STS-127 / 2JA

FD 03 Execute Package

MSG	Page(s)	Title
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015	40 - 45	FD03 RNDZ Package **(pdf)**
016	46	Updated Reboost Procedure **(pdf)**

Approved by FAO: *F. Reynolds*

Last Updated: Jul 17 2009 10:21AM GMT
JEDI *(**J**oint **E**xecute package **D**evelopment and **I**ntegration), v2.04.0003*

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MSG INDEX

MSG NO.	TITLE
011A	FD3 Flight Plan Revision
012	FD3 Mission Summary
013A	FD3 Transfer Message
014A	2J/A FD03 SODF Transfer
015	FD03 RNDZ Package
016	Updated Reboost Procedure

1. POST SLEEP CRYO CONFIG

To be in the best config for cryo destrat, please wait to perform today's post sleep cryo config until after the MNVR to the Simo Dump Att (MET 1/13:25).
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. POST-DOCKING CONJUNCTION

We are currently tracking a conjunction with Object 84180. The Time of Closest Approach (TCA) is ~2/11:08. We have planned a Config 3 reboost at 2/02:27 to avoid this object if necessary. The plan is to assess the miss distances and probability of collision after tracking out the docking dispersions to determine whether or not we will need to execute the reboost. We will utilize MSG 016 instead of the ORB OPS Checklist procedure.

3. SIMO DUMP DETAILS

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 ~26 minutes. Dump the waste tank to 5%.

Supply dump valve open time will be 30 minutes.

4. SHUTTLE CONDENSATE COLLECTION DETAILS

Perform SETUP of SHUTTLE CONDENSATE COLLECTION (ORB OPS, ECLS) p. 5-40. The Y-Y Condensate Hose is located in MF57C. The Condensate CWCs are located in the M-02 Bag S/N 1026 located at NOD2O2. Use either of the CWCs S/N 1054 or 1070 and report CWC serial number to MCC.

5. EVA BATTERY CHARGING

Dave, regarding your observations on battery current during EMU battery charging at the end of EMU C/O on FD02:

EMU batteries 2078 and 2079 are from the newest lot of high-capacity batteries. The first few cycles on these batteries differ from the older ones; however, the data observed during EMU Checkout was as expected. This was observed on STS-125 batteries as well – and those batteries performed nominally. Post flight we will need to update our EMU Checkout procedures so the battery charging criteria captures both the new and old batteries.

6. REPLACE PAGES 2-6 THROUGH 2-9 AND 3-20 THROUGH 3-29.

REPLANNED

FD03

GMT 07/17/09 (198) — 07/17/09 05:10:43

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

^NH ^NC4 ^T1 ^RPM

STS-127	CDR POLANSKY	SLEEP	POST SLEEP	MNVR^	POST SLEEP	IMU	GRPB	PWRUP	ISS RNDZ OPS	APPROACH W/RPM	DOCKING*	MNVR -XLV	GRPB	PWRDN		HATCH OPEN	HELLO	SFTY BRIEF		P/B 02 S/U
STS-127	PLT HURLEY	SLEEP	POST SLEEP	ROMSS@*	GRPB	PWRUP	ISS RNDZ OPS	APPROACH W/RPM	DOCKING*	SSPTS VERIF	GRPB	PWRDN	SSV-2		HELLO/O	HELLO	SFTY BRIEF	MNVR#	OPCU%	EXERCISE	SODF%
STS-127	MS1 CASSIDY	SLEEP	SLVA	LOG	POST SLEEP	OOCA%	OO2-I	PSTSLP	O2-T	ISS RNDZ OPS	APPROACH W/RPM	DOCKING*	HATCH LEAK CK	ODS PREP FOR INGR	HATCH OPEN	HELLO	SFTY BRIEF	PSTVOU5P	EVA 1 TOOL CONFG	EXER
STS-127	MS2 PAYETTE	SLEEP	POST SLEEP	SIMO INIT	POST SLEEP	SSV-3	SIMO TERM	ISS RNDZ OPS	APPROACH W/RPM	DOCKING*	POST RNDZ PGSC CONFG	WLCEIS^	MCSU*		HELLO	SFTY BRIEF	MNVR#		FNL ACT	POLYBK	PCS XFR &SU
STS-127	MS3 MARSHBURN	SLEEP	SLVA	LOG	POST SLEEP	XFR UPDAT	CNFG*	DIDB FILL	CNFG^	EXERCISE	APPROACH W/RPM		PSTVOU4P		P/TV 04 OPS INGR/EGR	HELLO	SFTY BRIEF	EVA XFER TO ISS	EVA1^		
STS-127	MS4 WOLF	SLEEP	SLVA	POST SLEEP	EMU RMVL	EXERCISE	P/TVO2 DOCK S/U	P/TVO2 DOCK OPS				HATCH LEAK CK	ODS PREP FOR INGR	ICOM		HELLO	SFTY BRIEF	EVA XFER TO ISS	REBA*	REBA C/O	EVA1^
UP	FE-2 EXP20 KOPRA	SLEEP	POST SLEEP	EMU RMVL	EXERCISE	APPROACH W/RPM										HELLO	SFTY BRIEF	TK IELK RMV	REBA*	REBA C/O	EVA1^

DAY/NIGHT

ORBIT: 25 26 27 28 29 30 31 32 33

TDRS: W E Z

ORB ATT: INTRL — DUMP — RNDZ — DCK — BIAS -XLV -ZVV

SSRMS POS: NODE2 PDGF

NOTES:
^DUMP @REG RCNFG %RATE DCNFG *GALLEY OVERNIGHT
*POD HEATER RCNFG ^GALLEY MORNING
*FILTER CK %ACT *INSTALL %XFER
^PST DOCK RCNFG #JEF UNBRTH CLR
^TOOL CNFG

*1/19:52

REPLANNED

FD03

GMT 07/17/09 (198) — 07/17/09 05:10:43

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

ISS — TDRS AVAIL

DN	FE-2 WAKATA	SLEEP; POST SLEEP; DPC; ♣; PW; VELO; PCS; MIDDAY MEAL; TMRSU; ACT; DOCK; VIDEO; SDSU; HATCH LEAK CK ISS; HATCH OPEN; HELLO; SFTY BRIEF; SSCR; VID; IELK GTHR STOW; P/B 02 S/U
EXP 19	ISS CDR PADALKA	SLEEP; POST SLEEP; DPC; PW; VELO; СВО Э ЕДВ FILL1; СОЖ MNT; P/TV RPM VRFY S/U; COMM; MIDDAY MEAL; PREP; 4OOMMO; PHOTO; PMA2 CFG; EXERCISE TVIS; HATCH OPEN; HELLO; SFTY BRIEF; TK 18S IELK REPL
EXP 19	FE-1 BARRATT	SLEEP; IRED; DPC; PW; POST SLEEP; TVIS; P/TV RPM VRFY S/U; MIDDAY MEAL; PREP; 8OOMMO; PHOTO; RPMDL; CAMD; EVA CAMERA CNFG; HATCH OPEN; HELLO; SFTY BRIEF; EVA XFER TO ISS; REBA*; REBA C/O; EVA1^
EXP 20	FE-3 ROMANENKO	SLEEP; МБИ21; POST SLEEP; DPC; МБИ12; PW; РБО 3-2 FE-MSR; ГКМ EQUIP SEARCH; VELO; MIDDAY MEAL; РОДНИК PUMP; СОГС CMS ANLZ; ГКМ EQUIP SEARCH; AKIM; SMPL; HELLO; SFTY BRIEF; TVIS
EXP 20	FE-4 THIRSK	SLEEP; POST SLEEP; DPC; RED CORD REPLACE; RED CALIBRATE; CONDS; INIT; FSL LAPTOP C/O; CONDS; CONDS; MIDDAY MEAL; FCE; LOCK; GSC; GSC OPS; IRED; HELLO; SFTY BRIEF; TVIS; GSC
EXP 20	FE-5 DE WINNE	SLEEP; POST SLEEP; DPC; PW; GLACIER R&R OBT; EXERCISE TVIS; MIDDAY MEAL; HAMS/U; HAM; PMA2 CFG; HATCH LEAK CK ISS; ICOM; HELLO; SFTY BRIEF; IRED; PCS

DOCKING*

DAY/NIGHT	
ORBIT	25; 26; 27; 28; 29; 30; 31; 32; 33
SSRMS POS	NODE2 PDGF
NOTES	♣JPM/LAB-SHUTTER-CL; *1/19:52; *INSTALL

4

FD03

07/17/09 05:10:43

GMT 07/17/09 (198)

MET Day 002

		002/00	23 01	07/18 02	01 03	02 04	03 05	04 06	05 07	06 08	07 09	08 10	09 11	10 12
STS-127	CDR POLANSKY	P/B 02 S/U	COND CWC S/U	EVA 1 PROC RVW	MUS	I CONCT* / H/O R #	^RBST RBST CFG3	MNVR^	H/O	PMC A/G	PRE SLEEP	SLEEP		
STS-127	PLT HURLEY	SODF%		EVA 1 PROC RVW	MUS	PRE SLEEP						SLEEP		
STS-127	MS1 CASSIDY	EXER		EVA 1 PROC RVW		PRE SLEEP						SLEEP		
STS-127	MS2 PAYETTE	♣		EVA 1 PROC RVW	MUS	PRE SLEEP						SLEEP		
STS-127	MS3 MARSHBURN	EVA1^	XFER TAG	EVA 1 PROC RVW	MUS	PRE SLEEP BRIEF	PRE SLEEP					SLEEP		
STS-127	MS4 WOLF	EVA1^	E-LK PREP	EVA 1 PROC RVW	PRE SLEEP		MASK PB/TOOL CONFIG	PRE SLEEP				SLEEP ISS A/L CAMPOUT @ 10.2 psi		
UP	FE-2 EXP20 KOPRA	EVA1^	E-LK PREP	SOKOL LK CK / EVA 1 PROC RVW	DPC	PMC	PRE SLEEP	MASK PB/TOOL CONFIG (10.2 DPRS)	PRE SLEEP			SLEEP		

