STS-123 / 1J / A

FD 03 Execute Package

MSG	Page(s)	Title
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011	15 - 16	FD03 Mission Summary **(pdf)**
012	17	FD03 Transfer Message **(pdf)**
013	18 - 20	FD03 EVA Deltas **(pdf)**
014	21 - 26	FD03 Rendezvous Package **(pdf)**

Approved by FAO:

L. Hearon

Last Updated: Mar 12 2008 6:49PM GMT
JEDI *(**J**oint **E**xecute package **D**evelopment and **I**ntegration), v2.04.0003*

MSG INDEX

MSG NO.	TITLE
010	FD03 Flight Plan Revision
011	FD03 Mission Summary
012	FD03 Transfer Message
013	FD03 EVA Deltas
014	FD03 Rendezvous Package

1. Exercise Constraints

   A. The following table lists the exercise constraints that apply to the entire docked timeframe.

Exercise Constraints Table A: Entire Docked Timeframe

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

   B. The table below summarizes the Shuttle and ISS exercise constraints that are specific for today. These constraints are also noted in your timelines for your reference.

Exercise Constraints Table B: Flight Day 3 Specific

Activity	Exercise Constraints	
	Shuttle	ISS
SLP Unberth	No exercise during SLP MNVR TO POA CAPTURE ENVELOPE	No exercise during SLP MNVR TO POA CAPTURE ENVELOPE
SLP Grappled by POA and SSRMS	Exercise allowed only if both SSRMS and POA grapple fixtures rigidized	Exercise allowed only if both SSRMS and POA grapple fixtures rigidized

2. LiOH Cue Card Update

As a result of performing a dual can changeout last night, the LiOH changeout this morning will be Can 7 in Slot A, no changeout for Slot B. The rest of the cue card will stay the same.

FLIGHT DAY	POS A	POS B	CK CMPLT
POST FD03	7	"	DOCKING

3. Simo Dump Details

At MET 1/14:00 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 ~ 30 minutes and will dump the waste tank to 5%. Supply dump valve open time will be 55 minutes

4. Shuttle Condensate Collection Details

At MET 1/16:35 perform SETUP of SHUTTLE CONDENSATE COLLECTION (ORB OPS, ECLS) p. 5-36. The Y-Y Condensate Hose and CWC are located in MA9G. Report CWC serial number to MCC.

5. Prebreathe Setup Procedure Update

Prebreathe Setup Procedure Update
Make the following pen & ink change to step 4.7 of JOINT OPS: 3.120 PREBREATHE USING SHUTTLE O2 SETUP:

From:
Uncap GO2 Xfer Panel QD.
Close GO2 Transfer Flex Hose Assy bent-end QD.
Remove plug.
Inspect both QDs for debris.

To:
Uncap GO2 Xfer Panel QD.
Remove plug from GO2 Transfer Flex Hose Assy bent-end QD.
Inspect both QDs for debris.

Make the following pen & ink change to step 4.8 of JOINT OPS: 3.120 PREBREATHE USING SHUTTLE O2 SETUP:

From:
Uncap Oxygen Recharge QD.
Close GO2 Transfer Flex Hose Assy straight-end QD.
Remove plug.
Inspect both QDs for debris.

To:
Uncap Oxygen Recharge QD.
Remove plug from GO2 Transfer Flex Hose Assy straight-end QD.
Inspect both QDs for debris.

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

GMT 03/12/08 (072) 12 19 13 20 14 21 15 22 16 23 17 03/13 18 01 19 02 20 03 21 04 22 05 23 06 002/00

MET β=13 Day 001

| | | |

No Exercise, period !
(SLP near POA)

03/12/08 13:31:58 **REPLANNED**

GMT 03/13/08 (073) 07 08 09 10 11 12 13 14 15 16 17 18

MET β=15 Day 002 002/00 01 02 03 04 05 06 07 08 09 10 11 12

STS-123	FD03	CDR GORIE	♣ / ODS^ / XFER OPS / SODF XFER / OPCU ACT / EVA 1 PROC RVW / PRE SLEEP / PMC A/G / PRE SLEEP / SLEEP
STS-123	M1	PLT JOHNSON	SLP UNBRTH /INST / SLP UNGP /MVR / EVA 1 PROC RVW / PRE SLEEP* / SLEEP
STS-123	M2	MS1 BEHNKEN	SLP UNBRTH /INST / SLP UNGP /MVR / CBCS^ / EVA 1 PROC RVW / PRE SLEEP / SLEEP
STS-123		MS2 FOREMAN	⊕ / REBA* / REBA C/O / XFER OPS (JLP & VOK) / XFER BRIEF / EVA 1 PROC RVW / PRE SLEEP / SLEEP
STS-123		MS3 DOI	P/TV 06 / EVA 1 PROC RVW / PRE SLEEP / SLEEP
STS-123	EV1	MS4 LINNEHAN	♦ / REBA* / REBA C/O / E_LK PREP / PRE SLEEP / EVA 1 PROC RVW / PRE SLEEP / MASK PB/TOOL CONFIG / 10.2 DPRS / PRE SLEEP / SLEEP
UP	EV2	FE-2 EXP16 REISMAN	PRE SLEEP / E_LK PREP / SOKOL LK CK / EVA 1 PROC RVW / PMC / PRE SLEEP / MASK PB/TOOL CONFIG / PRE SLEEP / SLEEP
EXP		ISS CDR WHITSON	♣ / PCS / REBA* / REBA C/O / EXER / DCS CNFG / PREP WORK / EVA 1 PROC RVW / PREP WORK / PRE SLEEP-ISS / SLEEP (8.5)
EXP		FE-1 MALENCHENKO	IELK REPLC / ЭЛКТ* / SOKOL LK CK / SOKOL DRY / PW / EVA 1 PROC RVW / БМП Ф2-Т / PRE SLEEP-ISS / GLOVE PS-ISS / SOKOL CLS / SLEEP (8.5)
DN		FE-2 EYHARTS	IELK STOW / CBCSU / PREP WORK / DCS / EVA 1 PROC RVW / CBCSD / PREP WORK / PRE SLEEP-ISS / SLEEP (8.5)

DAY/NIGHT

ORBIT 33 34 35 36 37 38 39 40 41

TDRS W -171 E -46 Z -275

ORB ATT BIAS -XLV -ZVV

NOTES
♣P/B SETUP W/STS 02 ^CAMR CK OUT *HUM SEP CHECK
⊕PST DK EVA XFR/RCNFG
♦PST DK EVA XFR/RCNFG
^CNCTR VERIF
*INSTL *ON

STS-123 (FD03)

GMT Date 03/12 (072) | W | TDRSE | Z | DORB | ORB | MET Day 001 | STS ATT

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

12:00 — 13:00 — 14:00 — 15:00 — 16:00 — 19:00 — 20:00 — 21:00 — 22:00

-ZLV -XVV -ZLV +YVV RNDZ

14 25 15 26 16 27

SLEEP (CDR GORIE)

SLEEP (PLT JOHNSON)

SLEEP (MS3 DOI)

FD03 EZ ACTIVITES
Check TEPC Status
OCAC Filter Inspect
Hard Reboot PGSCs (Except WLES)

