STS-129 / ULF3

FD 08 Execute Package

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075	22	FD08 to EOM LiOH CC

Approved by FAO:
Gail Hansen

Houston MCC welcomes Baby Abigail Bresnick,
our newest addition to our NASA family.
Mother and child are doing fine.
Father is running circles around the
earth in excitement (every 90 min)

Last Updated: Nov 23 2009 5:52 AM GMT
JEDI *(**J**oint **E**xecute package **D**evelopment and **I**ntegration), v3.0*

Flight Director Paul Dye decides his ‘call sign’ isn’t hip enough for Twitter, so he updates it to be more in line with Gen-Y’s taste…

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MSG INDEX

MSG NO.	TITLE
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MSG072	EVA3 Suit Sizing Recommendations
MSG073	FD08 Crew Choice Downlink
MSG074	External A/L Bag (Bag I) Layout
MSG075	FD08 to EOM LiOH CC

1. Post-Sleep Cryo Config

For today's Post-Sleep cryo config, O2 Tanks 2, 3, and 4 and H2 Tanks 2 and 4 will be active.

R1 O2,H2 MANF VLV TK2 (two) - OP (tb-OP)
O2 TK3 HTR A - AUTO

A11 CRYO TK4 HTR O2 A - AUTO

A15 CRYO TK5 HTR O2 A - OFF

Pre-Sleep Cryo Config

√MCC for deltas prior to configuring for Pre-Sleep.

For tonight's Pre-Sleep cryo config, Manifold 1 will be closed with O2 Tanks 1 and 5 and H2 Tanks 1 and 4 active. O2 tanks will have single heaters active.

A15 CRYO TK5 HTR O2 A - AUTO

A11 CRYO TK4 HTR O2 A - OFF

R1 O2 TK1 HTR A - AUTO
TK2 HTRS A,B (two) - OFF
TK3 HTR A - OFF
H2 TK1 HTRS A,B (two) - AUTO
TK2 HTRS A,B (two) - OFF
O2,H2 MANF VLV TK1 (two) - CL (tb-CL)

2. **ISS PWD Usage**

The WPA has been processing enough water to exceed demand. In order to create ullage in the WPA water tanks, ISS has invited you to drink from the PWD at your convenience.

3. **LiOH Swap Plan**

   Transfer 2 fresh STS-129 LiOH cans to ISS and return 2 used STS-129 LiOH cans to the LiOH box. The 2 fresh cans were reserved for use on a +1 docked day. Transfer details are provided below:

   - ☐ Retrieve any two socks from cans in the LiOH box and install them on STS-129 cans 22 and 23.
   - ☐ Transfer STS-129 cans 22 and 23 to ISS NOD1S4_D2.
   - ☐ Retrieve any two USED STS-129 cans from ISS NOD1S4_D2 that were transferred on FD5 and stow them in the LiOH box for return. Report which cans are being returned to MCC.

4. **LiOH Cue Card Update**

   Your new LiOH cue card is MSG075. This cue card should be used for the remainder of the mission starting with today's post-sleep LiOH changeout.

5. Bresnik's EMU Resize:
   We have put together words in message 21-0497 (MSG072) which give Randy steps to run through suit sizing options. Please reference this message prior to 1.216 EVA Prep for EVA 3.

6. REPLACE PAGES 2-26 AND 2-28, 3-80 THROUGH 3-87.

NO UNISOLATED EXERCISE
[During HPGT Removal, Translation,and Installation]

