STS-119 / 15A

FD 03 Execute Package

MSG	Page(s)	Title
013B	1 - 14	FD03 Flight Plan Revision **(pdf)**
014A	15 - 16	FD03 Mission Summary **(pdf)**
012	17 - 18	Orbiter SSC Setup **(pdf)**
015	19 - 20	FD03 Transfer Message **(pdf)**
016	21 - 23	FD03 HD Digital CC DNLK TEST **(pdf)**
017	24	STS-119 Consumables Cue Card **(pdf)**
018	25	STS-119 Battery Recharge Plan **(pdf)**
019	26	FD02 MMT Summary
021	27 – 32	FD03 RNDZ Package **(pdf)**
022	33 – 34	LiOH Cue Card **(pdf)**
023	35	AVIU Forward Plan **(pdf)**
024	36 – 41	STS-119/15A Exercise Constraints
025A	---	Stowage Locations for FD03 (GMT 076) **(pdf - Electronic Only)**

Approved by FAO: *Tobin Melroy*

Last Updated: Mar 17 2009 12:30PM GMT
JEDI *(**J**oint **E**xecute package **D**evelopment and **I**ntegration), v2.04.0003*

MSG INDEX

MSG NO.	TITLE
012	Orbiter SSC Setup (18-1264)
013	FD03 Flight Plan Revision
014	FD03 Mission Summary
015	FD03 Transfer Message (18-1274)
016	FD03 HD Digital CC DNLK TEST (18-1271)
017	STS-119 Consumables Cue Card (18-1272)
018	STS-119 Battery Recharge Plan (18-1273)
019	FD02 MMT Summary
021	FD03 RNDZ Package
022	LiOH Cue Card
023	AVIU Forward Plan
024	STS-119/15A Exercise Constraints (18-1269)
025	Stowage Locations for FD03 (GMT 076) (18-1201A)

1. Cryo Config

   For today's cryo config, O2 Tanks 1 and 2 and H2 tanks 2 and 4 will be active.

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

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

2. EVA Message Summary

   Swanny, Tony, Joe, Koichi, and Ricky,
   Good work on EMU Checkout- we're ready to go with 2 solid suits. The ISS crew asked for the battery recharge and consumables tracking plan, which are covered in MSG017 (18-1272) and MSG018 (18-1273). It is provided here for your reference only. Mike and Sandy will print out a copy prior to your docking and have it waiting for you. After docking, please tape the updated version over the cue card you transferred.

3. Waste Water Dump Details

   Perform a Waste Water Dump using SUPPLY/WASTE WATER DUMP (ORB OPS, ECLS) p. 5-2. MCC will TMBU limits in steps B and K.

   Dump the waste tank to 5%. Nozzle open time will be ~25 minutes.

4. Shuttle Condensate Collection Details

   At MET 1/17:05 perform SETUP of SHUTTLE CONDENSATE COLLECTION (ORB OPS, ECLS) p. 5-40. The Y-Y Condensate Hose and CWC are located in MF71M. Report CWC serial number to MCC.

5. LiOH Cue Card

   MSG 022 is your new LiOH Cue Card. Use this card starting on the evening of FD03.

   A new cue card was required due to the changes in mission duration and to reflect the use of expired Russian LiOH. A Russian LiOH can will be installed in the SM ~3 hours prior to sleep on FD3, 6 and 8. Should these cans not perform as expected, US LiOH cans will be installed to maintain CO2 within limits.

6. WHC High Loads Test Update

   There will be no high loads test of the ISS WHC during STS-119 due to limited supply of urine tanks [EDVs].

7. Updates to MSG 011 - Rendezvous Lighting and Sequence Timeline

   The TDRS gap we mentioned in MSG 011, Item #5 is now only 3 minutes long, from 1/20:17 to 1/20:20 (still right around 1000 ft). No Impact to RPM.

   The SM arrays will be feathered a bit earlier than we thought in MSG 011, Item #7, now planned for 1/20:40 (just after nominal TORVA start).

   One additional note - the moon will be passing through the -Z tracker field of view during the post-Ti night pass from about 1/19:39 to 1/19:43 (just about the nominal MC2 time). No impact as long as the radar works, but could result in some lost data in a radar failed case.

8. Exercise Constraints

   Due to the current condition of the ergometer and your planned use of the ISS exercise equipment, please reference MSG 024 for the latest exercise constraints.

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

REPLANNED

GMT 03/17/09 (076) 12 13 14 15 16 17 18 19 20 21 22 23

MET Day 001 12 13 14 15 16 17 18 19 20 21 22 23 002/00

FD03

STS-119	CDR ARCHAMBAULT	SLEEP; POST SLEEP; +YVV^; IMU; GRPB; PWRUP; ISS RNDZ OPS; NH^; NC4^; Ti^; RPM^; APPROACH T/L; HATCH LEAK CK - STS; ODS PREP FOR INGR; HATCH OPEN; WLCM; SFTY BRF
STS-119	PLT ANTONELLI	SLEEP; POST SLEEP; GRPB; PWRUP; ISS RNDZ OPS; APPROACH T/L; MNVR TEA; GRPB; PWRDN; ATHO*; SSHPTS; VERIF; OPCU@; WLCM; SFTY BRF; PTVO5
STS-119	MS1 ACABA	SLEEP; POST SLEEP; WASTE; MCIU*; POST SLEEP; WASTE; TERM; POST SLEEP; ALT ERG EXERCISE; ISS RNDZ OPS; APPROACH T/L; SSV-2; WLCM; SFTY BRF; ♣
STS-119	MS2 SWANSON	SLEEP; POST SLEEP; OCA%; COND CWC S/U; ISS RNDZ OPS; EMU RMVL; ALT ERG EXERCISE; ISS RNDZ OPS; APPROACH T/L; PCS SETUP - STS; GRPB; PWRDN; POST RNDZ PGSC CNFG; WLECS; WLCM; SFTY BRF; SSC; ⊕
STS-119	MS3 ARNOLD	SLEEP; POST SLEEP; AVIU#; ERG; MDK*; ALT ERG EXERCISE; EMU RMVL; P/TVO2 DOCK S/U; P/TVO2 DOCK OPS; AUDIO; PTVO4; STUP; PTVO4; WLCM; SFTY BRF; ♦
STS-119	MS4 PHILLIPS	SLEEP; LOG; POST SLEEP; XFR; UPDAT; ISS RNDZ OPS; APPROACH T/L; HATCH LEAK CK - STS; ODS PREP FOR INGR; HATCH OPEN; WLCM; SFTY BRF; XFER; OPS
UP	FE-2 EXP18 WAKATA	SLEEP; POST SLEEP; ISS RNDZ OPS; ALT ERG EXERCISE; APPROACH T/L; WLCM; SFTY BRF; IELK; XFER
EXP-18	ISS CDR FINCKE	SLEEP; POST SLEEP; DPC; POST SLEEP; PREP WORK; PTV; VCLS; TAPE; ARED; EXERCISE CEVIS; PCS; MIDDAY-MEAL; PREP; 8POMM0; PRMDL; DEACT; PMA2 CNFG; HATCH LEAK CK ISS; AUDIO; HATCH OPEN; WLCM; SFTY BRF; SSC; SETUP
EXP-18	FE-1 LONCHAKOV	SLEEP; POST SLEEP; DPC; POST SLEEP; PREP WORK; COЖ MNT; СОГС CMS ANLZ; TEX 15 DAK; TVIS; COM; MIDDAY-MEAL; TIMER; TIMER; IMS; РБО-3; CTC; MNT-1; HATCH; STS; WLCM; SFTY BRF; IELK; RMVL
DN	FE-2 MAGNUS	SLEEP; POST SLEEP; DPC; POST SLEEP; PREP WORK; PTV; JPM*; SHUTR; SLVA; TVIS; ARED; MIDDAY-MEAL; PREP; 4POMTO; PRMDL; DVICKEQ; PMA2 CNFG; HATCH LEAK CK ISS; HATCH OPEN; WLCM; SFTY BRF; SSCR; ACCEL

DOCKING* HARDMATE

DAY/NIGHT

ORBIT 25 26 27 28 29 30 31 32 33

TDRS W E Z

TDRS ISS AVAIL

ORB ATT -ZLV -XVV | -ZLV +YVV | RNDZ | BIAS -XLV -ZVV

NOTES: *FILTER CK; %RATE DECONFIG; *STATUS CK; #RECONFIG; 2-6 *WIND SHUTTER CL; FLT PLN/119/FLIGHT; *STS TO USTO; *Docking 01/21:30; @ACTIVATION

♣EMU RSIZE
⊕EMU RSIZE
♦EMU XFER

REPLANNED

GMT 03/17/09 (076) 03/18 01 02 03 04 05 06 07 08 09 10 11

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

STS-119	**FD03** CDR ARCHAMBAULT	BLEED; N2 XFER SETUP; PRE SLEEP; ARED; PRE SLEEP; PMC A/G; PRE SLEEP; SLEEP
STS-119	PLT ANTONELLI	PTV05; POLYBK; OPS; ARED; MOP; PRE SLEEP; SLEEP
STS-119	MS1 ACABA	EMU RSIZE; EMU XFER; REBA*; REBA C/O; MUS; MOP; PRE SLEEP; SLEEP
STS-119	MS2 SWANSON	EMU RSIZE; EMU XFER; REBA*; REBA C/O; MOP; PRE SLEEP; SLEEP
STS-119	MS3 ARNOLD	EMU XFER TO ISS; REBA*; REBA C/O; MDK#; PRE SLEEP; HDTV; TEST; CREW@; MOP; PRE SLEEP; SLEEP
STS-119	MS4 PHILLIPS	XFER OPS; XFER TAGUP; N2 XFER SETUP; XFER BREF; ALT ERG EXERCISE; MUS; PRE SLEEP; SLEEP
UP	FE-2 EXP18 WAKATA	IELK; XFER; SODF XFER; PREP; PWD SHOCK; PREP; DPC; PRE SLEEP-ISS; SLEEP
EXP-18	ISS CDR FINCKE	SHOCK; PWD SHOCK; PREP; DPC; PRE SLEEP-ISS; SLEEP
EXP-18	FE-1 LONCHAKOV	IELK; RMVL; IELK; TCГОАСУ; COГС-; DPC; TEX 15 DAK; TEX 15 DAK; PRE SLEEP-ISS; SLEEP
DN	FE-2 MAGNUS	ACCEL; RSU; IELK GTHR STOW; VIDEO; REBA*; REBA C/O; PBA; PREP WORK; DPC; PRE SLEEP-ISS; SLEEP