FLIGHT SLEEP LOG (ORB OPS, SDBI)

< MNVR -ZLV +YVV (FUT LOAD)

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

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

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

RCS REG RCNFG (ORB OPS, RCS)

IMU STAR OF OPPTY ALIGN (ORB OPS)

PRIORITY PWRUP GRP B (ORB PKT, PRIOR PWRDN) Steps 12 (IMU 1),10,9,6 (triple G2),5 — CDR GORIE

RENDEZVOUS TIMELINE (RNDZ, RENDEZVOUS T/L) — CDR GORIE

RCS/OMS HEATER RCNFG [A]

PRIORITY PWRUP GRP B (ORB PKT, PRIOR PWRDN) Steps 12 (IMU 1),10,9,6 (triple G2),5 — PLT JOHNSON

RENDEZVOUS TIMELINE (RNDZ, RENDEZVOUS T/L) — PLT JOHNSON

L17 Check MCIU filter screen

RENDEZVOUS TIMELINE (RNDZ, RENDEZVOUS T/L) — MS3 DOI

< NH TIG 1/15:42

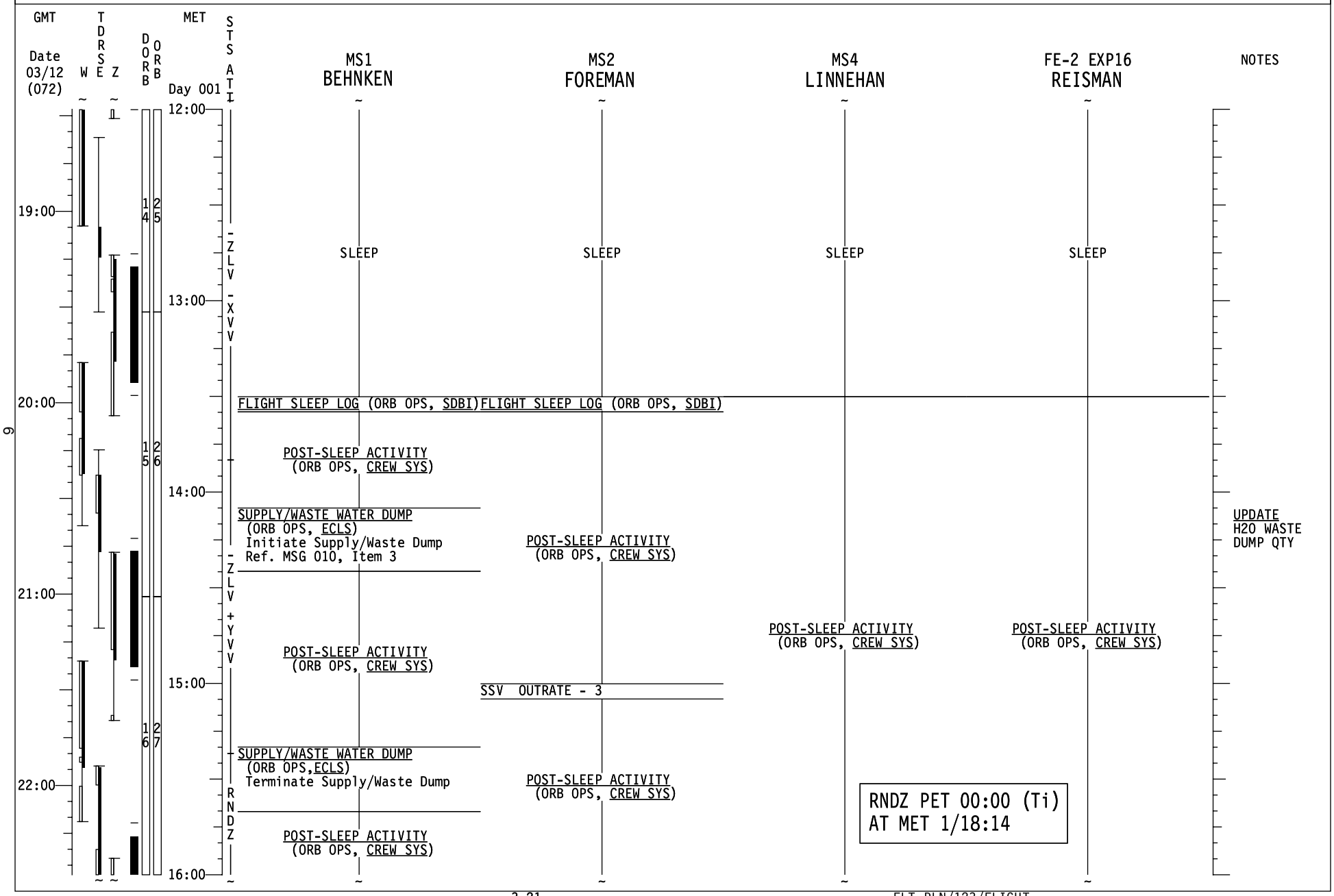
RNDZ PET 00:00 (Ti)
AT MET 1/18:14

[A] A14 RCS/OMS HTR L POD B - OFF
A - ON
R POD B - OFF
A - ON

NOTES: UPDATE H2O WASTE DUMP QTY

NOTES: UPLINK TFL 192

STS-123 (FD03)


GMT
Date 03/12 (072)
W
TDRSE
Z
DORB
ORB
MET
Day 001
STS ATT
MS1 BEHNKEN
MS2 FOREMAN
MS4 LINNEHAN
FE-2 EXP16 REISMAN
NOTES
12:00
13:00
14:00
15:00
16:00
19:00
20:00
21:00
22:00
14
25
15
26
16
27
-ZLV
-XVV
-ZLV
+YVV
RNDZ
SLEEP
SLEEP
SLEEP
SLEEP
FLIGHT SLEEP LOG (ORB OPS, SDBI)
FLIGHT SLEEP LOG (ORB OPS, SDBI)
POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
SUPPLY/WASTE WATER DUMP (ORB OPS, ECLS) Initiate Supply/Waste Dump Ref. MSG 010, Item 3
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)
SSV OUTRATE - 3
SUPPLY/WASTE WATER DUMP (ORB OPS,ECLS) Terminate Supply/Waste Dump
POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
UPDATE H2O WASTE DUMP QTY
RNDZ PET 00:00 (Ti) AT MET 1/18:14

STS-123 (FD03)

GMT Date 03/12 (072) | W | TDRS E | Z | DORB 1 2 3 | ORB 28 29 30 | MET Day 001 | STS ATT | CDR GORIE | PLT JOHNSON | MS3 DOI | MCC | NOTES

16:00 — 17:00 — 18:00 — 19:00 — 20:00 — 23:00 — 00:00 — 01:00 — 02:00

RNDZ

RENDEZVOUS TIMELINE (RNDZ, RENDEZVOUS T/L)

< NC4 TIG 1/16:42

< TI TIG 1/18:14

APPROACH CUE CARD (RNDZ)

UPLINK
321 + Mask
Box 20

STS-123 (FD03)

