation

PRIVATE MEDICAL CONFERENCE

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

EVA SYS: 1.206 10.2 PSIA CAMPOUT MASK PREBREATHE Continued on Page 3-28

PLT HAM

EVA TRANSFER TO ISS
(EVA, AIRLOCK CONFIG)
Ref. Transfer List: Items 1-4
Ref. MSG 011

SSPTS OPCU ACT D

EVA PROCEDURE REVIEW
Ref: EVA 1 BRIEFING CARD (EVA, TIMELINES)

D SSPTS OPCU ACT
On MCC GO:A15 OPCU 1,2 CONV(two) - ON
R1 MN BUS TIE B - ON(tb-ON)
C - ON(tb-ON)

EXERCISE

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

MS1 NYBERG

EXERCISE

MIDDECK TRANSFER
Ref. Transfer List: Item 31

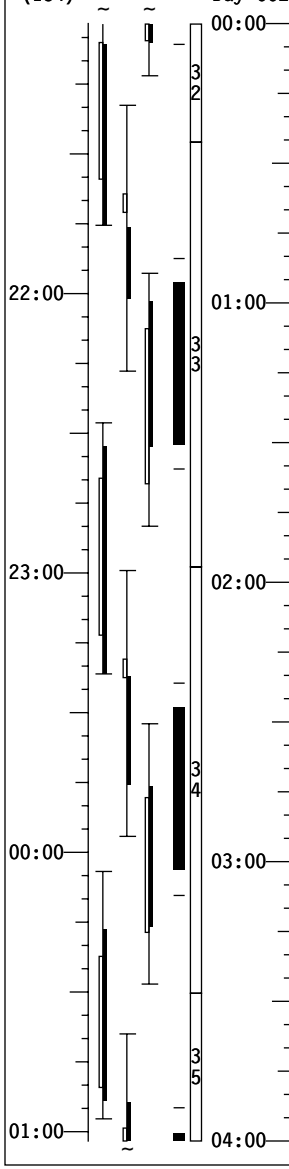
EVA PROCEDURE REVIEW
Ref: EVA 1 BRIEFING CARD (EVA, TIMELINES)

ASSY OPS: 3.129 IWIS INSTALLATION IN SHUTTLE AIRLOCK
Steps 1.1-1.6, 1.10
Ref. MSG 010

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

STS-124 FD03

GMT Date 06/02 (154) | W | TDRSE | Z | D/N | ORB | MET Day 002 | STS ATI | BIAS - XLV - ZVV



MS2 GARAN	MS3 FOSSUM	MS4 HOSHIDE	FE-2 UP CHAMITOFF	Notes
EVA SYS: 1.307 REBA INSTL/RMVL Continued from Page 3-25	EVA SYS: 1.307 REBA INSTL/RMVL Continued from Page 3-25	PLAYBACK (DIGITAL) (PHOTO/TV, CUE CARD) DOCKING VIDEO KU TDRW (00:05-00:33)	IELK INSTALL & C/O Ref. RODF	
EVA SYS: 1.403 REBA PWRD H/W CK	EVA SYS: 1.403 REBA PWRD H/W CK			
EVA SYS: 1.305 EQUIP LOCK PREP Ref: STS-124/1J EMU CONSUMABLES TRACKING CC	EVA SYS: 1.305 EQUIP LOCK PREP Ref: STS-124/1J EMU CONSUMABLES TRACKING CC	MIDDECK TRANSFER Ref. Transfer List: Items 6,25,& 7.1		
EVA PROCEDURE REVIEW Ref: EVA 1 BRIEFING CARD (EVA, TIMELINES)	EVA PROCEDURE REVIEW Ref: EVA 1 BRIEFING CARD (EVA, TIMELINES)	EVA PROCEDURE REVIEW Ref: EVA 1 BRIEFING CARD (EVA, TIMELINES)	EVA PROCEDURE REVIEW Ref: EVA 1 BRIEFING CARD (EVA, TIMELINES)	
		PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PRE SLEEP	
		DAILY STS/ISS CREW TRANSFER TAGUP	DAILY PLANNING CONFERENCE	
		TRANSFER BRIEF Call down status to MCC	EVENING PREP WORK	
PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)			
		PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PRE SLEEP	
EVA SYS: 1.206 10.2 PSIA CAMPOUT MASK PREBREATHE ~Cont.on Pg 3-29	EVA SYS: 1.206 10.2 PSIA CAMPOUT MASK PREBREATHE ~ Continued on Page 3-29		EVA SYS: 1.206 10.2 PSIA CAMPOUT MASK PREBREATHE ~ Cont.on Pg 3-29	

STS-124 FD03

GMT Date 06/03 (155) | W | TDRSE | Z | D/N | ORB | MET Day 002 | STS ATI | CDR KELLY | PLT HAM | MS1 NYBERG | Notes

04:00 — EVA SYS: 1.206 10.2 PSIA CAMPOUT MASK PREBREATHE
Steps 1-16

Ref: EVA 1 TOOL CONFIG (EVA, TIMELINES)