DAY/NIGHT											
ORBIT		33	34	35	36	37	38	39	40	41	
TDRS	W										
	E										
	Z										
ORB ATT		BIAS -XLV -ZVV	RBST	BIAS -XLV -ZVV							
SSRMS POS		NODE2 PDGF									

NOTES

♣PCS XFER &SU
%XFER
^TOOL CNFG
#REBOOST
^TEA
*L OMS to RCS

REPLANNED

07/17/09 05:10:43

FD03

GMT 07/17/09 (198)

MET Day 002

ISS	TDRS AVAIL	002/00	23 01	07/18 02	01 03	02 04	03 05	04 06	05 07	06 08	07 09	08 10	09 11	10 12
DN	FE-2 WAKATA	P/B 02 S/U	XFER TAG	EVA 1 PROC RVW	DPC	PW	IRED	PRE SLEEP	SLEEP					
EXP 19	ISS CDR PADALKA		SOKOL LK CK	EVA 1 PROC RVW	DPC	PW	PRE SLEEP	SLEEP						
EXP 19	FE-1 BARRATT	EVA1^	E-LK PREP	EVA 1 PROC RVW	DPC	PW	PRE SLEEP	SLEEP						
EXP 20	FE-3 ROMANENKO	TVIS	TVIS HYG	ИП-1	КПТ-2	PW	DPC	PW	PRE SLEEP	SLEEP				
EXP 20	FE-4 THIRSK		EVA 1 PROC RVW	DPC	PW	HAM	PRE SLEEP	SLEEP						
EXP 20	FE-5 DE WINNE	PCS	EVA 1 PROC RVW	DPC	EXDL	PW	PRE SLEEP	SLEEP						
DAY/NIGHT														
ORBIT		33	34	35	36	37	38	39	40	41				
SSRMS POS		NODE2 PDGF												
NOTES														

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STS-127 FD (03)

GMT Date 07/17 (198) | W | TDRSE | Z | D/N | DORB | ORB | MET Day 001 | STS ATT | CDR POLANSKY | PLT HURLEY | MS2 PAYETTE | NOTES

12:00 — 13:00 — 14:00 — 15:00 — 16:00

FD03 EZ ACTIVITIES:
TEPC (ORB OPS, CREW SYS)
CHECK STATUS
√OCAC FILTER
HARD REBOOT ALL PGSCs EXCEPT:
STS-7(WLES),STS-6(RPOP2),
& OCA ROUTER.

SLEEP | SLEEP | SLEEP

INTRL

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

MNVR -ZLV +YVV (DUMP)
TG=2 BV=3 OM=270
A/AUTO/VERN Init TRK
POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

DUMP

IMU STAR OF OPPTY ALIGN (ORB OPS, GNC)

RCS REGULATOR RCNFG (ORB OPS, RCS)

OMS POD HEATER RECONFIG [A]

SUPPLY/WASTE WATER DUMP (ORB OPS, ECLS)
INIT SUPPLY/WASTE DUMP
Ref. MSG 011, item 3

PRIORITY PWRUP GRP B (ORB PKT, PRIOR PWRDN)
Steps 12 (IMU3),10,9,6(Triple G2), & 5

PRIORITY PWRUP GRP B (ORB PKT, PRIOR PWRDN)
Steps 12 (IMU3),10,9,6(Triple G2), & 5

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

RENDEZVOUS TIMELINE (RNDZ, RENDEZVOUS T/L)

RENDEZVOUS TIMELINE (RNDZ, RENDEZVOUS T/L)

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

SSV OUTRATE - 3 — TFL 192

SUPPLY/WASTE WATER DUMP (ORB OPS, ECLS)
TERM SUPPLY/WASTE DUMP

< NH TIG (14:57)

RNDZ

RENDEZVOUS TIMELINE (RNDZ, RENDEZVOUS T/L)

TRANSITION TO RNDZ C/L AT MET 01/14:25

RNDZ PET 00:00 (Ti) AT MET 1/17:14

< NC4 TIG (15:42)

STS-127 FD (03)

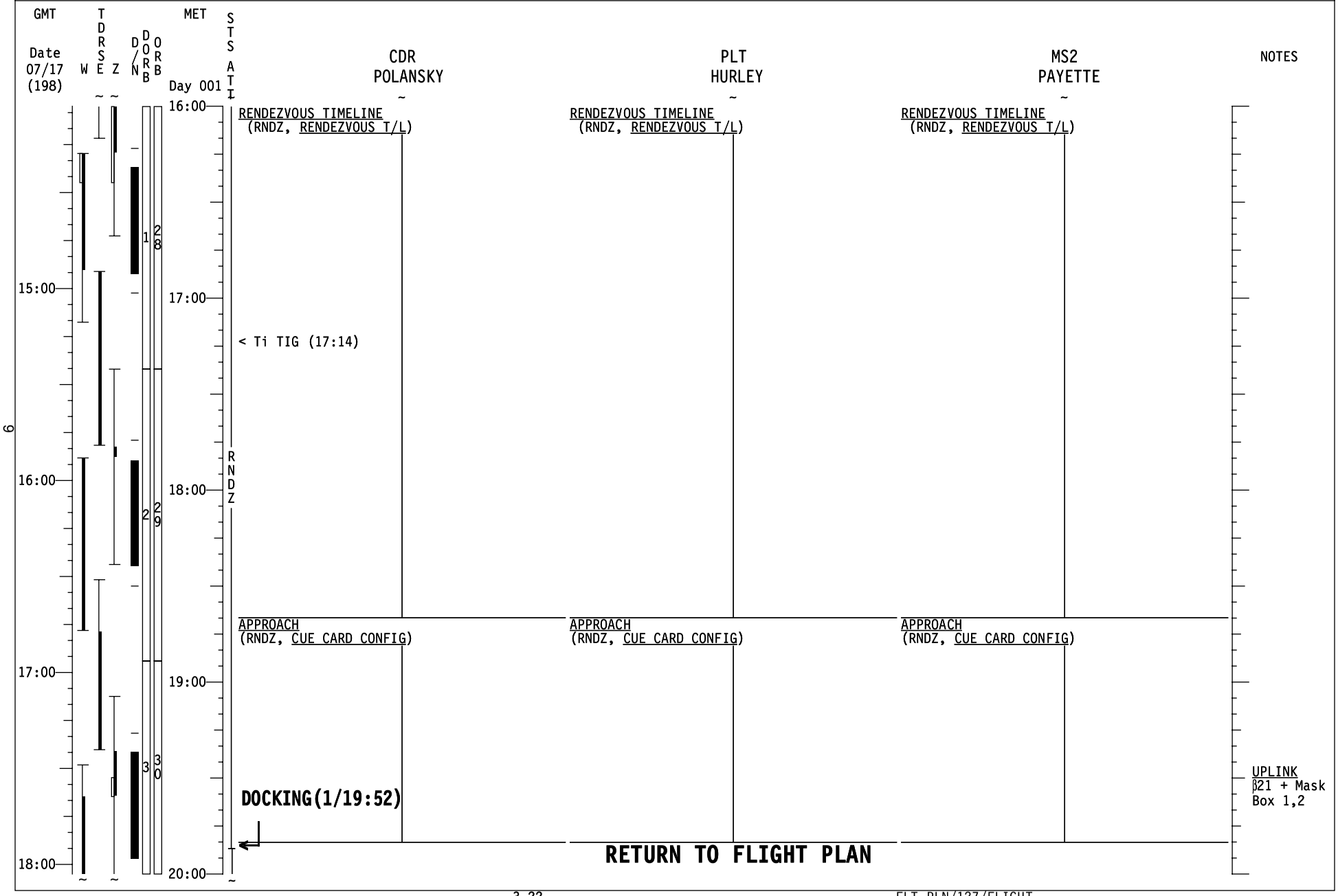
GMT Date 07/17 (198) | W | TDRSE | Z | D/N | DORB | ORB | MET Day 001 | STS ATT

MS1 CASSIDY	MS3 MARSHBURN	MS4 WOLF	FE-2 EXP20 KOPRA	NOTES
SLEEP	SLEEP	SLEEP	SLEEP	
LIQUID SLVA CLCT (ORB OPS, SDBI)	LIQUID SLVA CLCT (ORB OPS, SDBI)	LIQUID SLVA CLCT (ORB OPS, SDBI)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
SLEEP LOGBOOK (ORB OPS, SDBI)	SLEEP LOGBOOK (ORB OPS, SDBI)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)		
POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)			
RECONFIG OCA DWNLK RATE B				
O2 REPRESS INIT OCAC PWR - OFF C5 DIRECT O2 vlv - OP				
POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)				
ON MCC GO: O2 REPRESS TERM C5 DIRECT O2 vlv - CL OCAC PWR - ON	DAILY TRANSFER LIST UPDATE Ref. Transfer List & MSG 013			
RENDEZVOUS TIMELINE (RNDZ, RENDEZVOUS T/L)				

B √MCC prior to configuring:
L10 MUX/VTR/CC PWR - (LED ON)
RECONFIGURE OCA D/L RATE (Ch. 2)
(ORB OPS, PGSC)
Part D then A, omit Step 4
Notify MCC when complete.