GMT Date 03/12 (072) | W | TDRSE | Z | DORB | ORB | MET Day 001 | STS ATT

MS1 BEHNKEN	MS2 FOREMAN	MS4 LINNEHAN	FE-2 EXP16 REISMAN	NOTES
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)	
EXERCISE	RENDEZVOUS TIMELINE (RNDZ, RENDEZVOUS T/L)	SHUTTLE CONDENSATE COLLECTION (ORB OPS, ECLS) Perform SETUP Ref. MSG 010, Item 4 GALLEY OVERNIGHT CONFIG (ORB OPS,ECLS) DIDB FILL Use DIDBs from Ln, Rm ECOKs For Ln fill/instl in EMU 3004 For Rm fill/instl in ECOK √ All EVA drink bags fills complete, THEN: GALLEY MORNING CONFIG (ORB OPS,ECLS) EMU REMOVAL Disconnect EMUs from AAPs & Stow in MDDK	DIDB FILL Use DIDBs from Ln, Rm ECOKs For Ln fill/instl in EMU 3004 For Rm fill/instl in ECOK EMU REMOVAL Disconnect EMUs from AAPs & Stow in MDDK	
SSP1 OIU PWR - OIU 1 ON (tb-UP) P/TV02 DOCK (P/TV FS, SCENES) Setup				
P/TV02 DOCK (P/TV FS, SCENES) OPS < TI TIG 1/18:14		EXERCISE		
		RENDEZVOUS TIMELINE (RNDZ, RENDEZVOUS T/L) HHL OPS	EXERCISE	
	MO69M LEH 02 8 vlv - CL APPROACH CUE CARD (RNDZ)			

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

Day 001: 1 28; 2 29; 3 30

RNDZ

8

STS-123 (FD03)

GMT Date 03/13 (073) | W E Z | DORB 3 4 5 6 | ORB 30 31 32 33 | MET Day 001 | STS ATT

DOCKING 1/20:57
RETURN TO FLIGHT PLAN

CDR GORIE	PLT JOHNSON	MS3 DOI	MCC	NOTES
APPROACH CUE CARD (RNDZ)	APPROACH CUE CARD (RNDZ)	APPROACH CUE CARD (RNDZ)		UPLINK U21 + Mask Box 30,50
√DAP A/LVLH/VERN MNVR (TRK) TEA TG=2 BV=5 P=161 Y=355 OM=177 Init TRK, DAP: FREE > 2 sec Then DAP: A/AUTO/VERN SSV OUTRATE - 2	SLP VIEWING (PDRS, VIEW SUPT)	SLP VIEWING (PDRS, VIEW SUPT) JOINT OPS: 6.107 PCS SETUP-SHUTTLE		UPLINK TFL 184
PRIORITY PWRDN GRP B (ORB PKT, PRIOR PWRDN) Steps 6(Single G2), 12 (IMU 1) O6 S TRK PWR -Z - OFF JOINT OPS: 3.111 H/O ATT CONTROL ORB to CMG TA	PRIORITY PWRDN GRP B (ORB PKT, PRIOR PWRDN) Steps 6(Single G2), 12 (IMU 1) O6 S TRK PWR -Z - OFF	POST RNDZ PGSC CONFIG Configure PGSCs		
		WLES DK/UNDK RECVRY (ORB OPS, WLES)		
WELCOME	WELCOME	WELCOME		
SAFETY BRIEFING	SAFETY BRIEFING	SAFETY BRIEFING		
JOINT OPS: 3.120 PREBREATHE USING SHUTTLE O2 SETUP Ref. MSG O10, Item 5	ROBO: 1.101 SLP INSTALL ON POA (Grapple) Steps 1-5	P/TVO6 ROBO OPS (P/TV FS, SCENES) OPS Item 2		UPLINK U21 + Mask Box 31,32,50
(PRLA Release)	ROBO: 1.101 SLP INSTALL ON POA (Unberth/Install) Steps 10-16	ROBO: 1.101 SLP INSTALL ON POA (PRLA Release) Steps 6-9 P/TVO6 ROBO OPS (P/TV FS, SCENES) OPS Item 2		

Time axis: 03:00, 04:00, 05:00, 06:00; MET 20:00, 21:00, 22:00, 23:00, 00:00

STS ATT: RNDZ, DK, BIAS-XLV-ZVV

STS-123 (FD03)

GMT Date 03/13 (073) | W | TDRSE | Z | DORB | ORB | MET Day 001 | STS ATT

MS1 BEHNKEN	MS2 FOREMAN	MS4 LINNEHAN	FE-2 EXP16 REISMAN	NOTES
P/TV02 DOCK (P/TV FS, SCENES) OPS	APPROACH CUE CARD (RNDZ)	RENDEZVOUS TIMELINE (RNDZ, RENDEZVOUS T/L) HHL OPS		
POST DOCKING HATCH LEAK CK (RNDZ, APDS)	P/TV04 INGRESS/EGRESS (P/TV FS, SCENES) Setup	POST DOCKING HATCH LEAK CK (RNDZ, APDS)	POST DOCKING HATCH LEAK CK (RNDZ, APDS)	
	PLAYBACK (DIGITAL) Docking (P/TV FS, CUE CARD) C/L camr 10ft thru contact +2 min KU TDRW(21:34-21:43)(21:49-22:14)			
A/L PREP FOR INGRS-BOOSTER FAN ACTIVE (RNDZ, APDS)	JOINT OPS: 6.109 HARDLINE ICOM AUDIO Steps 1,5,6	A/L PREP FOR INGRS-BOOSTER FAN ACTIVE (RNDZ, APDS)		
JOINT OPS: 2.104 HATCH OPEN AND SHUTTLE/ISS DUCT INSTALL √MCC step 1 complete, Steps 2-15	P/TV06 ROBO OPS (P/TV FS, SCENES) Setup Steps 1-4	JOINT OPS: 2.104 HATCH OPEN AND SHUTTLE/ISS DUCT INSTALL √MCC step 1 complete, Steps 2-15		
WELCOME	WELCOME	WELCOME	WELCOME	
SAFETY BRIEFING	SAFETY BRIEFING	SAFETY BRIEFING	SAFETY BRIEFING	
ROBO: 1.101 SLP INSTALL ON POA (Grapple) Steps 1-5	P/TV05 ISS INTERNAL OPS (HC) (P/TV FS, SCENES) Setup; Maintain VPU GREEN JUMPER - Keel 1	POST-DOCKING EVA TRANFER/RECNFG (EVA, AIRLOCK CNFG) Ref Transfer List: Items 28-37	IELK REMOVAL AND TEMP STOW IN SOYUZ Ref. Transfer List, Item 20 REF: RODF	
	POST-DOCKING EVA TRANFER/RECNFG (EVA, AIRLOCK CNFG) Ref Transfer List: Items 28-37		ROBO: 1.101 SLP INSTALL ON POA (PRLA Release) Steps 6-9	KU-BD STANDBY
ROBO: 1.101 SLP INSTALL ON POA (Unberth/Install) Steps 10-16				

DOCKING 1/20:57
RETURN TO FLIGHT PLAN

Time scale: 03:00, 04:00, 05:00, 06:00; 20:00, 21:00, 22:00, 23:00, 00:00

STS ATT: RNDZ, DK, BIAS-XLV-ZVV

DORB: 3, 4, 5, 6; ORB: 30, 31, 32, 33

STS-123 (FD03)