35

PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS) — PLT HAM

PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS) — MS1 NYBERG

02:00 — 05:00

PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS) — CDR KELLY

36

BIAS -XLV -ZVV

03:00 — 06:00

WAKE UP AT 2/13:30

SLEEP — CDR KELLY

SLEEP — PLT HAM

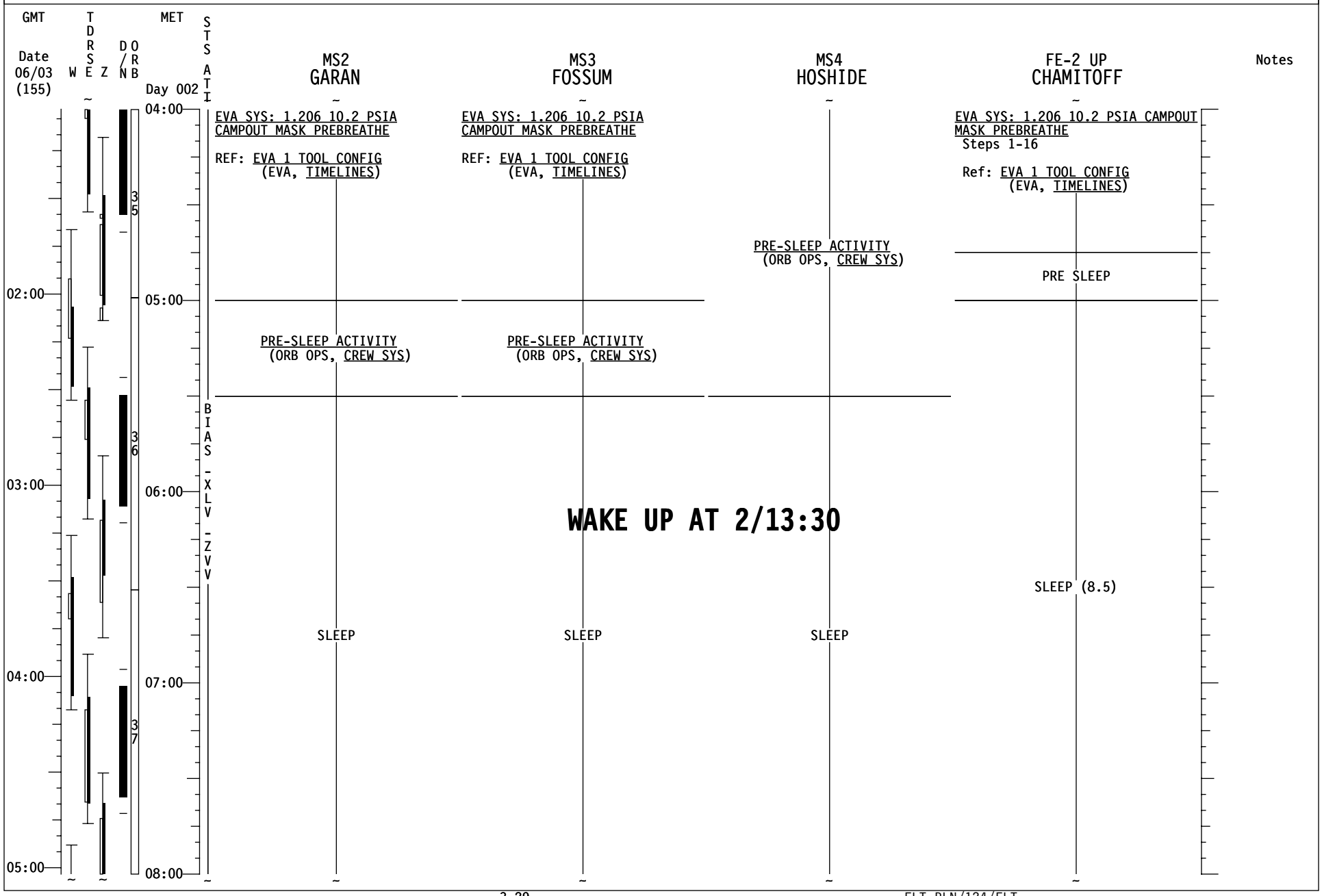
SLEEP — MS1 NYBERG

04:00 — 07:00

37

05:00 — 08:00

STS-124 FD03


GMT
Date 06/03 (155)
W
TDRSE
Z
D/N
ORB
MET
Day 002
STS ATI
MS2 GARAN
MS3 FOSSUM
MS4 HOSHIDE
FE-2 UP CHAMITOFF
Notes
04:00
05:00
06:00
07:00
08:00
02:00
03:00
04:00
05:00
35
36
37
BIAS -XLV -ZVV
EVA SYS: 1.206 10.2 PSIA CAMPOUT MASK PREBREATHE
REF: EVA 1 TOOL CONFIG (EVA, TIMELINES)
EVA SYS: 1.206 10.2 PSIA CAMPOUT MASK PREBREATHE
REF: EVA 1 TOOL CONFIG (EVA, TIMELINES)
EVA SYS: 1.206 10.2 PSIA CAMPOUT MASK PREBREATHE
Steps 1-16
Ref: EVA 1 TOOL CONFIG (EVA, TIMELINES)
PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)
PRE SLEEP
PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)
PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)
WAKE UP AT 2/13:30
SLEEP (8.5)
SLEEP
SLEEP
SLEEP

Good Morning Discovery!!!
Welcome to Rendezvous Day!
The station crew is anxiously awaiting your arrival!!!!

YOUR CURRENT ORBIT IS: 183 X 173 NM

NOTAMS:
EDW – LAKEBED RUNWAY 15/33 ELS ONLY. OTHER LAKEBED RWYS RED.
NOR – LAKEBED RUNWAYS GREEN.
NTU – NGU TACAN CH CHANGED TO 86Y.
YJT – TACAN CH 78 DME ONLY.
HAW – RWY 31 CLOSED. RWY 13 TODA 8,994'.
WAK – CLOSED. NOT USABLE.
IKF – NOT USABLE. NO AGREEMENT.
BEN – NOT RECOMMENDED/NOT SUPPORTED.
ZZA – FIRST 600M (~2,000') OF RWY 30L NOT AVAILABLE. 10,200' REMAINING.
FMH – PVD TACAN CH103 OTS.

NEXT 2 PLS OPPORTUNITIES:
NOR23 ORB 32 – 1/23:45 SKC 220/14P24
EDW22 ORB 48 – 3/00:06 SKC 250/15P25

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 = 29.8 R OMS OX = 30.2
FU = 29.5 FU = 30.2

DELTA V AVAILABLE:

OMS	274 FPS
ARCS (TOTAL ABOVE QTY1)	30 FPS
TOTAL IN THE AFT	304 FPS
ARCS (TOTAL ABOVE QTY2)	58 FPS
FRCS (ABOVE QTY 1)	30 FPS
AFT QTY 1	83 %
AFT QTY 2	45 %

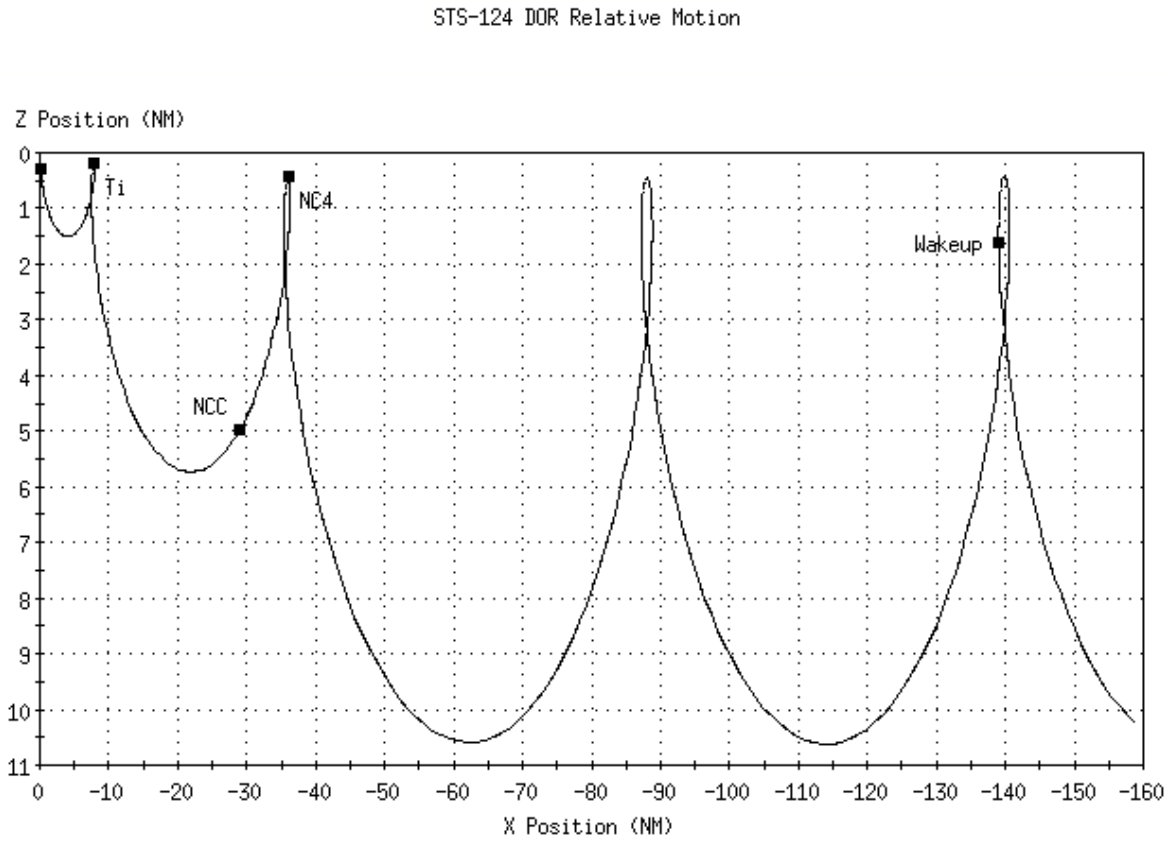
THERE ARE NO FAILURE/IMPACT/WORK AROUNDS FOR TODAY.

