Post Insertion

STS-125

Mission Operations Directorate
Operations Division

Basic
January 16, 2008
List of Implemented Change Requests (482s):

PI-0840

Incorporate the following:

1. Replace iii & iv
2. Replace 1-13 & 1-14
3. Replace CC 3-3 & CC 3-4

Prepared by:  

Approved by:  

Accepted by:  

Encl: 6 pages  

File this PCN immediately behind the front cover as a permanent record
PCN-3 (Sept 10, 2008) Sheet 1 of 1

List of Implemented Change Requests (482s):

MULTI-1820

Incorporate the following:

1. Replace iii & iv
2. Replace 1-13 & 1-14
3. Replace CC 3-3 & CC 3-4

Prepared by: ____________________________  08/12/08
Publication Manager

Approved by: ____________________________
Manager, Shuttle Procedures Management

Accepted by: ____________________________
FDF Manager

Encl: 6 pages

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PCN-2 (May 23, 2008) Sheet 1 of 1

List of Implemented Change Requests (482s):
PI-0833

Incorporate the following:
1. Replace iii & iv
2. Replace 1-13 & 1-14
3. Replace CC 3-3 & CC 3-4

Prepared by: [Signature]
Publication Manager

Approved by: [Signature]
Manager, Shuttle Procedures Management

Accepted by: [Signature]
FDF Manager

Encl: 6 pages

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PCN-1 (Mar 19, 2008) Sheet 1 of 1

List of Implemented Change Requests (482s):
PI-0829
PI-0830

Incorporate the following:
1. Replace iii & iv
2. Replace 1-5 & 1-6, 1-9 & 1-10, 1-25 & 1-26

Prepared by: [Signature]
Publication Manager

Approved by: [Signature]
Manager, Shuttle Procedures Management

Accepted by: [Signature]
FDF Manager

Encl: 8 pages

File this PCN immediately behind the front cover as a permanent record
POST INSERTION
STS-125

BASIC
January 16, 2008

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Publication Manager

APPROVED BY:

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Manager, Shuttle Procedures Management

Michael Shaw
Flight Data File Manager

This document is under the configuration control of the Crew Procedures Control Board (CPCB). Except for Discrepancy Notices (DN) approved at the flight operations review (FOR), all proposed changes must be submitted via FDF Workflow Crew Procedure Change Request (CR) to DO3/FDF Manager.

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<table>
<thead>
<tr>
<th>AREAS OF TECHNICAL RESPONSIBILITY</th>
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<tbody>
<tr>
<td>Publication Manager</td>
<td>DO3/Y. Fuller</td>
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<td>DO3/C. Simon</td>
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<td>INCO</td>
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<td>DS6/J. Helms</td>
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<td>DPS</td>
<td>DS2/R. Schwank</td>
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<td>P T/V</td>
<td>DX3/R. Tijerina</td>
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<td>Pointing</td>
<td>DO4/K. Lawson</td>
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</table>
### POST INSERTION CUE CARDS

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<thead>
<tr>
<th>Title</th>
<th>Ref. Page</th>
<th>Card No.</th>
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<tbody>
<tr>
<td>AFT FLIGHT DECK RECONFIGURATION (Front).....</td>
<td>CC 3-3</td>
<td>PI-1a/125/O/C</td>
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<tr>
<td>AFT FLIGHT DECK RECONFIGURATION (Back).....</td>
<td>CC 3-4</td>
<td>PI-1b/125/O/B</td>
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<td>MIDDECK RECONFIGURATION (Front)..................</td>
<td>CC 3-5</td>
<td>PI-2a/125/O/A</td>
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<td>MIDDECK RECONFIGURATION (Back)...................</td>
<td>CC 3-6</td>
<td>PI-2b/125/O/A</td>
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</table>

* – Omit from flight book
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<tr>
<th>CONTENTS</th>
<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>
</tr>
<tr>
<td>CUE CARD CONFIG</td>
<td>3-1</td>
</tr>
</tbody>
</table>
NOTE

The STS-125 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-125 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>FAILED GPC</th>
<th>GPC 1</th>
<th>GPC 2</th>
<th>GPC 3</th>
<th>GPC 4</th>
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<tbody>
<tr>
<td></td>
<td>G2</td>
<td>FD</td>
<td>SM</td>
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</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

C,P
1. REASSIGN G2FD STRING TO ANOTHER GPC IN MC 1

   GNC 0 GPC MEMORY
   CONFIG – ITEM 1 +1 EXEC
   Modify MC 1 per table
   BFC CRT DISP – OFF
   GNC, OPS 106 PRO
   GNC 0 GPC MEMORY

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

   C3
   STR 1  1
   2  2
   3  2
   4  4
   PL  1/2 1
   CRT  1  1
   2  2
   3  2
   4  0

2. MODE G2FD GPC TO OPS 0
   GPC MODE G2FD – STBY (tb-bp)
   – RUN (tb-RUN)
   O6
   PL 1/2 0
   CRT  1  1
   2  2
   3  0
   4  0
   MM  1  0
   2  1

