# STS-123 / 1J / A

## *FD 14 Execute Package*

| MSG | Page(s) | Title |
|---|---|---|
| 128A | 1 - 15 | FD14 Flight Plan Revision **(pdf)** |
| 129 | 16 - 17 | FD14 Mission Summary **(pdf)** |
| 126 | 18 - 22 | FD14 Transfer Message **(pdf)** |
| 130A | 23 - 26 | FD14 EVA Deltas **(pdf)** |
| 125 | --- | FD13 MMT Summary **(pdf - Electronic Only)** |
| 127 | --- | FD14 PAO Event Summary **(pdf - Electronic Only)** |

***Approved by FAO:*** *Telisha M. Harris* Telisha M. Harris

*Last Updated: Mar 23 2008 1:42PM GMT*
***JEDI*** *(**J**oint **E**xecute package **D**evelopment and **I**ntegration), v2.04.0003*

MSG INDEX


| MSG NO. | TITLE |
|---|---|
| 125 | FD13 MMT Summary |
| 126 | FD14 Transfer Message (16-1424) |
| 127 | FD14 PAO Event Summary (16-1423) |
| 128 | FD14 Flight Plan Revision |
| 129 | FD14 Mission Summary |
| 130 | FD14 EVA Deltas (16-1425) |


1. Exercise Constraints

   A. The generic exercise constraints that apply to the entire docked timeframe are listed in the table below.

Exercise Constraints Table A: Entire Docked Timeframe

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

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

Exercise Constraints Table B: RIGEX

| Activity | Exercise Constraints | |
|---|---|---|
| | Shuttle | ISS |
| RIGEX | No exercise for seven hours starting with RIGEX activation | No exercise for seven hours starting with RIGEX activation |

2. GAP Activation and Termination

   Today you will activate and terminate more GAPs. We've updated the detailed pages with a note to call down the time as soon as possible. The payload developer GAP MDRV is running ground controls, and science could be lost if the ground controls are not activated and terminated as close as possible to Shuttle experiment.

3. RIGEX

   Tonight you will activate the RIGEX payload. Please verify the FES dump has been terminated prior to RIGEX activation.

4. CDM DTO Completion

   Today you will perform the CDM DTO COMPLETION procedure to install the last new battery and stow the unit to preserve the data taken so far. If you would like to use the CDM after performing this procedure, ensure MCC is aware so battery usage can be monitored to ensure data is maintained for post flight analysis.

5. Shuttle Condensate Collection

   At MET 12/19:00, perform CHANGEOUT of SHUTTLE CONDENSATE COLLECTION (ORB OPS, ECLS), p. 5-36. Retrieve empty Condensate CWC s/n 5075 from Middeck Ceiling Port 2 (Bag F) and temp stow full Condensate CWC s/n 5093 for dumping post undocking.

6. Outlook Files

   Please clean up your outlook folders (Inbox, Work Related, and Sent Items). After undocking we will only be able to use Shuttle KU and the files need to be small.

7. Mulitmeter Photos

   We have reviewed all of the photos which were downlinked overnight; however the multimeter photos were not located on a card for downlink by OCA. Can you insert the card the photos are stored on into a PGSC so that we can bring them down today? Please inform us of which machine you place the card in for downlink.

8. REPLACE PAGES 2-48, 2-50, 2-52, 3-150 THROUGH 3-159.

03/23/08 08:25:52 **REPLANNED**

GMT 03/23/08 (083) 07 08 09 10 11 12 13 14 15 16 17 18

MET β=53 Day 012 012/00 01 02 03 04 05 06 07 08 09 10 11 12

| | | FD13 | | | FD14 | |
|---|---|---|---|---|---|---|
| STS-123 | CDR GORIE | ♣PMC OCA | PRE SLEEP | SLEEP | | POST SLEEP |
| STS-123 | PLT JOHNSON | | PRE SLEEP | SLEEP | SLEEP | POST SLEEP |
| STS-123 | MS1 BEHNKEN | | PRE SLEEP | SLEEP | SALOG ASPRN | POST SLEEP |
| STS-123 | MS2 FOREMAN | | PRE SLEEP | SLEEP | SALOG ASPRN | POST SLEEP |
| STS-123 | MS3 DOI | | PRE SLEEP | CDM-A CDM 5 OPS SLEEP | | POST SLEEP |
| STS-123 | MS4 LINNEHAN | | PRE SLEEP | SLEEP | | POST SLEEP |
| DN | FE-2 EYHARTS | | PS ISS | SLEEP (8.5) | SALV ⊕ | POST SLEEP HAND OVER |
| EXP | ISS CDR WHITSON | | PRE SLEEP-ISS | SLEEP (8.5) | | POST SLEEP DCS RCNFG MTX-I ♦ |
| EXP | FE-1 MALENCHENKO | | PS ISS TEX* | SLEEP (8.5) | TEX* | POST SLEEP |
| UP | FE-2 EXP16 REISMAN | | PS ISS | SLEEP (8.5) | DRY | POST SLEEP HAND OVER |

STS

DAY/NIGHT

ORBIT 191 192 193 194 195 196 197 198

TDRS W -171 E -46 Z -275

ORB ATT BIAS -XLV -ZVV

NOTES

♣PRE SLEEP *20 PUMP OFF ⊕IMMN-1JA SALIVA-XFER ♦N2 DUCT I

*20 PUMP OFF

2-48 FLT PLN/123/FLIGHT IWIS RS THRSTR TEST

**REPLANNED**

No Exercise, period !
(RIGEX OPS)