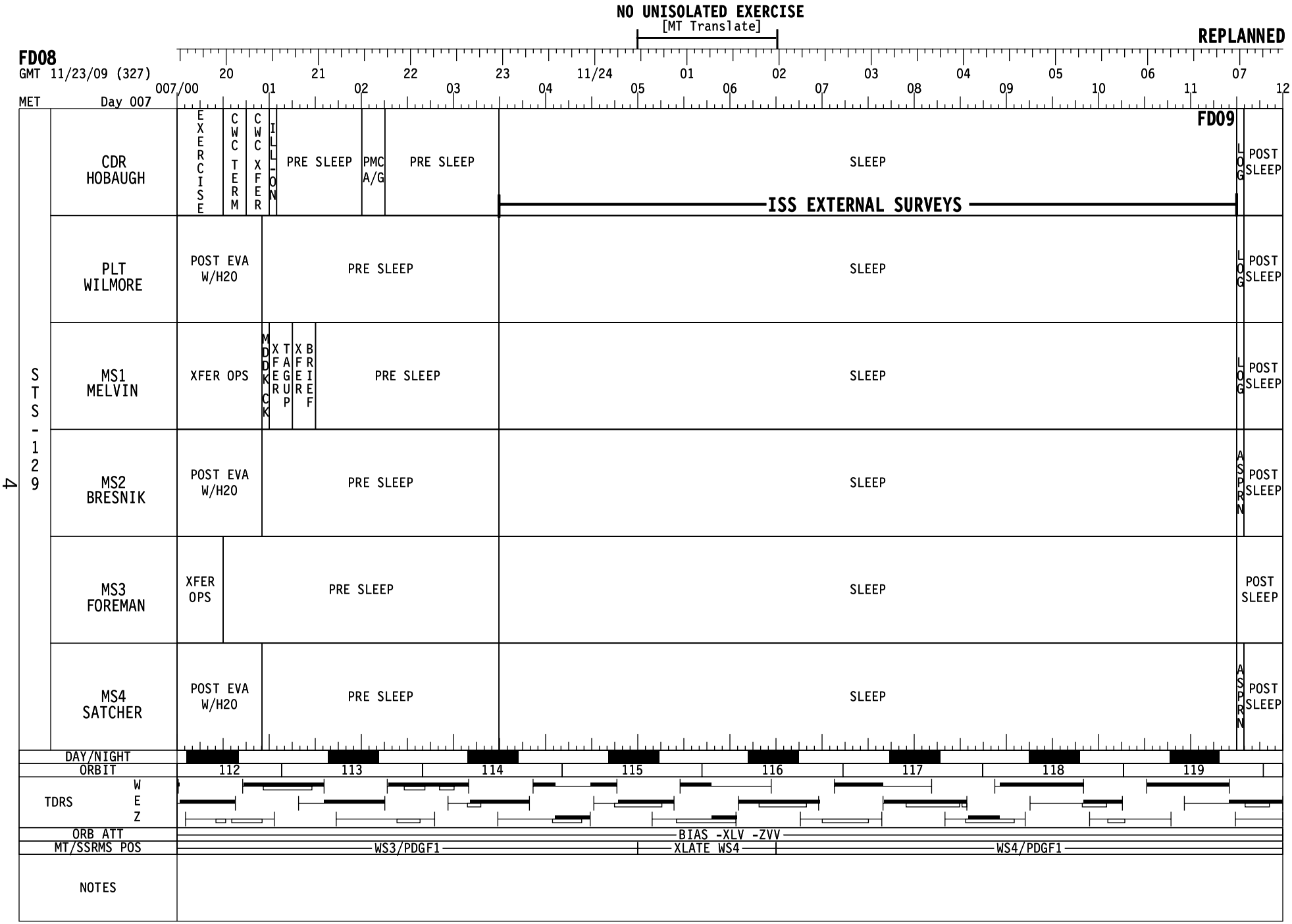
REPLANNED

FD08
GMT 11/23/09 (327)
MET Day 006

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

STS-129 3

| | | |


NO UNISOLATED EXERCISE
[MT Translate]
REPLANNED
FD08
GMT 11/23/09 (327)
MET Day 007
007/00 20 21 22 23 11/24 01 02 03 04 05 06 07 08 09 10 11 12
01 02 03 04 05 06 07
FD09
STS-129
CDR HOBAUGH
EXERCISE
CWC TERM
CWC XFER
ILL-ON
PRE SLEEP
PMC A/G
PRE SLEEP
SLEEP
LOG
POST SLEEP
ISS EXTERNAL SURVEYS
PLT WILMORE
POST EVA W/H2O
PRE SLEEP
SLEEP
LOG
POST SLEEP
MS1 MELVIN
XFER OPS
MDK CK
XFER
TAG UP
XFER
BRIEF
PRE SLEEP
SLEEP
LOG
POST SLEEP
MS2 BRESNIK
POST EVA W/H2O
PRE SLEEP
SLEEP
ASPRN
POST SLEEP
MS3 FOREMAN
XFER OPS
PRE SLEEP
SLEEP
POST SLEEP
MS4 SATCHER
POST EVA W/H2O
PRE SLEEP
SLEEP
ASPRN
POST SLEEP
DAY/NIGHT
ORBIT
112 113 114 115 116 117 118 119
TDRS
W
E
Z
ORB ATT
BIAS -XLV -ZVV
MT/SSRMS POS
WS3/PDGF1
XLATE WS4
WS4/PDGF1
NOTES

STS-129/ULF3 FD08

REPLANNED

GMT Date 11/23 (327) | TDRS W E Z | DO/NB ORB | MET Day 006 | ATT

CDR HOBAUGH

12:00
- SLEEP LOGBOOK (SDBI 1634)
- POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- √HUM SEP FOR H2O ACCUMULATION