3. LOAD MC 2 INTO G2FD GPC
   PL, GPC/CRT G2FD GPC/X EXEC
   X: PL GPC MEMORY
   CONFIG – ITEM 45 +2 EXEC
   GPC CHANNEL (G2FD) EXEC
   STORE – ITEM 47 EXEC
   Store complete when MC = 02

4. TRANSITION TO GNC OPS 2
   GNC 0 GPC MEMORY
   CONFIG – ITEM 1 +2 EXEC
   Modify MC 2 per table
   GNC, OPS 201 PRO
   GNC UNIV PTG

   DUAL G2
   12000
   10000
   SINGE G2
   2
   2

5. TURN OFF BFC LT
   BFC CRT DISP – OFF
   BFC lt – off
   C3
   CRT  1  1
   2  2
   3  0
   4  0
   L  1  0
   2  0
   MM  1  0
   2  1
Ref ASC for activities from 00:00-00:50 MET

MEMORY CONFIGURATION TABLE

<table>
<thead>
<tr>
<th>CONFIG</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<tbody>
<tr>
<td>OPS</td>
<td>G1, G6</td>
<td>G2</td>
<td>G3</td>
<td>SM</td>
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<tr>
<td>GPC SEL</td>
<td>1,2,3,4</td>
<td>1,2</td>
<td>1,2,3,4</td>
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</tbody>
</table>

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

C
L4:B,Q,R All cbs closed
L4:D,E All cbs open
L4:J cb AC3 \& A SIG CONDR HUM SEP – cl
B SIG CONDR IMU FAN – cl

MS SPECIALIST SEAT EGRESS

C,P

CONFIG GPCs FOR OPS 2

(USE DUAL G2 CONFIG)

If two PASS GPCs failed, \^MCC
If BFS engaged: Go to MAL, DPS, GPC FRP-4

P

PL BUS ACTIVATION

R1

PL CAB – MNA
PRI MNC – ON (tb-ON)
AUX – ON
AFT MNB – ON

MS PRELIM MIDDECK CONFIG (MID Cue Card)

<table>
<thead>
<tr>
<th>CONFIG</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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</tbody>
</table>

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

6. TRANSITION TO SM OPS 201

CRTX  SM, GPC/CRT SM GPC/X EXEC

<table>
<thead>
<tr>
<th>CONFIG</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<tr>
<td>OPS</td>
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</tbody>
</table>

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

7. SECURE BFS

CRT3 BFS, SYS SUMM 2

C3 BFS CRT DISP – OFF

C3 BFS CRT DISP – STBY

8. RECONFIG MEDs

C2 IDP/CRT 3 PWR – OFF

F6,F7,F8 Power off MDUs as desired

9. LOAD ORBIT TFLs

C3 \^0 PCMMU FORMAT – GPC

SM 62 PCMMU/PL COMM

FORMAT:

CRT FXD – ITEM 1 EXEC (*)
SEL ID – ITEM 3 +1 9 2 EXEC
LOAD – ITEM 4 EXEC
\^-RUN, CPLT
SEL ID – ITEM 3 +1 0 3 EXEC
LOAD – ITEM 4 EXEC
\^-RUN, CPLT
PGM – ITEM 2 EXEC

SM ANTENNA

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

~ ~ ~ ~
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-bp)
- STBY (tb-RUN)
- HALT (tb-bp)

If single G2 reqd:

- IDP/CRTX MAJ FUNC – PL
- CRTX

  - 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-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:

- GNC 0 GPC MEMORY
- CONFIG – ITEM 1 +2 EXEC

  - Modify MC 2 per table

  - GNC, OPS 201 PRO

  - GNC UNIV PTG

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-bp)
- STBY (tb-RUN)
- HALT (tb-bp)

If GPC failed from ASCENT,

- Perform MAL, DPS, GPC FRP-1 as time permits

**C2**

- CRT

  - CONFIG – ITEM 48 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-bp)

  - STBY (tb-RUN)

  - HALT (tb-bp)

**PI LOCKER**

- When all GPC switch configuration complete, unstow, install GPC MODE switchguard.
**MS CONFIG FOR PLBD OPERATIONS** (AFT Cue Card) 4, 1-14

**WCS CONFIG/ACT** (MID Cue Card) 5, 1-16

**SWITCH CONFIG/GALLEY ACT** (MID Cue Card) 6, 1-16

**DON/CONFIG COMM**
- Don headsets
- HIU Vol – minimum

**LOAD DAP A5**

**MNVR TO PLBD OPENING ATT** (*-ZLV, -XVV*)
- CRT1
  - √ TGT ID +2
  - BODY VECT +3
  - √ P +90
  - √ Y +0.0
  - OM 0

**DAP**: AUTO/ALTER
- Initiate TRK
- 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 Bp – RAD
  - * If RAD BYP VLV 1(2) tb – Bp:
    - RAD BYP VLV MODE 1(2) – AUTO
    - 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 Bp – RAD
  - * If RAD BYP VLV 1(2) tb – Bp:
    - RAD BYP VLV MODE 1(2) – AUTO
    - 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 Bp – RAD
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    - RAD BYP VLV MODE 1(2) – AUTO
    - 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 Bp – RAD
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    - RAD BYP VLV MODE 1(2) – AUTO
    - After 10 sec, RAD BYP VLV MODE 1(2) – AUTO
    - Wait 90 sec
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    - MAN SEL 1(2) – RAD FLOW
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    - RAD BYP VLV MODE 1(2) – AUTO
    - 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 Bp – RAD

