Post Insertion

STS-134

Mission Operations Directorate
Operations Division

Final
April 30, 2010

National Aeronautics and Space Administration
Lyndon B. Johnson Space Center
Houston, Texas

Verify this is the correct version for the pending operation (training, simulation or flight).
Electronic copies of FDF books are available. URL: http://mod.jsc.nasa.gov/do3/FDF/index.html
| PI-00894A | ASC-01953B |

Incorporate the following:

1. Replace iii and iv
2. Replace 1-3 and 1-4, 1-17 thru 1-20, 1-27 and 1-28

Prepared by: [Signature] 3/8/11

Book Manager

Approved by: [Signature]

Manager/Flight Procedures

Accepted by: [Signature]

PDF Manager

Encl: 10 pages

File this PCN immediately behind the front cover as a permanent record.
PCN-1 (Dec 3, 2010) Sheet 1 of 1

List of Implemented Change Requests (482s):
PI-00892

Incorporate the following:
1. Replace iii and iv
2. Replace 1-3 and 1-4, 1-13 and 1-14, 1-17 and 1-18
3. Replace CC 3-3 and CC 3-4

Prepared by: [Signature] Book Manager 12/1/10

Approved by: [Signature] Manager, Flight Procedures

Accepted by: [Signature] FDP Manager

Encl: 10 pages

File this PCN immediately behind the front cover as a permanent record
MISSION OPERATIONS DIRECTORATE

POST INSERTION
STS-134

FINAL
April 30, 2010

PREPARED BY:

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Publication Manager

APPROVED BY:

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Michael T. Hurt
Flight Data File Manager

This document is under the configuration control of the Crew Procedures Control Board (CPCB). All proposed changes must be submitted via Change Request Workflow (CRW) to DO3/FDF Manager.

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Incorporates the following:

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AREAS OF TECHNICAL RESPONSIBILITY

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# POST INSERTION

**STS-134**

## LIST OF EFFECTIVE PAGES

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### POST INSERTION CUE CARDS

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<tr>
<td>AFT FLIGHT DECK RECONFIGURATION (Front)</td>
<td>CC 3-3</td>
<td>PI-1a/134/O/C</td>
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<tr>
<td>(Back)</td>
<td>CC 3-4</td>
<td>PI-1b/134/O/A</td>
</tr>
<tr>
<td>MIDDECK RECONFIGURATION (Front)</td>
<td>CC 3-5</td>
<td>PI-2a/134/O/A</td>
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<tr>
<td>(Back)</td>
<td>CC 3-6</td>
<td>PI-2b/134/O/A</td>
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* – Omit from flight book
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<th>PAGE</th>
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<tr>
<td>POST INSERTION PROCEDURES</td>
<td>1-1</td>
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<tr>
<td>ON-ORBIT SWITCH LIST</td>
<td>1-17</td>
</tr>
<tr>
<td>ORBIT 5/6 DEORBIT</td>
<td>2-1</td>
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<tr>
<td>CUE CARD CONFIG</td>
<td>3-1</td>
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</table>
NOTE

The STS-134 Post Insertion contains the nominal procedures from:

MET (DAY/HR:MIN)
000/00:51 TO 000/02:30 – POST INSERTION (Section 1)

The remaining STS-134 flight phases are conducted using the Ascent Checklist, Flight Plan, Deorbit Prep Book, Entry Checklist, EVA Checklist, and Rendezvous Book.
POST INSERTION PROCEDURES
For single PASS GPC failure, build PASS set as follows:

<table>
<thead>
<tr>
<th></th>
<th>GPC</th>
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<tbody>
<tr>
<td>1</td>
<td>G2</td>
<td>FD</td>
<td>SM</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>G2</td>
<td>FD</td>
<td>SM</td>
<td></td>
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<td>3</td>
<td>G2</td>
<td>FD</td>
<td>SM</td>
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</tr>
<tr>
<td>4</td>
<td>G2</td>
<td>SM</td>
<td>FD</td>
<td></td>
</tr>
</tbody>
</table>

In step 1:
- Assign strings 1,3 to one GPC and strings 2,4 to other GPC

**NOTE**
No keyboard entries or sw throws 10 sec:
Before and after moding PASS GPCs to RUN
Before OPS transition or set expansion/contraction requests until new OPS base page is displayed

---

1. REASSIGN G2FD STRING TO ANOTHER GPC IN MC 1

   **CAUTION**
   If BFS is standalone (BFC It flash):
   - BFC CRT DISP – ON
   - BFS, GNC I/O RESET
   - BFC CRT DISP – OFF

   **NOTE**
   No keyboard entries or sw throws 10 sec:
   Before and after moding PASS GPCs to RUN
   Before OPS transition or set expansion/contraction requests until new OPS base page is displayed

2. MODE G2FD GPC TO OPS 0

   **CAUTION**
   If BFS is standalone (BFC It flash):
   - BFC CRT DISP – ON
   - BFS, GNC I/O RESET
   - BFC CRT DISP – OFF

3. LOAD MC 2 INTO G2FD GPC

   **CAUTION**
   If BFS is standalone (BFC It flash):
   - BFC CRT DISP – ON
   - BFS, GNC I/O RESET
   - BFC CRT DISP – OFF

---

**CONFIG GPCs FOR OPS 2**

<table>
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<tr>
<th></th>
<th>GPC</th>
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<tbody>
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<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

If no MC = 02 after 30 sec:
- a. On MCC GO, cycle pwr on MMU 1,2
- b. Retry GPC FREEZE DRY (step 3)
- c. If FD successful, continue with step 4

If not successful and:
- NO GPCs FAILED: go to step 1, delete GPC 3 from TGT SET, restring 1,3, 1,3 to GPC 1, 1,3, and
- restring 2,4 to GPC 4, try to FD GPC 2 with steps 2,3, then go to step d
- ONE GPC FAILED: go to step 1, delete attempted FD GPC from TGT SET, restring all strings to lowest ID GPC, try to FD other GPC with steps 2,3, then go to step d
- d. If FD successful, continue with step 4

If not successful: consider both MMUs failed;
- on MCC GO, perform transition to OPS 3

---

**TRANSITION TO GNC OPS 2**

<table>
<thead>
<tr>
<th></th>
<th>GPC</th>
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<tr>
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<tr>
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<tr>
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<td>G2</td>
<td></td>
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</table>

|   |   |   |   |   |
|---|---|---|---|
|   | STR |   |   |   |
|   | 1   | 1  | 1  | 1  |
|   | 2   | 2  | 2  | 2  |
|   | 3   | 2  | 2  | 2  |
|   | 4   | 4  | 4  | 4  |
|   | PL  |   |   |   |
|   | 1/2 | 1  | 1  | 1  |
|   | CRT |   |   |   |
|   | 1   | 2  | 2  | 2  |
|   | 2   | 2  | 2  | 2  |
|   | 3   | 2  | 2  | 2  |
|   | 4   | 2  | 2  | 2  |
|   | L   |   |   |   |
|   | 1   | 2  | 2  | 2  |
|   | MM  |   |   |   |
|   | 1   | 2  | 2  | 2  |
|   | 2   | 2  | 2  | 2  |