Time scale: 11:00, 12:00, 13:00, 14:00; 12:00, 13:00, 14:00, 15:00, 16:00

STS-127 FD (03)


GMT
Date 07/17 (198)
W
TDRSE
Z
D/N
DORB
ORB
MET
Day 001
STS ATT
CDR POLANSKY
PLT HURLEY
MS2 PAYETTE
NOTES
16:00
17:00
18:00
19:00
20:00
15:00
16:00
17:00
18:00
RENDEZVOUS TIMELINE
(RNDZ, RENDEZVOUS T/L)
< Ti TIG (17:14)
RNDZ
APPROACH
(RNDZ, CUE CARD CONFIG)
DOCKING(1/19:52)
RETURN TO FLIGHT PLAN
UPLINK
β21 + Mask
Box 1,2

STS-127 FD (03)

GMT Date 07/17 (198) | W | TDRSE | Z | D/N | DORB | ORB | MET Day 001 | STS ATT

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

15:00 16:00 17:00 18:00

1 2 8 2 2 9 3 3 0

RNDZ

MS1 CASSIDY

RENDEZVOUS TIMELINE
(RNDZ, RENDEZVOUS T/L)

APPROACH
(RNDZ, CUE CARD CONFIG)

MS3 MARSHBURN

DAILY TRANSFER LIST UPDATE
Ref. Transfer List & MSG 013

GALLEY OVERNIGHT CONFIG
(ORB OPS, ECLS)

DIDB FILL
Use DIDBs from Bag A
Fill 10 DIDBs from Galley
Remove GAS
When filled, stow in crew specific ECOKs
Dispose Fill Tool in Wet Trash

√ All EVA drink bags fills complete, then:

GALLEY MORNING CONFIG
(ORB OPS, ECLS)

EXERCISE

APPROACH
(RNDZ, CUE CARD CONFIG)

MS4 WOLF

POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

EMU REMOVAL
Disconnect EMUs from AAPs & stow in MDDK

EXERCISE

P/TVO2 DOCK
(PHOTO/TV, SCENES) SETUP

P/TVO2 DOCK
(PHOTO/TV, SCENES) OPS

FE-2 EXP20 KOPRA

EMU REMOVAL
Disconnect EMUs from AAPs & stow in MDDK

EXERCISE

APPROACH
(RNDZ, CUE CARD CONFIG)

NOTES

RETURN TO FLIGHT PLAN

10

STS-127 FD (03)

GMT Date 07/17 (198) | W | TDRS E | Z | D/N | DORB | ORB | MET Day 001 | STS ATT DCK BIAS -XLV -ZVV

CDR POLANSKY

20:00 — MNVR BIAS -XLV -ZVV
√DAP A12/LVLH/VERN
TG=2 BV=5 P=161 Y=359 OM=180
Init TRK, DAP:FREE > 2 sec, then
DAP:A12/AUTO/VERN
PRIORITY PWRDN GRP B (ORB PKT,PRIOR PWRDN)
Steps 6 (C) & 12 (IMU3)
O6 S TRK PWR -Z - OFF

21:00 — JOINT OPS: 2.104 HATCH OPENING AND STS/ISS DUCT INSTALLATION

WELCOME

SAFETY BRIEFING

23:00 — JOINT OPS: 3.120 PREBREATHE USING SHUTTLE O2 SETUP Steps 2-6
Ground will perform Steps 2.4 & 6.14

PLT HURLEY

SSPTS ODS CONNECTOR VERIF
A15 ODS MATE X1,X2 (two) - ON
√MCC then - OFF

PRIORITY PWRDN GRP B (ORB PKT,PRIOR PWRDN)
Steps 6 (C) & 12 (IMU3)
O6 S TRK PWR -Z - OFF

SSV OUTRATE - 2

C Single G2 - after mnvr cmplt
Step 3: √MCC or pause ~ 3 min (DAP settling)
DAP: as req'd

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)

When ISS is GO for attitude cntrl,DAP:FREE

WELCOME

SAFETY BRIEFING

JEF UNBERTH CLEAR (PDRS, JEF NOMINAL)
SSPTS OPCU ACT D

EXERCISE

SODF TRANSFER
Ref. Transfer List: Resupply item 35
& MSG 014

MS2 PAYETTE

POST RNDZ PGSC CONFIG
Configure PGSCs per Usage Chart

WLES DOCK/UNDOCK RECOVERY (ORB OPS, WLES)
L17 Check MCIU filter screen

WELCOME

SAFETY BRIEFING

JEF UNBERTH CLEAR (PDRS, JEF NOMINAL)

J-ROBO: 1.101 JEMRMS FINAL ACTIVATION
Steps 1-7

PLAYBACK (DIGITAL)
(PHOTO/TV, CUE CARD)

KU TDRW (23:14-23:44)

JOINT OPS: 6.107 PCS SETUP - SHUTTLE
Ref. Transfer List,
Resupply items 50, 50.1, 50.2

NOTES

UPLINK
β21 + Mask
Box 2,4
TFL 184

STS-127 FD (03)

GMT Date 07/17 (198) | W | T D R S E | Z | D/N | D O R B | O R B | MET Day 001 | STS ATT | MS1 CASSIDY | MS3 MARSHBURN | MS4 WOLF | FE-2 EXP20 KOPRA | NOTES

STS ATT: IDCK+ / BIAS-XLV-ZVV

20:00

- POST DOCKING HATCH LEAK CHECK (RNDZ, APDS) — MS1
- P/TV04 INGRESS/EGRESS (PHOTO/TV, SCENES) SETUP — MS3
- POST DOCKING HATCH LEAK CHECK (RNDZ, APDS) — MS4

21:00

- AIRLOCK PREP FOR INGRESS - AIRLOCK FAN ACTIVE (RNDZ, APDS) — MS1
- P/TV04 INGRESS/EGRESS (PHOTO/TV, SCENES) OPS — MS3
- AIRLOCK PREP FOR INGRESS - AIRLOCK FAN ACTIVE (RNDZ, APDS) — MS4
- JOINT OPS: 2.104 HATCH OPENING AND STS/ISS DUCT INSTALLATION — MS1
- JOINT OPS: 6.109 H/L ICOM AUDIO Steps 1,5 & 6 — MS4

22:00

- WELCOME — MS1, MS3, MS4, FE-2
- SAFETY BRIEFING — MS1, MS3, MS4, FE-2
- P/TV05 ISS INTERNAL OPS (HC) (PHOTO/TV, SCENES) SETUP — MS1
- EVA TRANSFER TO ISS (EVA, AIRLOCK CONFIG) Ref: EVA SYS: 1.515 EMU METOX /LIOH/BATTERY REPLACEMENT Ref. Transfer List, Resupply items 1-8 — MS3
- EVA TRANSFER TO ISS (EVA, AIRLOCK CONFIG) Ref: EVA SYS: 1.515 EMU METOX /LIOH/BATTERY REPLACEMENT Ref. Transfer List, Resupply items 1-8 — MS4
- TK IELK REMOVAL Ref. Transfer List, Resupply items 16,17,18 — FE-2
- EVA 1 TOOL CONFIG (EVA, TIMELINES) EVA TOOLS MANAGEMENT (EVA, TOOLS AND STOWAGE) Ref. MSG 005, lines 3-4 — MS1
- EVA 1 TOOL CONFIG (EVA, TIMELINES) EVA TOOLS MANAGEMENT (EVA, TOOLS AND STOWAGE) Ref. MSG 005, lines 3-4 — MS3
- EVA SYS: 1.307 REBA INSTL/RMV Install in EMU 3003 Ref: 127 EMU CTCC — MS4, FE-2
- EVA SYS: 1.403 REBA POWERED HARDWARE C/O Perform on EMU 3003 & 3005 — MS4, FE-2
- EVA 1 TOOL CONFIG (EVA, TIMELINES) EVA TOOLS MANAGEMENT (EVA, TOOLS AND STOWAGE) Ref. MSG 005, lines 3-4 — MS4, FE-2

23:00

00:00

- EXERCISE — MS1

W: ~ ~ ~

STS-127 FD (03)

GMT Date 07/17 (198) | W | TDRSE | Z | D/N | DORB | ORB | MET Day 002 | STS ATT

CDR POLANSKY	PLT HURLEY	MS2 PAYETTE	NOTES
JOINT OPS: 3.120 PREBREATHE USING SHUTTLE O2 SETUP Steps 2-6 Ground will perform Steps 2.4 & 6.14	SODF TRANSFER Ref. Transfer List: Resupply item 35 & MSG 014	JOINT OPS: 6.107 PCS SETUP - SHUTTLE Ref. Transfer List, Resupply items 50, 50.1, 50.2	
SHUTTLE CONDENSATE COLLECTION (ORB OPS, ECLS) SETUP Ref. MSG 011, item 4			
EVA 1 PROCEDURE REVIEW Ref: 127 EVA 1 BRIEFING CARD (EVA, TIMELINES)	EVA 1 PROCEDURE REVIEW Ref: 127 EVA 1 BRIEFING CARD (EVA, TIMELINES)	EVA 1 PROCEDURE REVIEW Ref: 127 EVA 1 BRIEFING CARD (EVA, TIMELINES)	
LOW BACK PAIN QUEST (ASSY OPS, PAYLOADS)	LOW BACK PAIN QUEST (ASSY OPS, PAYLOADS)	LOW BACK PAIN QUEST (ASSY OPS, PAYLOADS)	
I'CNCT: L OMS TO RCS (OPCL, RCS)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
H/O ATTITUDE CONTROL CMG TA TO ORBITER E			
MNVR (TRK) BIAS -XLV -ZVV TG=2 BV=5 P=176 Y=0 OM=178 A12/AUTO/VERN Init TRK			
AUTO REBOOST CONFIG 3 Ref. MSG 016			
MNVR (TRK) BIAS -XLV -ZVV TG=2 BV=5 P=161 Y=359 OM=180 A12/AUTO/VERN Init TRK When in attitude and ISS is GO for attitude cntrl,DAP:FREE			
PRIVATE MEDICAL CONFERENCE L9 PAYLOAD STATION A/G(two) -OFF Perform via A/G 2			
PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)			

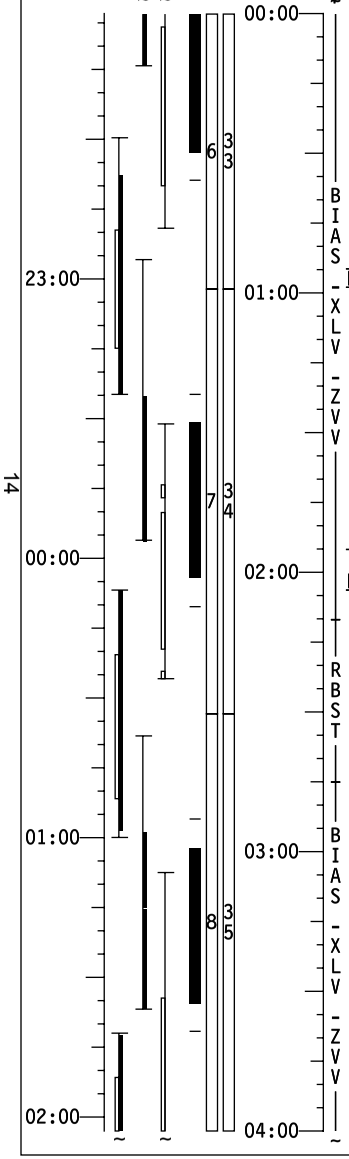
E √A12/FREE/VERN
When ISS in Free Drift, DAP:LVLH,
When jet activity stopped for > 5 sec,
DAP:FREE > 2 sec, Then DAP:AUTO