**L1**
- FLASH EVAP CNTLR PRI A – OFF
- B – ON

**NOTE**
Expect ‘S88 EVAP OUT T 1(2)’ msg

**L2**
- FREON ISOL MODE – AUTO

**RAD/PLBD OPS NO-GO FOR FOLLOWING FAILURES**

<table>
<thead>
<tr>
<th>OMS/RCS</th>
<th>GNC</th>
<th>ECLS/EPS</th>
<th>MECH</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 OMS Engs</td>
<td>2 IMUs</td>
<td>1 H2O or Freon Lp</td>
<td>2 LG DPY METHODS</td>
</tr>
<tr>
<td>1 OMS Eng &amp;1</td>
<td>3 RGAs</td>
<td>Both RFCA</td>
<td>PRES or REDNT</td>
</tr>
<tr>
<td>+X RCS jet</td>
<td>3 AAs</td>
<td>Both Cab Fans</td>
<td>WINDOW PANE</td>
</tr>
<tr>
<td>1 OMS Inlet line</td>
<td>3 ARTAs</td>
<td>3 of 6 Av Bay Fans</td>
<td>FAILURE</td>
</tr>
<tr>
<td>OMS Prop Tk Leaks</td>
<td>3 Elev or 2 FCS</td>
<td>DPE</td>
<td></td>
</tr>
<tr>
<td>Aft RCS He or Prop Leaks</td>
<td>BF Pos Fdbs</td>
<td>Any MN or 3d AC Bus</td>
<td>3 GPCs</td>
</tr>
<tr>
<td><strong>COMM</strong></td>
<td>2 FCS Ch</td>
<td>IMU Fans</td>
<td>2 FF or FA MDMs</td>
</tr>
<tr>
<td>No Voice and No CMD</td>
<td>(same surface)</td>
<td>(same surface)</td>
<td>2 APURHD/DWSB</td>
</tr>
</tbody>
</table>

**RAD ACT** 7

If NO-GO for RAD/PLBD OPS, go to **ORB 3 DEORBIT** 8

**OPEN PLBDs, AUTO MODE**, 18, 1-11

**NOTE**: CAUTION BLOCK on 1-11

**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.

If NO-GO due to any other failure:
Go to CONT DEORB, LAUNCH DAY ORBIT 3.
STAR TRKR ACTIVATION/DOOR OPEN

C O6 S TRK PWR (two) – ON
GNC I/O RESET

O6 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

R11L 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
<table>
<thead>
<tr>
<th>Time</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>01:30</td>
<td>MCC &amp; CREW: GO for orbit ops</td>
</tr>
<tr>
<td></td>
<td>C O6 UHF MODE sel – OFF</td>
</tr>
<tr>
<td></td>
<td>MS KU–BD ANT DEPLOY (ORB OPS, COMM/INST)</td>
</tr>
<tr>
<td></td>
<td>MS KU–BD ANT ACTIVATION (ORB OPS, COMM/INST)</td>
</tr>
<tr>
<td>01:35</td>
<td>C,P SEAT EGRESS</td>
</tr>
<tr>
<td></td>
<td>POST PLBD OPS RAD CONFIG 11</td>
</tr>
<tr>
<td></td>
<td>C 1: SM 88 APU/ENVIRON THERM</td>
</tr>
<tr>
<td></td>
<td>NOTE FREON LOOP RAD OUT temps will not drop to normal operating range (&lt; 60 deg) until ~15 min after doors are opened</td>
</tr>
<tr>
<td></td>
<td>L1 NH3 CNTLR B(A) – OFF</td>
</tr>
<tr>
<td></td>
<td>√ RAD BYP VLV tb (two) – RAD</td>
</tr>
<tr>
<td></td>
<td>H2O LOOP 2 BYP MODE – AUTO</td>
</tr>
<tr>
<td></td>
<td>CRT1 When FREON LOOP RAD OUT T &lt; 60 deg:</td>
</tr>
<tr>
<td></td>
<td>L1 HI LOAD EVAP – OFF</td>
</tr>
<tr>
<td></td>
<td>1: GNC UNIV PTG</td>
</tr>
<tr>
<td>01:40</td>
<td>C,P CLOTHING CONFIG 9</td>
</tr>
<tr>
<td></td>
<td>MS CLOTHING CONFIG (MID,AFT Cue Cards) 10, 1-14, 1-15</td>
</tr>
<tr>
<td>01:45</td>
<td>ALL QUICKDON MASKS SETUP 19</td>
</tr>
<tr>
<td></td>
<td>If time permits: OCAC SETUP (ORB OPS, CREW SYS)</td>
</tr>
<tr>
<td>01:50</td>
<td>C POST PLBD OPS RAD CONFIG 11</td>
</tr>
<tr>
<td></td>
<td>MS SPECIALIST SEAT REMOVAL/STOWAGE</td>
</tr>
<tr>
<td>01:55</td>
<td>C STAR TRKR ACTIVATION/DOOR OPEN 12, 1-6</td>
</tr>
<tr>
<td></td>
<td>MS ESCAPE POLE STOWAGE (MID Cue Card) 13, 1-16</td>
</tr>
<tr>
<td></td>
<td>P SUPPLY WATER CONFIG 14, 1-6</td>
</tr>
</tbody>
</table>