08:00 — 104

- PRIVATE MEDICAL CONFERENCE
- L9 PAYLOAD STATION A/G(two) - OFF
- Perform via A/G 2

13:00
- POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

09:00 — 105

BIAS-XLV-ZVV

14:00

10:00
- TV (ILLUMINATOR OPS)(P/TV, CC)ILL OFF - A,D
- L17 Check MCIU filter screen
- IMU STAR OF OPPTY ALIGN (ORB OPS, GNC)
- EVA 3 INHIBIT PAD Ref. MSG 065

15:00 — 106

- WCS COMPACTOR OPS (DUAL-VANE) (CUE CARD)
- TRANSFER OPS Ref. Transfer List & MSG 070

11:00

16:00

PLT WILMORE

- POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- ISS EVA SYSTEMS: 1.211 HYGIENE BREAK
- ISS EVA SYSTEMS: 1.216 EVA PREP Ref. MSG 072
- ISS EVA SYSTEMS: 1.220 EMU PURGE
- ISS EVA SYSTEMS: 1.225 EMU PREBREATHE

MS1 MELVIN

- SLEEP LOGBOOK (SDBI 1634)
- POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- DAILY TRANSFER LIST UPDATE Ref. Transfer List & MSG 070
- CGBA and ABRS STATUS CK(CUE CARD) CGBA only
- GLACIER STATUS CHECK (CUE CARD)
- P/TV09 GLACIER (PHOTO/TV, SCENES) Perform Video, Photos
- GLACIER SET POINT (ASSY OPS, PAYLOADS)
- TRANSFER OPS Ref. Transfer List & MSG 070

FD08 EZ ACTIVITIES:
- √OCAC FILTER & MDDK DUCT SCREEN
- TEPC (STATUS CHECK) (ORB OPS, CREW SYS)
- HARD REBOOT ALL PGSCs EXCEPT: STS-1(OCA ROUTER), STS-5 (RPOP2), AND STS-6(WLES)

NOTES

STS-129/ULF3 FD08

REPLANNED

GMT Date 11/23 (327) | W | TDRS E | Z | DON/ORB | MET Day 006 | ATT

MS2 BRESNIK | MS3 FOREMAN | MS4 SATCHER | NOTES

08:00 — 09:00 — 10:00 — 11:00

12:00 — 13:00 — 14:00 — 15:00 — 16:00

104 — 105 — 106

BIAS-XLV-ZVV

MS2 BRESNIK

- POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- ISS EVA SYSTEMS: 1.211 HYGIENE BREAK
- ISS EVA SYSTEMS: 1.216 EVA PREP Ref. MSG 072
- ISS EVA SYSTEMS: 1.220 EMU PURGE
- ISS EVA SYSTEMS: 1.225 EMU PREBREATHE

MS3 FOREMAN

- POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- EXERCISE
- IVA SUPPORT PREP

MS4 SATCHER

- POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- ISS EVA SYSTEMS: 1.211 HYGIENE BREAK
- ISS EVA SYSTEMS: 1.216 EVA PREP Ref. MSG 072
- ISS EVA SYSTEMS: 1.220 EMU PURGE
- ISS EVA SYSTEMS: 1.225 EMU PREBREATHE

STS-129/ULF3 FD08

REPLANNED

GMT Date 11/23 (327) | TDRS W E Z | DO/N ORB | MET Day 006 | ATT

MET	CDR HOBAUGH	PLT WILMORE	MS1 MELVIN	NOTES
16:00	TRANSFER OPS Ref. Transfer List & MSG 070	ISS EVA SYSTEMS: 1.225 EMU PREBREATHE	TRANSFER OPS Ref. Transfer List & MSG 070	
		ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CUE CARD		
12:00	P/TV07 EVA (PHOTO/TV, SCENES) Setup			
	P/TV07 EVA (PHOTO/TV, SCENES) Ops	ISS EVA SYSTEMS: CREWLOCK POST DEPRESS (CC)	EXERCISE	
17:00				UPDATE β21+MASK Box 20,21, 30
		ROBOTICS: 1.410 EVA3- HPGT TRANSFER	ROBOTICS: 1.410 EVA3- HPGT TRANSFER	
13:00	BIAS-XLV A N2 REPRESS USING PAYLOAD N2 VALVES (ORB OPS, ECLS) Perform REPRESS SETUP AND INIT Steps 3-7 MCC will TMBU S/W FDA. H/W already INH.			
18:00	-ZVV N2 REPRESS USING PAYLOAD N2 VLVS A P/TV07 EVA (PHOTO/TV, SCENES) Ops			NO EXERCISE DURING HPGT REMOVE, XLATE, INSTALL
14:00				
19:00	PWR FILL (ORB OPS, ECLS) Init Fill #1 (S/N 1005) Fill dur ~20 min Ref. MSG 017			
	PWR FILL (ORB OPS, ECLS) Init Fill #2 (S/N 1023) Fill dur ~20 min Ref. MSG 017			
15:00	PWR FILL (ORB OPS, ECLS) Init Fill #3 (S/N 1007) Fill dur ~20 min Ref. MSG 017			
20:00	PWR TRANSFER Transfer 3 PWRs to ISS			