Time scale: 23:00, 00:00, 01:00, 02:00 (GMT); 00:00, 01:00, 02:00, 03:00, 04:00 (MET)

13

STS-127 FD (03)

GMT Date 07/17 (198) | W | TDRSE | Z | D/N | DORB | ORB | MET Day 002 | STS ATT



MS1 CASSIDY

EXERCISE

EVA 1 PROCEDURE REVIEW
Ref: 127 EVA 1 BRIEFING CARD
(EVA, TIMELINES)

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

MS3 MARSHBURN

EVA 1 TOOL CONFIG
(EVA, TIMELINES)
EVA TOOLS MANAGEMENT
(EVA, TOOLS AND STOWAGE)
Ref. MSG 005, lines 3-4

TRANSFER TAGUP
Coordinate with xfer counterpart

EVA 1 PROCEDURE REVIEW
Ref: 127 EVA 1 BRIEFING CARD
(EVA, TIMELINES)

LOW BACK PAIN QUEST (ASSY OPS,P/L)
PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

TRANSFER BRIEF
Call down status to MCC
PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

MS4 WOLF

EVA 1 TOOL CONFIG
(EVA, TIMELINES)
EVA TOOLS MANAGEMENT
(EVA, TOOLS AND STOWAGE)
Ref. MSG 005, lines 3-4
EVA SYS: 1.305 EQUIPMENT LK PREP
Steps 1-3 not req'd.
In Step 27, use Vacuum Manometer s/n 05. Ref: 127 EMU CTCC

EVA 1 PROCEDURE REVIEW
Ref: 127 EVA 1 BRIEFING CARD
(EVA, TIMELINES)

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

EVA SYS: 1.206 10.2 PSIA
CAMPOUT MASK PREBREATHE
Ref: 127 EVA 1 TOOL CONFIG
(EVA, TIMELINES)
Ref: 127 EMU CTCC

FE-2 EXP20 KOPRA

EVA 1 TOOL CONFIG
(EVA, TIMELINES)
EVA TOOLS MANAGEMENT
(EVA, TOOLS AND STOWAGE)
Ref. MSG 005, lines 3-4
EVA SYS: 1.305 EQUIPMENT LK PREP
Steps 1-3 not req'd.
In Step 27, use Vacuum Manometer s/n 05. Ref: 127 EMU CTCC

SOKOL LK CK

EVA 1 PROCEDURE REVIEW
Ref: 127 EVA 1 BRIEFING CARD
(EVA, TIMELINES)

DAILY PLANNING CONFERENCE (DPC)

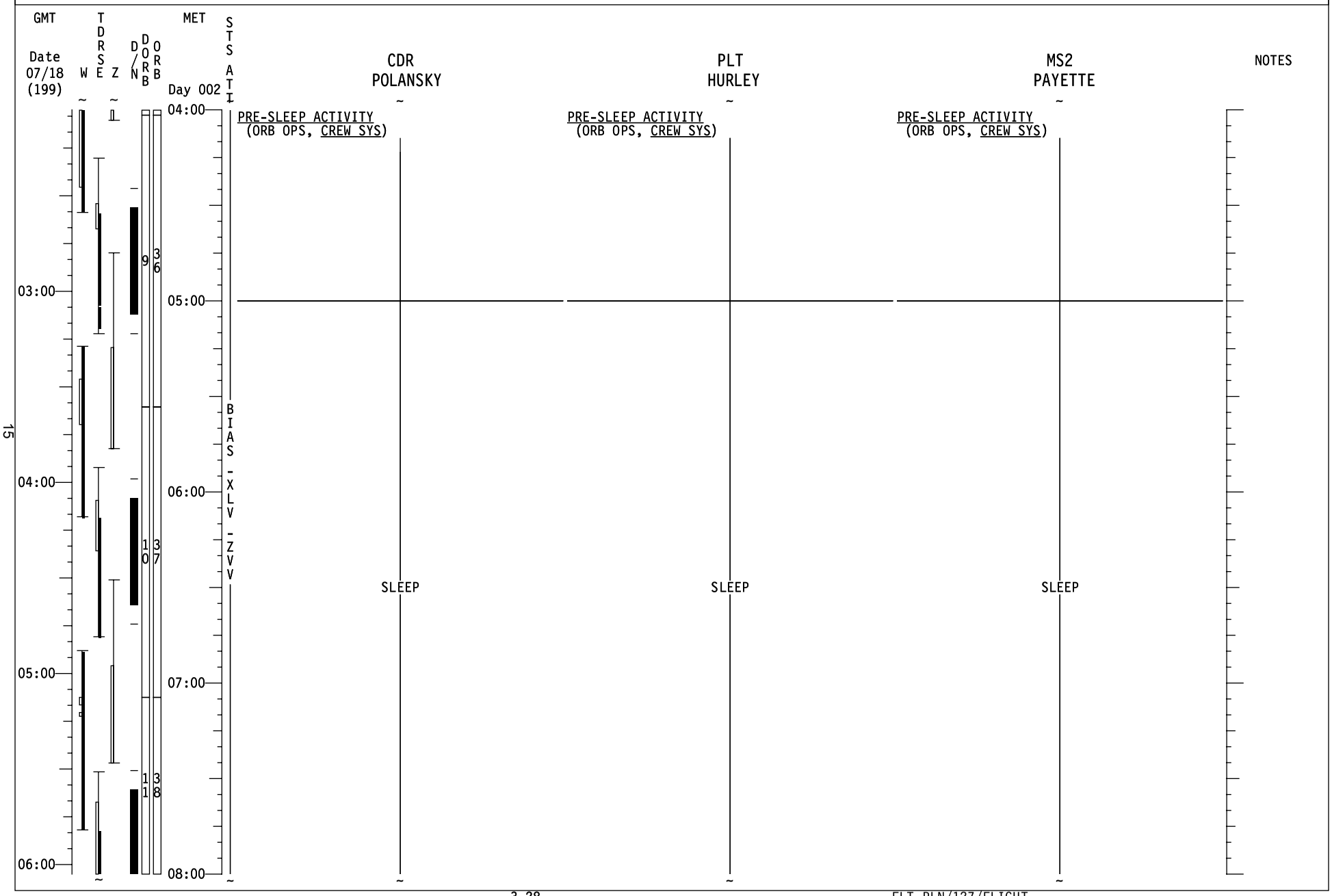
PRIVATE MEDICAL CONFERENCE

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

EVA SYS: 1.206 10.2 PSIA
CAMPOUT MASK PREBREATHE
Ref: 127 EVA 1 TOOL CONFIG
(EVA, TIMELINES)
Ref: 127 EMU CTCC

NOTES

STS-127 FD (03)


GMT
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CDR
POLANSKY
PLT
HURLEY
MS2
PAYETTE
NOTES
PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)
SLEEP
03:00
04:00
05:00
06:00
04:00
05:00
06:00
07:00
08:00
9
36
10
37
11
38

STS-127 FD (03)

GMT Date 07/18 (199) | W | TDRS E | Z | D/N | DORB 9 10 11 | ORB 36 37 38 | MET Day 002 | STS ATT

BIAS -XLV -ZVV

MS1 CASSIDY	MS3 MARSHBURN	MS4 WOLF	FE-2 EXP20 KOPRA	NOTES
PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	EVA SYS: 1.206 10.2 PSIA CAMPOUT MASK PREBREATHE Ref: 127 EVA 1 TOOL CONFIG (EVA, TIMELINES) Ref: 127 EMU CTCC	EVA SYS: 1.206 10.2 PSIA CAMPOUT MASK PREBREATHE Ref: 127 EVA 1 TOOL CONFIG (EVA, TIMELINES) Ref: 127 EMU CTCC	
		PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
SLEEP	SLEEP	SLEEP	SLEEP	

MSG 012 - FD03 MISSION SUMMARY

Good Morning Endeavour!!!

Thanks for the good survey you did yesterday.

The ISS crew is ready for guests, so have a great rendezvous and docking today!

YOUR CURRENT ORBIT IS: 128 X 103 NM

NOTAMS:

NOTAMS - NO CHANGE

EDW - EDW IN USE. EDT ELS DAY / VFR ONLY.
EDW - LAKEBED RWY 15/33 - GREEN. RWY 18L - UNUSABLE.
NOR - LAKEBED RUNWAYS GREEN.
GUA - RWY 24R END LIGHTS OTS.
GUA - RWY 06R/24L CLOSED.
INN - CLOSED.
IKF - NOT USABLE. NO AGREEMENT.
BEN - NOT RECOMMENDED/NOT SUPPORTED.

NEXT 2 PLS OPPORTUNITIES:

NOR17 ORB 33 – 2/00:20 SCT150 BKN250 7 170/06P08
EDW22 ORB 49 – 3/00:42 FEW120 SCT200 7 240/16P24

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(%)

Subtract interconnect counter for current OMS quantities.

L OMS OX = 39.5 R OMS OX = 39.0
FU = 39.1 FU = 38.7

DELTA V AVAILABLE:

OMS	375 FPS
ARCS (TOTAL ABOVE QTY1)	37 FPS
TOTAL IN THE AFT	412 FPS

END OF PAGE 1 OF 2, MSG 012

ARCS (TOTAL ABOVE QTY2)	66 FPS
FRCS (ABOVE QTY 1)	37 FPS
AFT QTY 1	86 %
AFT QTY 2	48 %

SYSTEM	FAILURE	IMPACT	WORK AROUND
CREW SYS	Leaking Microbe filter	Free water in cabin	Replaced w/spare, stowed leaking unit
CREW SYS	Leaking water transfer hose	Free water in cabin	Tightened fitting, monitor for leaks
EVA	SCOF: Yellow tape used to cover vent outlet duct interface not removed during ground processing.	Taped SCOF may not provide over pressurization protection to EMU O2 system	Removed tape from SCOF

END OF PAGE 2 OF 2, MSG 012

Tom & Dave,

Welcome to your first day of transfer!! Remember that this morning's transfer list update is much larger than you can expect on subsequent days due to us sending you the entire return list.