---

**POST INSERTION**
Ref ASC for activities from 00:00-00:50 MET

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</table>

1: GNC OMS 2 MNVR COAST
2: GNC OMS 2 MNVR COAST
3: BFS, SYS SUMM 2

6. TRANSITION TO SM OPS 201(401)

CRTX SM, GPC/CRT SM GPC/X EXEC

<table>
<thead>
<tr>
<th>CONFIG – ITEM 1</th>
<th>4(5) EXEC</th>
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<tr>
<td>MODIFY MC 4(5) per table</td>
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<tr>
<td>SM, OPS 201(401) PRO</td>
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<tr>
<td>SM ANTENNA</td>
<td></td>
</tr>
<tr>
<td>C3 UPLK – ENS</td>
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<tr>
<td>C3 SM 1 DPS UTILITY</td>
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<tr>
<td>UL CNTL AUTO – ITEM 35 EXEC</td>
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<tr>
<td>CRTX SM, GPC/CRT SM GPC/X EXEC</td>
<td></td>
</tr>
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</table>

7. SECURE BFS

C3 BFS CRT DISP – ON
C3 BFS, GNC, OPS 000 PRO
C3 BFS, BFS MEMORY

8. RECONFIG MECs

C2 IDP/CRT 3 PWR – OFF

9. LOAD ORBIT TFLs

C3 OI PCMMU FORMAT – GPC

FORMATE:

| CRT | FXD – ITEM 1 EXEC (*) |
| SEI D – ITEM 3 +1 9 9 EXEC |
| LOAD – ITEM 4 EXEC |
| \RUN\ CPTL |
| SEL ID – ITEM 3 +1 9 3 EXEC |
| LOAD – ITEM 4 EXEC |
| \RUN\ CPTL |
| PGM – ITEM 2 EXEC |

C3 SM ANTENNA

1. GNC OMS 2 MNVR COAST
2. GNC OMS 2 MNVR COAST
3. BFS, SYS SUMM 2
4. TRANS DAP

A1(B1) AUTO PRI RT 0.2 DB 5.0
10. RECONFIG GPCs

O6

GPC MODE 5 – HALT (tb-bp)
OUTPUT 5 – NORM (tb-bp)
OUTPUT (SM GPC) – TERM (tb-bp)

If no failed GPC:
√All IDPs deassigned from FD GPC
GPC MODE (FD GPC) – STBY (tb-bp)
– HALT (tb-bp)
– STBY (tb-RUN)
– HALT (tb-bp)

If single G2 reqd:
IDP/CRTX MAJ FUNC – PL
GPC/CRT 2/X EXEC

X: PL GPC MEMORY
CONFIG – ITEM 45 +2 EXEC
GPC – ITEM 46 +2 EXEC
STORE – ITEM 47 EXEC
Store complete when MC = 2 (~30 sec)
√All IDPs deassigned from FD GPC
GPC MODE 2 – STBY (tb-bp)
– HALT (tb-bp)
– STBY (tb-RUN)
– HALT (tb-bp)

Perform ERR LOG RESET
GNC 0 GPC MEMORY
ITEM 48 EXEC
SM 0 GPC MEMORY
ITEM 48 EXEC

If PASS GPC failed from ASCENT and dual
G2 reqd, use G2FD to form G2 RS:

CRT

If PASS GPC failed from ASCENT and single
G2 reqd:
√All IDPs deassigned from FD GPC
GPC MODE (FD GPC) – STBY (tb-bp)
– HALT (tb-bp)
– STBY (tb-RUN)
– HALT (tb-bp)

If GPC failed from ASCENT,
perform MAL, DPS, GPC FRP-1 as time permits

PI LOCKER
When all GPC switch configuration complete,
unstow, install GPC MODE switchguard
MET
DAY 000
01:00
A1(B1)
AUTO
PRI
RT 0.2
DB 5.0

1-5 PI/134/FIN

1: GNC UNIV PTG
2: SM ANTENNA

RAD ACT 7

NOTE
If RAD flow has been initiated manually, delay RAD ACT until MCC call or until RAD OUT T low

L1 RAD BYP VLV MODE (two) – AUTO
C NTLR LOOP (two) – AUTO A
Wait 90 sec
RAD BYP VLV tb (two) – RAD
* If RAD BYP VLV 1(2) tb – BYP:
  * RAD CNTLR LOOP 1(2) – AUTO B
  * Wait 90 sec
  * RAD BYP VLV 1(2) tb – RAD
* If RAD BYP VLV 1(2) tb still BYP or bp:
  * RAD BYP VLV MODE 1(2) – MAN
  * MAN SEL 1(2) – RAD FLOW
  * Hold 3 sec or until tb – RAD
* If RAD BYP VLV 1(2) tb – bp:
  * RAD BYP VLV MODE 1(2) – MAN
  * CNTLR LOOP 1(2) – AUTO B
  * After 10 sec, RAD BYP VLV MODE 1(2) – AUTO
  * Wait 90 sec
  * RAD BYP VLV 1(2) tb – RAD
  * If RAD BYP VLV 1(2) tb – bp:
    * RAD BYP VLV MODE 1(2) – MAN
    * MAN SEL 1(2) – RAD FLOW
    * Hold 3 sec or until tb – RAD
  * If RAD BYP VLV 1(2) tb – bp:

L2 FREON ISOL MODE – AUTO

ORB 3 DEORBIT 8

If NO-GO for RAD/PLBD OPS due to 2 FCs failed:
Go to CONT DEORB, LOSS OF 2 FC ORB 2 OR 3,
at TIG-1:30
If NO-GO due to any other failure:
Go to CONT DEORB, LAUNCH DAY ORBIT 3,
at TIG-2:00
**STAR TRKR ACTIVATION/DOOR OPEN**

**C  O6**
- S TRK PWR (two) – ON
- GNC I/O RESET
- S TRK DR CNTL SYS (two) – OP (start timer)
  - POS tb (two) – bp
  - When both tb – OP (8-24 sec), or either tb – bp for > 24 sec, CNTL SYS (two) – OFF
  - If tb – bp > 8 sec, notify MCC

*1: GNC 22 S TRK/COAS CNTL*
*STAR TRK – ITEM 3.4 EXEC*
*1: GNC 21 IMU ALIGN*
*RESUME*

**SUPPLY WATER CONFIG**

**NOTE**
Do not perform until blocks 5 and 6 are performed

**L1**
- FLASH EVAP CNTLR PRI A – OFF

**R1**
- SPLY H2O DUMP ISOL VLV – OP (tb-OP)
- XOVR VLV – CL (tb-CL)
- TKB INLET – CL (tb-CL)
- TKA OUTLET – OP (tb-OP)

**ML86B:A**
- cb MNB SPLY H2O TKB INLET – op
- MNC SPLY H2O XOVR VLV – op

**SM SYS SUMM 2**

**CRT**
- If FREON EVAP OUT TEMP > 41 and ≤ 47 degF:
- L1 RAD CNTLR OUT TEMP – HI

**CRT**
- When FREON EVAP OUT TEMP > 50 degF,
- L1 RAD CNTLR OUT TEMP – NORM, then immediately:
  - FLASH EVAP CNTLR PRI B – ON