03/23/08 08:25:52

GMT 03/23/08 (083) 19 20 21 22 23 03/24 01 02 03 04 05 06

MET β=53 Day 012 12 13 14 15 16 17 18 19 20 21 22 23 013/00

| | | |
|---|---|---|
| STS-123 | FD14 CDR GORIE | PFC OCA; POST SLEEP; OFF DUTY; MEAL; FES-I; COND SWAP; EXERCISE; IMU; GAP-A; CREW CONF; CREW PHOTO; ICNCT; GAP-T; FES-T; PS; PMC OCA; *PRE SLEEP |
| STS-123 | PLT JOHNSON | POST SLEEP; PFC OCA; OFF DUTY; MEAL; EXERCISE; PWR FILL #5; MCIU*; CREW CONF; CREW PHOTO; PWR #6 FILL; PRE SLEEP* |
| STS-123 | MS1 BEHNKEN | POST SLEEP; XFER UPDT; OFF DUTY; PFC OCA; OFF DUTY; MEAL; RNDZ TOOLS C/O; EXERCISE; CREW CONF; CREW PHOTO; PRE SLEEP; XFER BRIEF; PRE SLEEP |
| STS-123 | MS2 FOREMAN | POST SLEEP; MRLN VLID; OFF DUTY; PFC OCA; OFF DUTY; MEAL; EVA PRP FOR XFER STS; CREW CONF; CREW PHOTO; PRE SLEEP; EXERCISE; PRE SLEEP |
| STS-123 | MS3 DOI | POST SLEEP; OFF DUTY; PFC OCA; OFF DUTY; MEAL; RNDZ TOOLS C/O; CDM; CMPLT; MRLN PHOTO; MRLN; CREW CONF; CREW PHOTO; EXERCISE; PRE SLEEP; RIGEX ACT; PRE SLEEP; RIGEX OPS |
| STS-123 | MS4 LINNEHAN | EXERCISE; OFF DUTY; PFC OCA; OFF DUTY; MEAL; WLES; EVA PRP FOR XFER STS; CREW CONF; CREW PHOTO; PRE SLEEP |
| DN | FE-2 EYHARTS | HAND OVER; MRLN; IWIS^; OFF DUTY; PFC; OFF DUTY; ♣; TVIS; MEAL; MRLN WAICO XFER/STOW; TVIS; TVIS XFER; CREW CONF; CREW PHOTO; ESA XFER; PW; PS- ISS |
| EXP | ISS CDR WHITSON | N2 DUCT INSTALL; RED; EXERCISE CEVIS; PMC; ⊕; OFF DUTY; MEAL; METOX SRVY1; HDCE/FOIB; MERTOX2; EXER; S/U; CREW CONF; CREW PHOTO; PREP WORK; PRE SLEEP-ISS |
| EXP | FE-1 MALENCHENKO | TEX-20 EXP INIT; TEX-20-EXP; TEX*; TEX-20 D/L; TOFF20; TVIS; IWIS D/L; MEAL; COЖ; ИП-1 MNT; VELO+RED; CREW CONF; CREW PHOTO; PREP WORK; PS ISS |
| UP | FE-2 EXP16 REISMAN | HAND OVER; S/U; OFF DUTY; PFC; OFF DUTY; ♦; EXERCISE CEVIS; BBA XFER; OFF DUTY; MEAL; OFF DUTY; CREW CONF; CREW PHOTO; PREP WORK; PRE SLEEP-ISS |

STS: DAY/NIGHT; ORBIT 199 200 201 202 203 204 205 206; TDRS W -171 E -46 Z -275; ORB ATT BIAS -XLV -ZVV

NOTES: ^DSCNCT; *20 EXP DSCNCT; ♦DCS RCNFG; ♣BLB-LAPTOP-SHUTDOWN; ⊕FD/ISS CREW-CONF; *FILTER CK; *LEB TOWEL CHECK; *HUM SEP CHECK

No Exercise, period !
(RIGEX OPS)

03/23/08 08:25:52 **REPLANNED**

GMT 03/24/08 (084) 07 08 09 10 11 12 13 14 15 16 17 18

MET β=53 Day 013 013/00 01 02 03 04 05 06 07 08 09 10 11 12

| | | FD14 | FD15 |
|---|---|---|---|
| STS-123 | CDR GORIE | *PRE SLEEP; SLEEP | POST SLEEP |
| STS-123 | PLT JOHNSON | PRE SLEEP*; SLEEP | SLEEP; POST SLEEP |
| STS-123 | MS1 BEHNKEN | PRE SLEEP; SLEEP | SLEEP; POST SLEEP |
| STS-123 | MS2 FOREMAN | PRE SLEEP; SLEEP | SLEEP; POST SLEEP |
| STS-123 | MS3 DOI | PRE SLEEP; RIGEX OPS; SLEEP | POST SLEEP; RIGX*; POST SLEEP |
| STS-123 | MS4 LINNEHAN | PRE SLEEP; SLEEP | POST SLEEP |
| DN | FE-2 EYHARTS | PS-ISS; PMC; PS ISS; SLEEP (8.5) | POST SLEEP; PREP WORK; DCB FAM |
| EXP | ISS CDR WHITSON | PRE SLEEP-ISS; SLEEP (8.5) | POST SLEEP; PREP WORK; RSU^; DCB FAM |
| EXP | FE-1 MALENCHENKO | PS ISS; TEX*; SLEEP (8.5) | TEX*; POST SLEEP; PREP WORK; РОДНИК БВ2 TRANSF |
| UP | FE-2 EXP16 REISMAN | PRE SLEEP-ISS; SLEEP (8.5) | SALV; POST SLEEP; PREP WORK; IMMN*; IWIS |

STS

DAY/NIGHT

ORBIT 206 207 208 209 210 211 212 213 214

TDRS W -171 E -46 Z -275

ORB ATT BIAS -XLV -ZVV

NOTES
*LEB TOWEL CHECK
*HUM SEP CHECK
*20 PUMP OFF
*20 PUMP ON
*RIGEX DEACT
^STOW
*STOW

# STS-123 (FD14 )

GMT Date 03/23 (083) | W | TDRSE | Z | DORB 14 15 | ORB 196 197 198 | MET Day 012 | STS ATI | CDR GORIE | PLT JOHNSON | MS3 DOI | MCC | NOTES

08:00 09:00 10:00 11:00 12:00 15:00 16:00 17:00 18:00

STS ATI: BIAS-XLV-ZVV

CDR GORIE: SLEEP

PLT JOHNSON: SLEEP

MS3 DOI: SLEEP

FLIGHT SLEEP LOG (ORB OPS, SDBI)