ORB: 107, 108, 109

7

STS-129/ULF3 FD08

REPLANNED

GMT Date 11/23 (327) | W | T D R S E | Z | D/N | O R B | MET Day 006 | A T T

MS2 BRESNIK | MS3 FOREMAN | MS4 SATCHER | NOTES

12:00 — 13:00 — 14:00 — 15:00

16:00 — 17:00 — 18:00 — 19:00 — 20:00

107 — 108 — 109

BIAS-XLV-ZVV

ISS EVA SYSTEMS: 1.225 EMU PREBREATHE

ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CUE CARD

ISS EVA SYSTEMS: CREWLOCK POST DEPRESS (CC)

EGRESS/SETUP

HPGT TRANSFER & MISSE 7 INSTALL

EXERCISE CONSTRAINT

IVA SUPPORT PREP

EVA IVA SUPPORT

NO EXERCISE DURING HPGT REMOVE, XLATE, INSTALL

STS-129/ULF3 FD08

REPLANNED

GMT — Date 11/23 (327) — MET Day 006

W E Z — D/N — O R B — A T T

CDR HOBAUGH

20:00 — PWR TRANSFER
Transfer 3 PWRs to ISS

SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS)
INIT FILL #12 Ref. MSG 017

MEAL

B N2 REPRESS USING PAYLOAD N2 VALVES
(ORB OPS, ECLS)
Perform REPRESS TERM AND RECONFIG
Steps 8-12
MCC will TMBU S/W FDA. Do not ENA H/W.

SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS)
Perform FILL TERMINATION

B I A S - X L V - Z V V

P/TV08 EXTERNAL SURVEY
(PHOTO/TV, SCENES)
Setup, Perform Step 2
NOTE: use the 28-70mm lens @ 50mm.

P/TV08 EXTERNAL SURVEY
(PHOTO/TV, SCENES)
When SETUP, Step 2 complete,
Perform OPS, Item 2
NOTE: use the 28-70mm lens @ 50mm.

CWC TRANSFER
Transfer 1 CWC to ISS

N2 REPRESS USING PAYLOAD N2 VLVS B
JOINT OPS: 3.103 NITROGEN XFER TERMINATION
Steps 3-5.1 Notify MCC-H when complete

SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS)
INIT FILL #13 Ref. MSG 017

EXERCISE

PLT WILMORE

ROBOTICS: 1.410 EVA3- HPGT TRANSFER

MEAL

TRANSFER OPS
Ref. Transfer List & MSG 070

EXERCISE

ISS EVA SYSTEMS: PRE REPRESS (CC)

ISS EVA SYSTEMS: CREWLOCK
DEPRESS/REPRESS CUE CARD

ISS EVA SYSTEMS: 1.240 POST EVA
With H2O

Ref: STS-129 CONSUMABLES
TRACKING CC (EVA)