GMT Date 03/13 (073) | W | TDRSE | Z | DORB | ORB | MET Day 002 | STS ATT | CDR GORIE | PLT JOHNSON | MS3 DOI | MCC | NOTES

CDR GORIE

- JOINT OPS: 3.120 PREBREATHE USING SHUTTLE O2 SETUP
- SSPTS ODS CONNECTOR VERIF
  A15 ODS MATE X1,X2 (two) - ON
  √MCC then - OFF
- TRANSFER OPS
  Ref. Transfer List & MSG 012
- SODF TRANSFER
  Ref Transfer List: Item 42
- SSPTS OPCU ACT (ORB OPS, EPS) B
  √ MCC for Bus Tie config
- EVA 1 PROCEDURE REVIEW
  REF: EVA 1 BRIEFING CARD (EVA, TIMELINES)
- PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- PRIVATE MEDICAL CONFERENCE
  Perform via A/G 2
- PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)

PLT JOHNSON

- ROBO: 1.101 SLP INSTALL ON POA (Unberth/Install) Steps 10-16
- ROBO: 1.101 SLP INSTALL ON POA (Ungrapple & MNVR to CBM View) Steps 17-18
- EVA 1 PROCEDURE REVIEW
  REF: EVA 1 BRIEFING CARD (EVA, TIMELINES)
- PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)
  √ HUM SEP for H2O Accumulation

MS3 DOI

- P/TV06 ROBO OPS (P/TV FS, SCENES) OPS Item 2
- EVA 1 PROCEDURE REVIEW
  REF: EVA 1 BRIEFING CARD (EVA, TIMELINES)
- PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)

MCC

- B SSPTS OPCU ACT
  On MCC GO: Activate OPCU 1 and 2
  In step 3: For OPCU 1 and 2 adjust voltage 17 increments UP for both

NOTES

- NO EXERCISE

DORB: 6, 7, 8 | ORB: 3, 3, 4, 3, 5

00:00, 01:00, 02:00, 03:00, 04:00, 07:00, 08:00, 09:00, 10:00

BIAS - XLV - ZVV

11

STS-123 (FD03)

GMT Date 03/13 (073) | W | TDRSE | Z | DORB | ORB | MET Day 002 | STS ATT | BIAS - XLV - ZVV

MS1 BEHNKEN	MS2 FOREMAN	MS4 LINNEHAN	FE-2 EXP16 REISMAN	NOTES
ROBO: 1.101 SLP INSTALL ON POA (Unberth/Install) Steps 10-16	POST-DOCKING EVA TRANFER/RECNFG (EVA, AIRLOCK CNFG) Ref Transfer List: Items 28-37	POST-DOCKING EVA TRANFER/RECNFG (EVA, AIRLOCK CNFG) Ref Transfer List: Items 28-37		
	EVA SYS: 1.307 REBA INST/RMVE INSTALLATION in EMU 3004	EVA SYS: 1.307 REBA INST/RMVE INSTALLATION in EMU 3004	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
	EVA SYS: 1.403 REBA POWERED HARDWARE CHECK Perform on EMUs 3004 & 3006	EVA SYS: 1.403 REBA POWERED HARDWARE CHECK Perform on EMUs 3004 & 3006		NO EXERCISE
	TRANSFER OPS (JLP & VOK) Ref. Transfer List: Items 16,17,& 19	EVA SYS: 1.305 EQUIP LOCK PREP Steps 1-3 not req'd. Select Overgloves for EVA use. Ref. MSG 013 REF: STS-123 CONSUMABLE TRACKING CC (EVA)	EVA SYS: 1.305 EQUIP LOCK PREP Steps 1-3 not req'd. Select Overgloves for EVA use. Ref. MSG 013 REF: STS-123 CONSUMABLE TRACKING CC (EVA)	
ROBO: 1.101 SLP INSTALL ON POA (Ungrapple & MNVR to CBM View) Steps 17-18				
			SOKOL LEAK CHECK REF: RODF	
P/TV11 CBCS C/O(P/TV FS, SCENES) Perform S/U	TRANSFER BRIEF Call down status to MCC	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)		
EVA 1 PROCEDURE REVIEW REF: EVA 1 BRIEFING CARD (EVA, TIMELINES)	EVA 1 PROCEDURE REVIEW REF: EVA 1 BRIEFING CARD (EVA, TIMELINES)	EVA 1 PROCEDURE REVIEW REF: EVA 1 BRIEFING CARD (EVA, TIMELINES)	EVA 1 PROCEDURE REVIEW REF: EVA 1 BRIEFING CARD (EVA, TIMELINES)	
			PRIVATE MEDICAL CONF - ISS	
PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	