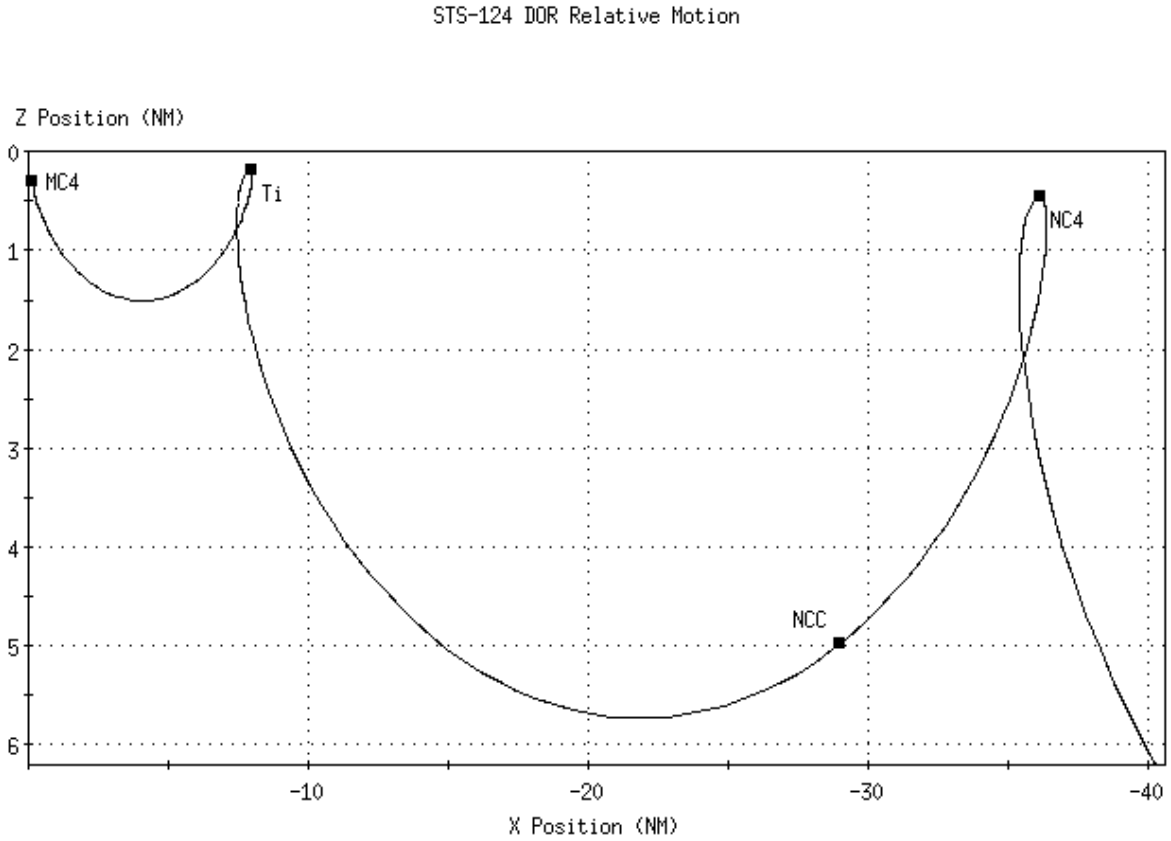
FLIGHT NOTE

TO: FD, CAPCOM, FAO, RENDEZVOUS, PROP, GC
FROM: FDO
SUBJECT: MANEUVER TIGS

COPIES: 1

	MET	
NC-4	001:16:42:23.400	
NCC	001:17:16:32.000	
TI	001:18:14:14.000	PET = 0:0 ; SS - 36 MIN
MC1	001:18:34:14.000	
MC2	001:19:04:08.000	ET = 0:0
MC3	001:19:21:08.000	MC2 + 17 MIN
MC4	001:19:31:08.000	MC2 + 27 MIN
DOCK	001:20:52:00.000	




STS-124 DOR Relative Motion
Z Position (NM)
0
1
2
3
4
5
6
MC4
Ti
NC4
NCC
-10
-20
-30
-40
X Position (NM)

PRELIMINARY ORBIT MANEUVER PAD FOR NC-4 (Rndz. C/L pg. 3-4)

OMS BOTH	1	
L	2	
R	3	X
RCS SEL	4	
TV ROLL	5	000
TRIM LOAD P	6	(+)0.5
LY	7	(+)4.6
RY	8	(-)4.6
WT	9	248084
TIG	10	01/16:42:23.4
TGT PEG 7 ΔVX	19	(+)008.3
ΔVY	20	(+)000.0
ΔVZ	21	(+)000.1

RCS SEL: [ ] +X [ ] -X [ ] MULTI-AXIS

BURN ATT

R	24	097
P	25	217
Y	26	040

ΔVTOT	008.3
TGO	00:11
VGO X	(+)007.9
VGO Y	(-)001.6
VGO Z	(+)002.2

	HA	HP
TGT	183	(+)178

NOTES

OMS GMBL CK:

	PRE	POST-BURN
L PRI		
L SEC		
R PRI		X
R SEC		
NONE	X	

RCS I'CNCT:

- [ ] L OMS → RCS
- [ ] R OMS → RCS
- [X] NONE

DOWN MODE OPTIONS:

- [ ] 2 OMS → 1 OMS
- [X] 1 OMS → RCS
- [ ] NONE

OMS HE REG TEST: [ ] NONE

	L GPC	L OP	L CL	R GPC	R OP	R CL
A					X	
B						X

-X RCS BURNS:

	BURN ATT		LVLH ATT
P 15	N/A	R	N/A
Y 16	N/A	P	N/A
OM 17	N/A	Y	N/A

ORBIT BURN MONITOR

GPC FILL-INS 1 (3)

- [X] CRIT BURN
- [ ] NON-CRIT BURN

MAX TIG SLIP ___ MIN.

- [ ] DO NOT UPDATE TIG
- [ ] UPDATE TIG AFTER ___ MIN.