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

**FD14 EZ ACTIVITES**
- Check TEPC Status
- OCAC Filter Inspect
- Hard Reboot PGSCs (Except WLES & RPOP2)

# STS-123 (FD14 )

GMT Date 03/23 (083) | W | TDRSE | Z | DORB | ORB | MET Day 012 | STS ATI | MS1 BEHNKEN | MS2 FOREMAN | MS4 LINNEHAN | NOTES

08:00

15:00

09:00

16:00

10:00

17:00

11:00

18:00

12:00

14 196 15 197 1 198

BIAS-XLV-ZVV

SLEEP

SLEEP

SLEEP

LIQ SALIVA & LOG (ORB OPS, SDBI)
EVA CREW: TAKE 1 ASPIRIN (325mg)

LIQ SALIVA & LOG (ORB OPS, SDBI)
EVA CREW: TAKE 1 ASPIRIN (325mg)

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

# STS-123 (FD14 )

GMT Date 03/23 (083) | W | TDRSE | Z | DORB | ORB | MET Day 012 | STS ATI

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

12:00

NETMEETING VIDEO CONFERENCING (ORB OPS, PGSC)
Private Family Conference
KU TDRE (11:50 - 12:21) A

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

OCA-PFC

19:00

13:00

NETMEETING VIDEO CONFERENCING (ORB OPS, PGSC)
Private Family Conference
KU TDRW (12:54 - 13:20) A

OFF DUTY

OCA-PFC

20:00

NETMEETING VIDEO CONFERENCING (ORB OPS, PGSC)
Private Family Conference
KU TDRE (13:30 - 13:58) A

OCA-PFC

14:00

BIAS-XLV-ZVV

A Omit VLHS item in Step 1
Omit Step 3
Use A/G2 for Audio and inform MCC which PGSC will be used.

21:00

OFF DUTY

OFF DUTY

OFF DUTY

15:00

22:00

16:00

# STS-123 (FD14 )

GMT Date 03/23 (083) | W | TDRSE | Z | DORB | ORB | MET Day 012 | STS ATI

MS1 BEHNKEN | MS2 FOREMAN | MS4 LINNEHAN | NOTES

12:00

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

19:00

TRANSFER UPDATE
Ref. Transfer List & MSG 126

P/TV10 IN-CABIN ACTS (MERLIN VIDEO)
(P/TV, SCENES) OPS Item 1

13:00

20:00

BIAS - XLV - ZVV

OFF DUTY

14:00

OFF DUTY

A Omit VLHS item in Step 1
Omit Step 3
Use A/G2 for Audio and inform MCC which PGSC will be used.

21:00

OFF DUTY

NETMEETING VIDEO CONFERENCING(ORB OPS,PGSC) — OCA-PFC
Private Family Conference
KU TDRW (14:40 - 14:56) A

15:00

NETMEETING VIDEO CONFERENCING (ORB OPS, PGSC) — OCA-PFC
Private Family Conference
KU TDRE (15:07 - 15:35) A

22:00

OFF DUTY

OFF DUTY

16:00

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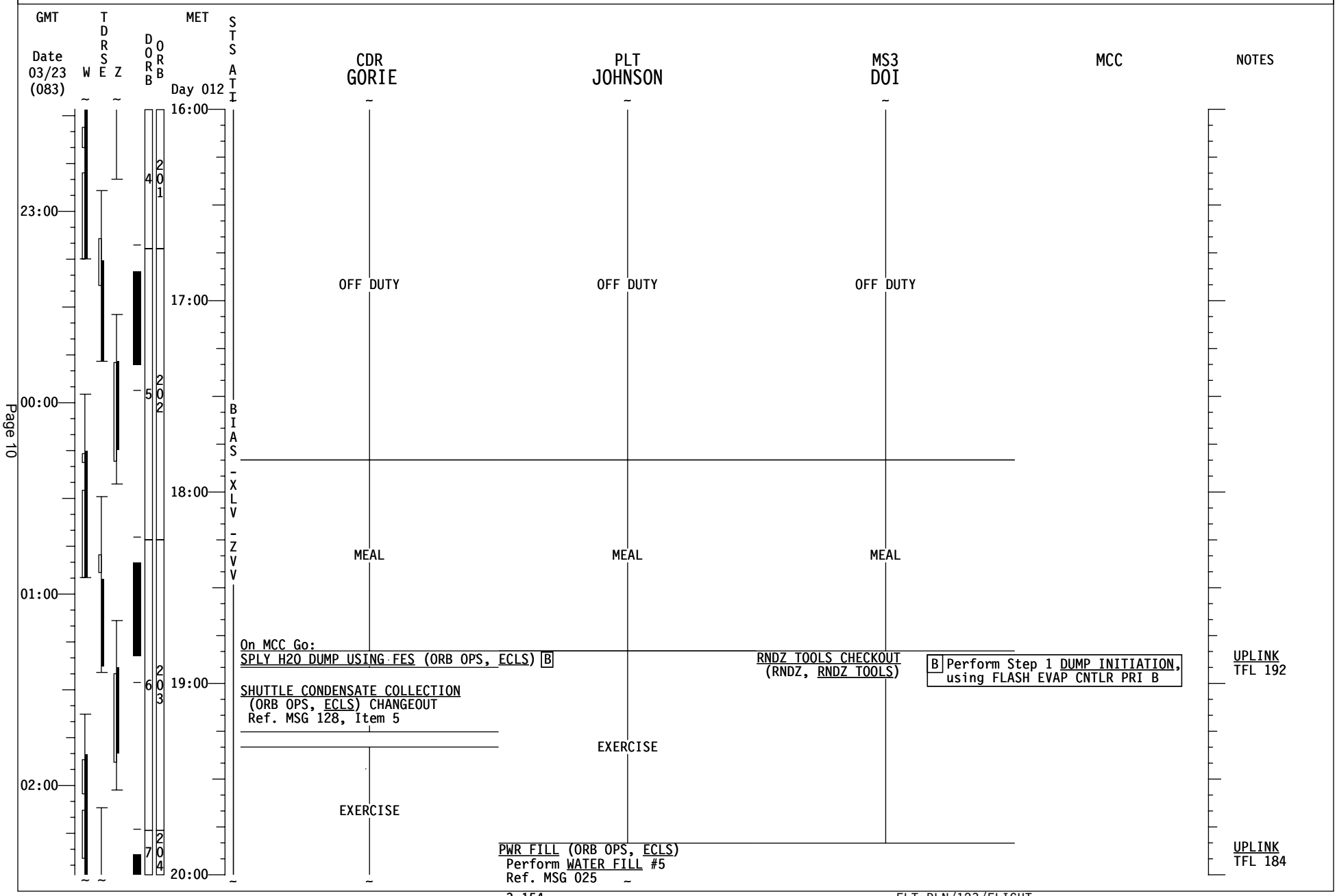
# STS-123 (FD14 )