Time scale: 07:00, 08:00, 09:00, 10:00; 00:00, 01:00, 02:00, 03:00, 04:00

DORB: 6, 7, 8; ORB: 33, 34, 35

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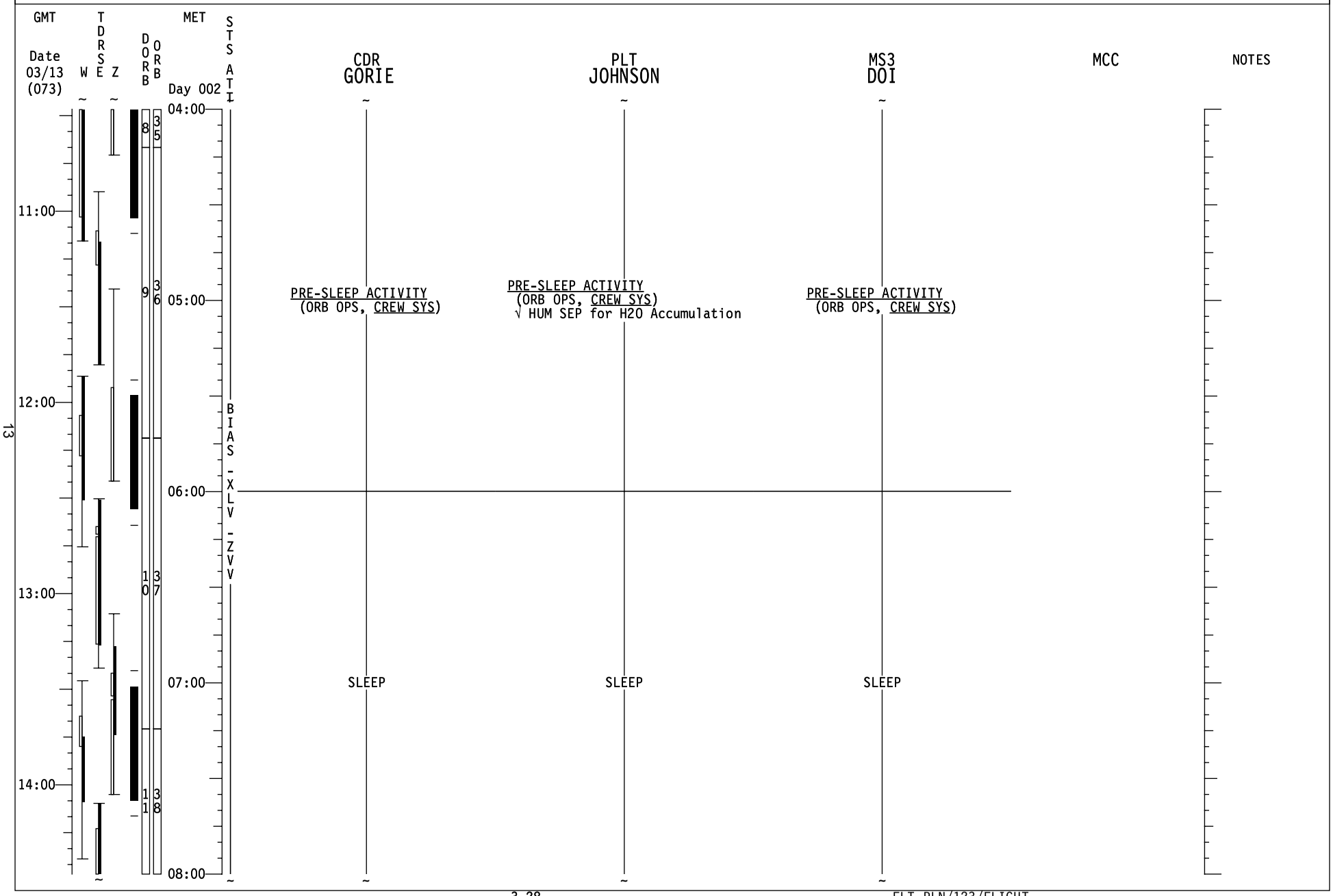
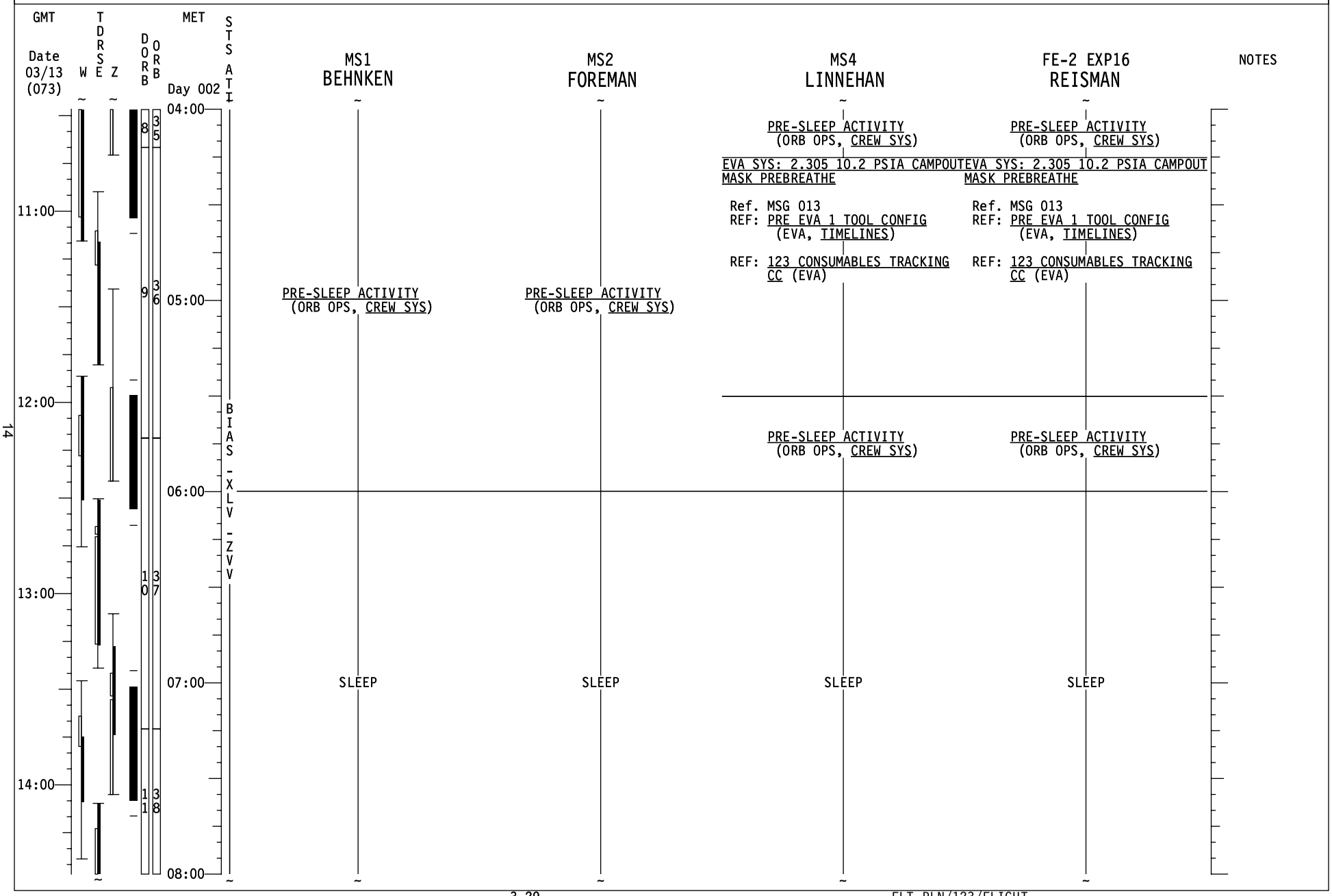
STS-123 (FD03)


GMT
Date 03/13 (073)
W
TDRSE
Z
DORB
ORB
MET
Day 002
STS ATI
CDR GORIE
PLT JOHNSON
MS3 DOI
MCC
NOTES
11:00
12:00
13:00
14:00
04:00
05:00
06:00
07:00
08:00
8
9
10
11
35
36
37
38
BIAS -XLV -ZVV
PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)
PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)
√ HUM SEP for H2O Accumulation
PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)
SLEEP
SLEEP
SLEEP

STS-123 (FD03)


GMT
Date 03/13 (073)
W
TDRS E
Z
DORB
ORB
MET
Day 002
STS ATT
04:00
05:00
06:00
07:00
08:00
11:00
12:00
13:00
14:00
8
9
10
11
35
36
37
38
BIAS -XLV -ZVV
MS1 BEHNKEN
PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)
SLEEP
MS2 FOREMAN
PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)
SLEEP
MS4 LINNEHAN
PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)
EVA SYS: 2.305 10.2 PSIA CAMPOUT MASK PREBREATHE
Ref. MSG 013
REF: PRE EVA 1 TOOL CONFIG (EVA, TIMELINES)
REF: 123 CONSUMABLES TRACKING CC (EVA)
PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)
SLEEP
FE-2 EXP16 REISMAN
PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)
EVA SYS: 2.305 10.2 PSIA CAMPOUT MASK PREBREATHE
Ref. MSG 013
REF: PRE EVA 1 TOOL CONFIG (EVA, TIMELINES)
REF: 123 CONSUMABLES TRACKING CC (EVA)
PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)
SLEEP
NOTES

MSG 011 - FD03 MISSION SUMMARY

Your port call today is the International Space Station. On arrival, you're authorized one backflip, but no fly-by's! After your rendezvous and docking, you'll get to deliver Dextre (and Garrett), hack into the Station's power supply, then start preparations for tomorrow's EVA.