Transfer Notes

- We wanted to remind you that return items 412 thru 418 (empty 0.5 CTBs) and items 611 thru 615 (empty food containers) are currently not approved for return; however, they do currently have green return labels on them. Your transfer list has been updated to reflect this, and we'll inform you when/if they are approved for return. We apologize for any confusion this may cause.

The Transfer List Excel file, FD03_Transfer_List_STS127.xls, locations are:

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

FD03 Transfer Choreography

- Resupply Items 1 thru 8: EMUs and EVA Sys and Task hardware
- Resupply Items 16, 17, 18: Kopra's IELK and running & cycling shoes
- Resupply Item 35: SODF transfer
- Resupply Items 50, 50.1, 50.2: PCS hardware from ISS

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:

Make following Pen & Ink on the Page Resupply 5:
Item 25: update return item reference in notes as follows:
WAS: (ref Return Item 729)
IS: (ref Return Item 727)

Replace the following pages:
Resupply 6, 7 & 9

Add the following page:
Resupply 13

In the Transfer List **RETURN** tab

Add the following pages:
Return 1 thru 14

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

- The 2J/A Transfer Team

END OF PAGE 1 OF 1, MSG 013A

CHNG	☑	FD	Initials	Item #	Item Name	Qty	Initial Stowage	Temp Stowage	Stowage at Undock	Wt (lbs)	ACTIVITY / **Constraints** / **Comments
				26	Bag H	5 MLE	MD CEIL STBD 2	COL1D3		57.51	**Bag H will only be stowed on ISS for the docked mission, and will return in the middeck per Return Item 702.
X				26.1	ARED DASHPOTS	3 ~~bubble-wrap bags~~	MD CEIL STBD 2 (Bag H)	COL1D3 (in Bag H)	NOD1D4_G1	2.25	**Transfer prior to ARED DASHPOT R&R on FD05. One dashpot will be installed and two will be stowed.** **Remove dashpots from foam prior to stowing on ISS. Foam will be used for returning dashpots (ref Return Item 730).**
				26.2	DOSIS	0.5 CTB	MD CEIL STBD 2 (Bag H)	COL1D3 (in Bag H)	COL1A3	13.88	**Transfer on FD04 per DOSIS XFER activity.**
				26.3	ISS Food [s/n 1209]	0.5 CTB	MD CEIL STBD 2 (Bag H)	COL1D3 (in Bag H)	NOD1O2	12.83	**Do not handle by green straps.**
X				26.4	Panhead Screws and Washers [ARED]	1 ziplock	MD CEIL STBD 2 (Bag H)	COL1D3 (in Bag H)	NOD1O2		**Transfer prior to ARED DASHPOT R&R on FD05.** **Stowed in foam block with ARED Dashpots.
				27	Ammonia Detection Kit [s/n 1002] [new]	1 orange kit	MD FLOOR PORT 1 (Bag A)		FGB_309 behind panel	10.00	**Swap with old Ammonia Detection Kit (ref Return Item 717).**

STS-127/2JA Resupply Transfer List

CHNG	☑	FD	Initials	Item #	Item Name	Qty	Initial Stowage	Temp Stowage	Stowage at Undock	Wt (lbs)	ACTIVITY / **Constraints** / **Comments
X				28	Bag B	5 MLE	MD FLOOR PORT 2		NOD2D5	65.45	~~**Remove item 28.1 before transferring Bag B to ISS.**~~ **Leave Iodine CWCs (ref Item 28.1) in Bag B.** **Swap with 5 MLE Bag E already on ISS (ref Return Item 608); swap letter "B" decals (qty 4) for letter "E" decals.** ~~**Swap letter "B" decals (qty 4) from this bag with letter "E" decals from returning 5 MLE bag.**~~
X				~~28.1~~	~~CWC-IODINE - 7~~	~~1 ziplock~~	~~MD FLOOR PORT 2 (Bag B)~~	~~Middeck~~		~~17.50~~	**Not planned to be filled on STS-127, so they can stay in Bag B. ~~**Temp stow on middeck for CWC-I FILLs beginning on FD04.**~~ ~~**Will transfer to ISS per Water Ops Cue Card.~~

[ ] - notes included by transfer team, - not on actual label

CHNG	☑	FD	Initials	Item #	Item Name	Qty	Initial Stowage	Temp Stowage	Stowage at Undock	Wt (lbs)	ACTIVITY / **Constraints** / **Comments
X				30	Bag D	5 MLE	MD FLOOR STBD 2	COL1D3		6.60	**Remove item 30.1 before transferring Bag D to ISS.** **Bag D will only be stowed on ISS for the docked mission, and will return in the middeck per Return Item 701.
X				30.1	CWC-IODINE - 2	1 ziplock	MD FLOOR STBD 2 (Bag D)	Middeck ~~COL1D3~~	~~NOD2O2 (in M-02 Bag, s/n 1026)~~	5.00	**Temp stow on middeck for CWC-I FILLs.** **Will transfer to ISS per Water Ops Cue Card. ~~**Not filled on STS-127.~~
				30.2	CWC-IODINE - 3	1 ziplock	MD FLOOR STBD 2 (Bag D)	COL1D3	NOD2O2 (in M-02 Bag, s/n 1026)	7.50	**Not filled on STS-127.
X				30.3	ISS Food [s/n 1230 & 1306]	2 0.5 CTBs	MD FLOOR STBD 2 (Bag D)	COL1D3	NOD1O2	26.50	**Do not handle by green straps.**
				30.4	WRS RECYCLE FILTER TANK ASSEMBLY [RFTA]	1	MD FLOOR STBD 2 (Bag D)	COL1D3	JLP1P2_C1/ D1/E1/F1	42.00	**Swap with returning RFTA (ref Return Item 616).** **Transfer nomexed foam cap with tank.
				31	ISS FOOD	1 ISS Locker	MF28E installed		LAB1O4_G1	51.74	**Transfer on FD09 per GLACIER SWAP-SHUTTLE.**
				32	ISS-Locker-to-VPMP Adapter Plate	1	MF28E installed		LAB1O4_M1	3.53	**Transfer on FD09 per GLACIER SWAP-SHUTTLE.**
				33	BCAT ISS FOOD (KOPRA-BONUS)	1 ISS Locker	MF28G installed		LAB1O4_J1	46.71	**Transfer on FD09 per GLACIER SWAP-SHUTTLE.**
				34	ISS-Locker-to-VPMP Adapter Plate	1	MF28G installed		LAB1O4_M1	3.53	**Transfer on FD09 per GLACIER SWAP-SHUTTLE.**

CHNG	☑	FD	Initials	Item #	Item Name	Qty	Initial Stowage	Temp Stowage	Stowage at Undock	Wt (lbs)	ACTIVITY / **Constraints** / **Comments
			Resupply Realtime Additions								
X				800	Fire Port Decals	1 ziplock	MF71G		NOD1O4 A1 (in 0.5 CTB, s/n 1039)	0.20	

CHNG	☑	FD	Initials	Item #	Item Name	Qty	Initial Stowage	Temp Stowage	Stowage at Undock	Wt (lbs)	ACTIVITY / **Constraints** / **Comments
			Middeck Return			**400 & 600's are physically labelled on the bag; 700's are not labelled**					
			Prepacked Bags/Items								
				400	2JA Return Bag 400 [RTH Samples]	1.0 CTB	LAB1O3		MF71K	13.90	
				401	2JA Return Bag 401	0.5 CTB	LAB1O3		MF57E	27.95	
				402	2JA Return Bag 402 [CHeCS]	1.0 CTB	LAB1O3	COL1D2 (Bag I)	MD FLOOR PORT 2 (Bag I)	16.77	**Stow Return Items 402.1 thru 402.4 in this bag prior to transferring CTB.**
				402.1	CSA-CPs [s/n 1045 & 1058]	2		ISS Deployed	MD FLOOR PORT 2 (Bag I) (in Bag 402)	2.80	**Transfer after successful activation and checkout of new CSA-CPs on FD04.**
				402.2	CSA-CP Resupply Kit [s/n 1026] [old] [contains CSA-CPs s/n 1044 & 1051]	1		ISS Deployed	MD FLOOR PORT 2 (Bag I) (in Bag 402)	9.39	**Transfer after successful activation and checkout of new CSA-CPs on FD04.**
				402.3	CSA-O2s [s/n 1043 & 1059]	2		ISS Deployed	MD FLOOR PORT 2 (Bag I) (in Bag 402)	2.80	**Transfer after successful calibration of new CSA-O2s on FD14.**
				402.4	Radiation Area Monitors (RAMs) [qty 24]	1 ziplock	ISS Deployed	COL1D2 (Bag I)	MD FLOOR PORT 2 (Bag I) (in Bag 402)	0.53	**Packed for return on FD07 per EHS-RAM-DEPLOY activity.**
				402.5	TVIS PCMCIA Card [s/n 1035, Romanenko]	1	NOD1D4_D1 (in 0.5 CTB, s/n 1042)	COL1D2 (Bag I)	MD FLOOR PORT 2 (Bag I) (in Bag 402)	0.07	
				402.6	TVIS PCMCIA Card [s/n 1036, Thirsk]	1	SM Deployed (near TVIS)	COL1D2 (Bag I)	MD FLOOR PORT 2 (Bag I) (in Bag 402)	0.07	**Pack for return after new cards have been transferred (ref Resupply Item 18).**