**CRT**
- If FREON EVAP OUT TEMP ≤ 41 or > 47 degF:
- L1 FLASH EVAP CNTLR PRI B – ON
MCC & CREW:
GO for orbit ops
C O6 UHF MODE sel – OFF
MS KU–BD ANT DEPLOY (ORB OPS, COMM/INST)
MS KU–BD ACTIVATION (ORB OPS, COMM/INST)
C,P SEAT EGRESS
01:40
C,P CLOTHING CONFIG
01:45
MS CLOTHING CONFIG (MIDDECK, AFT FLIGHT DECK RECONFIGURATION Cue Cards)
10, 1-14, 1-15
ALL QUICKDON MASKS SETUP
01:50
C POST PLBD OPS RAD CONFIG
01:55
C STAR TRKR ACTIVATION/DOOR OPEN
MS ESCAPE POLE STOWAGE (MIDDECK RECONFIGURATION Cue Card)
13, 1-16

CLOTHING CONFIG
Doff, stow:
Harness, Boots, LES
Stow gloves in Helmet
Remove radiation dosimeter from LES and insert in inflight garments
Doff, stow in Wet Trash:
UCD (clamp if used)
Emesis Bag, if used (unstow new bag)

POST PLBD OPS RAD CONFIG
C 1: SM 88 APU/ENVIRON THERM
NOTE FREON LOOP RAD OUT temps will not drop to normal operating range (< 60 deg) until ~15 min after doors are opened
L1 NH3 CNTLR B(A) – OFF
\sqrt{RAD BYP VLV tb (two)} – RAD
H2O LOOP 2 BYP MODE – AUTO
CRT1 When FREON LOOP RAD OUT T < 60 deg:
L1 HI LOAD EVAP – OFF

QUICKDON MASKS SETUP
Connect QDM COMM to HIU
Connect QDM O2 to LEH hose
Verify operation
Temp stow QDM/HIU assembly
1: GNC UNIV PTG
2: SM ANTENNA
4: SM ANTENNA

A5(B1) AUTO
ALT RT 0.2
DB 5.0

02:00

MS AIRLOCK SETUP FOR INGRESS (MIDDECK RECONFIGURATION
Cue Card) 15, 1-16
P W/B STEAM VENT HTR ACT
R2 \BLR CNTLR/HTR (three) – A
PWR (three) – ON

02:05

C CONFIG VERNIER CONTROL
MCC GO for vernier control
O16: F RJD MANF L5/F5/R5 DR/IVER – ON, wait 5 sec
DAP: A/AUTO/VERN

02:10

ALL CONFIG CONTROLS FOR ON-ORBIT
Perform actions on 1-17 thru 1-27
Unstow, install HUD covers (two)

02:15

L2 Remove, stow (on panel L2/FDF FD locker)
NWS sw flex extension

P HYD THERMAL CONDITIONING-ENABLE
R2 HYD CIRC PUMP (three) – GPC

02:20

P SUPPLY WATER CONFIG 14, 1–6

02:25

MS RESET C/W (AFT FLIGHT DECK RECONFIGURATION
Cue Card) 16, 1–14

02:30

MS FUEL CELL VI PERFORMANCE PLOT (ORB OPS, EPS)

Stow POST INSERTION, go to FLIGHT PLAN, FLT DAY 1
**DETAILED PLBD OPENING PROCEDURES**

- If no motion determined visually or ‘OP/CL’ not blank within 10 sec after cmd.
- PL BAY DR – STOP, perform MAL, MECH, 9.1a
- If latch not ‘OP’ in single mtr time, PL BAY DR – STOP, perform MAL, MECH, 9.1d
- If door motion stops and not ‘OP’, PL BAY DR – STOP, perform MAL, MECH, 9.1f
- If SM GPC fails during this operation, PL BAY DR SYS (two) – DSBL
- Perform PASS SM GPC FAIL (ORB PKT, DPS)

**CAUTION**

Use MANUAL mode for subsequent BFS PLBD ops if BFS AUTO sequence has been interrupted by reversing latch/door drive direction or if MANUAL mode has already been used during mission

**NOTE**

Note any single mtr operations (continue ops)
(single mtr times = 2X listed dual motor times).
If one mtr in each of two separate latch gangs fails:
- PL BAY DR – STOP
- MCC