MS1 MELVIN

ROBOTICS: 1.410 EVA3- HPGT TRANSFER

MEAL

TRANSFER OPS
Ref. Transfer List & MSG 070

WRS DA PACK
Ref. Transfer List: Item 902 & MSG 060

WRS DA TRANSFER
Ref. Transfer List Item #902

WRS DA STOW IN MDDK
Ref. Transfer List: Item 902 & MSG 060

TRANSFER OPS
Ref. Transfer List & MSG 070

NOTES

NO EXERCISE DURING HPGT REMOVE, XLATE, INSTALL

UPDATE
β21+MASK
Box 20,21, 28

STS-129/ULF3 FD08

REPLANNED

GMT Date 11/23 (327) | W | T D R S E | Z | D/N | O R B | MET Day 006 | A T T

109

110

111

112

BIAS-XLV-ZVV

MS2 BRESNIK	MS3 FOREMAN	MS4 SATCHER	NOTES
HPGT TRANSFER & MISSE 7 INSTALL		HPGT TRANSFER & MISSE 7 INSTALL	NO EXERCISE DURING HPGT REMOVE, XLATE, INSTALL
EXERCISE CONSTRAINT		EXERCISE CONSTRAINT	
A/L MMOD SHIELDS		A/L MMOD SHIELDS	
P1/P3 FLUID JUMPER INSTALL		S1 ATA BOLT 1 RELEASE	
		CHEATER BAR STOW	
S1/S3 FLUID JUMPER INSTALL	EVA IVA SUPPORT	CONNECTOR INSULATING SLEEVE INSTALL AND MSS CMRA COVER INSTL ON LEE A TIP & MBS CMRA	
APFR 3 RELOCATION FOR 20A			
CONTINGENCY		CONTINGENCY	
EVA CLEANUP & INGRESS		EVA CLEANUP & INGRESS	
ISS EVA SYSTEMS: PRE REPRESS (CC)	TRANSFER OPS Ref. Transfer List & MSG 070	ISS EVA SYSTEMS: PRE REPRESS (CC)	
ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CUE CARD		ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CUE CARD	
ISS EVA SYSTEMS: 1.240 POST EVA With H2O		ISS EVA SYSTEMS: 1.240 POST EVA With H2O	
Ref: STS-129 CONSUMABLES TRACKING CC (EVA)		Ref: STS-129 CONSUMABLES TRACKING CC (EVA)	

STS-129/ULF3 FD08

REPLANNED

GMT Date 11/23 (327) | W | TDRS E | Z | DON/ORB | MET Day 007 | ATT

00:00 | 20:00 | 21:00 | 22:00 | 03:00 | 23:00 | 04:00

DON/ORB: 112, 113, 114

ATT: BIAS-XLV-ZVV

CDR HOBAUGH

EXERCISE

SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS)
Perform FILL TERMINATION

CWC TRANSFER
Transfer 1 CWC to ISS

01:00 TV (ILL OPS)(P/TV, CC)ILL ON - A,D

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

02:00 PRIVATE MEDICAL CONFERENCE

L9 PAYLOAD STATION A/G(two) - OFF
Perform via A/G 2

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

SLEEP

PLT WILMORE

ISS EVA SYSTEMS: 1.240 POST EVA
With H2O

Ref: STS-129 CONSUMABLES TRACKING CC (EVA)

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

SLEEP

MS1 MELVIN

TRANSFER OPS
Ref. Transfer List & MSG 070

CGBA and ABRS STATUS CK(CUE CARD) CGBA only

GLACIER STATUS CHECK (CUE CARD)

TRANSFER TAGUP
Coordinate with transfer counterparts

TRANSFER BRIEF
Call down status to MCC

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

SLEEP

NOTES

CREW WAKE @ 7/11:30

STS-129/ULF3 FD08

REPLANNED

GMT Date 11/23 (327) | W | T D R S E | Z | D / N | O R B | MET Day 007 | A T T

MS2 BRESNIK | MS3 FOREMAN | MS4 SATCHER | NOTES

00:00

ISS EVA SYSTEMS: 1.240 POST EVA
With H2O

Ref: STS-129 CONSUMABLES TRACKING CC (EVA)

TRANSFER OPS
Ref. Transfer List & MSG 070

ISS EVA SYSTEMS: 1.240 POST EVA
With H2O

Ref: STS-129 CONSUMABLES TRACKING CC (EVA)

20:00

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

112

01:00

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

21:00

BIAS-XLV-ZVV

113

02:00

22:00

03:00

114

23:00

CREW WAKE @ 7/11:30

SLEEP | SLEEP | SLEEP

04:00

Congratulations to again-new-father Randy. Your crew-choice downlink was a big hit on the news channels, and we're still enjoying the pink cigars.

YOUR CURRENT ORBIT IS: 188 X 179 NM

NOTAMS: **NO CHANGES**

EDW - LAKEBED RWY 15/33 GREEN - ELS ONLY. RWY 18L - UNUSABLE.
NOR - LAKEBED RUNWAYS GREEN.
YQX - TACAN YQX CH74 OTS.
LAJ - TACAN LAJ45 OTS.
PTN - AIRFIELD CLOSED.
GUA - RWY 06R/24L CLOSED. RWY O6L REIL OTS.
KKI- RWY 15R/33L CLOSED. 15L/33R USABLE.
IKF - NOT USABLE. NO AGREEMENT.
BEN - NOT RECOMMENDED/NOT SUPPORTED.

NEXT 2 PLS OPPORTUNITIES:

EDW04 ORB111 – 6/22:58 FEW200 7 030/05P08
EDW04 ORB126 – 7/21:46 FEW250 7 040/08P13

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 = 38.5 R OMS OX = 38.8
FU = 38.5 FU = 38.4

Subtract interconnect counter for current OMS quantities.