CHNG	☑	FD	Initials	Item #	Item Name	Qty	Initial Stowage	Temp Stowage	Stowage at Undock	Wt (lbs)	ACTIVITY / **Constraints** / **Comments
				403	2JA Return Bag 403 [Payloads]	1.0 CTB	LAB1O3	COL1D2 (Bag I)	MD FLOOR PORT 2 (Bag I)	18.97	**Stow Return Items 403.1 thru 403.4 in this bag prior to transferring CTB.**
				403.1	Saliva Collection Pouch [Kopra]	1		ISS Deployed	MD FLOOR PORT 2 (Bag I) (in Bag 403)	0.26	**Transfer on FD14 after the IMMUNE SALIVA STOW ISS crew activity.**
				403.2	Integrated Immune Saliva Collection Kit [s/n 1014]	1		ISS Deployed	MD FLOOR PORT 2 (Bag I) (in Bag 403)	1.50	**Transfer on FD14 after the IMMUNE SALIVA STOW ISS crew activity.**
				403.3	Blood Sample Sleeves	4		ISS Deployed	MD FLOOR PORT 2 (Bag I) (in Bag 403)	5.99	**Transfer on FD14 after the IMMUNE BLOOD STOW ISS crew activity.**
				403.4	HRF Sharps Container [p/n SED46105119-305] [s/n 1069]	1	LAB1O2_J2 (in 0.5 CTB, s/n 1151)	ISS Deployed	MD FLOOR PORT 2 (Bag I) (in Bag 403)	0.95	**Transfer after FD08 NUTRITION BLOOD DRAW ISS crew activity.**

STS-127/2JA Return Transfer List

CHNG	☑	FD	Initials	Item #	Item Name	Qty	Initial Stowage	Temp Stowage	Stowage at Undock	Wt (lbs)	ACTIVITY / **Constraints** / **Comments
				404	2JA Return Bag 404	1.0 CTB	LAB1O3		MF43O	29.54	
				405	2JA Return Bag 405	1.0 CTB	LAB1O3	COL1D3 (Bag H)	MD CEIL STBD 2 (Bag H)	24.22	
				406	2JA Return Bag 406	1.0 CTB	LAB1O3	COL1D2 (Bag I)	MD FLOOR PORT 2 (Bag I)	22.20	
				407	2JA Return Bag 407	1.0 CTB	LAB1O3	NOD2D2 (Bag C)	MD FLOOR STBD 2 (Bag C)	23.90	
				408	2JA Return Bag 408	1.0 CTB	LAB1O3	NOD2D2 (Bag C)	MD FLOOR STBD 2 (Bag C)	27.59	
				409	2JA Return Bag 409	0.5 CTB	LAB1O3	NOD2D2 (Bag C)	MD FLOOR STBD 2 (Bag C)	10.97	
				410	2JA Return Bag 410	0.5 CTB	LAB1O3		MF71M	20.87	

[ ] - notes included by transfer team, - not on actual label

STS-127/2JA Return Transfer List

CHNG	☑	FD	Initials	Item #	Item Name	Qty	Initial Stowage	Temp Stowage	Stowage at Undock	Wt (lbs)	ACTIVITY / **Constraints** / **Comments
				411	2JA Return Bag 411	1.0 CTB	LAB1O3		MF57O	29.30	**Stow Return Item 411.1 in this bag prior to transferring CTB.**
				411.1	GSC [s/n 1108]	1		ISS Deployed	MF57O (in Bag 411)	1.10	**Transfer after EHS-GSC-OPS on FD03.**
				412 - 418	Items 412 - 418 are reserved for empty CTBs once they are approved for return.		LAB1O3				

[ ] - notes included by transfer team, - not on actual label

STS-127/2JA Return Transfer List

CHNG	☑	FD	Initials	Item #	Item Name	Qty	Initial Stowage	Temp Stowage	Stowage at Undock	Wt (lbs)	ACTIVITY / **Constraints** / **Comments
				600	2JA Return Bag 600	0.5 CTB	LAB1O3		EXT A/L FLOOR (Bag F)	11.00	
				601	2JA Return Bag 601	0.5 CTB	LAB1O3		MD CEIL STBD 1 (Bag G)	11.00	
				602	2JA Return Bag 602	0.5 CTB	LAB1O3		MD CEIL STBD 1 (Bag G)	11.00	
				603	2JA Return Bag 603	0.5 CTB	LAB1O3		MF57K	11.00	
				604	2JA Return Item 604 [LON ECOK]	1 mesh bag	LAB1O3	COL1D3 (Bag H)	MD CEIL STBD 2 (Bag H)	3.89	

[ ] - notes included by transfer team, - not on actual label

CHNG	☑	FD	Initials	Item #	Item Name	Qty	Initial Stowage	Temp Stowage	Stowage at Undock	Wt (lbs)	ACTIVITY / **Constraints** / **Comments
				605	2JA Return Item 605 [WK ECOK]	1 mesh bag	LAB1O3	COL1D3 (Bag H)	MD CEIL STBD 2 (Bag H)	7.51	**Remove items 605.1 thru 605.4 prior to stowing ECOK for return.**
				605.1	EMU Gloves [WK1]	1 pair	LAB1O3 (in WK ECOK)	COL1D3 (Bag H)	MD CEIL STBD 2 (Bag H)	6.20	**Remove gloves from WK ECOK and stow in foam cutouts in Bag H used to launch EMU gloves.**
				605.2	EMU Gloves [WK2]	1 pair	LAB1O3 (in WK ECOK)	COL1D3 (Bag H)	MD CEIL STBD 2 (Bag H)	6.20	**Remove gloves from WK ECOK and stow in foam cutouts in Bag H used to launch EMU gloves.**
				605.3	LCVG [WK]	1	LAB1O3 (in WK ECOK)	COL1D3 (Bag H)	MD CEIL STBD 2 (Bag H)	8.25	**Remove LCVG from ECOK and stow in Bag H.**
				605.4	Comm Cap [WK1]	1	LAB1O3 (in WK ECOK)	COL1D3 (Bag H)	MD CEIL STBD 2 (Bag H)	1.42	**Remove comm cap from ECOK and stow in foam cutout in Bag H used to launch comm cap.**
				606	2JA Return Item 606 [FN ECOK]	1 mesh bag	LAB1O3	COL1D2 (Bag I)	MD FLOOR PORT 2 (Bag I)	7.41	

CHNG	☑	FD	Initials	Item #	Item Name	Qty	Initial Stowage	Temp Stowage	Stowage at Undock	Wt (lbs)	ACTIVITY / **Constraints** / **Comments
				607	2JA Return Item 607 [Torque Analyzer Kit, s/n 1004]	1	LAB1O3		MD CEIL PORT 2 (Bag E)	5.20	
				608	2JA Return Bag 608 [Bag B] [WRS Recycle Filter Tank Assembly]	5 MLE	NOD2D5		MD FLOOR PORT 1	4.60	**Verify letter "B" decals (qty 4) are applied to bag before transfer to shuttle.** **Stow Return Item 608.1 in this bag prior to transferring 5 MLE bag.**
				608.1	DRT foam boxes	2	MF71O (in 1.0 CTB)		MD FLOOR PORT 1 (Bag B)	1.00	**Used to launch DRTs (ref Resupply Item 46).
				609	2JA Return Item 609	1 jett stow bag	LAB1O3		MD CEIL PORT 2 (Bag E)	23.45	
				610	2JA Return Item 610 [PCE Monoblock]	1	LAB1O3		EXT A/L FLOOR (Bag F)	122.36	

CHNG	☑	FD	Initials	Item #	Item Name	Qty	Initial Stowage	Temp Stowage	Stowage at Undock	Wt (lbs)	ACTIVITY / **Constraints** / **Comments
				611-615	Items 611 - 615 are reserved for food containers once they are approved for return.		LAB1O3				
				616	WRS RECYCLE FILTER TANK ASSEMBLY [RFTA]	1	LAB1O3	COL1D3 (in Bag D)	MD FLOOR STBD 1 (Bag D)	148.00	
				617	ARED DASHPOT [including small piece of broken rod end]	1 ziplock	LAB1O3	COL1D3 (in Bag H)	MD CEIL STBD 2 (Bag H)	2.25	**NOTE: Dashpot contains broken glass contained by kapton tape.** **Don deer skin gloves and goggles before handling. Stow old dashpot in foam from new dashpots (ref Resupply Item 26.1); remove towels as necessary.** **Ensure small piece of broken rod end (already in ziplock) returns in this location as well.**

[ ] - notes included by transfer team, - not on actual label

CHNG	☑	FD	Initials	Item #	Item Name	Qty	Initial Stowage	Temp Stowage	Stowage at Undock	Wt (lbs)	ACTIVITY / **Constraints** / **Comments
			Non- Prepacked Bags/Items								
				700	Bag C	5 MLE		NOD2D5	MD FLOOR STBD 2	4.60	**Verify Return Items 407, 408, and 409 are packed prior to transfer.**
				701	Bag D	5 MLE		COL1D3	MD FLOOR STBD 1	4.60	**Verify Return Item 616 is packed prior to transfer.**
				702	Bag H	5 MLE		COL1D3	MD CEIL STBD 2	4.60	**Verify Return Items 405, 604, 605, and 617 are packed prior to transfer.**
				703	Bag I	5 MLE		COL1D2	MD FLOOR PORT 2	4.60	**Verify Return Items 412 thru 415 & 610 are packed prior to transfer.**

CHNG	☑	FD	Initials	Item #	Item Name	Qty	Initial Stowage	Temp Stowage	Stowage at Undock	Wt (lbs)	ACTIVITY / **Constraints** / **Comments
				704	1.0 CTB	1.0 CTB	LAB1O3		MF71O	4.00	**Retrieve one of the empty 1.0 CTBs gathered at LAB1O3 to pack items 704.1 and 704.2.** **Use this bag to stow the following shuttle hardware for return: mineral syringe kit, silver bio kit, sample purge kit, and saliva collection kit.
				704.1	Integrated Immune Blood Collection Kit [s/n 1009]	1	LAB1O3		MF71O (in 1.0 CTB)	5.99	**Transfer after SDBI Blood supplies are stowed in this kit on FD06 per IMAK UNPACK activity.**
				704.2	Silver Biocide Syringe Kit [s/n 1006]	1	NOD2D2 (in M-02 Bag s/n 1026)	LW MAR	MF71O (in 1.0 CTB)	1.34	**This kit should be used for CWC fills and then packed for return.**
				705	D2Xs Camera [s/n 1107]	1	ISS Deployed		MD CEIL STBD 1 (Bag G) (in foam cutout)	2.76	**Transfer camera only; remove battery, flash card, flash, and lens and restow in NOD2P4 (in 0.5 CTB: PhotoTV Consumables, s/n 1360).**
				706	Double Coldbag [s/n 1003]	1	JPM1F5_D2		MA16J	46.47	**Transfer on FD14 per DCB TRANSFER activity.**
				707	Double Coldbag [s/n 1006]	1	JPM1F6_C2		MA16L	39.28	**Transfer on FD14 per DCB TRANSFER activity.**
				708	Double Coldbag [s/n 1011]	1	JPM1F5_J1		MF71C	46.40	**Transfer on FD14 per DCB TRANSFER activity.**