NOTES

PRELIMINARY ORBIT MANEUVER PAD FOR Ti (Rndz C/L pg. 3-6)

OMS BOTH	1	
L	2	
R	3	X
RCS SEL	4	

- [ ] +X
- [ ] -X
- [ ] MULTI-AXIS

TV ROLL	5	000
TRIM LOAD P	6	(+)0.5
LY	7	(+)4.6
RY	8	(-)4.6
WT	9	247866
TIG	10	01/18:14:14.0
TGT PEG 7 ΔVX	19	(+)007.4
ΔVY	20	(-)000.4
ΔVZ	21	(+)000.0

BURN ATT

R	24	095
P	25	221
Y	26	039

ΔVTOT	007.4
TGO	00:09
VGO X	(+)007.0
VGO Y	(-)001.4
VGO Z	(+)001.9

	HA	HP
TGT	184	(+)182

NOTES

OMS GMBL CK:

	PRE	POST-BURN
L PRI		
L SEC		
R PRI		
R SEC		
NONE	X	X

RCS I'CNCT:

- [ ] L OMS → RCS
- [ ] R OMS → RCS
- [X] NONE

DOWN MODE OPTIONS:

- [ ] 2 OMS → 1 OMS
- [X] 1 OMS → RCS
- [ ] NONE

OMS HE REG TEST:

- [ ] NONE

	L GPC	L OP	L CL	R GPC	R OP	R CL
A						X
B					X	

-X RCS BURNS:

	BURN ATT				LVLH ATT		
P	15	N	/	A	R	N	/	A
Y	16	N	/	A	P	N	/	A
OM	17	N	/	A	Y	N	/	A

ORBIT BURN MONITOR

GPC FILL-INS 1 (3)

- [X] CRIT BURN
- [ ] NON-CRIT BURN

TIG SLIP: If Ti not started by nominal TIG + ___ min go to Ti DELAY, 5-27

Max Ti DELAY TIG slip ___ min.

- [ ] DO NOT UPDATE TIG
- [ ] UPDATE TIG AFTER ___ MIN.

Ti DELAY

TGT PEG 7 ΔVX	19	(-)
ΔVY	20	(-)
ΔVZ	21	(-)
NEW Ti (BASETIME)		01/19:45:31.0

NOTES

Contents:

Timeline Procedures:
IMMN-FE2U SALIVA-S/U
IWIS-ORBTR RSU-PREP
IWIS-S/U
ISS-HATCH LEAK CK-DK
ISS-HATCH OPEN
P/TV-EVA DCS-CNFG
**ACS-O2 P/B CONFIG
**IWIS-ACCEL-INSTALL

Timeline Procedures:

IMMN-FE2U SALIVA-S/U						
2.002 SALIVA COLLECTION FOR INTEGRATED IMMUNE						
Type: Standard			IMS Plan: No			
#	**LOCATION**	**ITEM NAME**	**P/N**	**S/N**	**B/C**	**Notes**
1	**LAB1O5_F2**	Integrated Immune Saliva Collection Kit	SJG46121521-301	1005 1007	HRF07569J HRF07567J	**NOTIFY POIC if different S/N used from this location.** Important for future crew ops.

IWIS-ORBTR RSU-PREP						
16-0778 IWIS RSU and Power Cable Installation/Removal						
Type: Standard			IMS Plan: No			
#	**LOCATION**	**ITEM NAME**	**P/N**	**S/N**	**B/C**	**Notes**
1	**NOD1S4_C2** 1.0 CTB S/N 1189 B/C 006685J	US DC Power Cable, 10ft	SEZ39129260-309	6026	POC10637J	
2		A31p 120V DC Power Supply	SEG33116412-303	1341	POC10348J	
3	**LAB1P5_A1** 0.5 CTB: IWIS CTB, S/N 1188, B/C 006637J	IWIS Power Cable	528-21376-1	1005		
4		IWIS Remote Sensor Unit (RSU) Assembly	SEG16102889-301	1029		Has been labeled with upgraded P/N SEG16102889-302
5		WIS Antenna	0060-04-005	-	-	

IWIS-S/U						
16-1168 IWIS SETUP AND PROGRAM - LAB, NODE 1, NODE 2, FGB AND SM						
Type: Standard			IMS Plan: No			
#	**LOCATION**	**ITEM NAME**	**P/N**	**S/N**	**B/C**	**Notes**
1	**LAB1P5_A1**	WIS NETWORK CONTROL UNIT	SEG16102890-301	1032	WISN1032J	Backup NCU.
2	0.5 CTB: IWIS CTB, S/N 1188, B/C 006637J	WIS Antenna	0060-04-005	-	-	
3	**ФГБ1ПГО_2_224_1**	Мешок	-	-	008153R	
4	0.5 CTB: CTB, S/N 1395, B/C CTB00301J	IMAX Russian Ground Cable 1.5'	SEZ39134181-301	1008	00006460J	
5		IMAX Russian Adapter Cable 1'	SEZ39134178-301	1004	00006432J	
6		IMAX 28VDC Y-Cable 2'	SEZ39134173-301	1003	00003593J	
7		DC Power 28VDC Cable Assy	SEG39129264-301	6008	POC01023J	
8		A31p 28V DC Power Supply	SEG33116428-301	1301	POC10404J	
9		IWIS Power Cable	528-21376-1	1006	00063522J	
10		IWIS Remote Sensing Unit	SEG16102889-301	1035	00011461J	FGB RSU; Has been labeled with upgraded P/N SEG16102889-302
11		WIS Antenna	0060-04-005	-	-	
12		IMAX Russian Ground Cable 1.5'	SEZ39134181-301	1005	00006462J	
13		PEEK 28 VDC 20AMP Russian Outlet Adapter Cable	SEG33112678-301	1002	00006801J	
14		IMAX 28VDC Y-Cable 2'	SEZ39134173-301	1010	004493J	
15		Orb DC Power Cable 10'	SEG39129264-303	5014	-	
16		A31p 28V DC Power Supply	SEG33116428-301	1014	00045846J	
17		IWIS Power Cable	528-21376-1	1007	00063523J	
18		IWIS Remote Sensor Unit Assembly	SEG16102889-301	1027	WISI1027J	SM RSU; Has been labeled with upgraded P/N SEG16102889-302
19		WIS Antenna	0060-04-005	-	-	

ISS-HATCH LEAK CK-DK						
2.102 POST DOCKING HATCH LEAK CHECK - ISS						
Type: Standard			IMS Plan: No			
#	**LOCATION**	**ITEM NAME**	**P/N**	**S/N**	**B/C**	**Notes**
1	**NOD1P4_D**	VAJ-78-1 5ft	683-17111-1	-	00002677J	
2	**NOD1O4_D1** 0.5 CTB, S/N 1202, B/C 006651J	MPEV INTERNAL SAMPLING ADAPTER	97M55830-1	2	000002M	AKA - ISA
3		ISA Scopemeter Pressure Probe	1525,760MMHGA/30 PSIA	005023439991	000009M	
4		Multimeter Kit	10118-10018-04	1017	-	
5		Multimeter	87	-	00059824J	Named “E16RULES.”
6	**Crew Pref**	Earplugs	-	-	-	