**CLOTHING CONFIG 9**
- 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 11**
- C 1: SM 88 APU/ENVIRON THERM

**QUICKDON MASKS SETUP 19**
- Connect QDM COMM to HIU
- Connect QDM O2 to LEH hose
- Verify operation
- Temp stow QDM/HIU assembly
**MS**  AIRLOCK SETUP FOR INGRESS  15, 1-16

**P**  WB STEAM VENT HTR ACT  
- BLR CNTLR/HTR (three) – A
- PWR (three) – ON  

**C**  CONFIG VERNIER CONTROL  
- MCC GO for vernier control  
- RJD MANF L5/F5/R5 DRIVER – ON, wait 5 sec  
- DAP: A/AUTO/VERN  

**ALL**  CONFIG CONTROLS FOR ON-ORBIT  
Perform actions on 1-17 thru 1-26  
Unstow, install HUD covers (two)  

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

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

**MS**  RESET C/W (AFT Cue Card)  16, 1-14  

**MS**  FUEL CELL VI PERFORMANCE PLOT (ORB OPS, EPS)  
Stow POST INSERTION, go to FLIGHT PLAN, FLT DAY 1
DETAILED PLBD OPENING PROCEDURES

1. If no motion determined visually or 'OP/CL' not blank within 10 sec after cmd, PL BAY DR – STOP, perform MAL, MECH, 9.1a
2. If latch not 'OP' in single mtr time, PL BAY DR – STOP, perform MAL, MECH, 9.1d
3. If door motion stops and not 'OP', PL BAY DR – STOP, perform MAL, MECH, 9.1f
4. If SM GPC fails during this operation, PL BAY DR SYS (two) – DSBL
   PL BAY DR – STOP, 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

OPEN C/L LATCHES

1. Select CENTER LATCHES 5-8,9-12 – ITEM 4,5 EXEC (*)
2. AC POWER ON – ITEM 1 EXEC (*)
3. AUTO MODE SEL – ITEM 3 EXEC (*)
4. Select CENTER LATCHES 1-4,13-16 – ITEM 6,7 EXEC (*)
5. PL BAY DR – STOP
6. Deselect CENTER LATCHES 5-8,9-12 – ITEM 4,5 EXEC (no *)
7. Select CENTER LATCHES 1-4,13-16 – ITEM 6,7 EXEC (no *)
8. PL BAY DR – STOP
9. Deselect CENTER LATCHES 1-4,13-16 – ITEM 6,7 EXEC (no *)

OPEN PORT FWD,AFT LATCHES & DOOR

1. Select PORT FWD,AFT LATCHES – ITEM 10 EXEC (*)
2. AC POWER ON – ITEM 1 EXEC (*)
3. AUTO MODE SEL – ITEM 3 EXEC (*)
4. Select PORT FWD,AFT LATCHES – ITEM 11,12 EXEC (*)
5. PL BAY DR – STOP
6. Deselect PORT FWD,AFT LATCHES – ITEM 11,12 EXEC (no *)
7. PL BAY DR – STOP
8. Deselect PORT FWD,AFT LATCHES –  ITEM 11,12 EXEC (no *)

POST-PLBD OPENING CLEANUP

1. PL BAY DOOR SYS (two) – DSBL
2. AC POWER OFF – ITEM 2 EXEC (*)
3. SM, OPS 201 PRO (if PASS SM)
4. SM ANTENNA
5. After floodlights ON > 10 min: PL BAY FLOOD (all) – OFF

MANUAL PLBD OPENING PROCEDURE

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. Select CENTER LATCHES 5-8,9-12 – ITEM 4,5 EXEC (*)
5. PL BAY DR – OP
6. Deselect CENTER LATCHES 5-8,9-12 – ITEM 4,5 EXEC (no *)
7. Select CENTER LATCHES 1-4,13-16 – ITEM 6,7 EXEC (*)
8. PL BAY DR – STOP
9. Deselect CENTER LATCHES 1-4,13-16 – ITEM 6,7 EXEC (no *)
10. PL BAY DR – STOP
11. Deselect CENTER LATCHES 1-4,13-16 – ITEM 6,7 EXEC (no *)