CHNG	☑	FD	Initials	Item #	Item Name	Qty	Initial Stowage	Temp Stowage	Stowage at Undock	Wt (lbs)	ACTIVITY / **Constraints** / **Comments
				709	ECOK [Cs]	1 mesh bag		ISS A/L	Middeck	8.11	**Transferred on FD14 per EVA XFER TO STS activity.
				710	ECOK [Mb]	1 mesh bag		ISS A/L	Middeck	7.78	**Transferred on FD14 per EVA XFER TO STS activity.
				711	ECOK [Wf]	1 mesh bag		ISS A/L	Middeck	5.38	**Transferred on FD14 per EVA XFER TO STS activity.
				712	EVA Systems Transfer Bag	1 mesh bag		ISS A/L	Middeck	8.25	**Transferred on FD14 per EVA XFER TO STS activity.
				713	EVA Task Transfer Bag	1 mesh bag		ISS A/L	Middeck	19.80	**Transferred on FD14 per EVA XFER TO STS activity.
				714	EMU [s/n: 3003] [Wf]	1		ISS A/L	EXT A/L	317.72	**Transferred on FD14 per EVA XFER TO STS activity.
				715	EMU [s/n: 3018] [Cs]	1		ISS A/L	EXT A/L	319.14	**Transferred on FD14 per EVA XFER TO STS activity.

CHNG	☑	FD	Initials	Item #	Item Name	Qty	Initial Stowage	Temp Stowage	Stowage at Undock	Wt (lbs)	ACTIVITY / **Constraints** / **Comments
				716	Micro Sample Post-flight Analysis Packet [p/n SEG46119988-308] [EVA WPA Samples]	5 bags	NOD2D2 (in M-02 Bag s/n 1026)		MF14E & MF14G	16.62	**Stow sample bags in food trays after the EMU WPA SAMPLE activity on FD14.**
				717	Ammonia Detection Kit [ERADK] [s/n 1001] [old]	1	FGB_309 behind panel		MD CEIL PORT 1 (Bag A)	10.00	**Swap with new Ammonia Detection Kit (ref Resupply Item 26).**
				718	Foam Applicators [p/n SED33119859-301] [s/n 5007 & 5008]	2 ziplocks	PMA1 (in Leak Patch Kit, in 0.5 CTB s/n 1099)		MA16D	0.60	**Swap with new Foam Applicators (ref Resupply Item 12).**
				719	G1 Camcorder [s/n 1006] [old]	1	ISS Deployed		Middeck Deployed	4.60	**Swap with STS G1 Camcorder (ref Resupply Item 48); swap video tapes and batteries as well.** **Make sure this camcorder has a wide converter attached before transferring to shuttle. If it does not, remove the one from G1 s/n 1010 (ref Resupply Item 48) and install on G1 s/n 1006.**
				720	Glacier	1	LAB1O4_G1 /J1 (EXPRESS Rack 6)		MF28E/G	114.58	**Transfer on FD09 per GLACIER XFER activity.**

CHNG	☑	FD	Initials	Item #	Item Name	Qty	Initial Stowage	Temp Stowage	Stowage at Undock	Wt (lbs)	ACTIVITY / **Constraints** / **Comments
				721	LiOH [cans STS-124-27 and -28] [cans STS-126-24 thru -31] [unused]	2 mesh bags	NOD1S4_D2		LiOH Box	70.00	**Swap on FD06 per LIOH EXCHANGE PART A activity with used cans from shuttle (ref Resupply Item 10).**
				722	LiOH [cans STS-126-32, -33, -35 thru -42] [unused]	2 mesh bags	NOD1S4_D2		LiOH Box	70.00	**Swap on FD11 per LIOH EXCHANGE PART B activity with used cans from shuttle (ref Resupply Item 11).**
				723	Multimeter [Dopey] [old]	1	LAB1P6 (in Multimeter Kit, s/n 1017)		MF43G	1.35	**Transfer the multimeter only; leave the kit and leads on ISS.** **Swap with Resupply Item 37.

CHNG	☑	FD	Initials	Item #	Item Name	Qty	Initial Stowage	Temp Stowage	Stowage at Undock	Wt (lbs)	ACTIVITY / **Constraints** / **Comments
				724	PCDF-PU	1 locker insert	COL1F1_F2		MA16F	68.12	**Transfer on FD13 per PCDF-PU XFER activity.**
				725	Post-flight Analysis Packet [p/n SEG46119988-313]	5		ISS Deployed	MF14E & MF14G	0.11	**Stow packets in food trays after the FD06 EHS-SM WATER-CLCT activity.**
				726	Post-flight Analysis Packet [p/n SEG46119988-313]	2		ISS Deployed	MF14E & MF14G	0.11	**Stow packets in food trays after the FD10 EHS-PWD WATER-CLCT activity.**
				727	GLACIER BLOWER & FAN MOTOR [old]	1 foam box	Installed in Glacier		MD CEIL STBD 1 (Bag G)	1.00	**Transfer after GLACIER R&R activity on FD05.** **Stow old blower and fan motor in the foam box used to launch the new components (ref Resupply Item 25).

DURATION: 30 Minutes

INSTRUCTIONS:

1. Transfer and temp stow ziplocks from MF71G to LAB1P6 rack front. Ziplocks are labeled “ODF TRANSFER 1 of 2” and “ODF TRANSFER 2 of 2”. (EMER 1 PCNs, EMER 2 PCNs, Warning PCNs, IVA Ammonia Detection Kit, Leak Pinpoint and Repair Kit, JAXA Cue Card Kit, and Free-Flyer Cue Cards will be deployed at a later time).

2. Verify cue cards required for Joint Mission located in ziplock bag titled “ISS EVA ZIPLOCK” stowed in MF71G and “JOINT MISSION CUE CARDS ZIPLOCK” stowed in MF43C have been deployed.

   <u>Cue Card Contents of bag titled “ISS EVA ZIPLOCK”</u>:
   Crewlock Depress/Repress Cue Card [QTY:2]
   - 1 in Equipment Lock
   - 1 in Crewlock

   Expedited Suit Doffing/Emergency Undocking – Cue Card [QTY:1]
   - Airlock

   Consumables Tracking Cue Card [QTY:1]
   - Airlock

   STS-127 EVA Battery Recharge Plan Cue Card [QTY:1]
   - Airlock

   Eva Prebeathe Cue Card [QTY:1]
   - Remain in ziplock

   <u>Cue Card Contents of bag titled “JOINT MISSION CUE CARDS ZIPLOCK”</u>:
   10.102 Joint Emergency Egress (can be placed in STS or ISS common trash at undock) [QTY:3]
   - 1 on Shuttle side of hatch
   - 1 in Node 2 FWD
   - 1 in Airlock

   10.103 Joint Emergency Ingress (can be placed in STS or ISS common trash at undock)
   [QTY:3]
   - 1 on Shuttle side of hatch
   - 1 on ISS side of hatch
   - 1 in Airlock

   10.104 ISS Ammonia Response – Shuttle Crew (can be placed in STS or ISS common trash at undock)
   [QTY:1]
   - 1 in PMA2

3. Verify the ISS EVA System book, cover says “Applicable at 15A” has been discarded in the ISS common trash per the EVA Prep procedure located in the EVA Checklist.

4. Verify the ISS EVA Systems Books, cover says “Applicable for ISS-2JA” have been deployed for use during the joint mission - 1 orange, 1 no color, per the EVA Prep procedure located in the EVA Checklist.