ISS-HATCH OPEN						
2.104 HATCH OPENING AND SHUTTLE/ISS DUCT INSTALLATION						
Type: Standard			IMS Plan: No			
#	**LOCATION**	**ITEM NAME**	**P/N**	**S/N**	**B/C**	**Notes**
1	**NOD1O4_C1** 0.5 CTB: Rubber Gloves, S/N 1159, B/C 006608J	Nitrile Gloves Assy	SEG33116807-301	-	-	Substitute for Rubber Gloves if none found.
2		Deerskin Gloves	528-41517-2	-	-	
3	**Crew Preference**	Towel	-	-	-	
4	**LAB1 Deployed**	Spotlight	528-20184-1	-	-	
5	**NODE2 FWD ENDCONE** DOCKING MECHANISM ACCESSORY KIT, P/N 33У.9962.003	Ручка	11Ф732.Г1021-ОА	-	-	APAS Hatch Tool
6		CLEANING PADS	33У.9938.002	-	-	
7		1 1/2 INCH WRENCH	528-20942-1	-	-	1 1/2" Open End Wrench
8		HATCH COVER	33У.9936.021	-	-	APAS Hatch Cover
9		Standoff Cover Bag Assy	SEM39125998-301	-	-	Docking Target Standoff Cross Bag
10		Target Base Cover Assy	SEM39125997-301	-	-	Docking Target Base Plate Cover

P/TV-EVA DCS-CNFG						
2.702 760 EVA CAMERA WITH FLASH & 2.701 760 EVA CAMERA						
Type: Standard			IMS Plan: No			
#	**LOCATION**	**ITEM NAME**	**P/N**	**S/N**	**B/C**	**Notes**
1	**ISS DEPLOYED**	1GB EVA Flash Card [QTY: 4]	SEZ33118356-301	Any	Any	B/U cards for RPM Photos
2		DCS 760 Camera [QTY: 2]	SEZ33113001-304	Any	-	
3	**LAB1D3 Deployed**	DCS Rechargeable Battery [QTY: 3]	SDZ33112993-802	Any	-	Use freshly charged batteries.
4	**A/L1D2_Behind Closeout** 1.0 CTB: EVA CAMERA ACCESSORIES S/N 1221, B/C 006717J	28 mm EVA Lens	SED33105019-301	Any	-	
5		EVA Filter w/o Glass	SEZ33114460-304	Any	Any	
6		50 mm EVA Lens	SED33104372-302	Any	Any	
7		EVA Filter w/o Glass	SEZ33114460-304	Any	Any	
8		Camera Mtg Assy Thermal Blanket [QTY: 2]	SED33117417-301	Any	-	
9		Camera Mounting Assy [QTY: 2]	SED33113695-302	Any	-	
10		EVA Camera Blanket [QTY: 2]	SEZ33113449-301	Any	Any	
11		28mm. 35mm. 50mm Lens Cap [QTY: 2]	SED33110611-327	Any	Any	Attached to Camera Blankets
12		EVA Action Finder [QTY: 2]	SED33110611-327	Any	Any	
13		Tie Wrap [QTY: 4]	SDD13101649-302	-	-	AKA: Zip Ties **CONFIRM** to MCC-H total number of Tie Wraps used for inventory management.
14	**A/L1D0 Behind closeout** 1.0 CTB: EVA FLASH S/N 1105, B/C 004099J	EVA Flash	SEG33111838-307	Any	Any	
15		Bracket Assembly Thermal Blanket	SED33117416-301	Any	-	
16		Bracket Assembly	SED33117404-301	Any	-	
17		DCS EVA 7VDC Power Cable	SEZ33117255-301	Any	-	
18		EVA Remote Cord	SED33112525-302	Any	-	
19		Flash Sync Cover	SEZ33113449-308	Any	-	
20		Flash Sync Cable	SEZ33117231-301	Any	-	

**ACS-O2 P/B CONFIG						
3.120 PREBREATHE USING SHUTTLE O2 SETUP						
Type: Standard			IMS Plan: No			
#	**LOCATION**	**ITEM NAME**	**P/N**	**S/N**	**B/C**	**Notes**
1	**LAB1O3** Mesh Bag	Clean Room Gloves	SEG33116979-301	-	-	These items were pregathered into a mesh bag by the ISS crew.
2		GO2 Transfer Hose Assy	V857-643003-002	AA0873793	002668-1J	
3		Flashlight	-	-	-	
4		Earplugs	-	-	-	
5		Teflon Bag	300045-08	-	-	
6		Clean Room Vinyl Tape	3M/1251	-	-	
7		Inspection Mirror	1016T2	-	-	

**IWIS-ACCEL-INSTALL						
3.129 IWIS Installation in Shuttle Airlock						
Type: Standard			IMS Plan: No			
#	**LOCATION**	**ITEM NAME**	**P/N**	**S/N**	**B/C**	**Notes**
1	**LAB1P5_A1** 0.5 CTB: IWIS CTB, S/N 1188, B/C 006637J	IWIS Accelerometer Cable Assy 25 FT	0060-04-013	1004	WISTAA05J	
2		Accelerometer Interface Plate	0060-04-015	1008	00050648J	
3		Accelerometer	0060-04-012	1005	WISTAA05J	

1) FS 2-10, Step 3 - When you're moving STS-124/1J EMERGENCY UNDOCK EVA TRANSFER CUE CARD make the following change to that CUE CARD:
* under "Critical" add a step 8. External A/L Floor (Bag I)

Rationale: A/L Floor (Bag 1) contains Contingency

- *CCC (LiOHs – 4 cans)*
- *Backup and Contingency gloves*
- *MWS*

2) FS 2-10, Step 5 – Delete "Cuff Checklists"
3) FS 2-15, Mesh Bag (EVA Systems 1) block – Delete "Cuff Checklists (Old from ISS)"
4) FS 2-17, Step 2 – Delete "ISS Cuff Checklists"

Rationale: Garrett has already pre-packed 6 cuffs in 1J return bag 404 during EMU Relocate.

DOUG Setup for 1J Robotics

1. This DOUG load contains the EVA Reconfig Menus as well as the SSRMS procedure states, and the SSRMS, SRMS, and JEM RMS targets.
2. For **stand-alone** procedure review, perform { Uplinked Procedures; US SODF: POC; 17-0278 1.301 DOUG Startup Procedure}, step 2
3. For **SSRMS real-time support**, perform { Uplinked Procedures; US SODF: POC; 17-0278 1.301 DOUG Startup Procedure}, step 1
   3.1 Set SSC volume such that tones are audible.
4. All DOUG States will have the SSRMS configured in its 'zero' position. For **stand alone** procedure review use the Options ► SSRMS Targets dialog box to find your starting SSRMS target. For **SSRMS real-time support**, the SSRMS will update its joint angles when DOUG is receiving telemetry.