GMT
Date 03/23 (083)
W
TDRSE
Z
DORB
ORB
MET
Day 012
STS ATI
CDR GORIE
PLT JOHNSON
MS3 DOI
MCC
NOTES
16:00
17:00
18:00
19:00
20:00
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201
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203
204
BIAS -XLV -ZVV
OFF DUTY
OFF DUTY
OFF DUTY
MEAL
MEAL
MEAL
On MCC Go:
SPLY H2O DUMP USING FES (ORB OPS, ECLS) B
SHUTTLE CONDENSATE COLLECTION (ORB OPS, ECLS) CHANGEOUT
Ref. MSG 128, Item 5
RNDZ TOOLS CHECKOUT (RNDZ, RNDZ TOOLS)
B Perform Step 1 DUMP INITIATION, using FLASH EVAP CNTLR PRI B
UPLINK TFL 192
EXERCISE
EXERCISE
PWR FILL (ORB OPS, ECLS)
Perform WATER FILL #5
Ref. MSG 025
UPLINK TFL 184

# STS-123 (FD14 )

GMT Date 03/23 (083) | W | TDRSE | Z | DORB | ORB | MET Day 012 | STS ATI

MS1 BEHNKEN | MS2 FOREMAN | MS4 LINNEHAN | NOTES

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

DORB: 4, 5, 6, 7

ORB: 201, 202, 203, 204

STS ATI: BIAS-XLV-ZVV

**MS1 BEHNKEN**

OFF DUTY

NETMEETING VIDEO CONFERENCING (ORB OPS, PGSC) [A]
Private Family Conference KU TDRW (16:20 - 16:46)
Expect KU dropout at 16:33:57 for ~20 sec

OFF DUTY

MEAL

RNDZ TOOLS CHECKOUT
(RNDZ, RNDZ TOOLS)

EXERCISE

**MS2 FOREMAN**

OFF DUTY

MEAL

EVA PREP FOR TRANSFER TO STS
(EVA, AIRLOCK CONFIG)
Ref. MSG 130

**MS4 LINNEHAN**

OFF DUTY

MEAL

WLES RNDZ TOOL C/O PREP (ORB OPS, WLES)

EVA PREP FOR TRANSFER TO STS
(EVA, AIRLOCK CONFIG)
Ref. MSG 130

**NOTES**

OCA-PFC

[A] Omit VLHS item in Step 1
Omit Step 3
Use A/G2 for Audio and inform MCC which PGSC will be used.

# STS-123 (FD14 )

GMT Date 03/24 (084) | W | TDRSE | Z | DORB | ORB | MET Day 012 | STS ATI | CDR GORIE | PLT JOHNSON | MS3 DOI | MCC | NOTES

**CDR GORIE**

EXERCISE

IMU STAR OF OPPTY ALIGN (ORB OPS)

GAP ACTIVATION (GAPs 1,2,3,12)
(ASSY OPS, GAP)
Notify MCC in Step 16 ASAP
Ref. MSG 128, Item 2

PUBLIC AFFAIRS EVENT
ISS KU TDRW: 20:48 - 21:29
Ref. MSG 127

CREW PHOTO

I'CNCT RETURN (OPS 2,3) (OPCL,RCS)
GAP TERMINATION (ASSY OPS,GAP)
(GAPs 4,5,6,7,9,10,11)
Notify MCC in Step 15 ASAP
Ref. MSG 128, Item 2

On MCC Go:
SPLY H2O DUMP USING FES (ORB OPS,ECLS) C

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

NETMEETING VIDEO CONFERENCING (ORB OPS,PGSC) A
Private Medical Conference
KU TDRW (22:42 - 23:09)

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

*Do LEB TOWEL CHECK.
Change out if req'd.
Report staus to MCC

**PLT JOHNSON**

PWR FILL (ORB OPS, ECLS)
Perform WATER FILL #5
Ref. MSG 025

L17 Check MCIU filter screen

PUBLIC AFFAIRS EVENT
ISS KU TDRW: 20:48 - 21:29
Ref. MSG 127

CREW PHOTO

PWR FILL (ORB OPS, ECLS)
Perform WATER FILL #6
Ref. MSG 025

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)
√ HUM SEP for H2O Accumulation

**MS3 DOI**

DTO COMPLETION (ORB OPS, CDM DTO)
Ref. MSG 128, Item 4

P/TV 10 IN-CABIN ACTIVITIES (MERLIN)
(P/TV FS, SCENES)
Perform SETUP Step 2 & OPS Item 1

ASSY OPS: MERLIN STATUS CK (CC)

PUBLIC AFFAIRS EVENT
ISS KU TDRW: 20:48 - 21:29
Ref. MSG 127

CREW PHOTO

EXERCISE

C Perform Step 2 DUMP TERMINATION
FES NOT Req'd.

A Omit VLHS item in Step 1
Omit Step 3
Use A/G2 for Audio and inform MCC
which PGSC will be used.