DAY/NIGHT

ORBIT 33 34 35 36 37 38 39 40

TDRS W E Z

TDRS ISS AVAIL

ORB ATT BIAS -XLV -ZVV

NOTES *INSTALL #STATUS CK @CHOICE D/L

STS-119 FD (03)

GMT Date 03/17 (076) | W | TDRSE | Z | D/N | DORB | ORB | MET Day 001 | STS ATI

CDR ARCHAMBAULT | PLT ANTONELLI | MS1 ACABA | NOTES

12:00 — 13:00 — 14:00 — 15:00 — 16:00

ORB: 14 25 — 15 26 — 16 27

STS ATI: -ZLV -XVV -ZLV +YVV

SLEEP (CDR, PLT, MS1)

FD03 EZ ACTIVITIES:
- √OCAC FILTER
- TEPC (STATUS CHECK) (ORB OPS, CREW SYS)
- HARD REBOOT ALL PGSCs EXCEPT: STS-6(WLES) & STS-5(RPOP2)

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS) — CDR, PLT, MS1

< MNVR +YVV

SUPPLY/WASTE WATER DUMP (ORB OPS, ECLS)
Initiate Waste Dump
Ref MSG 013, Item 3

L17 Check MCIU filter screen

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

IMU STAR OF OPPTY ALIGN (ORB OPS, GNC) — CDR

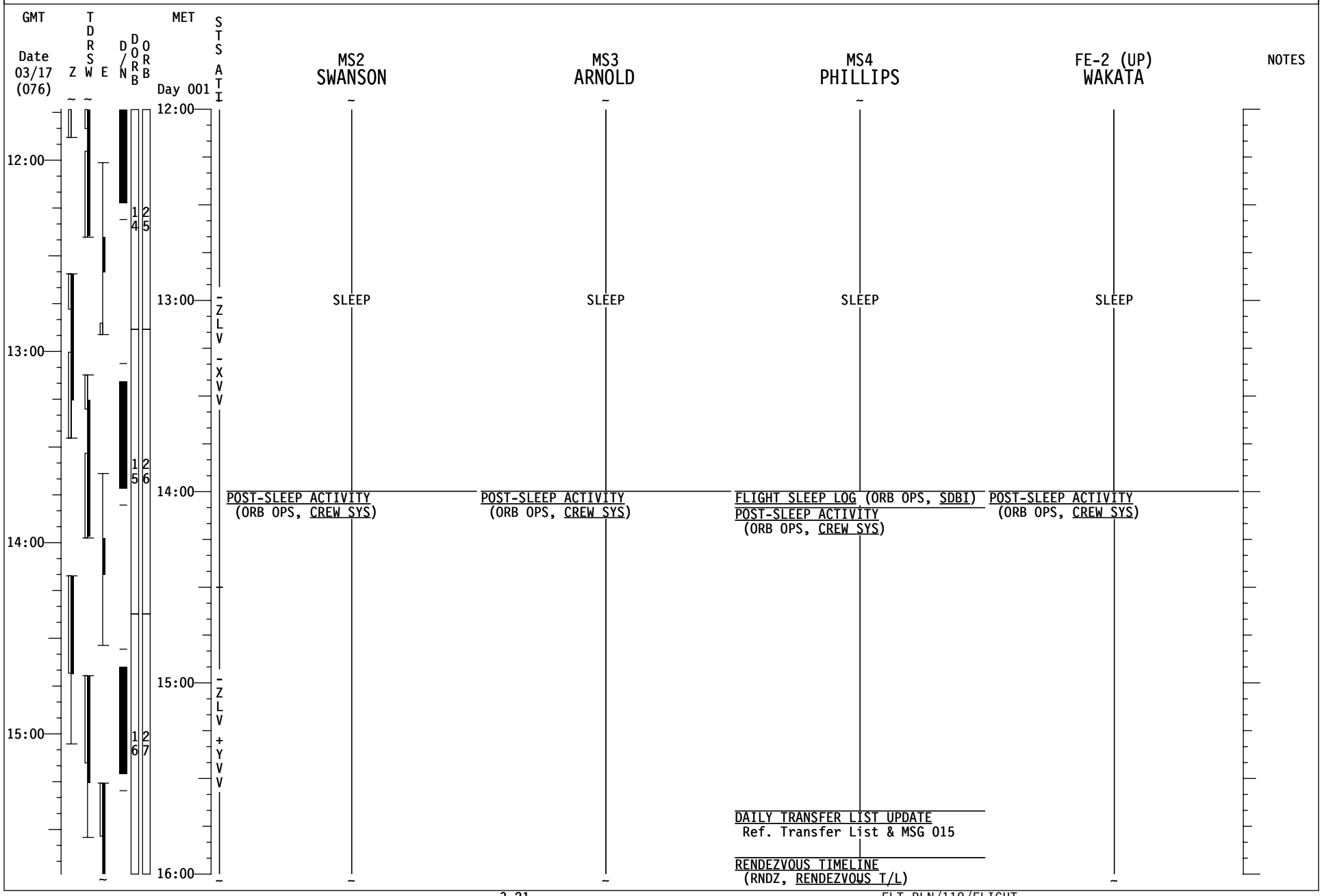
PRIORITY PWRUP GRP B (ORB PKT, PRIOR PWRDN) Steps 12 (IMU 3),10,9,6 (Triple G2),5 — CDR, PLT

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

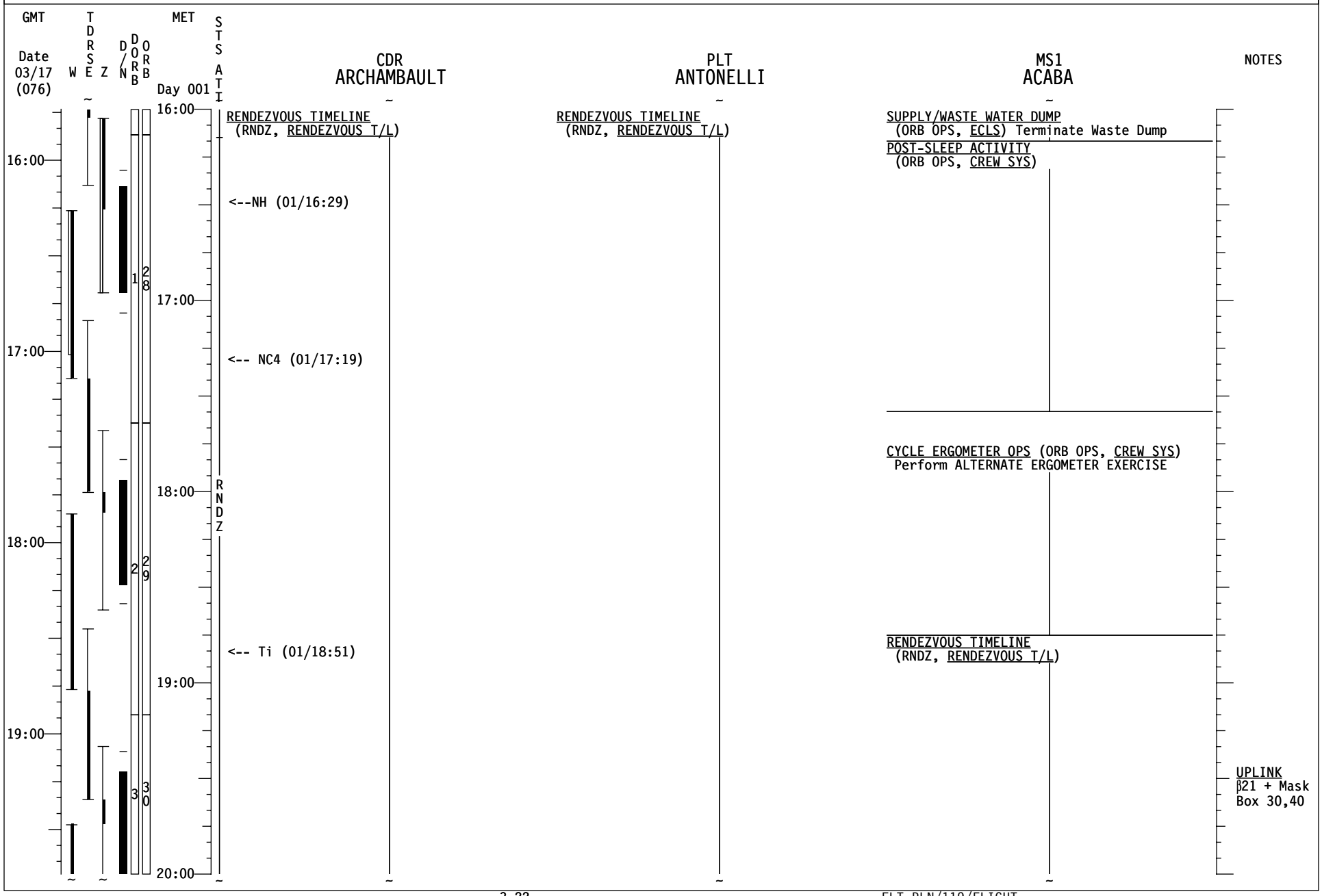
SUPPLY/WASTE WATER DUMP (ORB OPS, ECLS) Terminate Waste Dump — MS1

NOTES: UPDATE H2O WASTE DUMP QTY; UPDATE TFL 192

STS-119 FD (03)


GMT
Date 03/17 (076)
Z
T D R S W
E
D / N
D O R B
O R B
MET
Day 001
S T S A T I
12:00
13:00
14:00
15:00
16:00
14
15
16
25
26
27
-ZLV
-XVV
-ZLV+YVV
MS2 SWANSON
MS3 ARNOLD
MS4 PHILLIPS
FE-2 (UP) WAKATA
NOTES
SLEEP
POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
FLIGHT SLEEP LOG (ORB OPS, SDBI)
DAILY TRANSFER LIST UPDATE
Ref. Transfer List & MSG 015
RENDEZVOUS TIMELINE
(RNDZ, RENDEZVOUS T/L)

STS-119 FD (03)