DELTA V AVAILABLE:

OMS	396 FPS
ARCS (TOTAL ABOVE QTY1)	42 FPS
TOTAL IN THE AFT	438 FPS
ARCS (TOTAL ABOVE QTY2)	75 FPS
FRCS (ABOVE QTY 1)	23 FPS
AFT QTY 1	79 %
AFT QTY 2	41 %

SYSTEM	FAILURE	IMPACT	WORK AROUND
EPS	FC3 O2 Flow Sensor is behaving erratically.	Inaccurate FC3 Flow O2 instrumentation on Spec page: SM 69 FUEL CELLS Associated FDA has been inhibited.	None. MCC will monitor FC3 health.

Congratulations to the Bresnik family on the birth of their daughter, Abigail!!!

The MMT met briefly to review mission progress and orbiter systems. The mission is progressing well, and Atlantis is in great shape. The APU Injector Water Tank heater A did not cycle on when expected, but thermal analysis indicates this will not be an issue for the remainder of the flight. Per the nominal timeline, the B heater will be selected post undock.

The ISS team continues to investigate the MRM2 C&W panel data but believe that the false alarms will not reoccur with the panel powered off. The photos of the EVA gloves were reviewed and are cleared for subsequent EVAs.

Good Morning Leland and Mike,

Currently you are 47% complete with transfer. You will notice that this percentage has gone down since yesterday. This is due to last minute additions to the resupply and return list and also due to less items being transferred then what we predicted would be complete by today. You have approximately 8hrs of transfer time today, split between the Shuttle and ISS crew. The time on FD08 is very important considering you have an extremely busy FD09. It is filled with transfer (timelined and generic) and departure prep.

Transfer Notes

- **5 MLE Return Bag I Layout:** MSG 074 has you EXT A/L Floor Bag (Bag I) layout for your reference.

- **5 MLE Bag Layouts:** I mentioned this in the transfer brief yesterday but we were a bit rushed. I just wanted to reiterate that the 5 MLE bags are going to look volumetrically empty, but they are full with respect to mass.

- **EDV-U:** An EDV-U has officially been added to Return. This has displaced a couple of items from return (Bag 403, 406 and 412) and will have specific packing constraints. These packing constraints are going to be sent up in a procedure and will be a timelined activity on and ISS crew member on FD08 or FD09.

- **LiOH Transfer:** You have words in the Leder about transferring two fresh LiOH from Shuttle to ISS and 2 used LiOH from ISS to Shuttle. We are carrying the LiOH generically in the transfer list, but all the LiOH details will be from EECOM in the FD08 Execute Package.

- **Bag 412:** I have added bag 412 to the Resupply list, it is Resupply Item 805. This is added to make sure that it gets transferred back to ISS prior to undock. I wanted it to be in your list so you wouldn't have to go back through the FD07 transfer message.

- **Samples and food containers in food lockers:** We copied that you are stowing the samples and food containers in the same lockers. If this is working for you and all items can be accommodated then please continue with this method. For your information, our plan on the ground was to have all the samples in the fresh food lockers and food containers in other available food lockers. We are just concerned that stowing them all together will make you run out of space faster. We also want to verify that you are "clamshelling" the food containers so that they fit better. Tracy predicts that when they are clamshelled you can fit at least six containers into a food locker.

- **Signal Conditioner:** These are still approved for return but are currently stowed in bags deleted from return. We will need you to scavenge signal conditioners from bag 403 and 406. The details are in the transfer list, they are items 403.3 and 406.1. If you cannot find the signal conditioners then move on and the ISS crew will try to find them later.

The Transfer List Excel file, FD08_Transfer_List_STS129.xls, locations are:

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

FD08 Choreography

- **Item 902:** Transfer WRS Distillation Assembly per WRS DA TRANSFER activity.
- **Item 804 and 907:** LiOH transfer per FD08 Execute Package words from EECOM
- **Unconstrained Transfer items:**
    - **Resupply:** 54, 55, and 62
    - **Return:** 403.1, 403.2, 403.3, 404, 405, 406.1, 410, 414 thru 420, 600, 601 thru 604, 606 thru 610, 705 thru 708, 731, 900, 904, and 905.