POST-PLBD OPENING CLEANUP

1. PL BAY DOOR SYS (two) – DSBL
2. AC POWER OFF – ITEM 2 EXEC (*)
3. SM, OPS 201 PRO (if PASS SM)
4. SM ANTENNA
5. 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</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>

Ref: MA73C.C&D for MCA cbs
AFT FLIGHT DECK RECONFIGURATION

AFT STATION CONFIG  3

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

A14  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

PDIP 1  KU BAND RATE – Low

A12  APU HTR LUBE OIL LN (three) – A AUTO
      HYD CIRC PUMP PWR 2 – MNC

ON-ORBIT CONFIG
Don headset (if reqd)

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

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
      HIU VOL (two) – minimum, full ccw

R6,L5  S-BD PM MODE – TDRS DATA
      NSP DATA RATE RCV – HI
      XMIT – HI
      CODING (two) – ON
      S-BD PAYLOAD POWER SYSTEM – 1

A1L  S-BAND FM DATA SOURCE sel – MMU 2 (rot)
      PWR – OFF
      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)

O17:A  ATVC (four) – OFF
    :B  EIU (three) – OFF
    :D  MEC 1 – OFF, wait 2 sec, then
         2 – OFF

PL BUS ACTIVATION complete

L12  

SSP1  cb PDIP1 PWR 2/Ku BAND RLY – cl
      PDIP1 PWR 1 – cl

SSP2  cb SW PWR – cl
      cb PDIP 2 PWR 2 – cl
      PWR 1 – cl

L11  

SSP3  cb KEEL CAM SW – cl
      HTR/ILLUM PWR – ON
      cb KEEL CAM PWR – cl

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

Unstow, deploy reqd FDF

MET  MS AFT ACTIONS

00:53  SPECIALIST SEAT EGRESS
00:59  AFT STATION CONFIG  3
01:03  CONFIG FOR PLBD OPERATIONS  4
01:41  CLOTHING CONFIG  10
01:54  SPECIALIST SEAT REMOVAL/STOWAGE
02:01  AIRLOCK SETUP FOR INGRESS 15
02:24  RESET C/W  16
AFT FLIGHT DECK RECONFIGURATION

CONFIG FOR PLBD OPERATIONS [4]

SET UP LIGHTS
A6U
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 AFT – ON
MID – OFF
FWD – ON
BHD – 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 [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)

RESET C/W [16]

<table>
<thead>
<tr>
<th>PARAMETER NAME</th>
<th>C/W CH</th>
<th>LOWER LIMIT</th>
<th>UPPER LIMIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREON LOOP EVAP OUT T1</td>
<td>107</td>
<td>-</td>
<td>1.90V/64.8 deg</td>
</tr>
<tr>
<td>T2</td>
<td>117</td>
<td>-</td>
<td>1.90V/64.8 deg</td>
</tr>
</tbody>
</table>

<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>
MIDDECK RECONFIGURATION

PRELIM MIDDECK CONFIG

2

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
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

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
ICOM 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 ARLK HTR LINE 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

MET MS AFT ACTIONS

00:53 SPECIALIST SEAT EGRESS
00:57 PRELIM MIDDECK CONFIG
01:07 WCS CONFIG/ACT
01:08 SWITCH CONFIG/GALLEY ACT
01:41 CLOTHING CONFIG
01:45 QUICKDON MASKS SETUP
01:54 SPECIALIST SEAT REMOVAL/STOWAGE
01:59 ESCAPE POLE STOWAGE
02:01 AIRLOCK SETUP FOR INGRESS

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)