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

RIGEX ACTIVATION
(ASSY OPS, RIGEX)
Ref. MSG 128, Item 3

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

**MCC**

OCA-PMC

NO EXERCISE

Page 12

3-156 FLT PLN/123/FLIGHT

# STS-123 (FD14 )

GMT Date 03/24 (084) | W E Z | DORB 7 8 9 | ORB 204 205 206 | MET Day 012 | STS ATI

MS1 BEHNKEN | MS2 FOREMAN | MS4 LINNEHAN | NOTES

20:00

EVA PREP FOR TRANSFER TO STS (EVA, AIRLOCK CONFIG) Ref. MSG 130 (MS2, MS4)

03:00 — EXERCISE (MS1)

21:00

PUBLIC AFFAIRS EVENT ISS KU TDRW: 20:48 - 21:29 Ref. MSG 127 (MS1, MS2, MS4)

04:00 — CREW PHOTO (MS1, MS2, MS4)

BIAS -XLV -ZVV

22:00

PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS) (MS2)

05:00 — PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS) (MS1)

EXERCISE (MS2)

23:00

TRANSFER BRIEF Call down status to MCC (MS1)

PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS) (MS4)

06:00 — PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS) (MS1, MS2)

NO EXERCISE (NOTES)

00:00

# STS-123 (FD14 )

GMT Date 03/24 (084) | W | TDRSE | Z | DORB | ORB | MET Day 013 | STS ATI | CDR GORIE | PLT JOHNSON | MS3 DOI | MCC | NOTES

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

9 206 10 207 11 208 12 209

BIAS - XLV - ZVV

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

*Do LEB TOWEL CHECK.
Change out if req'd.
Report staus to MCC

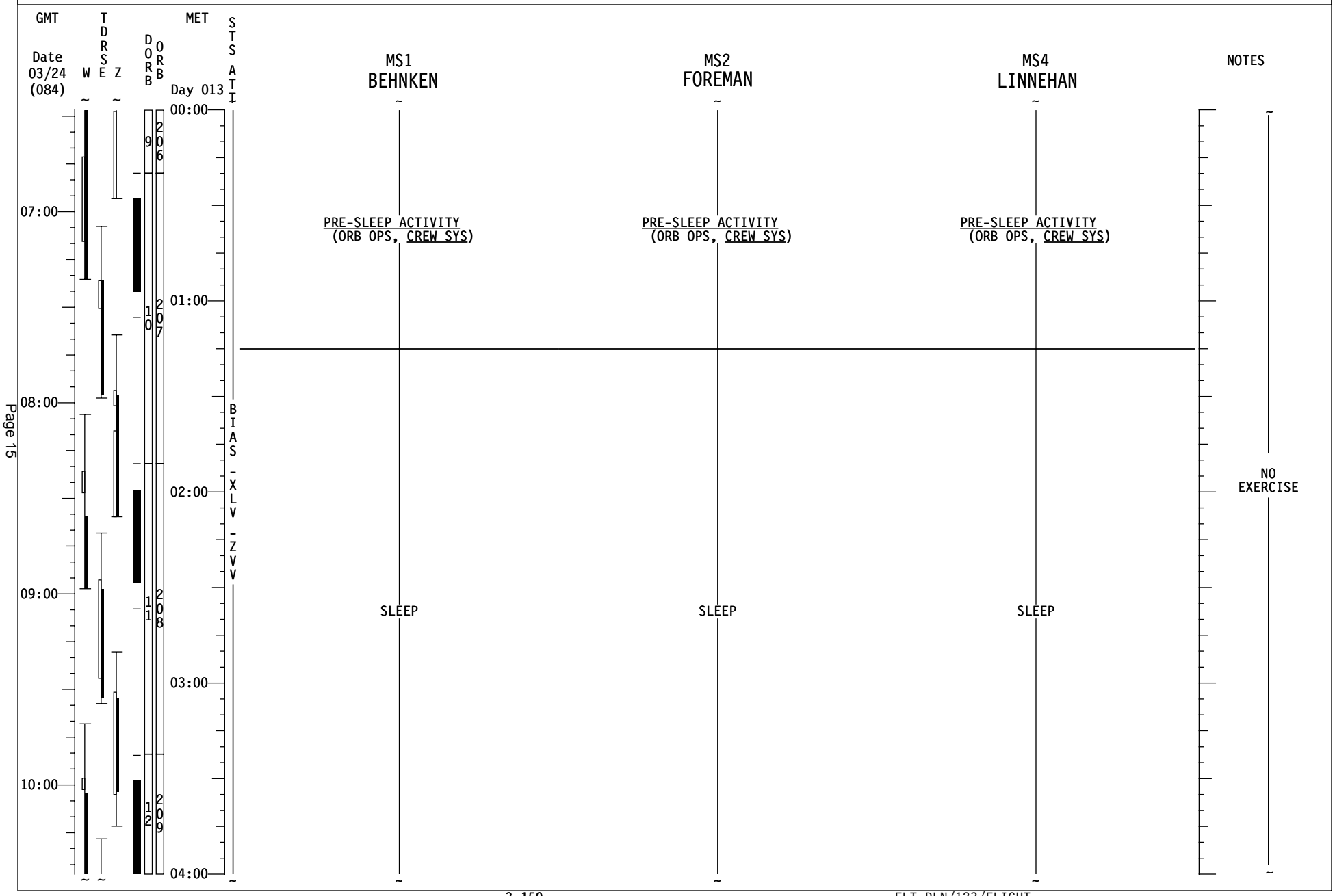
PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)
√ HUM SEP for H2O Accumulation

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

SLEEP SLEEP SLEEP

NO EXERCISE

# STS-123 (FD14 )


GMT
Date 03/24 (084)
W
TDRSE
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DORB
ORB
MET
Day 013
STS ATI
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02:00
03:00
04:00
07:00
08:00
09:00
10:00
9
10
11
12
206
207
208
209
BIAS -XLV -ZVV
MS1
BEHNKEN
MS2
FOREMAN
MS4
LINNEHAN
NOTES
PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)
PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)
PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)
SLEEP
SLEEP
SLEEP
NO EXERCISE

Happy Easter Endeavour!

We hope that you enjoy a little time off on this day of rest. You've certainly earned it. As with any holiday however, there are a few safety tips that will help to avoid ruining the good cheer.

1. THOSE AREN'T RABBIT EGGS. Rabbits do not lay eggs.
2. We know that lots of software have hidden "Easter Eggs" in them. Your flight control software is not among them. We do not encourage you to make random key entries into the DPS to see what surprises might pop up today.
3. Egg tosses might not work as well for you in microgravity -- especially dehydrated scrambled eggs.
4. Please check first with your ISS hosts before you eat the last of their powdered lamb shanks.