Notes:
1. Use the Options ► SSRMS Targets dialog box to find your starting SSRMS target and ensure 'Targ SSRMS' is checked.
2. Use the Home Key to cycle through the Camera, SSRMS & SRMS Targets.
3. Use Page Up and Page Down keys to scroll through Target selections.
4. Reconfig notes should be executed at end of maneuver
5. Display ► Puddle Plot Shoulder/Wrist
6. For real-time support, Display ►Show SSRMS Target
7. For Real-time support, Options ►SSRMS Proximity, set all distances to 24 (inches)
8. For Real-time support, 'Shift'+'V' will display the VPP (Vegas) vector tool in the lower right corner

FD4 Targets

OBSS Grapple

File ► Load State

From Load State Dialog box, select 'FD4_1.101_Mnvr_to_OBSS_Grapple', open

Confirm Load State is complete with loaded state file, otherwise complete these steps as needed.

Reconfig ►

SSRMS > SSRMS_BASE_A
SSRMS > SSRMS ->MBS_PDGF3
SSRMS > MT_to_WORKSITE_4
JEM_PM > JEM_PM->Bay
JEM_ELM > JEM_ELM->NODE2
Orbiter_Inspection > Stow _OBSS_on_S1

Procedure	Step	SSRMS	Notes
1.101 Mnvr to OBSS Grapple	2	1.101 Park Position	
	3	1.101 OBSS Pre-Grapple	
	6.3	1.101 OBSS Captured	Reconfig >Orbiter_Inspection> OBSS_GF2_to_SSRMS

OBSS Handoff

File ► Load State

From Load State Dialog box, select 'FD4_1.102_OBSS_Unberth_and_Handoff', open

Confirm Load State is complete with loaded state file, otherwise complete these steps as needed.

Reconfig ►

SSRMS > SSRMS_BASE_A
SSRMS > SSRMS ->MBS_PDGF3
SSRMS > MT_to_WORKSITE_4
JEM_PM > JEM_PM->Bay
JEM_ELM > JEM_ELM->NODE2
Orbiter_Inspection > OBSS_GF2_to_SSRMS
RMS Target = OBSS Pregrapple at Handoff

1.102 OBSS Unberth and Handoff	3	1.102 OBSS Grapple	
	4	1.102 Cable Removal	
	5	1.102 JOCAS Start	
	6	1.102 OBSS Handoff	RMS Target = OBSS Handoff Reconfig >Orbiter_Inspection> OBSS_GF1_to_SRMS
1.103 OBSS Ungrapple to Node 2 Grapple	2.3	1.103 OBSS Back-Off	
	3	1.103 Intermediate Position	
	4	1.103 Node 2 Approach	
	5	1.103 Node 2 Pre-Grapple (+SP)	
	8	1.103 Node 2 Grapple	

JPM Install

File ► Load State

From Load State Dialog box, select 'FD4_2.101_Mnvr_to_JPM_Grapple', open

Confirm Load State is complete with loaded state file, otherwise complete these steps as needed.

Reconfig ►

SSRMS > SSRMS_BASE_B'.
SSRMS > SSRMS ->Node2_PDGF
SSRMS > MT_to_WORKSITE_4
JEM_PM > JEM_PM->Bay
JEM_ELM > JEM_ELM->NODE2
Orbiter_Inspection > OBSS_GF1_to_SRMS
RMS Target =JPM Install Viewing

2.101 Mnvr to JPM Grapple	1	2.101 MBS PDGF 3 Grapple	
	2.4	2.101 MBS PDGF 3 Release	
	3	2.101 Intermediate Position 1	
	4	2.101 Intermediate Position 2	
	5	2.101 JPM Pre-Grapple	
	8	2.101 JPM Grappled	Reconfig-> JEM_PM> JEM_PM_PDGF->SSRMS
2.102 JPM Install	1	2.102 JPM Grappled	
	7	2.102 JPM Unberth	
	9	2.102 JAUTO Start	
	11	2.102 JAUTO 1	
		2.102 JAUTO 2	
		2.102 JPM Pre-Install	
	14	2.102 JPM Ready-To-Latch	
	16	2.102 JPM Install	Reconfig-> JEM_PM> JEM_PM->Node2

<u>FD6 Targets</u>

JPM Release

File ► Load State

From Load State Dialog box, select

'FD6_2.103_JPM_Release_and_Walkoff_to_MBS_PDGF3', open

Confirm Load State is complete with loaded state file, otherwise complete these steps as needed.

Reconfig ►

SSRMS > SSRMS_BASE_B
SSRMS > SSRMS ->Node2_PDGF
SSRMS > MT_to_WORKSITE_6
JEM_ELM > JEM_ELM->NODE2
JEM_PM > JEM_PM->NODE2
JEM_PM > Install_JEM_FWD_Camerea_and_Boom
JEM_PM > Install_JEM_AFT_Camerea_and_Boom
Reconfig> JEM_PM> Remove_CBM_MLI
Orbiter_Inspection > OBSS_GF1_to_SRMS.
RMS Target =JPM Install Viewing

2.103 JPM Release and Walkoff to MBS PDGF 3	1	2.103 JPM Install	
	2.3	2.103 JPM Release	
	3	2.103 JPM Clear	
	4	2.103 Intermediate Position (-SP)	
		2.103 Intermediate Position (-SR)	
	5.1	2.103 PDGF3 Approach	
	5.2	2.103 MBS PDGF 3 Pre-	

		Grapple	
	8	2.103 MBS PDGF 3 Grapple	

<u>FD7 Targets</u>

Node 2 Release and Focus Inspection Support

File ► Load State

From Load State Dialog box, select

'FD7_2.103_JPM_Release_and_Walkoff_to_MBS_PDGF3', open

Confirm Load State is complete with loaded state file, otherwise complete these steps as needed.

Reconfig ►

SSRMS > SSRMS_BASE_A.
SSRMS > SSRMS ->MBS_PDGF3
SSRMS > MT_to_WORKSITE_6
JEM_ELM > JEM_ELM->NODE2
JEM_PM > JEM_PM->NODE2
JEM_PM > Install_JEM_FWD_Camerea_and_Boom
JEM_PM > Install_JEM_AFT_Camerea_and_Boom
Reconfig> JEM_PM> Remove_CBM_MLI
Orbiter_Inspection > OBSS_GF1_to_SRMS.
RMS Target =JPM Install Viewing

2.103 JPM Release and Walkoff to MBS PDGF 3	9	2.103 Node2 Grapple	
	10.3	2.103 Node2 Release	
3.101 Mnvr to Focused Inspection Support	1	3.101 Node2 Release	
	2	3.101 Clear of JPM	
	3	3.101 FI Support	

JLP Relocate

File ► Load State

From Load State Dialog box, select

'FD7_4.101_Mnvr_from_FI_Support_to_JLP_Pre-Grapple', open

Confirm Load State is complete with loaded state file, otherwise complete these steps as needed.