**AUTO PLBD OPENING PROCEDURE**

**MS**

1. SM, OPS 202 PRO or BFS, SM 63 PL BAY DOORS

2. AC POWER ON – ITEM 1 EXEC (*)

3. AUTO MODE SEL – ITEM 3 EXEC (*)

4. PL BAY DR SYS (two) – ENA

5. OP/CL STATUS (ten) – CL

6. CENTER LATCHES 5-8,9-12,1-4,13-16 (two) – blank,OP (~20 sec)

7. STBD FWD,AFT LATCHES (two) – blank,OP (~30 sec)

8. PORT FWD,AFT LATCHES (two) – blank,OP (~30 sec)

9. PORT DOOR – RDY,blank,OP (~63 sec)

10. PL BAY DR – STOP

**POST-PLBD OPENING CLEANUP**

1. PL BAY DOOR SYS (two) – DSBL

2. OP/CL STATUS (ten) – OP

3. AC POWER OFF – ITEM 2 EXEC (*)

4. SM, OPS 201 PRO (if PASS SM)

5. SM ANTENNA

6. After floodlights ON > 10 min:
   - PL BAY FLOOD (all) – OFF

**MANUAL PLBD OPENING PROCEDURE**

**MS**

1. SM, OPS 202 PRO or BFS, SM 63 PL BAY DOORS

2. AC POWER ON – ITEM 1 EXEC (*)

3. AUTO MODE SEL – ITEM 3 EXEC (*)

4. PL BAY DR – STOP

5. OP/CL STATUS (ten) – CL

**OPEN STBD FWD,AFT LATCHES & DOOR**

1. Select STBD FWD,AFT LATCHES – ITEM 8,9 EXEC (*)

2. AC POWER ON – ITEM 1 EXEC (*)

3. AUTO MODE SEL – ITEM 3 EXEC (*)

4. CENTER LATCHES 5-8,9-12 (two) – blank,OP (~20 sec)

5. STBD FWD,AFT LATCHES (two) – blank,OP (~30 sec)

6. PORT FWD,AFT LATCHES (two) – blank,OP (~30 sec)

7. PORT DOOR – RDY,blank,OP (~63 sec)

8. PL BAY DR – STOP

**POST-PLBD OPENING CLEANUP**

1. PL BAY DOOR SYS (two) – DSBL

2. SM, OPS 201 PRO (if PASS SM)

3. SM ANTENNA

4. After floodlights ON > 10 min:
   - PL BAY FLOOD (all) – OFF
<table>
<thead>
<tr>
<th>FUNCTION</th>
<th>PLBD CONTROL</th>
<th>PLBD DISPLAY MDM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MTR 1</td>
<td>MTR 2</td>
</tr>
<tr>
<td></td>
<td>AC/ MCA</td>
<td>CNTL MDM SYS</td>
</tr>
<tr>
<td>LATCH</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-8</td>
<td>1/MID3</td>
<td>AB3/AB2</td>
</tr>
<tr>
<td>9-12</td>
<td>1/MID1</td>
<td>AB3/AB1</td>
</tr>
<tr>
<td>1-4</td>
<td>1/MID3</td>
<td>AB3/AB2</td>
</tr>
<tr>
<td>13-16</td>
<td>3/MID4</td>
<td>CA3/CA2</td>
</tr>
<tr>
<td>S FWD</td>
<td>1/MID1</td>
<td>AB3/AB1</td>
</tr>
<tr>
<td>S AFT</td>
<td>3/MID4</td>
<td>CA3/CA2</td>
</tr>
<tr>
<td>S DOOR</td>
<td>1/MID1</td>
<td>AB3/AB1</td>
</tr>
<tr>
<td>P FWD</td>
<td>1/MID1</td>
<td>AB3/AB1</td>
</tr>
<tr>
<td>P AFT</td>
<td>1/MID3</td>
<td>AB3/AB2</td>
</tr>
<tr>
<td>P DOOR</td>
<td>3/MID4</td>
<td>CA3/CA2</td>
</tr>
</tbody>
</table>
# AFT FLIGHT DECK RECONFIGURATION

## AFT STATION CONFIG

### POST SEAT EGRESS

<table>
<thead>
<tr>
<th>Station</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>O14:D</td>
<td>cb MNA CAB VENT – op ISOL – op</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Station</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>A14</td>
<td>RCS/OMS HTR FWD RCS – A AUTO L POD (two) – A AUTO, B OFF R POD (two) – A AUTO, B OFF OMS CRSFD LINES (two) – A AUTO, B OFF FWD,AFT RCS JET (ten) – AUTO</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Station</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>PDIP 1</td>
<td>KU BAND RATE – LO</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Station</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>A12</td>
<td>APU HTR LUBE OIL LN (three) – A AUTO</td>
</tr>
</tbody>
</table>

### ON-ORBIT CONFIG

- Don headset (if reqd)
- If WCCS flown, perform STD WCCS CONFIG (ORB OPS, COMM/INST)
- If flight deck handheld mic/speaker operation:
  - A11 MS COMM CCU PWR – OFF Connect HHMIC to MHA MS COMM CCU PWR – ON
  - R6,L5 CCU PWR – OFF
  - A13 OS AUD SPKR PWR sel – SPKR MSTR SPKR VOL sel – as reqd
  - R6,L5 HIU VOL (two) – minimum, full ccw
  - A1L S-BD PM MODE – TDRS DATA S-BD PL PWR SYS – 1 NSP DATA RATE RCV – HI XMIT – HI CODING (two) – ON
  - A1R S-BD FM DATA SOURCE sel – MMU 2 (rot) AUD CTR VOICE RCD SEL CH 1 sel – OFF 2 sel – OFF
  - R14:C cb MNB KU ANT HTR – cl UHF EVA (two) – cl :D Close left to right all cbs :E Close left to right all cbs
  - L10 Remove, stow VIP, VTR covers
  - R11L IDP/CRT 4 PWR – ON
  - R12 VPU PWR – ON (LED on)
  - MDU AFD 1 – ON (if desired)

## OSCILLATOR CONFIG

### POST SEAT EGRESS

<table>
<thead>
<tr>
<th>Station</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>A14</td>
<td>RCS/OMS HTR FWD RCS – A AUTO L POD (two) – A AUTO, B OFF R POD (two) – A AUTO, B OFF OMS CRSFD LINES (two) – A AUTO, B OFF FWD,AFT RCS JET (ten) – AUTO</td>
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<td>APU HTR LUBE OIL LN (three) – A AUTO</td>
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  - L10 Remove, stow VIP, VTR covers
  - R11L IDP/CRT 4 PWR – ON
  - R12 VPU PWR – ON (LED on)
  - MDU AFD 1 – ON (if desired)

## METRICS

<table>
<thead>
<tr>
<th>Time</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>00:53</td>
<td>SPECIALIST SEAT EGRESS</td>
</tr>
<tr>
<td>00:59</td>
<td>AFT STATION CONFIG 3</td>
</tr>
<tr>
<td>01:03</td>
<td>CONFIG FOR PLBD OPERATIONS</td>
</tr>
<tr>
<td>01:41</td>
<td>CLOTHING CONFIG 10</td>
</tr>
<tr>
<td>01:54</td>
<td>SPECIALIST SEAT REMOVAL/STOWAGE</td>
</tr>
<tr>
<td>02:01</td>
<td>AIRLOCK SETUP FOR INGRESS</td>
</tr>
<tr>
<td>02:24</td>
<td>RESET C/W 16</td>
</tr>
</tbody>
</table>

## AFT FLIGHT DECK ACTIONS

<table>
<thead>
<tr>
<th>Time</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>01:41</td>
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</tr>
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<tr>
<td>02:24</td>
<td>RESET C/W 16</td>
</tr>
</tbody>
</table>
AFT FLIGHT DECK RECONFIGURATION

CONFIG FOR PLBD OPERATIONS

A6U
SET UP LIGHTS
ANNUN BUS SEL – MNC

NOTE
Minimum operating time for PLB Floodlights is 10 min. Light must be OFF for minimum of 10 min UNBLOCKED, 16 min BLOCKED prior to reuse. ~3 min to full bright

A7U
PL BAY FLOOD MID (two) – ON
PL BAY FLOOD FWD (two) – ON

Record MET: _____/_____ : _____

* If PLB Floodlight not ON to full bright within 5 min: *
* (Aff) PL BAY FLOOD – OFF *

SET UP P/TV
Perform ACTIVATION, OPERATION (Cue Card, TV)
If PLBD video rec desired:
Perform PLBD VTR RECORDING (Cue Card)

CLOTHING CONFIG

Doff, stow:
Harness, Boots, LES
Stow gloves in Helmet
Remove radiation dosimeter from LES and insert in inflight garments

Doff, stow in Wet Trash:
UCD (clamp if used)
Emesis Bag, if used (unstow new bag)

RESET C/W

R13U
PARAMETER NAME | C/W CH | UPPER LIMIT
FREON LOOP EVAP OUT T1 | 107 | 1.90V/64.8 deg
T2 | 117 | 1.90V/64.8 deg
CABIN PRESS | 4 | 3.85V/15.34 psia