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 17

In the Transfer List **RETURN** tab
Replace the following pages:
Return 2 and 13

Add the following page:
Return 14

Changes to the Transfer List are detailed below:

MIDDECK RESUPPLY
Item 804 and 805 - new item

MIDDECK RETURN
Item 403.3 - new item
Item 406.1 - new item
Item 905 - changed item number
Item 906 - 908 - new item

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

- The STS-129 Transfer Team

21-0497 (MSG 072) – EVA3 Suit Sizing Recommendations
Page 1 of 2

Randy,
In order to help with your suit fit, we have a couple of options for tomorrow's EVA3. We recommend that you continue with your prime gloves because they are the redesigned TMG. We believe increasing the overall EMU arm length will help with your glove comfort. We understand you are going to use the moleskin provided in your ECOK and would recommend **NOT** adding any mosite (black peanut pads).
We believe you have already completed steps 1 - 5 in Option 1 and would just like to verify so we all start on the same page. After that has been verified, you can pick up in step 6 and work through the options until you have a satisfactory fit.

Use the following procedure as a reference if necessary during any of the resize options:
US_SODF: EVA: ISS EVA SYS: EVA Prep and Post; 1.550 EMU RESIZE

Option 1: Add sizing ring and adjust arm cams
A/L101 1) Retrieve 0.5 " arm sizing rings s/n 145/146
M-02 s/n 1010

EMU 3006 (BR) 2) Remove arms, temp stow
3) Install -0.5 " arm sizing rings s/n 145/146
4) Reinstall arms
Verify Locks 1,2,3 → LOCK
Verify lower arm power harness →|← upper arm

5) Adjust arm cam configuration to **SHORT**/LONG (**bolded** is adjustment)
6) Suit fit check during 1.216 EVA Prep
6.1) Add step 69A DCM O2 ACT→ PRESS
6.2) When suit P is stable, perform suit evaluation
(optional manipulate tools on MWS)
6.3) If good suit fit, continue with step 70 of 1.216 EVA Prep
6.4) If suit fit too short, go to Option 2
6.5) If suit fit too long, go to Option 3

Option 2: Adjust arm cams
EMU 3006 7) Work EMU Depress Block below, steps 1 - 4
8) Adjust arm cam configuration to **LONG**/LONG (**bolded** is adjustment)
9) Complete EMU Depress Block, steps 5 - 8
When suit P is stable, perform suit evaluation
(optional manipulate tools on MWS)

9.1) If good suit fit, perform steps 65 - 67 of 1.216 EVA Prep
Then pick up in step 70, Leak Check, and press on
9.2) If suit fit too long, go to Option 3
9.3) If suit fit too short, call **MCC-H**

Option 3: Doff HUT, remove arm rings, don HUT, use BR2 gloves
EMU 3006 10) Work steps 12, 13, 17 - 28 in 1.240 Post EVA
11) Remove 0.5 " sizing ring s/n 145/146
12) Reinstall arms
Verify Locks 1,2,3 → LOCK
Verify lower arm power harness →|← upper arm
Leave arm cam configuration in SHORT/LONG

13) Perform steps 14, 26 - 53, (in step 48, use BR2 gloves), 56 - 67 of 1.216 EVA Prep

14) Add step 67A, DCM O2 ACT→ PRESS
- 14.1) When suit P is stable, perform suit evaluation (optional manipulate tools on MWS)
- 14.2) If good suit fit, continue with step 70 of 1.216 EVA Prep
- 14.3) If suit fit NO JOY, call **MCC-H**

EMU Depress Block

1) O2 ACT → OFF

2) Purge valve → op (up)

3) √STATUS: SUIT P < 0.4 psi (compare with gauge)

4) Gloves ←|→ EMU (leaved donned, disconnected)

5) Gloves →|← EMU

6) DCM O2 ACT → PRESS

7) √Helmet purge vlv→ closed, down

8) PURGE vlv → closed (down)