GMT
Date 03/17 (076)
W
T D R S E
Z
D / N
D O R B
O R B
MET
Day 001
STS ATI
16:00
17:00
18:00
19:00
20:00
1
2
3
28
29
30
RNDZ
CDR
ARCHAMBAULT
RENDEZVOUS TIMELINE
(RNDZ, RENDEZVOUS T/L)
<--NH (01/16:29)
<-- NC4 (01/17:19)
<-- Ti (01/18:51)
PLT
ANTONELLI
RENDEZVOUS TIMELINE
(RNDZ, RENDEZVOUS T/L)
MS1
ACABA
SUPPLY/WASTE WATER DUMP
(ORB OPS, ECLS) Terminate Waste Dump
POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)
CYCLE ERGOMETER OPS (ORB OPS, CREW SYS)
Perform ALTERNATE ERGOMETER EXERCISE
RENDEZVOUS TIMELINE
(RNDZ, RENDEZVOUS T/L)
NOTES
UPLINK
β21 + Mask
Box 30,40

STS-119 FD (03)

GMT Date 03/17 (076) | Z | TDRS W | TDRS E | D/N | DORB 1 | DORB 2 | DORB 3 | MET Day 001 | STS ATI | RNDZ

MS2 SWANSON

- 16:00 POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- 17:00 RECONFIGURE OCA DOWNLINK RATE [A]
- SHUTTLE CONDENSATE COLLECTION (ORB OPS, ECLS) Perform SETUP Ref MSG 013 Item 4
- RENDEZVOUS TIMELINE (RNDZ, RENDEZVOUS T/L)
- 18:00 EMU REMOVAL (EVA, AIRLOCK CONFIG)
- CYCLE ERGOMETER OPS (ORB OPS, CREW SYS) Perform ALTERNATE ERGOMETER EXERCISE
- RENDEZVOUS TIMELINE (RNDZ, RENDEZVOUS T/L)

MS3 ARNOLD

- 16:00 POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- AVIU RECONFIGURE Ref. MSG 023
- ERGOMETER TROUBLESHOOTING Ref. MSG 020
- 17:00 MDDK ST CK (ASSY OPS, PAYLOADS)
- CYCLE ERGOMETER OPS (ORB OPS, CREW SYS) Perform ALTERNATE ERGOMETER EXERCISE
- 18:00 EMU REMOVAL (EVA, AIRLOCK CONFIG)
- P/TVO2 DOCK (PHOTO/TV, SCENES) Setup
- 19:00 P/TVO2 DOCK (PHOTO/TV, SCENES) Ops

MS4 PHILLIPS

- RENDEZVOUS TIMELINE (RNDZ, RENDEZVOUS T/L)

FE-2 (UP) WAKATA

- 16:00 POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- RENDEZVOUS TIMELINE (RNDZ, RENDEZVOUS T/L)
- 19:00 CYCLE ERG OPS (ORB OPS, CREW SYS) Perform ALTERNATE ERG EXERCISE

NOTES

[A] (ORB OPS, PGSC) Perform "Deconfigure from KU PL MAX" In Step 2, perform Step A

STS-119 FD (03)

GMT Date 03/17 (076) | W | TDRS E | Z | D/N | DORB | ORB | MET Day 001 | STS ATT

CDR ARCHAMBAULT	PLT ANTONELLI	MS1 ACABA	NOTES
RENDEZVOUS TIMELINE (RNDZ, RENDEZVOUS T/L)	RENDEZVOUS TIMELINE (RNDZ, RENDEZVOUS T/L)	RENDEZVOUS TIMELINE (RNDZ, RENDEZVOUS T/L)	
APPROACH CUE CARD (RNDZ)	APPROACH CUE CARD (RNDZ)	APPROACH CUE CARD (RNDZ)	
<-- RPM (01/20:28)			
DOCKING(1/21:30)			
RETURN TO FLIGHT PLAN			
POST DOCKING HATCH LEAK CHECK (RNDZ, APDS)	MNVR (TRK) BIAS -XLV -ZVV TG=2 BV=5 P=161 Y=356 OM=171 Init TRK, DAP:FREE > 2 sec, then DAP:A12/AUTO/VERN		UPLINK β21 + Mask Box 40,60 UPDATE TFL 184
AIRLOCK PREP FOR INGRESS - AIRLOCK FAN ACTIVE (RNDZ, APDS)	PRIOR PWRDN GRP B(ORB PKT,PRIOR PWRDN) Steps 6(When MNVR cmplt Sngl G2),&12(IMU3) O6 Star Tracker -Z - OFF		
JOINT OPS: 2.104 HATCH OPENING AND SHUTTLE/ISS DUCT INSTALLATION √MCC-H Complete with Step 1 Perform Steps 2-15	When ISS GO for ATT CTRL, DAP: FREE SSPTS ODS CONNECTOR VERIF A15 ODS MATE X1,X2 (two) - ON √MCC then - OFF SSPTS OPCU ACT [B]	SSV OUTRATE - 2 [B] On MCC GO: A15 OPCU 1,2 CONV(two) - ON R1 MN BUS TIE B - ON(tb-ON) C - ON(tb-ON)	
WELCOME	WELCOME	WELCOME	
SAFETY BRIEFING	SAFETY BRIEFING	SAFETY BRIEFING	
	P/TV05 ISS INTERNAL OPS (PHOTO/TV, SCENES) Setup, Ops	EMU RESIZE (EVA, AIRLOCK CONFIG)	

STS-119 FD (03)

GMT Date 03/17 (076) | Z | TDRS W | TDRS E | D/N | DORB | ORB | MET Day 001 | STS ATT

MS2 SWANSON	MS3 ARNOLD	MS4 PHILLIPS	FE-2 (UP) WAKATA	NOTES
RENDEZVOUS TIMELINE (RNDZ, RENDEZVOUS T/L)	P/TV02 DOCK (PHOTO/TV, SCENES) Ops	RENDEZVOUS TIMELINE (RNDZ, RENDEZVOUS T/L)	CYCLE ERG OPS (ORB OPS, CREW SYS) Perform ALTERNATE ERG EXERCISE	
APPROACH CUE CARD (RNDZ)		APPROACH CUE CARD (RNDZ)	APPROACH CUE CARD (RNDZ)	
DOCKING(1/21:30)				
RETURN TO FLIGHT PLAN				
JOINT OPS: 6.107 PCS SETUP-SHUTTLE		POST DOCKING HATCH LEAK CHECK (RNDZ, APDS)		
PRI PWRDN GRP B(OPCL,PRIOR PWRDN) Steps 6(When MNVR complete Sngl G2)&12(IMU3-STBY) 06 Star Tracker -Z - OFF		AIRLOCK PREP FOR INGRESS - AIRLOCK FAN ACTIVE (RNDZ, APDS)		
POST RNDZ PGSC CONFIG Configure PGSCs per EVA/RMS usage chart	JOINT OPS: 6.109 HARDLINE ICOM AUDIO Steps 1,5,6	JOINT OPS: 2.104 HATCH OPENING AND SHUTTLE/ISS DUCT INSTALLATION √MCC-H Complete with Step 1 Perform Steps 2-15		
	P/TV04 INGRESS/EGRESS (PHOTO/TV, SCENES) Setup			
WLES DOCK/UNDOCK RECOVERY (ORB OPS, WLE SENSORS)	P/TV04 INGRESS/EGRESS (PHOTO/TV, SCENES) Ops			
WELCOME	WELCOME	WELCOME	WELCOME	
SAFETY BRIEFING	SAFETY BRIEFING	SAFETY BRIEFING	SAFETY BRIEFING	
ORBITER SSC SETUP Ref. MSG 012, Perform Step 2	POST-DOCK EVA XFER/RCNFG (EVA,A/L CNFG)Xfer 2 EMUs Ref. Transfer List: Resupply Item 32	TRANSFER OPS Ref. Transfer List & MSG 015	IELK REMOVAL & TRANSFER Ref. Transfer List: Resupply Item 10.1	
EMU RESIZE (EVA, AIRLOCK CONFIG)				

STS-119 FD (03)

GMT Date 03/17 (076) | W | TDRS E | Z | D/N | DORB 6 7 8 | ORB 3 3 3 4 3 5 | MET Day 002 | STS ATI

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

BIAS-XLV-ZVV

CDR ARCHAMBAULT

00:00
M069M LEH O2 8 vlv - CL
JOINT OPS: 3.102 NITROGEN TRANSFER INITIATION
Perform Steps 3-5

01:00
PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

02:00
ARED

03:00
PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

PRIVATE MEDICAL CONFERENCE

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

04:00

PLT ANTONELLI

P/TV05 ISS INTERNAL OPS
(PHOTO/TV, SCENES)Setup, Ops

PLAYBACK OPERATIONS (RNDZ)
(PHOTO/TV, CUE CARD)
C/L Camr: Approx 10ft to Contact +2 min
KU TDRW (00:53-01:27)

ARED

MOP (ASSY OPS, PAYLOADS)

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

MS1 ACABA

EMU RESIZE (EVA, AIRLOCK CONFIG)

POST-DOCK EVA XFER/RECONFIG (EVA, A/L CNFG)
Transfer 2 EMUs to ISS
Ref Transfer List: Resupply Item 30 & 31

EVA SYSTEMS: 1.307 REBA INSTALLATION
Ref MSG 017

EVA SYSTEMS: 1.403 REBA POWERED HARDWARE CHECKOUT EMU 3017 & 3006

MUS (ASSY OPS, PAYLOADS)
MOP (ASSY OPS, PAYLOADS)

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

NOTES

STS-119 FD (03)

GMT Date 03/17 (076) | Z | TDRSW | E | D/N | DORB | ORB | MET Day 002 | STS ATI

MS2 SWANSON

- 00:00 EMU RESIZE (EVA, AIRLOCK CONFIG)
- POST-DOCK EVA XFER/RCNFG (EVA,A/L CNFG)Xfer 2 EMUs Ref Transfer List: Resupply Items 30 & 31
- EVA SYSTEMS: 1.307 REBA INSTALL Ref MSG 017
- EVA SYSTEMS: 1.403 REBA POWERED HARDWARE CHECKOUT EMU 3017 & 3006
- BIAS_XLV_ZVV
- MOP (ASSY OPS, PAYLOADS)
- 02:00 PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)

MS3 ARNOLD

- POST-DOCK EVA XFER/RCNFG (EVA,A/L CNFG)Xfer 2 EMUs Ref. Transfer List: Resupply Item 32
- EVA SYSTEMS: 1.307 REBA INSTALL Ref MSG 017
- EVA SYSTEMS: 1.403 REBA POWERED HARDWARE CHECKOUT EMU 3017 & 3006
- MDDK ST CK (ASSY OPS, PL)Step 1 only
- PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- HD DOWNLINK TEST Ref MSG 016
- PLAYBACK OPERATIONS (CREW CHOICE) (P/TV, CC) KU TDRW (02:29-03:04)
- MOP (ASSY OPS, PAYLOADS)
- PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)