Looking forward to working with you on wrapping up transfer and preparing for tomorrow's undocking and separation. Have a safe and happy Easter Sunday.

YOUR CURRENT ORBIT IS: 186 X 180 NM

<u>NOTAMS – NO CHANGE:</u>

EDW – LAKEBED RUNWAY 15/33 ELS ONLY. OTHER LAKEBED RWYS RED.
NOR – LAKEBED RUNWAYS GREEN.
HAW – RWY 31 CLOSED. RWY 13 TODA 8,994'.
WAK – CLOSED. NOT USABLE.
IKF – NO AGREEMENT. NOT USABLE.
BEN – POLITICALLY NOT RECOMMENDED/NOT SUPPORTED.
ZZA – FIRST 600M (~2,000') OF RWY 30L NOT AVAILABLE. 0,200' REMAINING.
BEJ – CLOSED.
FMI – CLOSED.
JDG – CLOSED.
NKT – CLOSED.
GUA – RWY 06L/24R NOT USABLE – CONSTRUCTION.

<u>NEXT 2 PLS OPPORTUNITIES:</u>

NOR17 ORB 203 – 12/19:05 (FEW 100 SCT 200 120/08P12)
EDW22 ORB 219 – 13/19:27 (SKT250 230/10P18)

<u>OMS TANK FAIL CAPABILITY:</u>

L OMS FAIL: NO R OMS FAIL: NO

<u>LEAKING OMS PRPLT BURN:</u>

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

OMS QUANTITIES(%)

L OMS OX = 34.7 R OMS OX = 33.8
FU = 34.3 FU = 33.6

SUBTRACT I'CNCT COUNTER FOR CURRENT OMS QUANTITIES

DELTA V AVAILABLE:

| | |
|---|---|
| OMS | 336 FPS |
| ARCS (TOTAL ABOVE QTY 1) | 43 FPS |
| TOTAL IN THE AFT | 379 FPS |
| | |
| ARCS (TOTAL ABOVE QTY 2) | 76 FPS |
| FRCS (ABOVE QTY 1) | 15 FPS |
| | |
| AFT QTY 1 | 76 % |
| AFT QTY 2 | 38 % |

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

END OF PAGE 2 OF 2, MSG 129

Good Morning Takao and Bob (and Peggy)!

You guys are doing great! There are only a few items left to “seek and hide”. We really appreciate all the transfer work you’re doing and the informative calldowns.

**Q & A**

- **A for Bob:** We have an ISS stowage location for the P411 EVA Override Bolts you asked about last night. Please place them in a ziplock and label it “P411 Connector Bolt Over-ride”. Stow the ziplock of bolts in 1.0 CTB: Unique EVA Tools, s/n 1022, located at A/L1D2 (behind the closeout).

**Changes to the Transfer List**

- **Urine Collection Kit:** Yesterday Peggy found a return item that was previously lost. This is a Urine Collection Kit and has been added to the Return Transfer List as item 405c.
- **Item 610 (Flexible Ventilation Duct 13'):** As you know, item 610 was taken back to ISS yesterday. This item is no longer returning and it has been removed from the Transfer list.
- **Baseplate Ballast Assembly (BBA):** We’ve added a BBA to the Return Transfer List as item 906. Garrett is timelined to transfer it this morning.
- **Items 803 & 907:** After days of careful review, item 803 is GO to stay on ISS. Item 907 is scheduled to transfer during the ESA XFER later today, however final transfer will occur on FD15.

**Foam for Return**

- We’ve found room to return ISS foam. You may pack 1 mesh bag with foam and temp stow it on STS. Instructions on stowing the mesh bag in the Ext A/L will be provided after undock via cabin stow. Please report part numbers on all foam you plan to return. We’ve sent this same information to the ISS crew via the Daily Summary.

For STS, the Transfer List Excel file, FD14_TransferList_STS123.xls, is located on the KFX machine in **C:\OCA-up\transfer**.

For ISS, the Transfer List Excel file, FD14_TransferList_STS123.xls, is located in **K:\OCA-up\transfer**.

**Choreography**

- Item 405c: Transfer Urine Collection Kit to STS for return.
- Item 726 (Leo): Transfer WAICO samples to MDDK for return per MRLN WAICO XFER/STOW.
- Item 725 (Leo): Transfer TVIS PCMCIA card s/n 1028 to STS for return after last TVIS exercise.
- Items 606 – 606.3, 904, 905 & 907 (Leo): Transfer the Crew Pref CTB, ESA MEDIA KIT, ERB Hard Disks and LEO to STS for return during ESA XFER.
- Item 721 (Leo). Transfer his Saliva Collection Kit to STS for return during IMMN-1JA SALIVA-XFER.
- Item 900: Transfer Bacteria Filters to STS.
- Item 906 (Garrett): Transfer the BBA to STS for return during BBA XFER.

**Crewmembers Scheduled for Generic Xfer Ops**

None

**Please update the Transfer List as follows:**

In **RESUPPLY** tab:
Replace Resupply Page 10

In **RETURN** tab:
Replace Return Page 2
Make Pen and Ink change to Return Page 5:
Item 610: Strikethrough entire row
Insert Return Page 15

Please call us with questions.
- The Transfer Team

## STS-123/1JA Resupply Transfer List

| CHNG | ☑ | FD | Initials | Item # | Item Name | Qty | Initial Stowage | Temp Stowage | Stowage at Undock | Wt (lbs) | PROCEDURES/**Constraints**/ **Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | **Real Time Additions** | | | | | | | |
| | ☑ | 7 | | 800 | ISS Food | n/a | MA16L | | Peggy, Leo & Yuri's stomachs | n/a | |
| | ☑ | 5 | | 801 | Sharp Edge Test Swatches | 5 | MA16L | | ISS | n/a | **Peggy will stow in final location per direction from ISO. |
| | | | | 802 | A31p Laptop<br>[PGSC]<br>[s/n 1098]<br>[STS-7] | 1 | | STS deployed | NOD1S4_C2 (in 1.0 CTB, s/n 1189) | 7.94 | **After PCS / PGSC DEACT XFER Activity on FD15, remove PGSC harddrive and stow MF71G.**<br><br>**Remaining internal components transfer, but no other peripherals (i.e. power supply, 1394 Firewire cable, WLE Receiver, LCS cable, wireless RF network card)** |
| X | | | | 803 | GARRETT | 1 | Endeavour | | ISS | UNK | **Handle with care - sensitive transfer item. Keep away from heat sources & food pantry |