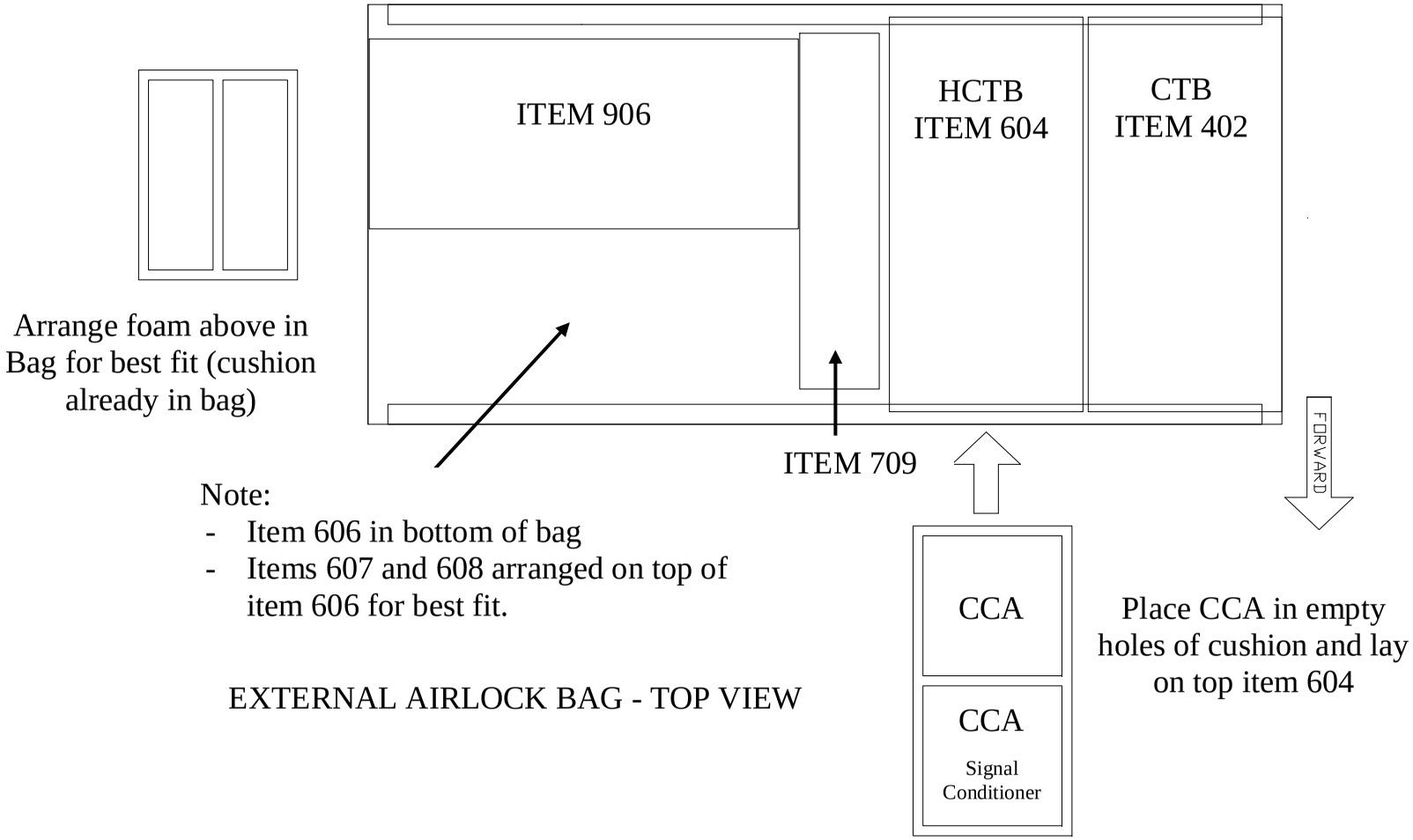
TDRS	AOS	LOS	Delta (min)	Notes
W	07/02:29	07/02:41	12	
W	07/02:51	07/03:00	9	
E	07/03:11	07/03:18	7	

Note: Please notify MCC-H 10 minutes prior to the event to allow for ground network configuration.

Good morning STS-129 Flight Crew,

The diagram below contains the last 5-MLE Bag layout for the External Airlock Bag.

-The STS-129 Middeck Stowage Team



Note:
- Item 606 in bottom of bag
- Items 607 and 608 arranged on top of item 606 for best fit.

EXTERNAL AIRLOCK BAG - TOP VIEW

LiOH CHANGEOUT

(7 Crewmembers/Single Shift/ FD 1-15)

FLIGHT DAY	POS A	POS B	CK CMPLT
POST FD08	"	STS-126____	EVA 3
PRE FD08	"	"	
POST FD09	STS-126____	"	
MID FD09	STS-126____	STS126____	Hatch Close
PRE FD09	"	"	
POST FD10	STS-126____	STS-119____	Undocking
PRE FD10	STS-119____	STS119____	
POST FD11	STS-119____	STS-119____	
PRE FD11	STS-127*____	STS-127*____	
POST FD12	STS-127____	STS-127____	EOM
PRE FD12	11*	12*	
POST FD13	13	14	EOM +1
PRE FD13	"	15	
POST FD14	16	17	EOM +2
PRE FD14	18	19	
POST FD15	20	21	EOM +3

* Re-bag and seal LiOH cans w/ Gray Tape and stow
(Location of canisters on back)

NOTE

This card is specifically used for the STS-129 mission with the Orbiter conducting Single shift operations with a crew size of 6 until Hatch Close and a crew size of 7 after Hatch Close. This changeout scheme reflects FD3 docking with ISS, Vozdukh, and dual bed CDRA operation.

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