MS4 PHILLIPS

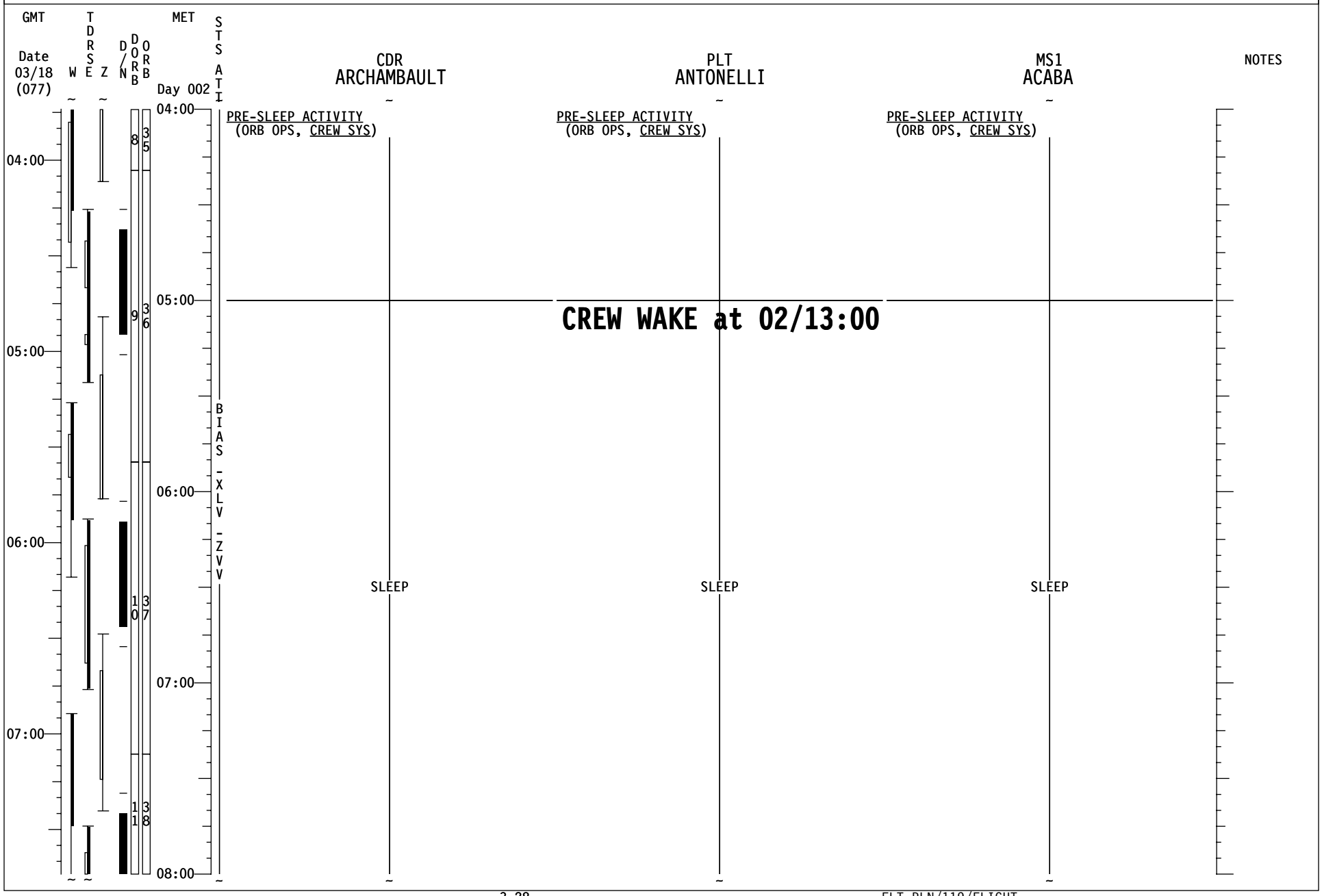
- TRANSFER OPS Ref. Transfer List & MSG 015
- TRANSFER TAGUP Coord with transfer counterpart
- JOINT OPS: 3.102 NITROGEN TRANSFER INITIATION Perform Steps 3-5
- TRANSFER BRIEF Call down status to MCC
- CYCLE ERGOMETER OPS (ORB OPS, CREW SYS) Perform ALTERNATE ERGOMETER EXERCISE
- MUS (ASSY OPS, PAYLOADS)
- PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)

FE-2 (UP) WAKATA

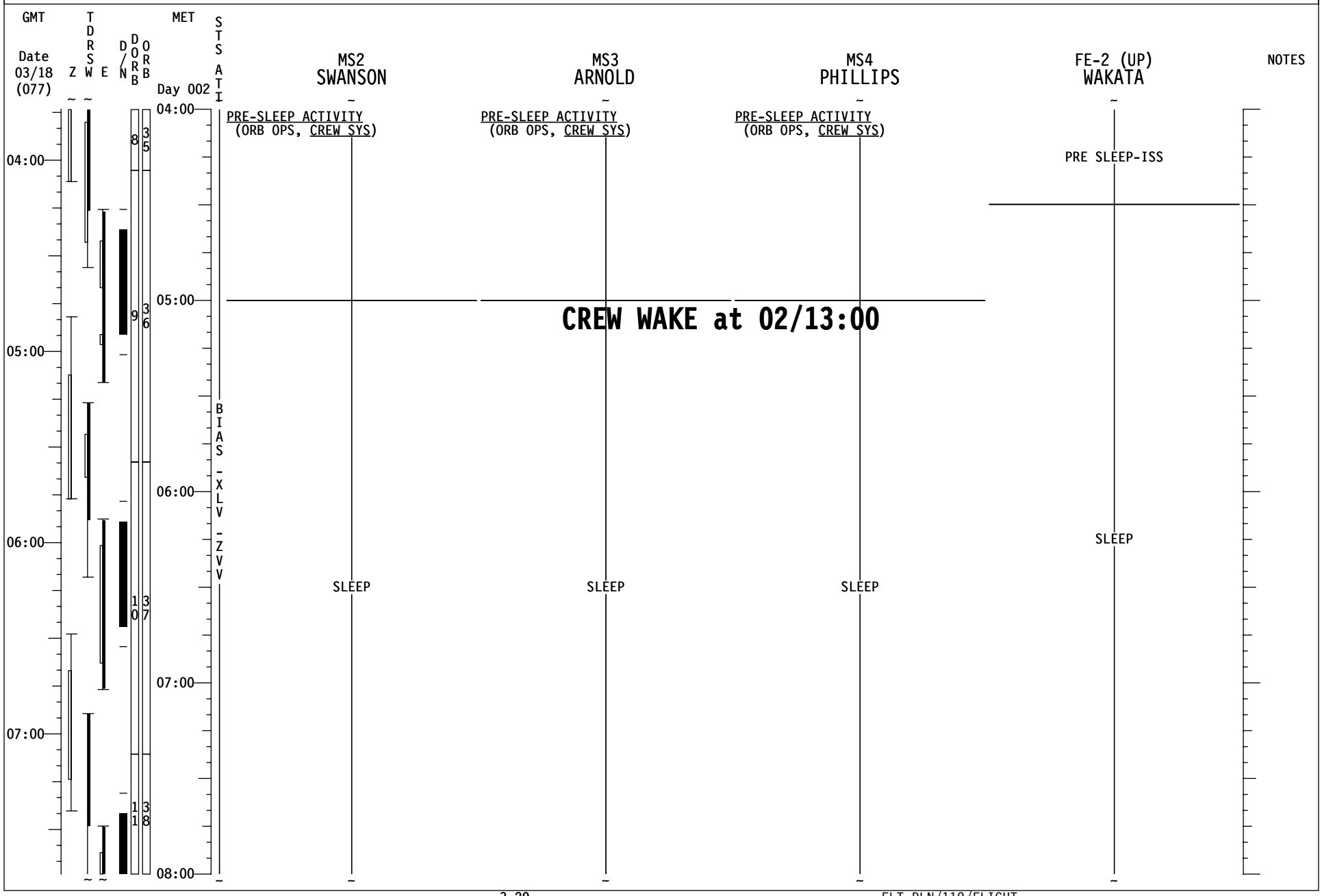
- IELK REMOVAL & TRANSFER Ref. Transfer List: Resupply Item 10.1
- SODF BOOK TRANSFER Ref Transfer List: Resupply Item 19
- PREP
- PWD SHOCK Ref MSG 18-1230, Steps 5-7
- PREP
- DAILY PLANNING CONFERENCE
- PRE SLEEP-ISS

NOTES

STS-119 FD (03)


GMT
Date 03/18 (077)
W
TDRSE
Z
D/N
DORB
ORB
MET
Day 002
STS ATI
BIAS -XLV -ZVV
CDR ARCHAMBAULT
PLT ANTONELLI
MS1 ACABA
NOTES
04:00
05:00
06:00
07:00
08:00
PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)
CREW WAKE at 02/13:00
SLEEP

STS-119 FD (03)


GMT
Date 03/18 (077)
Z
TDRS W
E
D/N
DORB
ORB
MET
Day 002
STS ATI
BIAS -XLV -ZVV
04:00
05:00
06:00
07:00
08:00
8
9
10
11
35
36
37
38
MS2 SWANSON
MS3 ARNOLD
MS4 PHILLIPS
FE-2 (UP) WAKATA
NOTES
PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)
PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)
PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)
PRE SLEEP-ISS
CREW WAKE at 02/13:00
SLEEP
SLEEP
SLEEP
SLEEP

Good Morning Discovery!
Thanks for the crew choice video downlink yesterday, which was really spectacular; it had the MCC team applauding! The ISS crew anxiously awaits your arrival later today!

YOUR CURRENT ORBIT IS: 147 X 126 NM

NOTAMS:

NOTAMS - ONE ADDITION

EDW -	EDW IN USE. EDT ELS DAY / VFR ONLY.
EDW -	LAKEBED RUNWAYS RED - WET.
NOR -	LAKEBED RUNWAYS GREEN.
FMH -	TACAN PVD103 DME ONLY.
DOV -	RWY 14/32 CLOSED.
MRN -	**TACAN AOG23 OTS.**
WAK -	TACAN AWK82 OTS.
HAW -	TACAN ASI59 OTS.
IKF -	NOT USABLE. NO AGREEMENT.
BEN -	NOT RECOMMENDED/NOT SUPPORTED.