YOUR CURRENT ORBIT IS: 157 X 102 NM

NOTAMS:

EDW – LAKEBED RUNWAYS RED.
NOR – LAKEBED RUNWAYS GREEN.
HAW – RWY 31 CLOSED. RWY 13 TODA 8,994'.
WAK – CLOSED. NOT USABLE.
IKF – NO AGREEMENT. NOT USABLE.
BEN – POLITICALLY NOT RECOMMENDED/NOT SUPPORTED.
ZZA – FIRST 600M (~2,000') OF RWY 30L NOT AVAILABLE. 10,200' REMAINING.

NEXT 2 PLS OPPORTUNITIES:

NOR35 ORB 33 – 02/00:27 (BKN250 290/04P7)
KSC15 ORB 47– 02/21:43 (SCT040 BKN250 160/06P08)

AFTER NH / PRIOR TO NC-4

OMS TANK FAIL CAPABILITY:

L OMS FAIL: YES R OMS FAIL: YES

LEAKING OMS PRPLT BURN:

L OMS LEAK: ALWAYS BURN OUT-OF-PLANE
R OMS LEAK: ALWAYS BURN OUT-OF-PLANE

OMS QUANTITIES(%)

L OMS OX = 44.2 R OMS OX = 41.8
FU = 43.8 FU = 41.5

DELTA V AVAILABLE:

OMS	409 FPS
ARCS (TOTAL ABOVE QTY 1)	53 FPS
TOTAL IN THE AFT	462 FPS
ARCS (TOTAL ABOVE QTY 2)	82 FPS
FRCS (ABOVE QTY 1)	40 FPS
AFT QTY 1	87 %
AFT QTY 2	49 %

END OF PAGE 1 OF 2, MSG 011

AFTER NC-4:

OMS TANK FAIL CAPABILITY:

L OMS FAIL: NO R OMS FAIL: NO

LEAKING OMS PRPLT BURN:

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

OMS QUANTITIES(%)

L OMS OX = 33.6 R OMS OX = 32.8
FU = 33.2 FU = 32.6

DELTA V AVAILABLE:

OMS	318 FPS
ARCS (TOTAL ABOVE QTY 1)	36 FPS
TOTAL IN THE AFT	354 FPS
ARCS (TOTAL ABOVE QTY 2)	66 FPS
FRCS (ABOVE QTY 1)	29 FPS
AFT QTY 1	82 %
AFT QTY 2	44 %

There are no FIWs Today.

Good morning Takao and Bob!

For STS, the Transfer List Excel file, FD03_TransferList_STS123.xls, is located on the KFX machine in **C:\OCA-up\transfer**.

For ISS, the Transfer List Excel file, FD03_TransferList_STS123.xls, is located in **K:\OCA-up\transfer**.

FD03 Choreography

- Items 16, 17 & 19 (Mike): Transfer MKAK, RADIAL PORT CLOSEOUT, and VOK CTBs during XFER OPS (JLP & VOK).
- Item 42 (Dom): Transfer SODF to ISS during SODF XFER.
- Item 20 (Garrett / Yuri): Transfer Garrett's IELK to ISS.

Crewmembers Scheduled for Generic Xfer Ops

- Dom – :55 min

Please update the Transfer List as follows:

In **RESUPPLY** tab:
Make Pen and Ink change to Resupply Page 2:
Item 6: Update "Stowage at Undock" to read COL1D4_A1

Please call us with questions.
- The Transfer Team

16-1304 (MSG 013) - FD03 EVA Deltas
Page 1 of 3

Excellent work on EMU checkout! It's a relief to know we have two good suits. Believe it or not, there are some changes required for your EVA checklists. Most of these should not be a surprise.

The following changes affect the ISS EVA SYSTEMS Checklist:

Due to the leak rate seen on the left PHA port, perform all STS-123 mask prebreathe activities on the right PHA port (QD027).

<u>1.305 EQUIPMENT LOCK PREP</u>
In step 22, configure PHA bags as shown:

Relief Valve Assy. (1) →|← Tee Assy. (1) →|← 120-ft PHA Bag (2)

<u>1.241 POST EVA PHOTOS</u>

During 1E a 3/16" Vectran cut along an EMU glove thumb seam went unnoticed until post flight inspections. Due to its size, this cut was not expected to be seen during EVA, but could be found during post EVA glove inspection.

The following change to 1.241 POST EVA GLOVE PHOTOS procedure has been made in IPV (Your checklists do not have a hardcopy of this procedure):

In step 2 Note box, between notes 3 & 4 add:
"Manipulate Vectran along seam from index finger to thumb to open potential holes"

For the duration of the mission, in 1.240 POST EVA, step 11, execute (MSG 16-1305.)

EMU UHF Comm. Configuration

Due to the ATU 6 failure, hardline comm. is not available for both suits. You will be using UHF comm. Remember not to use the P-Mic in the airlock with the EMU's in RF. Please make the following changes to the 2 shuttle copies of the STS-123 ISS EVA Systems Checklists.

1. In **2.305 10.2 PSIA CAMPOUT MASK PREBREATHE**,

   1a. Delete step 12
   1b. After step 26, add step 27:

   Configuring ATU for Overnight Isolation

ATU 4	27.1 PHA comm cable ←|→ ATU 4
	27.2 pb PTT → Press pb 1 → Press
	27.3 √Display – '**1TG**' and other loops as required √Display PTT

2. In **2.315 HYGIENE BREAK**, delete step 29.2.

3. In **2.320 10.2 PSIA CAMPOUT EVA PREP**,

   3a. Change step 20 to:

ATU 4	pb PTT → Press pb 3 → Press (Shuttle/ISS ICOM) pb 1 → Press (Big Loop) ✓Display - '1TG, 3' and other loops as reqd ✓Display – PTT

   3b. Delete step 21.
   3c. At step 37, temporarily take the Comm mode → PRI for the comm check
   3d. After step 57 add step 57a:
   57a. EV1,2 sw COMM mode → PRI

4. In **1.240 POST EVA**, delete steps 35, 36, 38, and 67.

The following changes affect the STS EVA Checklist. Please update accordingly.

1. The Beta angle for EVA 2 makes the removal of SJEU covers 2.3 and 2.4 No Go for EVA 1 and the beginning of EVA 2.

   Page 7-22 ASSEMBLY PREP TASKS, step 3
   - ☐ Delete "2.4 (on MCC GO), 2.3 (on MCC GO)"

   Page 7-47 SPDM ARM2 STOW, EV2 step 4
   - ☐ Delete "2.4 (on MCC GO), 2.3 (on MCC GO)"

   Page 7-52 SPDM COVER REMOVAL, EV2 step 4
   - ☐ Delete "if not previously performed"
   - ☐ Add (may require 2 trips to the Lg trash bag)

   Page 7-52 SPDM COVER REMOVAL, EV1 step 4f should read
   - ☐ If reqd, tether and remove SJEU covers 2.5, ***2.4, and 2.3***

2. Update turn count for Arm 2 shoulder roll clamp
   Page 7-81 SLP CLEANUP, EV2 step 19
   - ☐ Turn count for "FSE A1" should be "~10 – 11 turns"

3. Verify spare TBA S/N
   Page 7-143 EVA Crewlock Bag #4
   - ☐ Verify TBA is s/n 1039, torque/turn data is specific to this TBA