Reconfig ►

SSRMS > SSRMS_BASE_A
SSRMS > SSRMS ->MBS_PDGF.
SSRMS > MT_to_WORKSITE_6
JEM_ELM > JEM_ELM->NODE2
JEM_PM >JEM_PM->NODE2
JEM_PM > Install_JEM_FWD_Camerea_and_Boom
JEM_PM > Install_JEM_AFT_Camerea_and_Boom
Reconfig> JEM_PM> Remove_CBM_MLI

Orbiter_Inspection > OBSS_GF1_to_SRMS
RMS Target = JLP Relocate Viewing

4.101 Mnvr from FI Support to JLP Pre-Grapple	1	4.101 FI Support	
	2	4.101 JLP Approach	
	3	4.101 JLP Pre-Grapple	
4.102 JLP Relocate	1	4.102 JLP Pre-Grapple	
	2	4.102 JLP Grapple	Reconfig> JEM_ELM> JEM_ELM_GF2->SSRMS
	5	4.102 JLP Unberth	
	9	4.102 JLP Pre-Install	
	12	4.102 JLP RTL	
	14	4.102 JLP Install	Reconfig> JEM_ELM> JEM_ELM-> JEM_PM
4.103 JLP Ungrapple to JEM RMS Viewing	1	4.103 JLP Install	
	2.3	4.103 JLP Release	
	3	4.103 JEM RMS Viewing	

<u>FD8 Targets</u>

Mnvr to EVA 3 Start

File ► Load State

From Load State Dialog box, select

'FD8_5.101_JEMRMS_Deploy_Viewing_to_EVA3_Start', open

Confirm Load State is complete with loaded state file, otherwise complete these steps as needed.

Reconfig ►

SSRMS > SSRMS_BASE_A
SSRMS > SSRMS ->MBS_PDGF3.
SSRMS > MT_to_WORKSITE_6
JEM_ELM > JEM_ELM->JEM_PM
JEM_PM > JEM_PM->NODE2
JEM_PM > Install_JEM_FWD_Camerea_and_Boom
JEM_PM > Install_JEM_AFT_Camerea_and_Boom
Orbiter_Inspection > OBSS_GF1_to_SRMS
RMS Target = EVA3 Viewing
JEM Target = 1.104 Step 8.7 Partial Deploy Position

5.101 JEM RMS Viewing to EVA3 Start	1	5.101 JEM RMS Viewing	
	2	5.101 EVA3 Start Position	

<u>FD9 Targets</u>

NTA R&R

File ► Load State

From Load State Dialog box, select ‘FD9_5.102_S1_NTA_Install’, open Confirm Load State is complete with loaded state file, otherwise complete these steps as needed.

Reconfig ►

SSRMS > SSRMS_BASE_A
SSRMS > SSRMS ->MBS_PDGF3.
SSRMS > MT_to_WORKSITE_6
JEM_ELM > JEM_ELM->JEM_PM
JEM_PM > JEM_PM->NODE2
JEM_PM > Install_JEM_FWD_Camerea_and_Boom
JEM_PM > Install_JEM_AFT_Camerea_and_Boom
Orbiter_Inspection > OBSS_GF1_to_SRMS
RMS Target = EVA3 Viewing
JEM Target = 1.104 Step 8.7 Partial Deploy Position

5.102 S1 NTA Retrieve	1	5.102 EVA3 Start Position	
	2	5.102 WIF Extender/APFR Install	Reconfig-> EVA_3_SSRMS_Setup> WIF_Extender&APFR_to SSRMS
	3	5.102 APFR Rotate	
	4	5.102 APFR Backoff	
	4	5.102 APFR Ingress	Reconfig-> EVA_3_SSRMS_Setup> EV2_on_APFR
	5	5.102 S1 NTA Retrieve	Reconfig-> EVA_3_SSRMS_Setup> S1_NTA_to_EV2
	6	5.102 JOCAS Start	
	7	5.102 ESP3 Backoff	Reconfig-> EVA_3_SSRMS_Setup> Temp_Stow_Spare_NTA
5.103 NTA Retrieve at ESP3	1	5.103 ESP3 Backoff	
	2	5.103 Old NTA Pre Stow	
	3	5.103 Old NTA Final Stow	Reconfig-> EVA_3_SSRMS_Setup> S1_NTA_Stow_on_ESP3
	4	5.103 New NTA Retrieve	Reconfig-> EVA_3_SSRMS_Setup> SPARE_NTA_to_EV2
	5	5.103 Return JOCAS Start	

5.104 S1 NTA Install	1	5.104 Return JOCAS Start	
	2	5.104 S1 NTA Pre-Install	
	3	5.104 S1 NTA Install	Reconfig-> EVA_3_SSRMS_Setup> SPARE_NTA_to_S1_Truss
	4	5.104 APFR Egress	Reconfig-> EVA_3_SSRMS_Setup> EV2_off_APFR
	5	5.104 APFR Backoff	
	5	5.104 APFR Rotate	
	5	5.104 APFR/WIF Removal	Reconfig-> EVA_3_SSRMS_Setup> WIF_Extender&APFR_off_SSRMS
	6	5.104 SSRMS Clear	
	7	5.104 Stage Park	

<u>JEM RMS</u>

For **stand-alone** procedure review, perform {1.402 JEMRMS DOUG STARTUP}, step 2 (JAXA_SODF: Robotics: Activation and Checkout)

For **JEMRMS real-time support**, perform {1.402 JEMRMS DOUG STARTUP}, step 1 (JAXA_SODF: Robotics: Activation and Checkout)

Note: In step 1.9 select:

JEMRMS if only JEMRMS joint angle telemetry is desired.

JEMRMS & SSRMS if only JEMRMS and SSRMS joint angle telemetry is desired

For FD 8

File ► Load State

From Load State Dialog box, select

'FD8_1.104_JEMRMS_Partial_Deploy_to_EVA3_Start', open

Confirm Load State is complete with loaded state file, otherwise complete these steps as needed.

Reconfig ►

SSRMS > SSRMS_BASE_A

SSRMS > SSRMS ->MBS_PDGF3.

SSRMS > MT_to_WORKSITE_6

JEM_ELM > JEM_ELM->JEM_PM

JEM_PM > JEM_PM->NODE2

JEM_PM > Install_JEM_FWD_Camerea_and_Boom

JEM_PM > Install_JEM_AFT_Camerea_and_Boom

Orbiter_Inspection > OBSS_GF1_to_SRMS

RMS Target = EVA3 Viewing

SSRMS Target = 4.103 JEM RMS Viewing

For FD 10

File ► Load State

From Load State Dialog box, select ‘FD10_1.105_JEMRMS_Final_Deploy’, open

Confirm Load State is complete with loaded state file, otherwise complete these steps as needed.