NEXT 2 PLS OPPORTUNITIES:

EDW22 ORB 33 – 2/00:35 FEW050 SCT180 7 300/8P11
EDW22 ORB 49 – 3/01:02 SCT250 7 270/8P11

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 = 35.2 R OMS OX = 35.0
FU = 34.7 FU = 34.9

DELTA V AVAILABLE:

OMS	330 FPS
ARCS (TOTAL ABOVE QTY1)	35 FPS
TOTAL IN THE AFT	365 FPS
ARCS (TOTAL ABOVE QTY2)	64 FPS
FRCS (ABOVE QTY 1)	38 FPS
AFT QTY 1	86 %
AFT QTY 2	48 %

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

18-1264 (MSG 012) ORBITER SSC SETUP

OBJECTIVE:
This procedure provides steps to relocate the SSC14 from ISS to the Orbiter and to return SSC14 back to ISS.

UNSTOW:

ML60E (LW MAR)	25' PGSC DC Power Cable	P/N: SED33103334-311
	Power Supply, 28VDC	P/N: SEG33116428-301
	10' Enhanced A31p DC Power Cable	P/N: SEG33116459-301

CONFIGURE AND DISCONNECT SSC CLIENT

ISS

1.1 √SSC Client (SSC14) – OFF

1.2 sw SSC Client Power Supply (s/n 1324) – OFF

1.3 SSC Client ←|→ A31p DC Power Cable (s/n 1012)

CONNECT SSC CLIENT

Orbiter

2.1 Relocate SSC14 to Orbiter

ML60E (LW MAR)

2.2 Unstow 25' PGSC DC Power Cable, 28VDC Power Supply, and 10' Enhanced A31p DC Power Cable

ML85E

2.3 √DC 10 AMP MN B S4 – OFF

2.4 25' PGSC DC Power Cable →|← DC Power Supply

2.5 10' Enhanced A31p DC Power Cable →|← DC Power Supply

2.6 SSC Client →|← 10' Enhanced A31p DC Power Cable

2.7 25' PGSC DC Power Cable →|← DC 10 AMP MNB J22 Outlet

2.8 sw DC 10 AMP MN B S4 – ON

2.9 sw DC Power Supply – ON

2.10 √SSC Client (SSC14) – ON

2.11 √NetGear Wireless Assistant window for Access Point connectivity and signal strength (refer to Figure 1).

2.12 Notify **MCC-H** Orbiter SSC Client is operational.

Figure 1: NetGear Wireless Assistant Information

Orbiter

DISCONNECT SSC CLIENT

3.1 sw DC Power Supply – OFF

ML85E

3.2 sw DC 10 AMP MN B S4 – OFF

3.3 SSC Client (SSC14) ←|→ 10’ Enhanced A31p DC Power Cable

3.4 10’ Enhanced A31p DC Power Cable ←|→ DC Power Supply

3.5 25’ PGSC DC Power Cable ←|→ DC Power Supply

3.6 25’ PGSC DC Power Cable ←|→ DC 10 AMP MNB J22 Outlet

ML60E (LW MAR)

3.7 Stow 25’ PGSC DC Power Cable, 28VDC Power Supply, and 10’ Enhanced A31p DC Power Cable

ISS

CONNECT AND CONFIGURE SSC CLIENT

4.1 Relocate SSC14 to JPM

4.2 SSC Client →|← A31p DC Power Cable (s/n 1012)

4.3 sw SSC Client Power Supply (s/n 1324) – ON

4.4 √SSC Client (SSC14) – ON

John & Ricky,

Welcome to the first day of transfer!

One piece of good news since yesterday: The mission can now accommodate all the time needed for completion of the transfer plan. There is transfer time scheduled every day through hatch closure, along with an end-of-the-day transfer brief.

Today's transfer message is the largest you should receive and includes your updated resupply pages and the entire return list. Resupply list changes include the late items added to your middeck, some new final ISS stowage locations, and updates to activities based on the new flight plan.

After hatches open, items needed on ISS include Koichi's IELK, SODF, the PWD hardware, and the EVA items. You can also begin to offload the 5 MLE bags from the middeck – starting with Bag F since there are items in this bag needed on FD04.

The Transfer List Excel file, FD3_Transfer_List_STS119.xls, locations are:

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

<u>FD03 Transfer Choreography</u>

- Resupply Item 22: Transfer TOCA/PWD CTB in support of PWD flush activity
- Resupply Item 6: Transfer Bag F to ISS
- Resupply Items 9, 10, 11 & 12: Transfer Bags A, B, C & D to ISS as time permits
- Joe, Swanny, Ricky: Resupply Items 30, 31 & 32: Transfer and temp stow per EVA transfer activities
- Koichi: Resupply Item 10.1: Transfer IELK per IELK Removal & Transfer activity
- Koichi: Resupply Item 19: Transfer SODF to ISS per SODF Transfer activity

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

In the Transfer List **RESUPPLY** tab
Replace the following pages:
Resupply 1, 3, 4, 6, 12, 13, 14
Add the following page:
Resupply 16

In the Transfer List **RETURN** tab
Add the following pages:
Return 1 thru 10

Changes to the Transfer List are detailed below:

RESUPPLY
Item 1 – initial stowage location clarification
Item 7 – item deleted based on updated LiOH plan
Items 9.1 and 9.2 – updated stowage at undock location
Item 9.3 – removed comment based on updated timeline
Item 9.11 – updated stowage at undock location
Item 9.13 – new item
Item 16 – updated notes
Item 20 – updated item name to match label
Item 21 – updated stowage at undock location
Item 22 – updated item name and added notes
Item 24 – updated stowage at undock location
Item 800, 801, 802 – new items

RETURN
All items new

FD04 Transfer Choreography

- Koichi: Resupply Item 21, 21.1 & 24: Transfer Dome Gene hardware per Dome Gene Transfer activity.
- Koichi: Return Item 721: Transfer returning Dome Gene foam post Dome Gene activities.
- Sandy: Return Item 729: Transfer returning PWD sample per WRS PWD sampling activity.

Have a great day and let us know if you have any questions!

- The 15A Transfer Team

HD DIGITAL CC DNLK TEST

1. FD Requests INCO/CATO/ISS GC/SSP GC to configure for SSP HDTV Downlink per FN 26345.

2. CATO: Verify ISS MPC is OFF and/or MSFC/DMC pass-thru is disabled onboard
   (no ISS MPC packets to ground)

3. STS Crew: Notify MCC, configuring for HD TV dnlk

   Config H/W per dwg at right

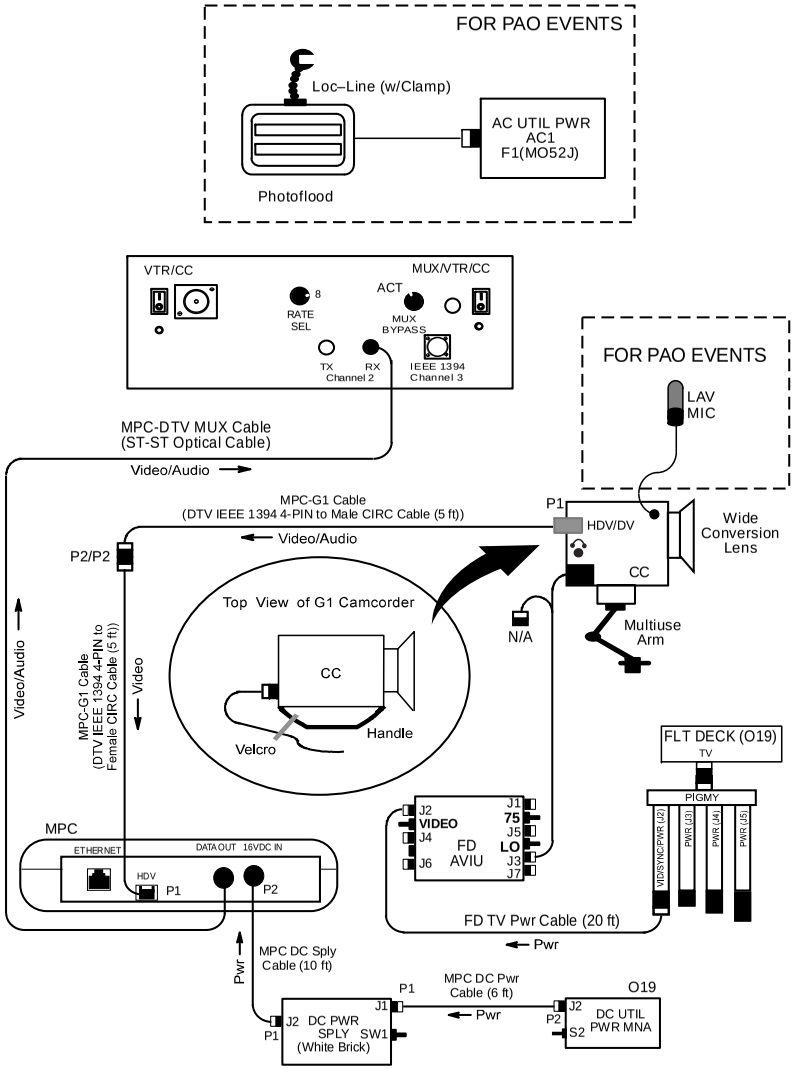
   CC — For cable strain relief attach MPC-to-G1 Cable
   Velcro strap to CC strap

   AVIU — SYNC/VIDEO – VIDEO
   HI-Z/75 – 75
   PWR SELECT – LO

   O19 — √TV PWR – ON

   CC — √Wide Conversion Lens installed
   Install LAV MIC
   √ND FILTER – OFF
   √OUTPUT – CAM
   √ .. –
   √STANDBY/LOCK – STANDBY
   PWR dial – “green”
   Mount Camcorder

   L10 (MUX) — √MUX/VTR/CC PWR – off (LED off)
   √VTR/CC/PWR – off (LED off)
   Disconnect CHANNEL 3 IEEE 1394 Cable
   MUX/VTR/CC PWR – on (LED on)
   √MUX BYPASS – ACT
   √CHANNEL 0,1 RATE SEL – 1
   √2 RATE SEL – 8



jsc48038_119_020r1.cvx

HD DIGITAL CC DNLK TEST (CONTINUED)