R13U
PARAMETER NAME | C/W CH | ENA/INH
MPS He TK P C L | 9 | INH
R | 19 | INH
MPS He REG P C L | 39 | INH
R | 49 | INH
HYD P 1 | 59 | INH
2 | 109 | INH
3 | 119 | INH
MIDDECK RECONFIGURATION

### PRELIM MIDDECK CONFIG

#### WARNING
Eye and skin damage can occur in as little as 10 sec.

INSTALL FILTERS
Don Sunglasses
Unstow, install: Side Hatch UV Filter and Locking Device, and Pyro Box Safing Pin

PRESS H2O TKA
ML26C
SPLY H2O GN2 TK VENT vlv – PRESS
A SPLY vlv – OP

#### NOTE
Disregard possible ‘S66 WASTE H2O PRES’ fault msg

COMM CONFIG
Unstow: headsets, handheld mic, and/or wireless comm.
(see WCCS Cue Card), if flown
If WCCS flown, perform STD WCCS CONFIG (ORB OPS, COMM/INST)
If middeck handheld mic/speaker ops:

MO42F
MIDDECK SPKR AUD A/G 1 – T/R, tw-2
A/G 2 – RCV, tw-2
A/A – RCV, tw-2
ICOM A – T/R, tw-2
B – RCV, tw-2
XMIT/COM MODE – PTT/PTT
SPKR PWR – SPKR
MSTR SPKR VOL – 8

MO39M
MIDDECK COMM CCU PWR – OFF
Connect HHMIC to CCU
MIDDECK COMM CCU PWR – ON

ML86B:C
cb MNA EXT AIRLK HTR LN ZN1,2 (two) – cl
STRUC Z1/2/3 – cl
:E
cb MNA FC PCM – op

FDF CONFIG
Slow in Helmet Bag: ASCENT Cue Cards, ASC, ASC PKT, SYS AOA
Unstow Jettison Stowage Bag, mark “Return to Houston”
Place Helmet Bag in Return to Houston Bag

Unstow VW Bags

### MET MS AFT ACTIONS

<table>
<thead>
<tr>
<th>Time</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>00:53</td>
<td>SPECIALIST SEAT EGRESS</td>
</tr>
<tr>
<td>00:57</td>
<td>PRELIM MIDDECK CONFIG 2</td>
</tr>
<tr>
<td>01:07</td>
<td>WCS CONFIG/ACT 5</td>
</tr>
<tr>
<td>01:08</td>
<td>SWITCH CONFIG/GALLEY ACT 6</td>
</tr>
<tr>
<td>01:41</td>
<td>CLOTHING CONFIG 10</td>
</tr>
<tr>
<td>01:45</td>
<td>QUICKDON MASKS SETUP 19</td>
</tr>
<tr>
<td>01:54</td>
<td>SPECIALIST SEAT REMOVAL/STOWAGE</td>
</tr>
<tr>
<td>01:59</td>
<td>ESCAPE POLE STOWAGE 13</td>
</tr>
<tr>
<td>02:01</td>
<td>AIRLOCK SETUP FOR INGRESS 15</td>
</tr>
</tbody>
</table>

### CLOTHING CONFIG 10

Doff, stow:
Harness, Boots, LES
Stow gloves in Helmet
Remove radiation dosimeter from LES and insert in inflight garments

Doff, stow in Wet Trash:
UCD (clamp if used)
Emesis Bag, if used (unstow new bag)

### QUICKDON MASKS SETUP 19

Connect QDM COMM to HIU
Connect QDM O2 to LEH hose
Verify operation
Temp stow QDM/HIU assembly
## MIDDECK RECONFIGURATION

### WCS CONFIG/ACT

<table>
<thead>
<tr>
<th>Configuration</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>WCS SWITCH CONFIGURATION</td>
<td>ML86B:A cb MNA H2O LN HTR A – cl</td>
</tr>
<tr>
<td></td>
<td>:B WASTE H2O DUMP ISOL – cl</td>
</tr>
<tr>
<td></td>
<td>:B MNA,MNB VAC VENT ISOL VLV (two) – cl</td>
</tr>
<tr>
<td></td>
<td>:F WCS CNTLR (two) – cl</td>
</tr>
<tr>
<td></td>
<td>:F MNB VAC VENT NOZ HTR – cl</td>
</tr>
<tr>
<td></td>
<td>:F MNA FLOODS WMC/MO13Q – cl</td>
</tr>
<tr>
<td>MA73C:E All cbs closed except:</td>
<td>cb AC3 PL 3Φ – op</td>
</tr>
<tr>
<td>ML31C WASTE H2O DUMP ISOL VLV – OP (tb-OP)</td>
<td>√ VAC VENT ISOL VLV BUS SEL – MNA</td>
</tr>
<tr>
<td></td>
<td>√ NOZ HTR – ON</td>
</tr>
<tr>
<td></td>
<td>√ ISOL VLV CNTL – OP (tb-OP)</td>
</tr>
<tr>
<td></td>
<td>* If VAC VENT ISOL VLV CNTL tb – CL or bp: *</td>
</tr>
<tr>
<td></td>
<td>* VAC VENT ISOL VLV BUS SEL – MNB</td>
</tr>
<tr>
<td></td>
<td>* CNTL – OP (tb-OP) *</td>
</tr>
<tr>
<td></td>
<td>* If VAC VENT ISOL VLV CNTL tb still CL or bp: *</td>
</tr>
<tr>
<td></td>
<td>* √ MCC for further actions</td>
</tr>
</tbody>
</table>

### WCS ACTIVATION

- Foot/Toe Restraints – down, locked
- VAC VLV – OP
- Unstow urinal hose from Velcro strap, install hose in cradle
- CRADLE – AUTO
- MODE – AUTO
- FAN SEP SEL sw – 1
- Unstow hose from cradle (Airflow)
- WCS ON it – on
- Stow hose in cradle
- WCS ON it – off
- Unstow, install WCS Container, Bag & Hose, Mirror, Elbow Bag Dispenser, First Day Clothing
- √ Ventline mated in aux Wet Trash
- Perform URINE PRETREAT SETUP (Cue Card, URINE PRETREAT CHANGEOUT)