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

<table>
<thead>
<tr>
<th>WCS CONFIG/ACT</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WCS SWITCH CONFIGURATION</strong></td>
<td></td>
</tr>
<tr>
<td>ML86B:A</td>
<td>cb MNA H2O LINE HTR A – cl</td>
</tr>
<tr>
<td>:B</td>
<td>WASTE H2O DUMP ISOL – cl</td>
</tr>
<tr>
<td></td>
<td>MNA,MNB VAC VENT ISOL VLV (two) – cl</td>
</tr>
<tr>
<td></td>
<td>WCS CNTLR (two) – cl</td>
</tr>
<tr>
<td>:F</td>
<td>MNB VAC VENT NOZ HTR – cl</td>
</tr>
<tr>
<td>MA73C:E</td>
<td>All cbs closed except: cb AC3 PL 3Φ – op</td>
</tr>
<tr>
<td></td>
<td>MNB H2O LINE HTR B – op</td>
</tr>
<tr>
<td></td>
<td>FLOOD TUNNEL ADAPTER (three) – op</td>
</tr>
<tr>
<td></td>
<td>CO2 SYS 1,2 CNTLR, CO2 COMM INSTR – op</td>
</tr>
<tr>
<td></td>
<td>FC PCM – op</td>
</tr>
<tr>
<td></td>
<td>All cbs closed except: ESS1BC FLOOD TUNNEL ADAPTER 1 – op</td>
</tr>
<tr>
<td></td>
<td>All cbs closed except: ESS1BC FLOOD TUNNEL ADAPTER 1 – op</td>
</tr>
<tr>
<td></td>
<td>SPLY H2O GALLEY SPLY VLV – OP (tb-OP)</td>
</tr>
<tr>
<td></td>
<td>H2O HTRS (two) – ON</td>
</tr>
<tr>
<td></td>
<td>OVEN/RHS – ON</td>
</tr>
<tr>
<td></td>
<td>Unstow,install Personal Hygiene Hose</td>
</tr>
<tr>
<td></td>
<td>MCC for further actions</td>
</tr>
<tr>
<td><strong>WCS ACTIVATION</strong></td>
<td></td>
</tr>
<tr>
<td>Foot/Toe Restraints – down, locked</td>
<td></td>
</tr>
<tr>
<td>VAC VLV – OP</td>
<td></td>
</tr>
<tr>
<td>Unstow urinal hose from Velcro strap, install hose in cradle</td>
<td></td>
</tr>
<tr>
<td>( √ ) CRADLE – AUTO</td>
<td></td>
</tr>
<tr>
<td>( √ ) MODE – AUTO</td>
<td></td>
</tr>
<tr>
<td>FAN SEP SEL sw – 1</td>
<td></td>
</tr>
<tr>
<td>Unstow hose from cradle (( √ ) Airflow)</td>
<td></td>
</tr>
<tr>
<td>( √ ) WCS ON It – on</td>
<td></td>
</tr>
<tr>
<td>Stow hose in cradle</td>
<td></td>
</tr>
<tr>
<td>( √ ) WCS ON It – off</td>
<td></td>
</tr>
<tr>
<td>Unstow,install WCS Container, Bag &amp; Hose, Mirror, Elbow Bag</td>
<td></td>
</tr>
<tr>
<td>Dispenser, First Day Clothing</td>
<td></td>
</tr>
<tr>
<td>Ventline mated in aux Wet Trash</td>
<td></td>
</tr>
<tr>
<td>Perform URINE PRETREAT SETUP (Cue Card, URINE PRETREAT CHANGEOUT)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SWITCH CONFIG/GALLEY ACT</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA73C:F</td>
<td>cb AC1 MAR 3Φ – cl</td>
</tr>
<tr>
<td>:G</td>
<td>cb AC3 GALLEY FAN (three) – cl</td>
</tr>
<tr>
<td>ML86B:A</td>
<td>All cbs closed except: MNB H2O LINE HTR B – op</td>
</tr>
<tr>
<td>:B</td>
<td>All cbs closed</td>
</tr>
<tr>
<td>:E</td>
<td>All cbs closed except: FLOOD TUNNEL ADAPTER (three) – op</td>
</tr>
<tr>
<td></td>
<td>CO2 SYS 1,2 CNTLR, CO2 COMM INSTR – op</td>
</tr>
<tr>
<td></td>
<td>FC PCM – op</td>
</tr>
<tr>
<td>:F</td>
<td>All cbs closed</td>
</tr>
<tr>
<td>:G</td>
<td>All cbs closed except: ESS1BC FLOOD TUNNEL ADAPTER 1 – op</td>
</tr>
<tr>
<td>R11L:G</td>
<td>SPLY H2O GALLEY SPLY VLV – OP (tb-OP)</td>
</tr>
<tr>
<td>GALLEY</td>
<td>H2O HTRS (two) – ON</td>
</tr>
<tr>
<td></td>
<td>OVEN/RHS – ON</td>
</tr>
<tr>
<td></td>
<td>Unstow,install Personal Hygiene Hose</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ESCAPE POLE STOWAGE</th>
<th>13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remove large Port Pin</td>
<td></td>
</tr>
<tr>
<td>Slide back – Safing Latch</td>
<td></td>
</tr>
<tr>
<td>Retract, hold Locking Pin (Ring)</td>
<td></td>
</tr>
<tr>
<td>Remove Large Pin</td>
<td></td>
</tr>
<tr>
<td>Release Locking Pin (Ring)</td>
<td></td>
</tr>
<tr>
<td>Remove STBD Pip Pin</td>
<td></td>
</tr>
<tr>
<td>Stow Pole</td>
<td></td>
</tr>
<tr>
<td>Reinstall Large Pin</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AIRLOCK SETUP FOR INGRESS</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inner Hatch 1</td>
<td>Equal vlv caps (two) – remove</td>
</tr>
<tr>
<td>2</td>
<td>Open hatch per decal</td>
</tr>
<tr>
<td>3</td>
<td>Equal vlv (two) – OFF, install caps</td>
</tr>
<tr>
<td>MDDK</td>
<td>Remove diffuser from aft middeck floor fitting and temp stow</td>
</tr>
<tr>
<td>EXT A/L 5</td>
<td>Unstow duct from Tunnel extension wall</td>
</tr>
<tr>
<td>6</td>
<td>Attach free end to aft middeck floor fitting</td>
</tr>
<tr>
<td>MO13Q 7</td>
<td>AIRLK 2 – ON/OFF</td>
</tr>
<tr>
<td>AW18A 8</td>
<td>LTG FLOOD 1(3,4) – ON (as reqd)</td>
</tr>
<tr>
<td>9</td>
<td>√ Airflow at top of external airlock halo</td>
</tr>
<tr>
<td>10</td>
<td>( √ ) NEG CAB PRESS RELIEF vlv cover (two) – CL (pushed in)</td>
</tr>
</tbody>
</table>
### ON-ORBIT SWITCH LIST