4. Update the TBA torque/turn data:
   Page 7-155 TBA INSTALL, EV1 step 15
   - ☐ PGT torque setting for "bolt 3 (mount bolt)" should be"**A2** 3.8 ft-lb"

   Page 7-156 TBA INSTALL, EV1 step 19
   - ☐ PGT torque setting for "bolt 2 (draw bolt)" should be "**A3** 4.8 ft-lb"
   - ☐ Turn count for "bolt 2 (draw bolt)" should be "~10.5 – 13 turns"

   Page 7-156 TBA INSTALL, EV1 step 20
   - ☐ PGT torque setting for "bolt 1 (bearing preload bolt)" should be "**A5** 7.0 ft-lb"
   - ☐ Turn count for "bolt 1 (bearing preload bolt)"should be "~5 – 7 turns"

   Page 7-156 TBA INSTALL, EV1 step 22
   - ☐ PGT torque setting for "bolt 3 (mount bolt)" should be"**A2** 3.8 ft-lb"
   - ☐ Turn count for "bolt 3 (mount bolt)" should be "~2 – 4 turns"

   Page 7-156 INSTALL MLI COVER, EV1 step 27
   - ☐ PGT speed setting should be"CW2 **30RPM**"

5. Page 7-161 EVA 5 CLEANUP/INGRESS
   - ☐ Add EV1 step 2a: "Inspect EV2 for SARJ debris"
   - ☐ Add EV2 step 2a: "Inspect EV1 for SARJ debris"