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

## STS-123/1JA Return Transfer List

| CHNG | ☑ | FD | Initials | Item # | Item Name | Qty | Initial Stowage | Temp Stowage | Stowage at Undock | Wt (lbs) | PROCEDURES/**Constraints**/ **Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | ☑ | 5 | | 404 | Return Bag 404 | 0.5 CTB | NOD2P2 | | MD CEIL PORT 1 (Bag A) | 9.46 | |
| | ☑ | 5 | | 405 | Return Bag 405 | 1.0 CTB | NOD2P2 | | MD CEIL PORT 1 (Bag A) | 26.05 | |
| X | | | | 405c | Urine Collection Kit [barcode HRF07299J] | 1 | Peggy | | MF57E | | **Before stowing this item, remove 0.5 CTB containing Entry Garments from MF57E and temp stow on MDDK. |
| | ☑ | 5 | | 406 | Return Bag 406 | 1.0 CTB | NOD2P2 | | MD CEIL PORT 1 (Bag A) | 40.02 | |
| | ☑ | 11 | | 406a | ISS Microbial Air Sampler Kit [s/n 1003] [Old] | 1 | LAB1D4_D2 | | MD FLOOR PORT 2 (Bag F) | | **This is already stowed in Bag F.<br><br>**Petri Dish Packets need to be removed from this Kit and taken back to ISS. Ref item 406.1 |
| | ☑ | 11 | | 406.1 | PETRI DISH PACKET ASSY MICROBIAL AIR SAMPLER [Expiration Date: 05/29/2008] | 7 foil pouches | MD FLOOR PORT 2 (Bag F) (in item 406a) | | LAB1D4_D2 (in new ISS Microbial Air Sampler Kit, s/n 1004) | | **Remove (7) unopened Petri Dish Packets (foil pouches) with expiration date of 05/29/2008.<br><br>**Transfer back to ISS and stow in new ISS Microbial Air Sampler Kit (s/n 1004). |
| | ☑ | 5 | | 407 | Return Bag 407 | 1.0 CTB | NOD2P2 | | MD CEIL PORT 1 (Bag A) | 17.65 | |
| | ☑ | 5 | | 408 | Return Bag 408 [Photo/TV Bag] | 0.5 CTB | NOD2P2 | | MD CEIL PORT 2 (Bag D) | 22.12 | |
| | ☑ | 5 | | 409 | Return Bag 409 | 0.5 CTB | NOD2P2 | | MD CEIL PORT 2 (Bag D) | 28.70 | |
| | ☑ | 5 | | 410 | Return Bag 410 | 1.0 CTB | NOD2P2 | | MD CEIL PORT 2 (Bag D) | 31.41 | |

# STS-123/1JA Return Transfer List

| CHNG | ☑ | FD | Initials | Item # | Item Name | Qty | Initial Stowage | Temp Stowage | Stowage at Undock | Wt (lbs) | PROCEDURES/**Constraints**/ **Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|
| X | | | | 906 | Baseplate Ballast Assembly (BBA)<br>[s/n: 0073]<br>[b/c: 00002617M] | 1 | LAB1O5 G | | MD CEIL PORT 2 (Bag D) | 4.39 | **Cushion BBA with up to 2 lbs of ISS Foam. Do not exceed 2 lbs (5MLE bag is weight limited).**<br><br>**Report part numbers of foam used.<br><br>**Stow on top of CTBs and in the center of the 5MLE bag. |
| X | | | | 907 | LEO | 1 | Columbus | | STS MDDK | UNK | **Do not stow in a 5 MLE bag. LEO must return on a LWSA for re-entry |

Bob, Mike, Rick, Peggy, and Garrett,
What an outstanding performance! Five EVAs completed and you got everything done except for a pesky patch panel, that's incredible work by a great team. Well, we're in the home stretch, and it's time to clean up and get ready to move out of the airlock. We have some clean-up deltas for you listed below. Again, thanks for all your hard work from the EVA Team.

## EVA Systems Items

Helmet Light Bulb
Upon repress yesterday, we heard a call that a helmet light bulb was blown out. From the video, we believe it was on Mike's suit. Can you confirm which helmet light s/n it was on and which bulb it was? We'd like to keep track to know which bulb needs to be changed out later.

Overgloves or Glove Check
Mike, unfortunately we won't be able to analyze the POST EVA 5 glove photos until after you undock. To protect for a contingency EVA on the way home, we have two choices on how to proceed. We need you to bring a pair of overgloves home on the shuttle, unless you do an inspection of your backup (2$^{nd}$ pair) right glove s/n 6066. Engineering didn't get the resolution that was required to verify there was no hole in the vectran at the target area identified in the photo below. If this right glove does not have a hole in the vectran, all the overgloves can remain on ISS. If there is a hole in the vectran, the glove will be no go for EVA. Your prime glove would be go for EVA with the use of an overglove. The options are explained in more detail below. Let us know which option you decide. These actions will be pen and ink changes to the EVA PREP FOR TRANSFER activity.

1. Option 1: Inspect B/U Right Glove s/n 6066: Visually inspect the vectran for holes in the target area identified in the photo below. Make sure you pinch the seam and manipulate it well enough to determine if there is a hole. If there is no hole, keep all overgloves on ISS. If there is a hole, bring a pair of overgloves home on shuttle. See Option 2 for details on bringing an overglove home.
2. Option 2: Transfer Overgloves to Shuttle: This is required if no inspection is done on the B/U right glove s/n 6066. Also required if after the inspection, a hole was found in the vectran. It is recommended to transfer the pair that had the loose RTV trimmed off.

EVA Prep for Transfer Pen & Inks

We have some additional changes for the EVA Prep for Transfer to Shuttle procedure you will be working today. We want to ensure the correct locations of helmets, batteries, and METOX prior to undocking so there are a couple of extra checks in the pen and inks below.