Reconfig ►

SSRMS > SSRMS_BASE_A
SSRMS > SSRMS ->MBS_PDGF3.
SSRMS > MT_to_WORKSITE_6
JEM_ELM > JEM_ELM->JEM_PM
JEM_PM > JEM_PM->NODE2
JEM_PM > Install_JEM_FWD_Camerea_and_Boom
JEM_PM > Install_JEM_AFT_Camerea_and_Boom
Orbiter_Inspection > OBSS_GF1_to_SRMS
RMS Target = JEM RMS Viewing
SSRMS Target = 5.104 Stage Park

Flight Day	Procedure	Step	JEMRMS Target
8	1.104 JEMRMS PARTIAL DEPLOY TO EVA 3 START	1	1.104 Step 2 Launch Position
		6.2[7]	1.104 Step 6.2[7] WP CO-0.2
		6.2[12]	1.104 Step 6.2[12] WY CO+0.2
		6.2[17]	1.104 Step 6.2[17] WR CO-0.2
		7.3[7]	1.104 Step 7.3[7] WP-8.8
		7.3[12]	1.104 Step 7.3[12] WY+6.8
		7.5[5]	1.104 Step 7.5[5] WR-89.8
		7.7[5]	1.104 Step 7.7[5] WY+81
		7.9[6]	1.104 Step 7.9[6] EP CO-0.2
		7.9[11]	1.104 Step 7.9[11] EP-2.8
		7.11[5]	1.104 Step 7.11[5] SP CO+0.2
		7.11[10]	1.104 Step 7.11[10] SP+2.8
		8.2[5]	1.104 Step 8.2[5] SY CO+0.2
		8.7	1.104 Step 8.7 Partial Deploy Position
10	1.105 JEMRMS FINAL DEPLOY	4.4	1.105 Step 4.4 SY+67
		4.4	1.105 Step 4.4 WP+52
		11.1[8]	1.105 Step 11.1[8] Final Deploy Position
10	1.106 JEMRMS MNVR TO STOWED POSITION	5.1[8]	1.106 Step 5.1[8] WR-90
		5.1[13]	1.106 Step 5.1[13] WY-88
		5.1[18]	1.106 Step 5.1[18] EP-101
		5.1[23]	1.106 Step 5.1[23] SP+90
		5.1[28]	1.106 Step 5.1[28] EP-135
		5.1[33]	1.106 Step 5.1[33] WP+90
		5.1[38]	1.106 Step 5.1[38] SP+48

		5.1[43]	1.106 Step 5.1[43] Stowed Position
10	1.107 JEMRMS BRAKE CHECKOUT	4.3[7]	1.107 Step 4.3[7] SY Break CO - Initial
		8.2[8]	1.107 Step 8.2[8] SY Break CO - Complete
		9[8]	1.107 Step 9[8] SP Break CO -Initial
		10.2[6]	1.107 Step 10.2[6] SP Break CO - Complete
		14[8]	1.107 Step 14[8] EP Break CO - Initial
		15.2[6]	1.107 Step 15.2[6] EP Break CO - Complete
		17.4	1.107 Step 17.4 Stowed Position

CWC FILLS

	CWC No.	Record S/N Used	Sample Kit Ref: Kit Table	Ag Biocide Kit Ref: Kit Table	Mineral Kit Ref: Kit Table	CWC Label	CWC Launch Location
☐	1		S/N 1006 (Note A)	S/N 1002	S/N 1003	Blue (Pot)	Launched in MD FLOOR (PORT 2, BAG B); temp stowed in Aki's Water Ops Mesh Bag -- Available Potable S/Ns: 1096 ☐ 1098 ☐ [Do NOT use Condensate CWC 5050 (5051) also in this bag]
☐	2		S/N 1006 (Note A)	S/N 1002	S/N 1003	Blue (Pot)	
☐	3		S/N 1006 (Note A)	S/N 1002	S/N 1003	Blue (Pot)	In Pregathered Mesh Bag on ISS; Available Potable S/Ns: 1039 ☐ 1079 ☐ Pregathered Mesh Bag is located in ISS LAB1O3, M-02 Bag S/N 1026
☐	4		S/N 1006 (Note A)	S/N 1002	S/N 1003	Blue (Pot)	
☐	5		S/N 1006 (Note A)	S/N 1002	Not Req'd	Green (Tech)	In Pregathered Mesh Bag on ISS; Available Technical S/Ns: 1030 ☐ 1053 ☐ 1035 ☐ 1076 ☐ Pregathered Mesh Bag is located in ISS LAB1O3, M-02 Bag S/N 1026
☐	6		S/N 1006 (Note A)	S/N 1002	Not Req'd	Green (Tech)	
☐	7		S/N 1006 (Note A)	S/N 1002	Not Req'd	Green (Tech)	

Pre-Fill Checklist:

- Disinfect CWC QD and Transfer Hose QD
  1☐ 2☐ 3☐ 4☐ 5☐ 6☐ 7☐

Post-Fill Checklist:

- Take Sample
  1☐ 2☐ 3☐ 4☐ 5☐ 6☐ 7☐
- Check correct label is in CWC window
  1☐ 2☐ 3☐ 4☐ 5☐ 6☐ 7☐
- Check correct decal on CWC end
  1☐ 2☐ 3☐ 4☐ 5☐ 6☐ 7☐
- Check correct CWC S/N on end decal
  1☐ 2☐ 3☐ 4☐ 5☐ 6☐ 7☐
- Report S/N to MCC
  1☐ 2☐ 3☐ 4☐ 5☐ 6☐ 7☐
- Transfer CWC to NOD1D2
  1☐ 2☐ 3☐ 4☐ 5☐ 6☐ 7☐
- Cap Transfer Hose QD between each fill

CWC Fill Notes:

A. Stow filled sample bags and purge bag in MF14E
B. Rough handling may cause leakage
C. Fill each CWC for 52 min or Term CWC Fill on MCC call

Kit	S/N	Stowage Location	Undock Location
Ag Biocide Kit	1002	Pregathered Mesh Bag on ISS	MD FLOOR (PORT 2, BAG B)
Mineralization Kit	1003	Aki's Water Ops Mesh Bag (Middeck)	MD FLOOR (PORT 2, BAG B)
Sample/Purge Kit	1006	Aki's Water Ops Mesh Bag (Middeck)	MD FLOOR (PORT 2, BAG B)
Ag Biocide Kit	1005	Aki's Water Ops Mesh Bag (Middeck)	ISS NOD2P2 (M-02 Bag S/N 1026)

PWR OPS

	PWR No.	PWR S/N	Stowage Location	Actions
☐	1	2003 (OGS)	Aki's Water Ops Mesh Bag (Middeck)	Fill and transfer to LAB1P1 (WDS); will return to Shuttle for future dump and fill
☐	2	1025	A/L1D1_A2	Dump, fill and transfer to ISS A/L1D1_A1
☐	3	1007	A/L1D1_A2	Post EVA2, dump, fill and transfer to ISS A/L1D1_B2
☐	4	2002 (OGS)	A/L1D1_B2	Dump, fill and transfer to ISS A/L1D1_A1
☐	5	2004 (OGS)	A/L1D1_B2	Dump, fill and transfer to ISS A/L1D1_B2
☐	6	2003 (OGS)	Temp Stowed post dump	Dump, fill and transfer to A/L1D1

PWR Fill Notes: Do not detach PWR (EMU H2O Recharge Bag) QD restraint during PWR ops
WDS = **W**ater **D**elivery **S**ystem in LAB1P1
PWR's will be dumped using the Supply Water Dump system

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