O19	DC UTIL PWR MNA – ON
MPC PWR SPLY	PWR SPLY PWR SW1 – ON
MPC	PWR – ON (HDV, TAXI, 5V, 3V green LEDs on)
L10 (MUX)	√CHANNEL 2 F/O OK,DATA LEDs on
F1(MO52J)	AC UTIL PWR AC1 – ON
Floodlight	ON/OFF – ON HI/LO – HI
Cabin Lts	Flt Deck – ON Lts in FOV – OFF as reqd Lt Shades – install as reqd Window Shades – install as reqd
CC	√Scene composition Adjust Camr angle for best framing

4. INCO: Request TDRSS config to PAYLOAD MAX at 48 MEG.

5. INCO: Verify good HD video received at MCC.

6. STS Crew: On MCC go, perform live video/audio test with subject in camcorder field-of-view:

LAV MIC	PWR – ON

7. INCO: Verify good video and audio at MCC.

HD DIGITAL CC DNLK TEST (CONCLUDED)

8. STS Crew: On MCC go, position camcorder view to include L10 DTV MUX and MPC status lights:

LAV MIC	PWR – OFF

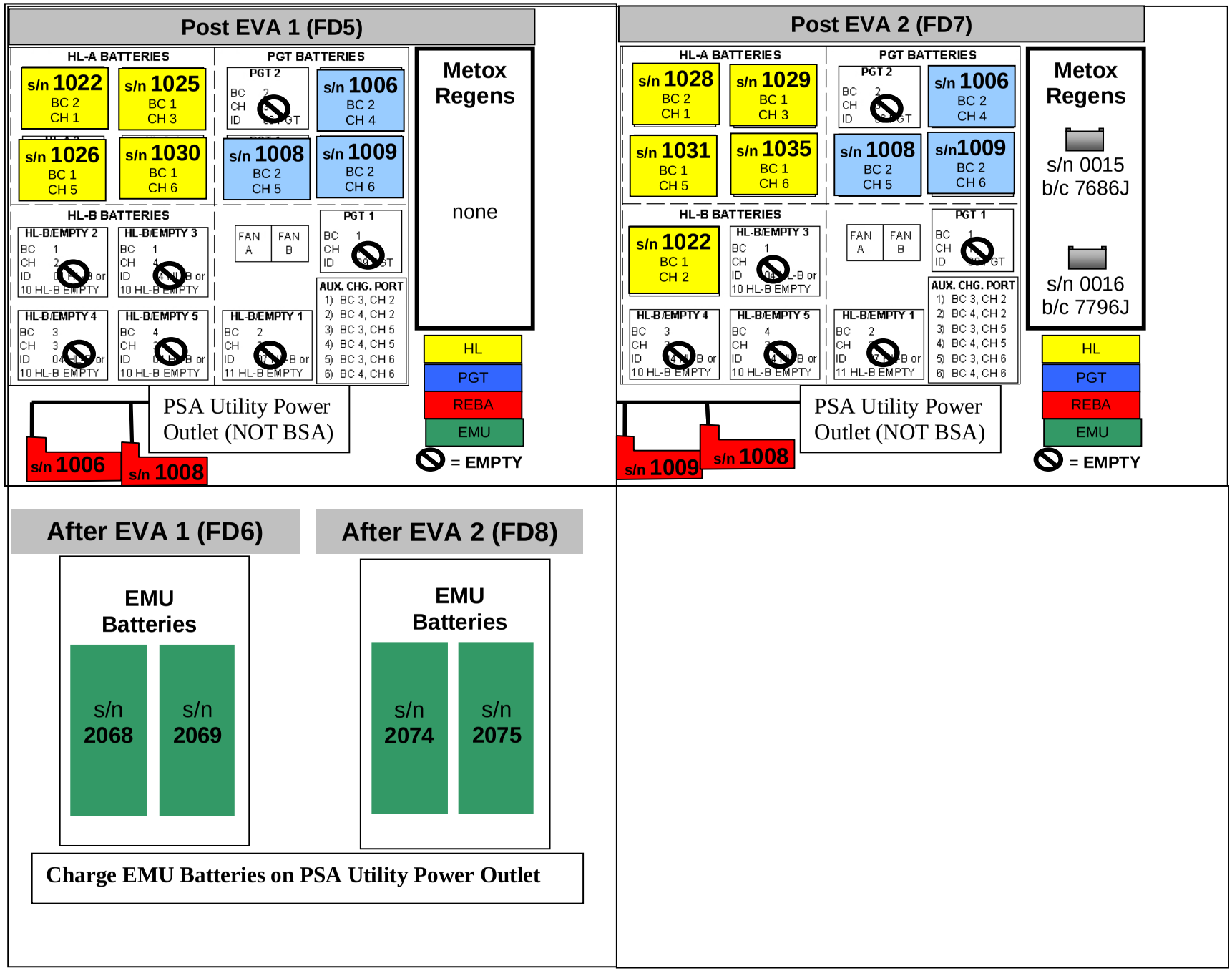
9. When test complete, STS Crew: Reconfigure for SDTV downlink:

CC	PWR dial – OFF
O19	TV PWR – OFF as reqd
MPC	PWR – OFF
MPC PWR SPLY	DC PWR SPLY PWR SW1 – OFF
O19	DC UTIL PWR MNA – OFF
L10 (MUX)	MUX/VTR/CC PWR – off (LED off) Connect CHANNEL 3 IEEE 1394 Cable
	Notify MCC, returned to SDTV dnlk
	Go to DEACTIVATION (Cue Card, TV) as reqd

10. INCO/GC/CATO: Return MCC to ISS MPC prime configuration

18-1272 (MSG 017) – STS-119 Consumables Cue Card

SAFER usage s/n 1004 & 1007				EVA 1 EMU TV: ID 16 (Sw) & 18 (An)			Dump CWC s/n 1059		
	EMU	**LiOH (s/n) (B/C)**	**METOX (s/n) (B/C)**	**EMU Battery**	**REBA (s/n)**	**HL Battery (s/n)**	**PGT Battery (s/n)**	**PGT Battery Spare (s/n)**	**PWR (s/n)**
Campout			**0005/0022**						
EVA 1	**EV1 – Sw** EMU 3017	2014	N/A	2068	1008	1022/1025	1008	1009	
	EV2 – An EMU 3006	2015	N/A	2069	1006	1026/1030	1006		
Post					**Recharge**	**Recharge**	**Recharge**	**Recharge**	**1032**
Between	**Swap**			**Recharge**					
Campout			**0015/0016**						
EVA 2	**EV1 – Sw** EMU 3017	N/A	0007 7802J	2074	1008	1028/1029	1008	1009	
	EV3 – Ac EMU 3005	N/A	0011 7792J	2075	1009	1031/1035 **IR Camera 1022**	1006		
Post			**Regen Campout**		**Recharge**	**Recharge**	**Recharge**	**Recharge**	**1032/1003**
Between	**Swap**			**Recharge**					
Campout			**0015/0016**						
EVA 3	**EV2 – An** EMU 3006	N/A	0012 (none)	2068	1006	1022/1025	1006	1009	
	EV3 – Ac EMU 3005	N/A	0013 7794J	2069	1009	1026/1030	1008		
Post									**1003**
Return	**EV1 – Sw** EMU 3017	2014		2074					
	EV2 – An EMU 3004	2015		2075					
Return	**AL Floor Bag**			2037 (TBD)					


Post EVA 1 (FD5)
HL-A BATTERIES
s/n 1022 BC 2 CH 1
s/n 1025 BC 1 CH 3
s/n 1026 BC 1 CH 5
s/n 1030 BC 1 CH 6
PGT BATTERIES
PGT 2
s/n 1006 BC 2 CH 4
s/n 1008 BC 2 CH 5
s/n 1009 BC 2 CH 6
HL-B BATTERIES
HL-B/EMPTY 2
HL-B/EMPTY 3
FAN A
FAN B
PGT 1
AUX. CHG. PORT
1) BC 3, CH 2
2) BC 4, CH 2
3) BC 3, CH 5
4) BC 4, CH 5
5) BC 3, CH 6
6) BC 4, CH 6
HL-B/EMPTY 4
HL-B/EMPTY 5
HL-B/EMPTY 1
Metox Regens
none
HL
PGT
REBA
EMU
= EMPTY
PSA Utility Power Outlet (NOT BSA)
s/n 1006
s/n 1008
Post EVA 2 (FD7)
HL-A BATTERIES
s/n 1028 BC 2 CH 1
s/n 1029 BC 1 CH 3
s/n 1031 BC 1 CH 5
s/n 1035 BC 1 CH 6
PGT BATTERIES
PGT 2
s/n 1006 BC 2 CH 4
s/n 1008 BC 2 CH 5
s/n1009 BC 2 CH 6
HL-B BATTERIES
s/n 1022 BC 1 CH 2
HL-B/EMPTY 3
FAN A
FAN B
PGT 1
AUX. CHG. PORT
1) BC 3, CH 2
2) BC 4, CH 2
3) BC 3, CH 5
4) BC 4, CH 5
5) BC 3, CH 6
6) BC 4, CH 6
HL-B/EMPTY 4
HL-B/EMPTY 5
HL-B/EMPTY 1
Metox Regens
s/n 0015
b/c 7686J
s/n 0016
b/c 7796J
HL
PGT
REBA
EMU
= EMPTY
PSA Utility Power Outlet (NOT BSA)
s/n 1009
s/n 1008
After EVA 1 (FD6)
EMU Batteries
s/n 2068
s/n 2069
After EVA 2 (FD8)
EMU Batteries
s/n 2074
s/n 2075
Charge EMU Batteries on PSA Utility Power Outlet

1

Congratulations on a spectacular launch! The FD02 MMT met briefly to review mission progress with only a few items of discussion. Discovery is performing very well and the team is looking forward to a great mission.

Orbiter Systems: The team reviewed the minor orbiter system anomalies that have been encountered with the ET umbilical flash/photo downloads, the fuel cell O2 flowmeter, the flight deck AVIU, the SRMS shoulder brace, and the ergometer. None of these anomalies present significant mission impacts. Also, the team was briefed on the flawless performance of the 3 flow control valves during ascent.

ISS Conjunction: The ISS team is monitoring an orbital conjunction with a debris object with a time of closest approach of 076/07:14 GMT (01/07:30 MET). The ISS and Shuttle flight control teams jointly developed an ISS debris avoidance plan and a corresponding shuttle rendezvous maneuver plan that accounted for this potential change to the ISS trajectory. After the MMT meeting, tracking assessments on the debris object confirmed this debris avoidance plan is not required.