<table>
<thead>
<tr>
<th>LEFT SEAT</th>
<th>RIGHT SEAT</th>
<th>AFT</th>
<th>MIDDECK-FWD</th>
<th>MIDDECK-AFT</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1 ............... 1-19</td>
<td>O16 ............... 1-22</td>
<td>C5 ............... 1-22</td>
<td>ML86B ............ 1-25</td>
<td></td>
</tr>
<tr>
<td>L2 ............... 1-19</td>
<td>O8 ............... 1-20</td>
<td>C6 ............... 1-22</td>
<td>MA73C ............ 1-25</td>
<td></td>
</tr>
<tr>
<td></td>
<td>R1 ............... 1-18</td>
<td>C7 ............... 1-22</td>
<td>MO32M ............ 1-24</td>
<td></td>
</tr>
<tr>
<td>O6 ............... 1-19</td>
<td></td>
<td></td>
<td>MO69M ............ 1-24</td>
<td></td>
</tr>
<tr>
<td>O7 ............... 1-20</td>
<td></td>
<td></td>
<td>MO63P ............ 1-26</td>
<td></td>
</tr>
<tr>
<td>O8 ............... 1-20</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>O14 ............... 1-21</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>O15 ............... 1-22</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Up**
- **Center**
- **Down**
- **Boxed items indicate switch configured during ON-ORBIT CONFIGURATION**

**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>
ALL VEH

1-19 PI/125/BAS
OV103, OV104

PNL MO63P

MN C-DC UTILITY POWER

CB4/ J4

CB3/ J3

CB2/ J2

POWER SELECT

15A 10A

ON OFF

ON OFF

ON OFF

ON OFF

CB5/ J5

CB6/ J6

RLY PWR

POWER SELECT

15A 10A

ON OFF

ON OFF

ON OFF

ON OFF

KEY PWR
ORBIT 5/6 DEORBIT
WARNING
If AV BAY FIRE (ASC PKT, PWRDN or ORBIT PKT, PWRDN) has been completed and the associated AC BUS, FF MDM, or FMCA is not recovered, \( V/MCC \) 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 Pwrnd
- PRI RJDs DRIVER & LOGIC OFF in Group B Pwrnd

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 1-26 (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**
\[ TG = 2 \quad BV = 3 \quad OM = 270 \]
## 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</td>
<td>GNC FRP-3 (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</td>
<td>PWRDN BACKOUT (Group A &amp; B) (ORB PKT, PRIOR PWRDN) (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
AFT FLIGHT DECK RECONFIGURATION

AFT STATION CONFIG

- POST SEAT EGRESS
- cb MNA CAB VENT – op
- ISOL – op
- RCS/OMS HTR FWD RCS
- L POD (two) – A AUTO
- R POD (two) – A AUTO, B OFF
- OMS CRSFD LINES (two) – A AUTO, B OFF
- √ FWD, AFT RCS JET (ten) – AUTO
- RCS/OMS HTR FWD RCS – A AUTO
- RCS/OMS HTR L POD (two) – A AUTO, B OFF
- RCS/OMS HTR R POD (two) – A AUTO, B OFF
- RCS/OMS HTR OMS CRSFD LINES (two) – A AUTO, B OFF
- PDIP 1 KU BAND RATE – Low

ON-OBJECT CONFIG
- Don headset (if reqd)
- APU HTR LUBE OIL LN (three) – A AUTO
- HYD CIRC PUMP PWR 2 – MNC

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 CW

MS AFT ACTIONS

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 CW

00:53 SPECIALIST SEAT EGRESS

- cb MNB KU ANT HTR – cl
- UHF EVA (two) – cl
- D Close left to right all cbs
- E Close left to right all cbs

01:03 CONFIG FOR PLBD OPERATIONS

- IDP/CRT 4 PWR – 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

01:41 CLOTHING CONFIG

- cb KEEL CAM SW – cl
- HTR/ILLUM PWR – ON
- cb KEEL CAM PWR – cl
- cb SW PWR – cl
- cb PDIP 2 PWR 2 – cl
- PWR 1 – cl

01:54 SPECIALIST SEAT REMOVAL/STOWAGE

- cb OBSS SW PWR – cl
- OBSS SW PWR – ON
- (OBSS) RSC PWR – ON

VPL BUS ACTIVATION complete

Unstow, deploy reqd FDF

02:01 AIRLOCK SETUP FOR INGRESS

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

02:24 RESET C/W (reduced copy)