5. **Report completion to MCC-H.**

FLIGHT NOTE

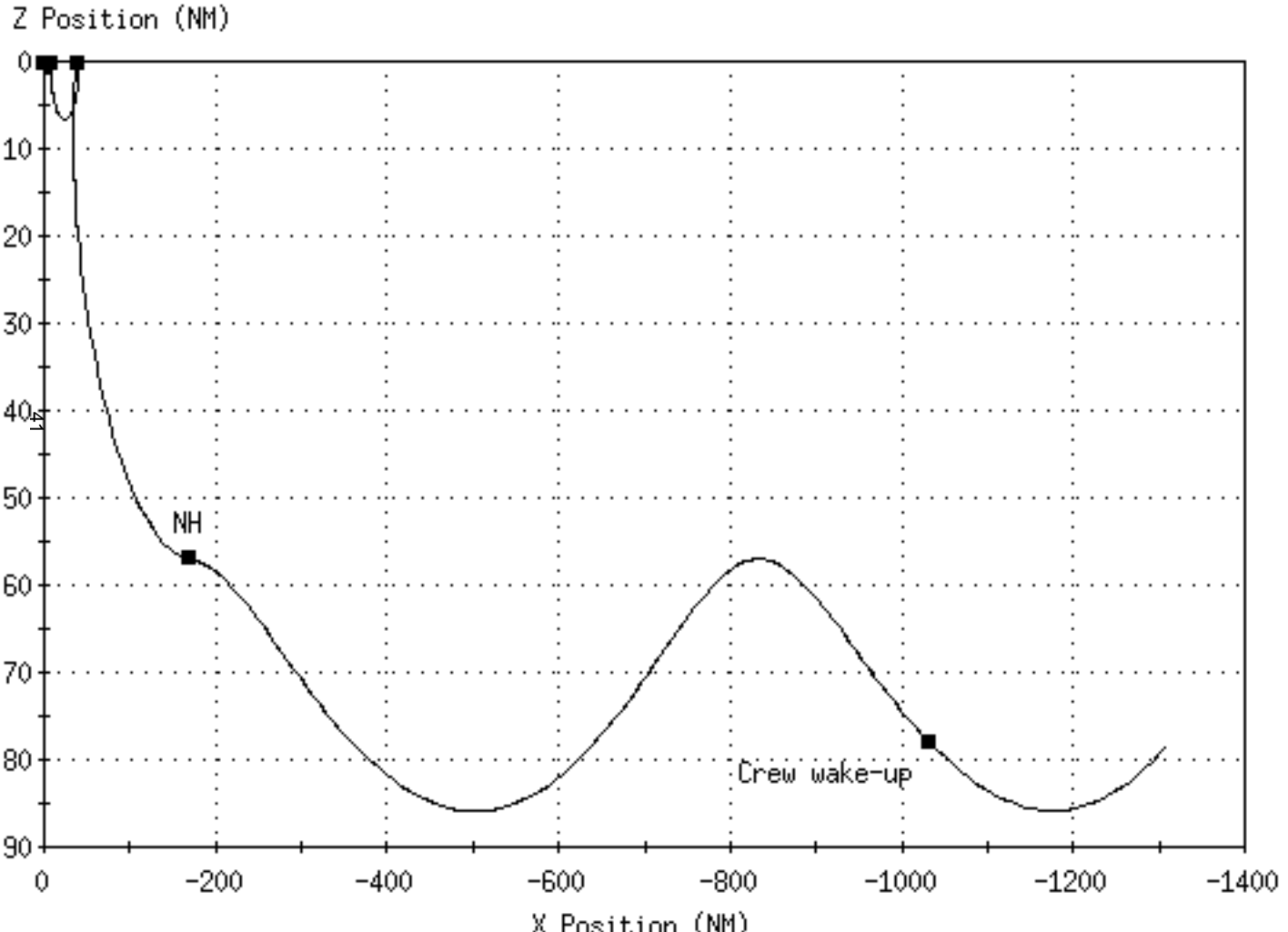
TO: FD, CAPCOM, FAO, RENDEZVOUS, PROP, GC
FROM: FDO
SUBJECT: MANEUVER TIGS
STS-127 DOR

COPIES: 1

	MET	
NH	001:14:57:00.600	
NC4	001:15:42:09.400	
NCC	001:16:16:34.000	
TI	001:17:14:16.000	PET = 0:0 ; SS - 36 MIN
MC1	001:17:34:16.000	
MC2	001:18:04:10.000	ET = 0:0
MC3	001:18:21:10.000	MC2 + 17 MIN
MC4	001:18:31:10.000	MC2 + 27 MIN
DOCK	001:19:52:22.000	

STS-127 Day of Rendezvous Plot

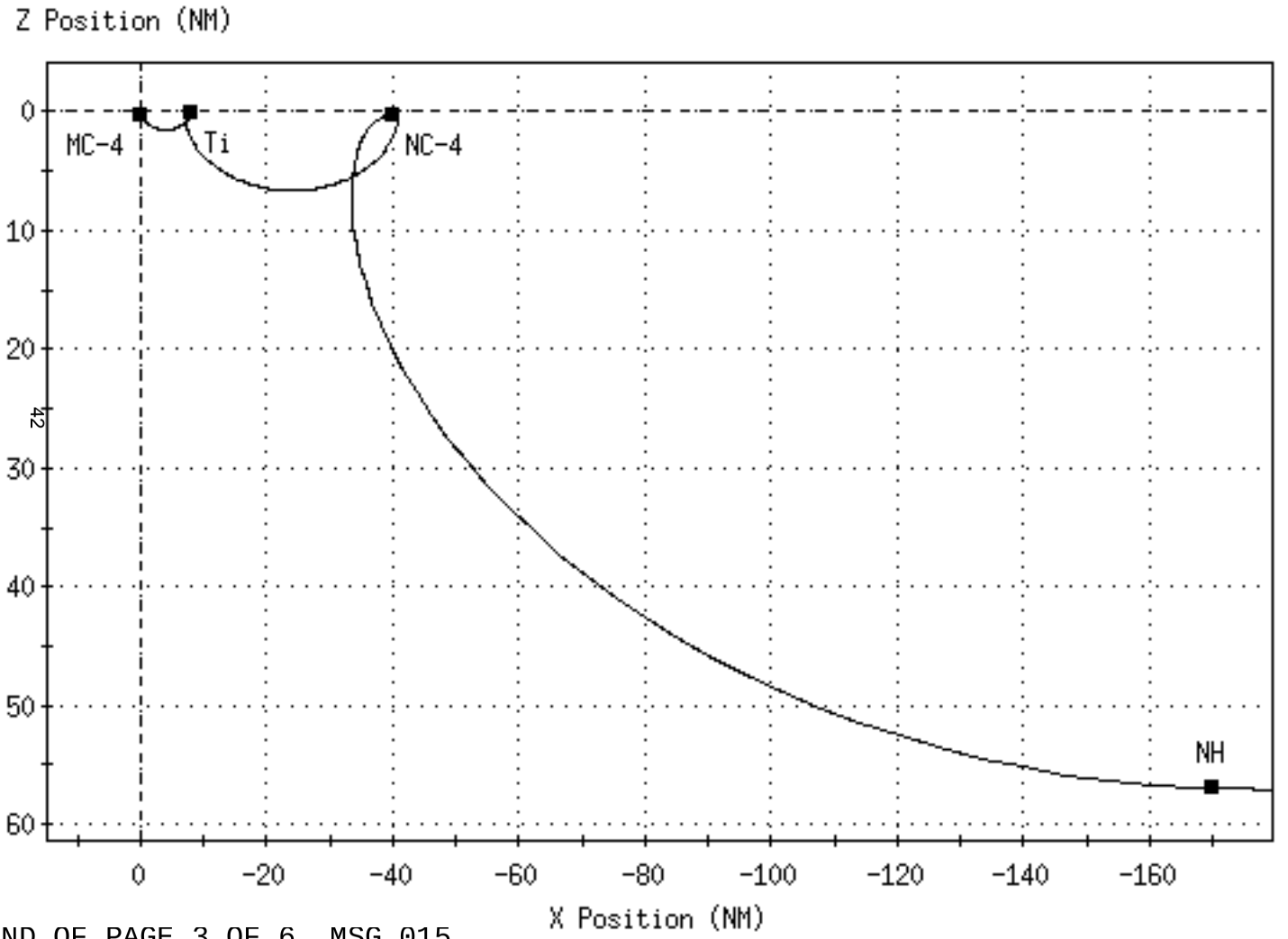
MSG 015 - FD03 RNDZ PACKAGE



END OF PAGE 2 OF 6, MSG 015

STS-127 Day of Rendezvous Plot

MSG 015 - FD03 RNDZ PACKAGE



PRELIMINARY ORBIT MANEUVER PAD FOR NH (Rndz C/L 3-2)

OMS BOTH	1	X
L	2	
R	3	
RCS SEL	4	
TV ROLL	5	000
TRIM LOAD P	6	(+)0.4
LY	7	(-)5.7
RY	8	(+)5.7
WT	9	251160
TIG	10	01/14:56:53.4
TGT PEG 7 ΔVX	19	(+)151.3
ΔVY	20	(+)000.0
ΔVZ	21	(+)008.8

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

BURN ATT		
R	24	227
P	25	033
Y	26	001

ΔVTOT	151.6
TGO	01:37
VGO X	(+)146.1
VGO Y	(+)000.0
VGO Z	(+)040.2

	HA	HP
TGT	189	(+)128

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 the loss of GPC3 as second gimbal fail on the right.

PRELIMINARY ORBIT MANEUVER PAD FOR NC-4 (Rndz C/L 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	(+)0.4	
LY 7	(-)5.7	
RY 8	(+)5.7	
WT 9	247417	
TIG 10	01/15:41:57.4	
TGT PEG 7 ΔVX 19	(+)088.3	
ΔVY 20	(+)000.0	
ΔVZ 21	(+)003.0	

BURN ATT R 24	133
P 25	212
Y 26	001

ΔVTOT	088.4
TGO	00:56
VGO X	(+)085.2
VGO Y	(+)000.0
VGO Z	(+)023.5

	HA	HP
TGT	189	(+)179

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 the loss of GPC3 as second gimbal fail on the right.

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

OMS BOTH	1	
L	2	X
R	3	
RCS SEL	4	
TV ROLL	5	000
TRIM LOAD P	6	(+)0.4
LY	7	(+)4.8
RY	8	(-)5.0
WT	9	245261
TIG	10	01/17:14:16.0
TGT PEG 7 ΔVX	19	(+)009.2
ΔVY	20	(-)000.7
ΔVZ	21	(+)000.0

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

BURN ATT

R	24	136
P	25	225
Y	26	010

ΔVTOT	009.3
TGO	00:12

VGO	X	(+)008.8
VGO	Y	(+)001.8
VGO	Z	(+)002.4

	HA	HP
TGT	189	(+)184

Ti DELAY

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

NEW Ti (BASETIME) 01/18:45:41.0

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.

NOTES

AUTO REBOOST – CONFIG 3, FD3 COLA

NOTE

Allow 5 min between establishing reboost attitude and reboost start time for DAP accelerations to converge. Steps 1-2 may be performed prior to completion of maneuver to reboost attitude.

1. Select Reboost Configuration

   GNC 20 DAP CONFIG
   REBOOST CFG – ITEM 8 + 3 EXEC
   INTVL – ITEM 9 + 2 . 0 0 EXEC

2. Set up Future Reboost

   √ MCC for DURATION update: _ _ + _ _ + _ _ . _ _

   GNC UNIV PTG
   DURATION – ITEM 27 + 0 0 + 1 5 + 0 0 . 0 0 EXEC
   START TIME – ITEM 1 + 0 2 + 0 2 + 2 7 + 0 3 EXEC

   RBST – ITEM 25 EXEC (FUT - ∗)

3. Select appropriate Reboost Rotation DAP

   When in attitude and prior to START TIME,
C3 DAP: A11/AUTO/VERN

NOTE

Reboost can be aborted with an Item 26 on UNIV PTG or by selecting FREE on the DAP

4. Post Reboost Configuration

   Load DAP: A12

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