Please add the following pen and ink changes to **EVA PREP FOR TRANSFER TO SHUTTLE.**

Prior to step 1:

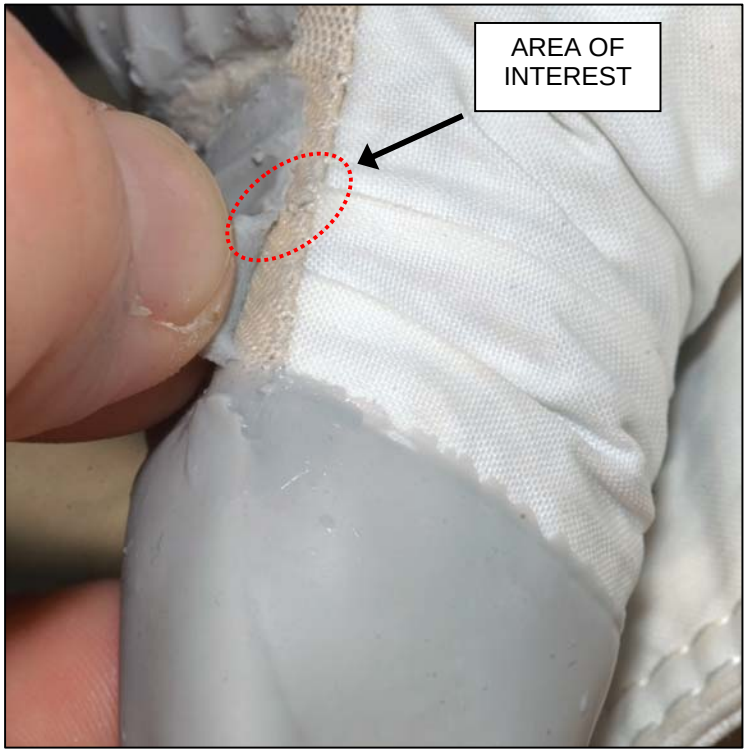
a. For EMU 3008/3003 remove REBA, EMU Battery, and Metox
b. Verify helmet s/n 1073 on EMU 3006
c. Verify helmet s/n 1077 on EMU 3008

Add step 8a, 8b and 8c:

a. Option 1: Inspect Fm right B/U (2nd pair) glove (s/n 6066). Transfer overgloves per Option 2 if a hole is found.
b. Option 2: Place 1 pair of old-style overgloves in EVA Systems Transfer Bag.
   (The over-gloves will be stowed in the Airlock Floor Bag during EVA UNPACK AND STOW.)
c. Notify **MCC-H** with resolution

To determine if there is a hole in the vectran of Mike's right backup EMU glove (s/n 6066), please perform the following steps on "area of interest" shown in the photos.

1. Pinch the thumb pleats together along the seam (as indicated in the photos).
2. Inspect the Vectran between the seam and the RTV pad.
3. Report down any holes.



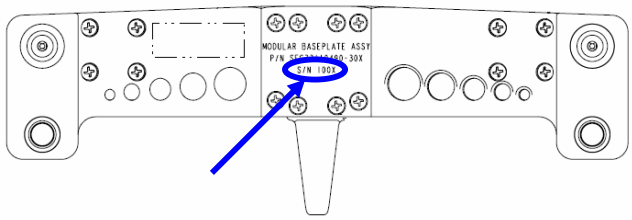
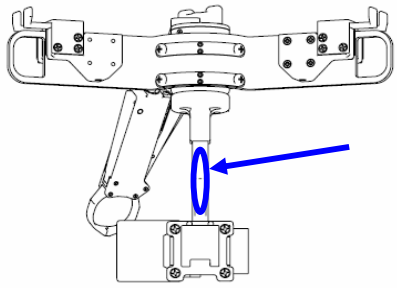
## EVA Task Items

Broken MWS Swap

As a heads up, we have scheduled time on FD 15 to swap the broken MWS with a unit from Shuttle. To make things easy you can swap the entire assembly, including the baseplate. Report S/N's from both the broken and new units to MCC-H.

Broken unit:
- Stow in Middeck Floor Stbd 1 Bag C
- Baseplate Assy expect S/N 1001, 1003 or 1005;
- Gimbal Assy expect S/N 1001 per your previous call down
- End Effector (during EVA 5 stowed in ISS small trash bag)

New unit:
- Retrieve from VOL D
- Baseplate Assy expect S/N 1002 or 1006,
- Gimbal Assy expect S/N 1005 or 1006

| **Modular MWS Baseplate Assembly**<br>SEG33110490-301 | **Modular MWS Gimbal Assy**<br>SEG33110493-301 |
|---|---|
|  |  |

P411 EVA Override Bolt Stowage for 1J

Regarding the stowage of the EVA Override bolts for P411 connector that you asked about last night, please place these in a ziplock (label "P411 Connector Bolt Over-ride") and stow in the Unique EVA Tools Bag (1.0 CTB 1022, A/L 1D2).

1J/A EVA Tool Cleanup

Just a reminder that MSG 16-1381 1J/A EVA Tool Restow Matrix has the locations to restow the EVA tools used on 1J/A. This will be added to the task list and time scheduled post undock.

FD13 MMT Summary

The FD13 MMT met briefly to discuss mission progress. At the time of the meeting, the review of the late inspection data was almost complete and there were no concerns. The team was statused on the EVA gloves usage plan for EVA #5 and for a subsequent contingency EVA. As the result of the hard work from the crew and from the ground team, the mission continues to go very well. The team is looking forward to a successful fifth EVA.

**PPCO2 Concentrations:** The team has been working to solve the air flow issues that have been causing the anomalous PPCO2 concentrations in the mated stack. It is believed that the anomalous PPCO2 levels on the shuttle have been caused by inadequate mixing of the ISS atmosphere between the US Lab and Node 2. The fundamental reason why there is inadequate mixing is still under investigation; however, preliminary reports from the crew suggest that the ducting placed between the Node 2 CCAA outlet and the Node 2 aft starboard IMV return has improved the air quality. After airflow measurements are obtained later in the crew day to confirm improved PPCO2 concentrations, the second booster fan will be turned off.