### SWITCH CONFIG/GALLEY ACT

<table>
<thead>
<tr>
<th>Configuration</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA73C:F cb AC1 MAR 3Φ – cl</td>
<td></td>
</tr>
<tr>
<td>:G cb AC3 GALLEY FAN (three) – cl</td>
<td></td>
</tr>
<tr>
<td>ML86B:A All cbs closed except: MNB H2O LN HTR B – op</td>
<td></td>
</tr>
<tr>
<td>:B All cbs closed</td>
<td></td>
</tr>
<tr>
<td>:E All cbs closed except: FLOOD TNL ADAPT (three) – op</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CO2 SYS 1,2 CNTLR, CO2 COM INSTR – op</td>
</tr>
<tr>
<td></td>
<td>FC PCM – op</td>
</tr>
<tr>
<td>:F All cbs closed</td>
<td></td>
</tr>
<tr>
<td>:G All cbs closed except: ESS 1BC FLOOD TNL ADAPT 1 – op</td>
<td></td>
</tr>
<tr>
<td>R11L:G SPLLY H2O GALLEY SPLLY VLV – OP (tb-OP)</td>
<td></td>
</tr>
<tr>
<td>GALLEY H2O HTRS (two) – ON</td>
<td></td>
</tr>
<tr>
<td>OVEN/RHS – ON</td>
<td></td>
</tr>
<tr>
<td>Unstow, install Personal Hygiene Hose</td>
<td></td>
</tr>
</tbody>
</table>

### ESCAPE POLE STOWAGE

- Remove large Port Pin
- Slide back – Safing Latch
- Retract, hold Locking Pin (Ring)
- Remove Large Pin
- Release Locking Pin (Ring)
- Remove Stbd PIP Pin
- Stow Pole
- Reinstall Large Pin

### AIRLOCK SETUP FOR INGRESS

<table>
<thead>
<tr>
<th>Configuration</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA73C:G 1. cb AC 1,2 ARLK TNL FAN A,B (six) – cl</td>
<td></td>
</tr>
<tr>
<td>MO13Q 2. AIRLK 2 – ON/OFF</td>
<td></td>
</tr>
<tr>
<td>Inner Hatch 3. Equal vlv cap (two) – remove</td>
<td></td>
</tr>
<tr>
<td>Tunnel Ext 4. Open hatch per decal</td>
<td></td>
</tr>
<tr>
<td>5. Equal vlv (two) – OFF, install caps</td>
<td></td>
</tr>
<tr>
<td>MDDK 7. Remove diffuser cap from Aft Middeck floor fitting and temp stow</td>
<td></td>
</tr>
<tr>
<td>8. Attach one end of Airlock Fan Inlet duct to Airlock Fan muffler inlet, attach free end to Aft Middeck floor fitting</td>
<td></td>
</tr>
<tr>
<td>AW18A 9. LTG FLOOD 1(3,4) – ON (as reqd)</td>
<td></td>
</tr>
<tr>
<td>MO13Q 10. AIRLK FAN A – ON</td>
<td></td>
</tr>
<tr>
<td>EXT A/L 11. Airflow at top of external airlock halo</td>
<td></td>
</tr>
<tr>
<td>12. NEG CAB PRESS RELIEF vlv cover (two) – CL (pushed in)</td>
<td></td>
</tr>
</tbody>
</table>
ON-ORBIT SWITCH LIST

LEFT SEAT
L1 ....................... 1-19
L2 ....................... 1-19

O6 ....................... 1-19
O7 ....................... 1-20
O8 ....................... 1-21

O14 .................... 1-22
O15 .................... 1-23

RIGHT SEAT
O16 .................... 1-23
O8 ...................... 1-21

R1 .......................1-18

O14 .................... 1-22
O15 .................... 1-23

AFT
C5 ...................... 1-23
C6 ...................... 1-23
C7 ...................... 1-23

A11 .................... 1-24

MIDDECK-FWD
ML86B ................ 1-26

MIDDECK-AFT
MA73C ................ 1-26
MO32M .............. 1-25
MO69M .............. 1-25
MO63P .............. 1-27 (no crew action reqd)

CIRCUIT BREAKER SNAP RING COLOR CODES

<table>
<thead>
<tr>
<th>COLOR</th>
<th>CONFIGURATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red</td>
<td>Open at all times</td>
</tr>
<tr>
<td>Green</td>
<td>Open on-orbit only</td>
</tr>
<tr>
<td>Yellow</td>
<td>Open ascent, close per procedure</td>
</tr>
<tr>
<td>Orange</td>
<td>Open orbit through entry</td>
</tr>
<tr>
<td>Blank (no ring)</td>
<td>Always closed or as required</td>
</tr>
</tbody>
</table>
OV105

RADAR ALTIMETER
1 2
ON OFF

MLS
1 2 3
ON OFF

CHANNEL
1 2 3

SEAT
OFF

CTR CNSL
DIM BRT

RIGHT SEAT/CTR CNSL FLOOD
OV103, OV105

PNL MO32M

PNL MO69M

Direct Oxygen
ORBIT 5/6 DEORBIT
WARNING
If AV BAY FIRE (ASC PKT, PWRDN or ORB PKT, PWRDN) has been completed and the associated AC BUS, FF MDM, or FMCA is not recovered, MCC for Vent Door config. Certain failure combinations will cause multiple vent doors to remain open during entry.

MET ACTIVITY

ASAP
Perform PRIORITY PWRDN GROUPS A & B (ORB PKT, PRIOR PWRDN) with following deltas:

DELETE: HI LOAD DUCT HTR OFF in Group A Pwrdrn
PRI RJDs DRIVER & LOGIC OFF in Group B Pwrdrn

When PRIORITY PWRDN is complete, return to Nominal Post Insertion, 1-5, completing all activities except the following:

MET 1:28 OPEN PLBDs
MET 1:36 KU-BD ANT DEPLOY
KU-BD ANT ACTIVATION
MET 1:52 POST PLBD OPS RAD CONFIG
MET 1:54 SPECIALIST SEAT REMOVAL/STOWAGE
MET 1:57 ESCAPE POLE STOWAGE
MET 2:01 AIRLOCK SETUP FOR INGRESS
MET 2:05 CONFIG VERNIER DRIVERS

1:00
If Both Voice and Command Unavailable:
Perform GPS INCORPORATION (ORB OPS, GNC)

2:12
CONFIG CONTROLS FOR ON-ORBIT, 1-17 thru 1-27 (SWITCH PICTORIALS)
NOTE: Some of these switch throws will have been done during PRIORITY POWERDOWNS

DELETE: HI LOAD DUCT HTR – OFF, on 1-19

2:30
Add following MNVR: MNVR (TRK) –ZLV, +YVV
TG = 2 BV = 3 OM = 270
## PEN AND INKS TO NOMINAL D/O PREP FOR ORBIT 5/6 DEORBIT