MSG 014 – FD03 RENDEZVOUS PACKAGE

```
                    FLIGHT NOTE
 ---------------------------------------------------------------------------
|                                                                           |
|    TO: FD, CAPCOM, FAO, RENDEZVOUS, PROP, GC                              |
|    FROM: FDO                                                              |
|    SUBJECT: MANEUVER TIGS                                                 |
|                                                                           |
|                                                                           |
|    COPIES:  1                                                             |
|                                                                           |
|              MET                                                          |
| NH        001:15:42:45.200                                                |
| NC-4      001:16:42:06.800                                                |
| NCC       001:17:16:26.000                                                |
| TI        001:18:14:08.000  PET = 0:0 ; SS - 36 MIN                       |
| MC1       001:18:34:08.000                                                |
| MC2       001:19:04:02.000  ET = 0:0                                      |
| MC3       001:19:21:02.000  MC2 + 17 MIN                                  |
| MC4       001:19:31:02.000  MC2 + 27 MIN                                  |
|                                                                           |
|                                                                           |
 ---------------------------------------------------------------------------
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END OF PAGE 1 OF 6, MSG 103

PRELIMINARY ORBIT MANEUVER PAD FOR NH (Rendz. 3-2)

OMS BOTH	1	X
L	2	
R	3	
RCS SEL	4	
TV ROLL	5	000
TRIM LOAD P	6	(+)0.5
LY	7	(-)5.7
RY	8	(+)5.7
WT	9	250662
TIG	10	01/15:42:45.2
TGT PEG 7 ΔVX	19	(+)087.8
ΔVY	20	(+)000.0
ΔVZ	21	(+)003.0

RCS SEL: +X / -X / MULTI-AXIS

BURN ATT		
R	24	142
P	25	179
Y	26	029

ΔVTOT	087.8
TGO	00:56
VGO X	(+)084.7
VGO Y	(+)000.0
VGO Z	(+)023.2

	HA	HP
TGT	182	(+)125

NOTES

OMS GMBL CK:

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

RCS I'CNCT:

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

DOWN MODE OPTIONS:

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

OMS HE REG TEST: [ ] NONE

	L GPC	L OP	L CL	R GPC	R OP	R CL
A		X			X	
B	X			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 3 MIN.

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

NOTES

Treat loss of GPC3 as 2nd gimbal fail on the right.

PRELIMINARY ORBIT MANEUVER PAD FOR NC-4 (Rendz. 3-4)

OMS BOTH	1	X
L	2	
R	3	
RCS SEL	4	
TV ROLL	5	000
TRIM LOAD P	6	(+)0.5
LY	7	(-)5.7
RY	8	(+)5.7
WT	9	248490
TIG	10	01/16:42:06.8
TGT PEG 7 ΔVX	19	(+)093.7
ΔVY	20	(+)000.0
ΔVZ	21	(+)003.3

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

BURN ATT		
R	24	225
P	25	042
Y	26	011

ΔVTOT		093.7
TGO		00:59
VGO	X	(+)090.4
VGO	Y	(+)000.0
VGO	Z	(+)024.7

	HA	HP
TGT	185	(+)177

NOTES

OMS GMBL CK:

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

RCS I'CNCT:
- [ ] L OMS → RCS
- [ ] R OMS → RCS
- [X] NONE

DOWN MODE OPTIONS:
- [X] 2 OMS → 1 OMS
- [ ] 1 OMS → RCS
- [ ] NONE

OMS HE REG TEST: [ ] NONE

	L GPC	L OP	L CL	R GPC	R OP	R CL
A	X			X		
B		X			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 2 MIN.
- [X] DO NOT UPDATE TIG
- [ ] UPDATE TIG AFTER ___ MIN.

NOTES

Treat loss of GPC3 as 2nd gimbal fail on the right.

PRELIMINARY ORBIT MANEUVER PAD FOR Ti (Rendz. 3-6)

OMS BOTH	1	
L	2	X
R	3	
RCS SEL	4	
TV ROLL	5	000
TRIM LOAD P	6	(+)0.5
LY	7	(+)4.8
RY	8	(-)4.8
WT	9	246194
TIG	10	01/18:14:08.0
TGT PEG 7 ΔVX	19	(+)009.1
ΔVY	20	(+)000.6
ΔVZ	21	(+)000.3

RCS SEL: +X / -X / MULTI-AXIS

BURN ATT

R	24	229
P	25	039
Y	26	018

ΔVTOT		009.1
TGO		00:12
VGO	X	(+)008.7
VGO	Y	(+)001.8
VGO	Z	(+)002.4

	HA	HP
TGT	186	(+)181

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 + 4 min go to Ti DELAY, 5-27

Max Ti DELAY TIG slip 5 min.
- [X] DO NOT UPDATE TIG
- [ ] UPDATE TIG AFTER ___ MIN.

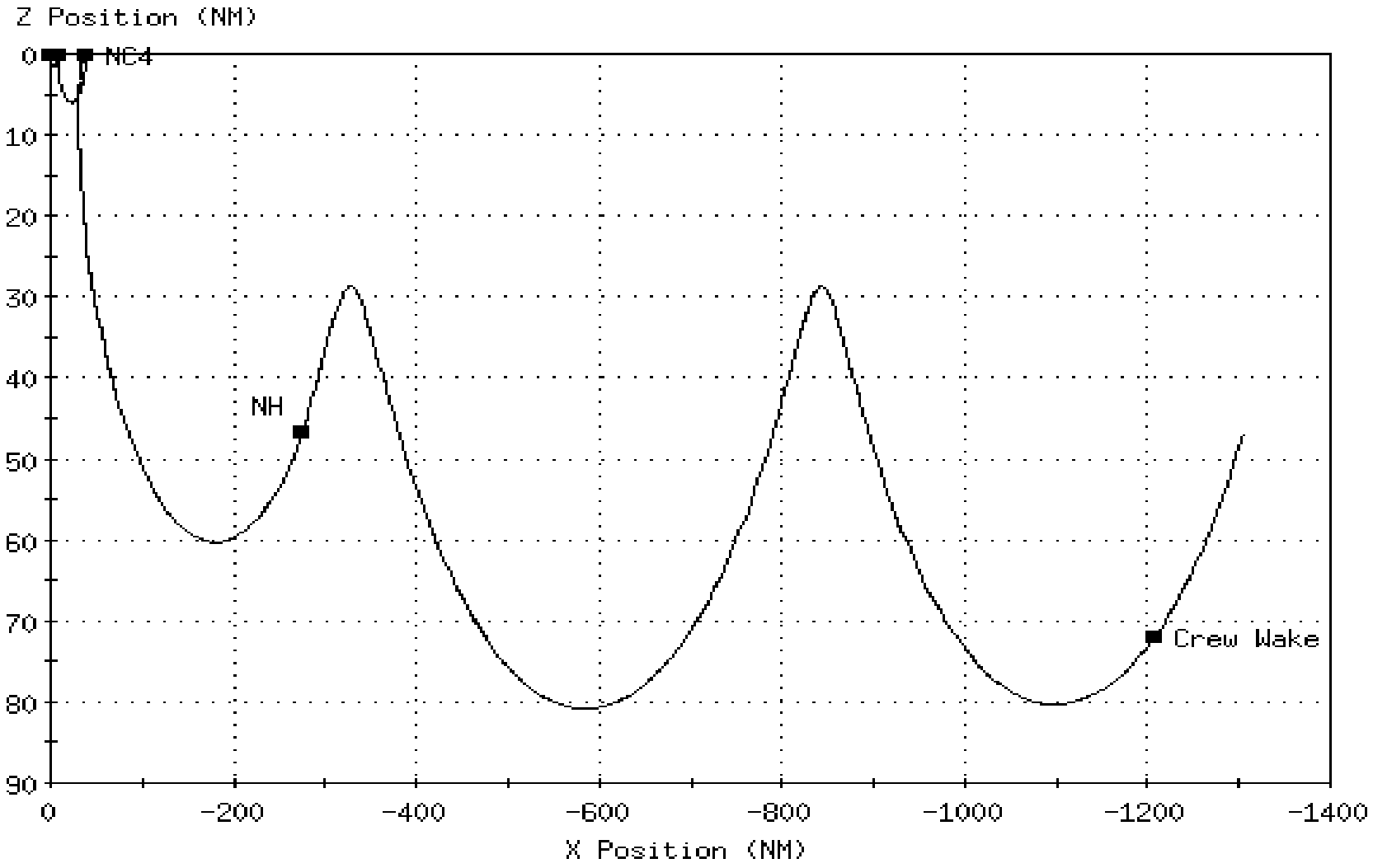
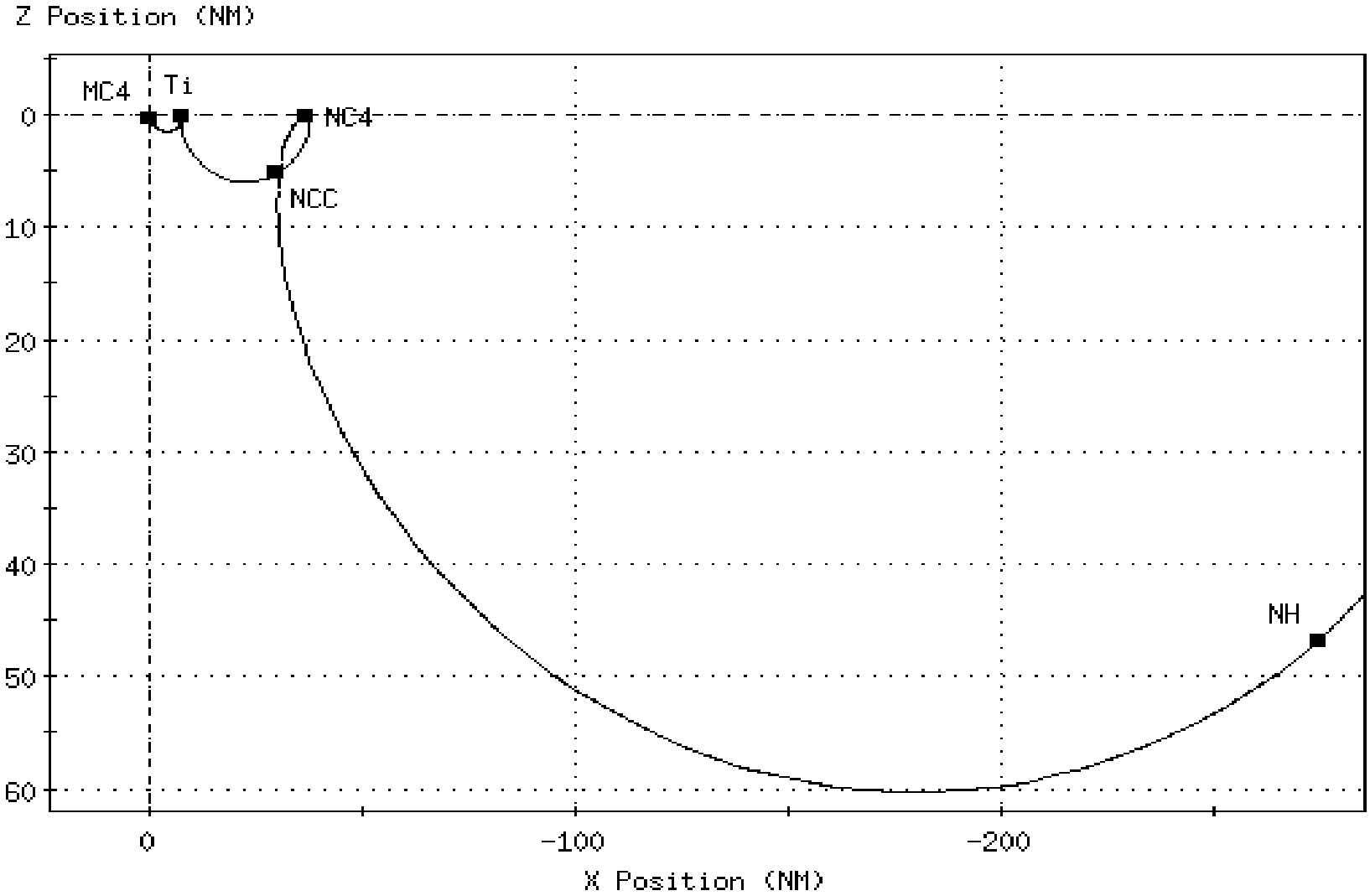
Ti DELAY

TGT PEG 7 ΔVX	19	(-)
ΔVY	20	(-)
ΔVZ	21	(-)

NEW Ti (BASETIME) 01/19:45:26.0

NOTES

STS-123 Day of Rendezvous Far Field Relative Motion



STS-123 Day of Rendezvous Near Field Relative Motion