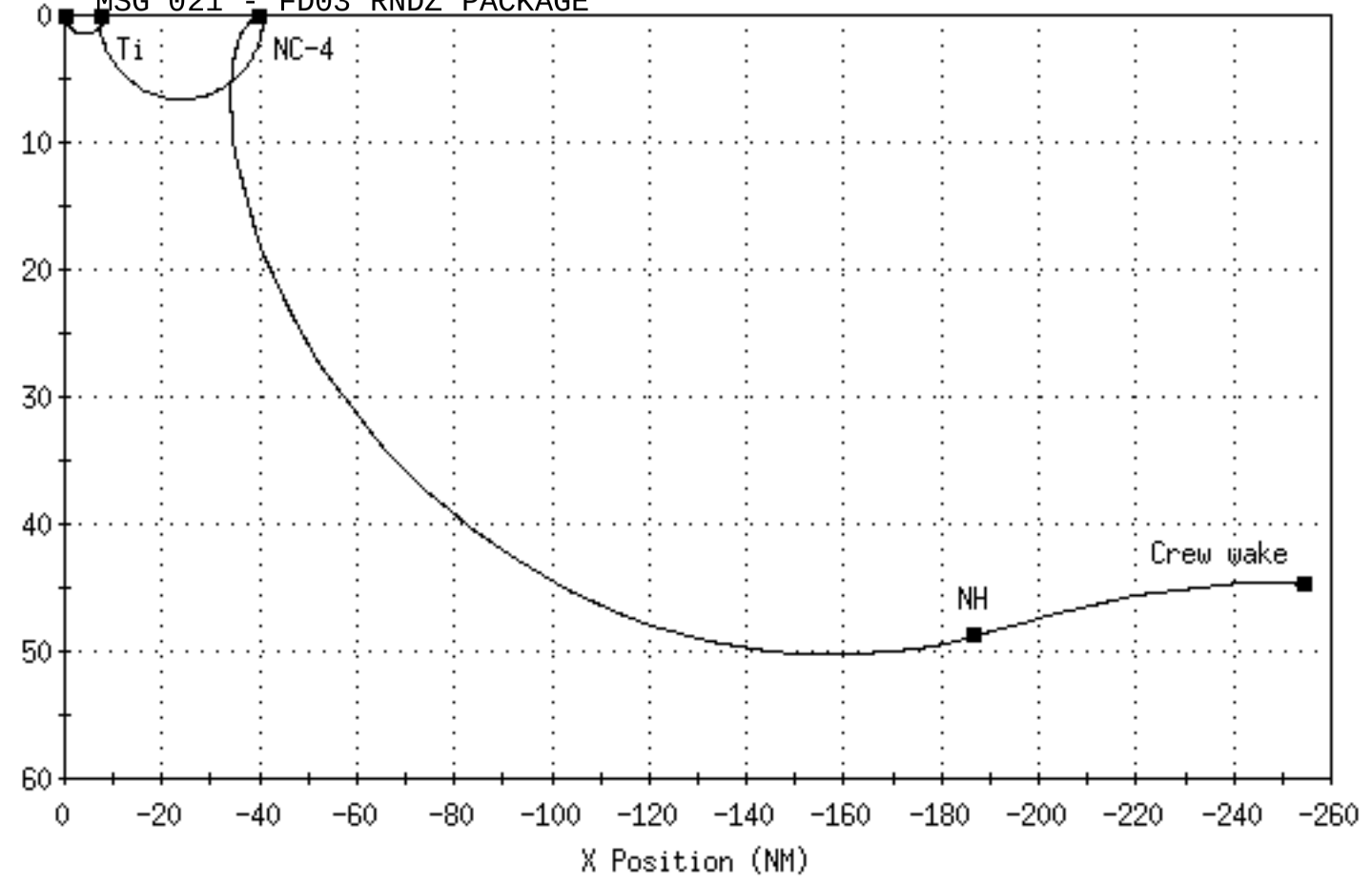
FLIGHT NOTE

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

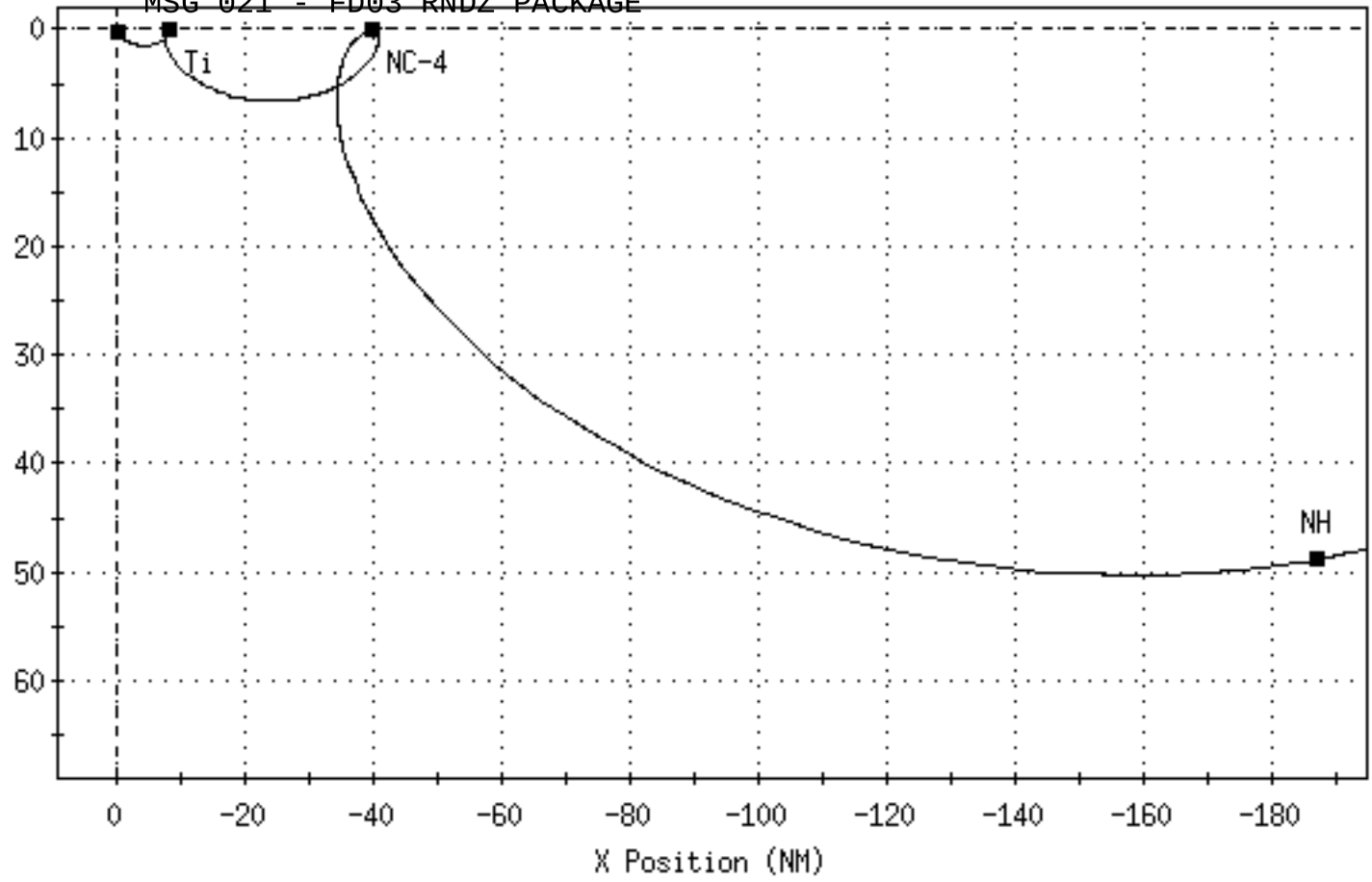
COPIES: 1

	MET	
NH	001:16:29:22.900	
NC4	001:17:19:35.300	
NCC	001:17:54:13.000	
TI	001:18:51:55.000	PET = 0:0 ; SS - 36 MIN
MC1	001:19:11:55.000	
MC2	001:19:41:49.000	ET = 0:0
MC3	001:19:58:49.000	MC2 + 17 MIN
MC4	001:20:08:49.000	MC2 + 27 MIN
DOCK	001:21:30:02.000	

MSG 021 - FD03 RNDZ PACKAGE



MSG 021 - FD03 RNDZ PACKAGE



PRELIMINARY ORBIT MANEUVER PAD FOR NH (RNDZ C/L, pg. 3-2)

OMS BOTH	1	X
L	2	
R	3	
RCS SEL	4	
TV ROLL	5	000
TRIM LOAD P	6	(+)0.7
LY	7	(-)5.7
RY	8	(+)5.7
WT	9	251337
TIG	10	01/16:29:22.9
TGT PEG 7 ΔVX	19	(+)105.7
ΔVY	20	(+)000.0
ΔVZ	21	(+)004.3

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

BURN ATT		
R	24	053
P	25	199
Y	26	318

ΔVTOT		105.8
TGO		01:08
VGO	X	(+)102.1
VGO	Y	(+)000.0
VGO	Z	(+)027.6

	HA	HP
TGT	197	(+)135

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

NOTES

Treat loss of GPC 3 as second gimbal fail on the right.

PRELIMINARY ORBIT MANEUVER PAD FOR NC4 (RNDZ C/L, pg. 3-4)

OMS BOTH	1	X
L	2	
R	3	
RCS SEL	4	
+X		
-X		
MULTI-AXIS		
TV ROLL	5	000
TRIM LOAD P	6	(+)0.7
LY	7	(-)5.7
RY	8	(+)5.7
WT	9	248736
TIG	10	01/17:19:35.3
TGT PEG 7 ΔVX	19	(+)076.4
ΔVY	20	(+)000.0
ΔVZ	21	(+)002.2

BURN ATT		
R	24	323
P	25	359
Y	26	056

ΔVTOT		076.4
TGO		00:48
VGO	X	(+)073.7
VGO	Y	(+)000.0
VGO	Z	(+)019.9

	HA	HP
TGT	197	(+)178

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 ___ MIN.

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

NOTES

Treat loss of GPC 3 as second gimbal fail on the right.