<table>
<thead>
<tr>
<th>TIG-</th>
<th>ACTION</th>
<th>PROCEDURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>3:57</td>
<td>Delete</td>
<td>COLDSOAK INITIATE</td>
</tr>
<tr>
<td>3:35</td>
<td>Delete</td>
<td>SPECIALIST SEAT INSTALLATION</td>
</tr>
<tr>
<td>3:30</td>
<td>Move to TIG-2:30</td>
<td>DPS CONFIG FOR D/O PREP</td>
</tr>
<tr>
<td>3:15</td>
<td>Move to TIG-2:20</td>
<td>DED DISP ENT CONFIG</td>
</tr>
<tr>
<td>3:00</td>
<td>Add GNC FRP-3 (MAL, GNC FRPs)</td>
<td>(MAL, GNC FRPs) to recover IMU 2</td>
</tr>
<tr>
<td>2:56</td>
<td>Delete</td>
<td>RAD BYPASS/FES C/O (ORB OPS, ECLS)</td>
</tr>
<tr>
<td>2:55</td>
<td>Delete</td>
<td>CONFIG FOR PLBD CLOSING</td>
</tr>
<tr>
<td>2:40</td>
<td>Delete</td>
<td>PLBD CLOSING</td>
</tr>
<tr>
<td>2:40</td>
<td>Add PWRDN BACKOUT (Group A &amp; B)</td>
<td>(ORB PKT, PRIOR PWRDN)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Delete IMU 2 recovery step)</td>
</tr>
<tr>
<td>2:26</td>
<td>Delete</td>
<td>POST CLOSING CONFIG</td>
</tr>
</tbody>
</table>
CUE CARD CONFIG
This Page Intentionally Blank
AFT FLIGHT DECK RECONFIGURATION

AFT STATION CONFIG

POST SEAT EGRESS
O14:D cb MNA CAB VENT – op
ISOL – op

RCS/OMS HTR FWD RCS
L POD (two) – A AUTO, B OFF
R POD (two) – A AUTO, B OFF
OMS CRSFD LINES (two) – A AUTO, B OFF
\(^{\text{FWD,AFT RCS JET (ten)}}\) – AUTO

PDIP 1
KU BAND RATE – LO

A14
APU HTR LUBE OIL LN (three) – A AUTO

ON-ORBIT CONFIG

If WCCS flown, perform STD WCCS CONFIG (ORB OPS,
COMM/INST)

R10
MS AUD PWR – AUD/TONE
A/G1 – T/R, tw-2
A/G2 – RCV, tw-2
AA – RCV, tw-2
ICOM A – T/R, tw-2
B – RCV, tw-2
XMIT/COM MODE sel – PTT/PTT

A11
MS COMM CCU PWR – OFF
Connect HHC to MHA
MS COMM CCU PWR – ON

R6,L5
MS AUD SPKR PWR sel – SPKR
MSTR SPKR VOL sel – as reqd

R6,L6
S-BD PL PWR SYS – ON

A10
S-BD PM MODE – TDRS DATA
S-BD PL PWR SYS – 1
NSP DATA RATE RCV – HI
XMIT – HI
CODING (two) – ON

A1R
S-BD FM DATA SOURCE sel – MMU 2 (rot)
AUD CTR VOICE RCD SEL CH 1 sel – OFF
2 sel – OFF

R14:C
cb MNB KU ANT HTR – cl
UHF EVA (two) – cl
\(^{\text{C}}\) Close left to right all cbs
\(^{\text{E}}\) Close left to right all cbs
L10 Remove, stow VIP, VTR covers

R11L
IDP/CRT 4 PWR – ON
R12
VPU PWR – ON (LED on)

MDU
AFD 1 – ON (if desired)

O17:A
ATVC (four) – OFF

:\B
EIU (three) – OFF

:\D
MEC 1 – OFF, wait 2 sec, then
2 – OFF

\(^{\text{PL BUS ACTIVATION complete}}\)

L12
SSP1
cb PDIP 1 PWR 2/KuBAND RLY – cl
PDIP 1 PWR 1 – cl
cb SW PWR 1 – cl
OIU PWR – cl
OIU 1 ON (tb-UP)

SSP2
cb PDIP 2 PWR 2/AMS RLY – cl
PDIP 2 PWR 1 – cl
cb SW PWR 3 – cl

EKC3 PWR – ON
\(^{\text{BUS 2/3 tb}}\) – UP
\(^{\text{i1 tb}}\) – UP

EKC3 PPSU HTRS – ON

R12 (OPP)
cb OBSS SW PWR – cl
OBSS SW PWR – ON

Unstow, deploy reqd FDF

MET

00:53 SPECIALIST SEAT EGRESS
00:59 AFT STATION CONFIG
01:03 CONFIG FOR PLBD OPERATIONS
01:41 CLOTHING CONFIG
01:54 SPECIALIST SEAT REMOVAL/STOWAGE
02:01 AIRLOCK SETUP FOR INGRESS
02:24 RESET C/W

MS AFT ACTIONS

00:53 SPECIALIST SEAT EGRESS
01:03 CONFIG FOR PLBD OPERATIONS
01:41 CLOTHING CONFIG
01:54 SPECIALIST SEAT REMOVAL/STOWAGE
02:01 AIRLOCK SETUP FOR INGRESS
02:24 RESET C/W

CC 3-3
PI-1a/134/O/C
### AFT FLIGHT DECK RECONFIGURATION

#### CONFIG FOR PLBD OPERATIONS

- **A6U**
  - Set up lights
  - Annun Bus Sel – MNC

  **NOTE**
  - Minimum operating time for PLB Floodlights is 10 min.
  - Light must be OFF for minimum of 10 min UNBLOCKED, 16 min BLOCKED prior to reuse. ~3 min to full bright

- **A7U**
  - PL Bay Flood MID (two) – ON
  - FWD (two) – ON

  * Record MET: / : : :

  * If PLB Floodlight not ON to full bright within 5 min:

  * (Aff) PL Bay Flood – OFF

- **SET UP P/TV**
  - Perform Activation, Operation (Cue Card, TV)
  - If PLBD video rec desired:
    - Perform PLBD VTR Recording (Cue Card)

#### CLOTHING CONFIG

- Doff, stow:
  - Harness, Boots, LES
  - Stow gloves in Helmet
  - Remove radiation dosimeter from LES and insert in inflight garments

- Doff, stow in Wet Trash:
  - UCD (clamp if used)
  - Emesis Bag, if used (unstow new bag)

---

#### RESET C/W

<table>
<thead>
<tr>
<th>PARAMETER NAME</th>
<th>C/W CH</th>
<th>Upper Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freon Loop Evap Out T1</td>
<td>107</td>
<td>1.900/84.8 deg</td>
</tr>
<tr>
<td>T2</td>
<td>117</td>
<td>1.900/84.8 deg</td>
</tr>
<tr>
<td>Cabin Press</td>
<td>4</td>
<td>3.850/15.34 psia</td>
</tr>
</tbody>
</table>

---

### R13U

<table>
<thead>
<tr>
<th>PARAMETER NAME</th>
<th>C/W CH</th>
<th>ENA/INH</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPS He TK P C</td>
<td>9</td>
<td>INH</td>
</tr>
<tr>
<td>L</td>
<td>19</td>
<td>INH</td>
</tr>
<tr>
<td>R</td>
<td>29</td>
<td>INH</td>
</tr>
<tr>
<td>MPS He REG P C</td>
<td>39</td>
<td>INH</td>
</tr>
<tr>
<td>L</td>
<td>49</td>
<td>INH</td>
</tr>
<tr>
<td>R</td>
<td>59</td>
<td>INH</td>
</tr>
<tr>
<td>HYD P 1</td>
<td>99</td>
<td>INH</td>
</tr>
<tr>
<td>2</td>
<td>109</td>
<td>INH</td>
</tr>
<tr>
<td>3</td>
<td>119</td>
<td>INH</td>
</tr>
</tbody>
</table>
WARNING
Eye and skin damage can occur in as little as 10 sec.