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

OMS BOTH	1	
L	2	X
R	3	
RCS SEL	4	
TV ROLL	5	0 0 0

- +X
- -X
- MULTI-AXIS

TRIM LOAD	P 6	(+) 0 . 7
	LY 7	(+) 4 . 7
	RY 8	(-) 4 . 9
	WT 9	2 4 6 8 7 4
	TIG 10	0 1 / 1 8 : 5 1 : 5 5 . 0
TGT PEG 7	ΔVX 19	(+) 0 0 9 . 1
	ΔVY 20	(-) 0 0 0 . 2
	ΔVZ 21	(+) 0 0 0 . 0

BURN ATT	R 24	3 3 6
	P 25	3 4 6
	Y 26	0 4 6

ΔVTOT		0 0 9 . 1
TGO		0 0 : 1 2
VGO	X	(+) 0 0 8 . 6
VGO	Y	(+) 0 0 1 . 8
VGO	Z	(+) 0 0 2 . 3

	HA	HP
TGT	1 9 7	(+) 1 8 3

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)		0 1 / 2 0 : 2 3 : 3 6 . 0

NOTES

LIOH CHANGEOUT

FLIGHT DAY 3 DOCKING ORBITER WITH ISS

(7 Crewmembers/Single Shift/FD1-17)

FLIGHT DAY	POS A	POS B	CK CMPLT
LAUNCH	1	2	
PRE FD1	"	"	
POST FD2	3	4	
PRE FD2	5	6*	
POST FD3	“	7	Docking
PRE FD3	“	“	Russian LiOH
POST FD4	"	"	
PRE FD4	8	“	
POST FD5	"	"	
PRE FD5	“	9	
POST FD6	"	"	
PRE FD6	“	“	Russian LiOH
POST FD7	"	"	
PRE FD7	10	“	
POST FD8	"	"	
PRE FD8	“	“	Russian LiOH
POST FD9	"	"	
PRE FD9	“	STS-123 22	
POST FD10	"	"	
MID FD10	11	12	Hatch Close
PRE FD10	“	“	
POST FD11	13	14	
PRE FD11	15	“	
POST FD12	16	17	
PRE FD12	18*	19*	
POST FD13	20	21	
PRE FD13	22	"	
POST FD14	23	24	EOM
PRE FD14	25*	26*	
POST FD15	27	28	EOM+1
PRE FD15	29	“	
POST FD 16	30	31	EOM+2
PRE FD16	32*	33*	
POST FD17	34	35	EOM+3

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

NOTE

This card is specifically used for the STS-119 mission with the orbiter conducting single shift operations with a crew size of 7. This changeout scheme reflects FD3 docking with ISS, Vozdukh, and dual bed CDRA operation.

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

LIOH CANISTER STOWAGE LOCATIONS

Ascent LiOH Locations

Orbiter:

MD52M: (LiOH):	Cans 1-31*
MDDK CEILING STBD 2:	Cans 32-39

ISS:

LAB1O3:	STS-123 22

*2 LiOH cans installed in LiOH slots A and B

Thanks for the information called down on the AVIU s/n 1031. We are currently not planning on any additional troubleshooting on this failed unit. Please stow this AVIU in the stow and go bag, additional testing will be performed on the ground.

With the failed AVIU, we lose FD camcorder function and recommend placing the MD AVIU on the FD to regain this. Since the Camcorder Battery Charger is nominally on the MD, it will now have to be moved to the FD. We recommend plugging the Camcorder Battery Charger into either the FD AVIU or one of the WVS AVIUs.

Please confirm that this plan is agreeable.

Note that if you choose to use one of the WVS AVIUs you will need to remove the Kapton tape to access the PWR SELECT switch and the J5 port.

Also note that power is routed to either the J5 <u>or</u> the J3 port via the PWR SELECT switch; when you are charging camcorder batteries (PWR SELECT – HI) you will lose the function through J3 (either FD camcorder lost for FD AVIU or V10 feed lost for WVS AVIU). Since the WVS AVIUs are mostly unused this may be a preferable plug-in option for the Camcorder Battery Charger.

For Focused Inspection/Late Inspection you will have to reconfigure the MD AVIU back to the middeck as the LCS interface for the laptop. We will remind you of this when applicable.

Reference H/W SUMMARY <u>PHOTO/TV</u>, 1-4 as needed.

STS-119/15A Exercise Constraints

FD	Event	No ARED	No Un-Isolated Exercise	No Exercise	Notes
FD03	*RNDZ/Dock (No Exercise Constraints)*				
FD04	SSRMS-GRPL/UNBTH-S6				SSRMS operations with payloads prohibit ARED Exercise per CHIT 6693
	SSRMS-S6 H/O-MNVR				SSRMS operations with payloads prohibit ARED Exercise per CHIT 6693
	MNVR PGPL & GRAPPLE SSRMS-S6-RELEASE (SRMS/SSRMS Grappled to S6)				No Exercise when both arms are double grappled.
	MT-TRANSLATE (MT Translate from WS6 to WS1/ground)				No Orbiter/Velo Ergometer, IRED, HC1
	MNVR S6 TO H/O (SRMS MNVR to S6 H/O Position)				No Orbiter/Velo Ergometer, IRED, HC1
	SSRMS-S6-GRAPPLE (SSRMS/SRMS Grappled to S6)				No Exercise when both arms are double grappled.
	SSRMS-OVER PARK-MNVR				SSRMS operations with payloads prohibit ARED Exercise per CHIT 6693
FD05	*EVA 1*				
	S6-MNVR-TO PREINSTLL				SSRMS operations with payloads prohibit ARED Exercise per CHIT 6693
	USTO Maneuver TEA				ISS maneuvers using USTO prohibits ARED per CHIT 6693 & Orbiter Ergometer exercise per FR 15A_C2-75 Docked Exercise Constraints
	HYG BRK/PREBREATHE				Spatial Constraint, No ARED
	CAMPOUT-EVA-PREP				Spatial Constraint, No ARED
	EMU-PURGE				Spatial Constraint, No ARED
	EMU-PREBREATHE				Spatial Constraint, No ARED
	C_LK-DPRS				Spatial Constraint, No ARED
	USTO Maneuver to S6				ISS maneuvers using USTO prohibits ARED per CHIT 6693 & Orbiter Ergometer exercise per FR 15A_C2-75 Docked Exercise Constraints
	S6-ATTACH (S6 Install)				

STS-119/15A Exercise Constraints

FD	Event	No ARED	No Un-Isolated Exercise	No Exercise	Notes
	EVA Activities Outboard of the SARJ. CONNECT S5 TO S6 UMB PVR CINCH/WINCH RLS RLS SABB RESTRAINTS KEEL PIN ROTATE BGA RELEASE UNSTOW SABBS SSU/ECU COVER RMVL				No Orbiter Ergometer, IRED, HC1
	After PVR CINCH/WINCH and Prior to Full Deploy				No Orbiter Ergometer/Velo Ergometer, IRED, HC1
	PVR DEPLOY				
	MT-TRANSLATE (MT Translate from WS1 to WS4/ground)				No Orbiter Ergometer/Velo Ergometer, IRED, HC1
	PPS-3B BRS PIN-RLS PPS-1B BRS PIN-RLS BRS Pin Release (ground)				

STS-119/15A Exercise Constraints

FD	Event	No ARED	No Un-Isolated Exercise	No Exercise	Notes
FD06	*Focused Inspection*				
	SSRMS-OBSS-PREGRAPLE SSRMS-OBSS-GRAP SSRMS-OBSS-UNBERTH SSRMS-OBSS H/O-MNVR				SSRMS operations with payloads prohibit ARED Exercise per CHIT 6693
	RMS GRAPPLE OBSS H/O SSRMS-OBSS-RLS (SSRMS/SRMS Grappled to OBSS)				No Exercise when both arms are double grappled.
	FOCUSED INSPECTION				No Exercise during LCS Imaging
	SSRMS-OBSS-PREGRAPLE				SSRMS operations with payloads prohibit ARED Exercise per CHIT 6693
	SSRMS-OBSS-GRAP SRMS UNGRPL OBSS				No Exercise when both arms are double grappled. SRMS/SSRMS Grappled to OBSS
	SSRMS-OBSS-BERTH SSRMS-OBSS-RLS				
	MT-TRANSLATE (MT Translate from WS4 to WS1/ground)				No Orbiter/Velo Ergometer, IRED, HC1
FD07	*EVA 2*				
	HYG BRK/PREBREATHE				Spatial Constraint, No ARED
	CAMPOUT-EVA-PREP				Spatial Constraint, No ARED
	EMU-PURGE				Spatial Constraint, No ARED
	EMU-PREBREATHE				Spatial Constraint, No ARED
	C_LK-DPRS				Spatial Constraint, No ARED
	P6 BATTERY R&R PREP				No Orbiter Ergometer, IRED, HC1
	P3 Nadir UCCAS DEPLOY				
	S1/P1 RAD IMAGING S1/P1 Radiator Imaging				No Orbiter Ergometer, IRED, HC1
	S3 OUTBRD/ZENITH PAS S3 Outboard/Zenith PAS Deploy				
FD08	*SAW Deploy*				
	PPS-1B-DPLY-1BAY (ground)				
	PPS-3B-DPLY-1BAY (ground)				
	PPS-1B MAST 15.5-DPL PPS-1B MAST 31.5-DPL PPS-3B MAST 15.5-DPL				

STS-119/15A Exercise Constraints

FD	Event	No ARED	No Un-Isolated Exercise	No Exercise	Notes
	PPS-3B MAST 31.5-DPL SAW Deploy (1B and 3B)				
	USTO Maneuver TEA				ISS maneuvers using USTO prohibits ARED per CHIT 6693 & Orbiter Ergometer exercise per FR 15A_C2-75 Docked Exercise Constraints
	MT-TRANSLATE MT Translate from WS1 to WS4 (ground)				No Orbiter/Velo Ergometer, IRED, HC1

STS-119/15A Exercise Constraints

FD	Event	No ARED	No Un-Isolated Exercise	No Exercise	Notes
FD09	*EVA 3*				
	HYG BRK/PREBREATHE				Spatial Constraint, No ARED
	CAMPOUT-EVA-PREP				Spatial Constraint, No ARED
	EMU-PURGE				Spatial Constraint, No ARED
	EMU-PREBREATHE				Spatial Constraint, No ARED
	C_LK-DPRS				Spatial Constraint, No ARED
	LEE B Repair				No Orbiter Ergometer, IRED, HC1
FD10	*Off –Duty/ Hatch Close*				
	Reboost (if performed, using PRCS)				No Orbiter Ergometer, ISS Hardmounted Exercise Equipment. Orbiter PRCS not analyzed during ARED exercise per CHIT 6693
FD11	*Undock (No Exercise Constraints)*				