INSTALL FILTERS
Don Sunglasses
Unstow, install: Side Hatch UV Filter and Locking Device, and Pyro Box Safety Pin

PRESS H2O TKA
ML26C
SPLY H2O GN2 TK VENT vlv – PRESS
A SPLY vlv – OP

NOTE
Disregard possible 'S66 WASTE H2O PRES' fault msg

COMM CONFIG
Unstow: headsets, handheld mic, and/or wireless comm.
(see WCCS Cue Card), if flown
If WCCS flown, perform STD WCCS CONFIG (ORB OPS, COMM/INST)
If middeck handheld mic/speaker ops:

MO42F
MIDDECK SPKR AUD A/G 1 – T/R, tw-2
A/G 2 – RCV, tw-2
A/A – RCV, tw-2
ICOM A – T/R, tw-2
B – RCV, tw-2
XMIT/ICOM MODE – PTT/PTT
SPKR PWR – SPKR
MSTR SPKR VOL – 8

MO39M
MIDDECK COMM CCU PWR – OFF
Connect HHMIC to CCU
MIDDECK COMM CCU PWR – ON

ML86B:C
cb MNA EXT AIRLK HTR LN ZN1,2 (two) – cl
STRUC Z1/2/3 – cl
E cb MNA FC PCM – op

FDF CONFIG
Stow in Helmet Bag: ASCENT Cue Cards, ASC, ASC PKT, SYS AOA
Unstow Jettison Stowage Bag, mark “Return to Houston” Place Helmet Bag in Return to Houston Bag
Unstow VW Bags

CLOTHING CONFIG
10
Doff, stow:
- Harness, Boots, LES
- Stow gloves in Helmet
Remove radiation dosimeter from LES and insert in inflight garments

Doff, stow in Wet Trash:
- UCD (clamp if used)
- Emesis Bag, if used (unstow new bag)

QUICKDON MASKS SETUP
19
Connect QDM COMM to HIU
Connect QDM O2 to LEH hose
Verify operation
Temp stow QDM/HIU assembly

MET
00:53 SPECIALIST SEAT EGRESS
00:57 PRELIM MIDDECK CONFIG 2
01:07 WCS CONFIG/ACT 5
01:08 SWITCH CONFIG/GALLEY ACT 6
01:41 CLOTHING CONFIG 10
01:45 QUICKDON MASKS SETUP 19
01:54 SPECIALIST SEAT REMOVAL/STOWAGE
01:59 ESCAPE POLE STOWAGE 13
02:01 AIRLOCK SETUP FOR INGRESS 15
MIDDECK RECONFIGURATION

**WCS CONFIG/ACT**

**WCS SWITCH CONFIGURATION**
- ML86B:A: cb MNA H2O LN HTR A – cl
- :B WASTE H2O DUMP ISOL – cl
- MNA,MNB VAC VENT ISOL VLV (two) – cl
- WCS CNTLR (two) – cl
- :F MNA FLOODS WMC/MO13Q – cl

**MA73C:E**
- All cbs closed except:
  - cb AC3 PL 3b – op

**ML31C**
- WASTE H2O DUMP ISOL VLV – OP (tb-OP)
- √ VAC VENT ISOL VLV BUS SEL – MNA
- NOZ HTR – ON
- ISOL VLV CNTL – OP (tb-OP)

* If VAC VENT ISOL VLV CNTL tb – CL or bp:
  * VAC VENT ISOL VLV BUS SEL – MNB
  * CNTL – OP (tb-OP)

* If VAC VENT ISOL VLV CNTL tb still CL or bp:
  * MCC for further actions

**WCS ACTIVATION**
- Foot/Toe Restraints – down, locked
- VAC VLV – OP
- Unstow urinal hose from Velcro strap, install hose in cradle
  - CRADLE – AUTO
  - MODE – AUTO
  - FAN SEP SEL sw – 1
  - Unstow hose from cradle ( √ Airflow)
  - WCS ON II – on
  - Stow hose in cradle
  - WCS ON II – off
- Unstow, install WCS Container, Bag & Hose, Mirror, Elbow Bag Dispenser, First Day Clothing
- Ventline mated in aux Wet Trash
- Perform URINE PRETREAT SETUP (Cue Card, URINE PRETREAT CHANGEOUT)

**SWITCH CONFIG/GALLEY ACT**

**MA73C:F**
- cb AC1 MAR 3b – cl
  :G cb AC3 GALLEY FAN (three) – cl

**ML86B:A**
- All cbs closed except: MNB H2O LN HTR B – op
  :B All cbs closed
  :E All cbs closed except: FLOOD TNL ADAPT (three) – op
  - CO2 SYS 1,2 CNTLR, CO2 COM INSTR – op
  - FC PCM – op
  :F All cbs closed
  :G All cbs closed except: ESS 18C FLOOD TNL ADAPT 1 – op

**R11L/G**
- SPLY H2O GALLEY SPLY VLV – OP (tb-OP)
- GALLEY H2O HTRS (two) – ON
- OVEN/RHS – ON

- Unstow, install Personal Hygiene Hose

**ESCAPE POLE STOWAGE**

**T3**
- Remove large Port Pin
- Slide back – Safing Latch
- Retract, hold Locking Pin (Ring)
- Remove Large Pin
- Release Stbd PIP Pin
- Stow Pole
- Reinstall Large Pin

**AIRLOCK SETUP FOR INGRESS**

**15**
- MA73C:G
  1. cb AC 1,2 ARLK TNL FAN A,B (six) – cl
  2. MO13Q
  3. AIRLK 2 – ON/OFF
  4. Inner Hatch
  5. Equal vlv cap (two) – remove
  6. Equal vlv (two) – OFF, install caps
- Tunnel Ext
  6. Unstow Airlock Fan Inlet duct from Tunnel Extension wall
  7. Remove diffuser cap from Aft Middeck floor fitting and temp stow
- MDDK
  7. Remove diffuser cap from Aft Middeck floor fitting
  8. Attach one end of Airlock Fan Inlet duct to Airlock Fan muffler inlet, attach free end to Aft Middeck floor fitting
- AW18A
  8. LTG FLOOD 1(3,4) – ON (as reqd)
- MO13Q
  9. AIRLK FAN A – ON
  10. AIRLK FAN B – ON
- EXT A/L
  11. √ Airflow at top of external airlock halo
  12. √ NEG CAB PRESS RELIEF vlv cover (two) – CL (pushed in)

PI-2b/134/O/A

(reduced copy)
POST INSERTION STS 134