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

PI-1a/125/O/C

CC 3-3

PI/125/BAS 4
AFT FLIGHT DECK RECONFIGURATION

CONFIG FOR PLBD OPERATIONS

A6U
- SET UP LIGHTS
  - ANNUN BUS SEL – MNC

NOTES
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 AFT – ON
- MID – OFF
- FWB – ON
- BHD – ON

Record MET: __/__/____:

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

<table>
<thead>
<tr>
<th>PARAMETER NAME</th>
<th>C/W CH</th>
<th>LOWER LIMIT</th>
<th>UPPER LIMIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREON LOOP EVAP OUT T1</td>
<td>107</td>
<td>107</td>
<td>1.90V/64.8 deg</td>
</tr>
<tr>
<td>T2</td>
<td>117</td>
<td>117</td>
<td>1.90V/64.8 deg</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>R</td>
<td>19</td>
<td>INH</td>
</tr>
<tr>
<td>MPS He TK P 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>
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</table>
### MIDDECK RECONFIGURATION

<table>
<thead>
<tr>
<th>Section</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRELIM MIDDECK CONFIG</td>
<td>2</td>
</tr>
<tr>
<td>WARNING</td>
<td>Eye and skin damage can occur in as little as 10 sec</td>
</tr>
<tr>
<td>INSTALL FILTERS</td>
<td>Don Sunglasses</td>
</tr>
<tr>
<td>Unstow, install:</td>
<td>Side Hatch UV Filter and Locking Device, and Pyro Box Safer Pin</td>
</tr>
<tr>
<td>PRESS H2O TKA</td>
<td>ML26C</td>
</tr>
<tr>
<td>SPLY H2O GN2 TK VENT vlv – PRESS</td>
<td>A SPLY vlv – OP</td>
</tr>
<tr>
<td>NOTE</td>
<td>Disregard possible ‘S66 WASTE H2O PRES’ fault msg</td>
</tr>
<tr>
<td>COMM CONFIG</td>
<td>Unstow: headsets, handheld mic</td>
</tr>
<tr>
<td>MO42F</td>
<td>MIDDECK SPKR AUD A/G 1 – T/R, tw-2</td>
</tr>
<tr>
<td>A/G 2</td>
<td>– RCV, tw-2</td>
</tr>
<tr>
<td>A/A</td>
<td>– RCV, tw-2</td>
</tr>
<tr>
<td>ICOM A</td>
<td>– T/R, tw-2</td>
</tr>
<tr>
<td>B</td>
<td>– RCV, tw-2</td>
</tr>
<tr>
<td>XMIT/ICOM MODE – PTT/PTT</td>
<td>SPKR PWR – SPKR</td>
</tr>
<tr>
<td>MSTR SPKR VOL – 8</td>
<td></td>
</tr>
<tr>
<td>MO39M</td>
<td>MIDDECK COMM CCU PWR – OFF</td>
</tr>
<tr>
<td>Connect HHMIC to CCU</td>
<td></td>
</tr>
<tr>
<td>MIDDECK COMM CCU PWR – ON</td>
<td></td>
</tr>
<tr>
<td>ML86B:C</td>
<td>cb MNA EXT ARLK HTR LINE ZN1.2 (two) – cl</td>
</tr>
<tr>
<td>:E</td>
<td>cb MNA FC PCM – op</td>
</tr>
<tr>
<td>FDF CONFIG</td>
<td>Stow in Helmet Bag: ASCENT Cue Cards, ASC, ASC PKT, SYS AOA</td>
</tr>
<tr>
<td>Unstow Jettison Stowage Bag, mark “Return to Houston”</td>
<td></td>
</tr>
<tr>
<td>Place Helmet Bag in Return to Houston Bag</td>
<td></td>
</tr>
<tr>
<td>Unstow VW Bags</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MET</th>
<th>MS AFT ACTIONS</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>

<table>
<thead>
<tr>
<th>CLOTHING CONFIG</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doff, stow:</td>
<td></td>
</tr>
<tr>
<td>Harness, Boots, LES</td>
<td></td>
</tr>
<tr>
<td>Stow gloves in Helmet</td>
<td></td>
</tr>
<tr>
<td>Remove radiation dosimeter from LES and insert in inflight garments</td>
<td></td>
</tr>
<tr>
<td>Doff, stow in Wet Trash:</td>
<td></td>
</tr>
<tr>
<td>UCD (clamp if used)</td>
<td></td>
</tr>
<tr>
<td>Emesis Bag, if used (unstow new bag)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>QUICKDON MASKS SETUP</th>
<th>19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connect QDM COMM to HIU</td>
<td></td>
</tr>
<tr>
<td>Connect QDM O2 to LEH hose</td>
<td></td>
</tr>
<tr>
<td>Verify operation</td>
<td></td>
</tr>
<tr>
<td>Temp stow QDM/HIU assembly</td>
<td></td>
</tr>
</tbody>
</table>
MIDDECK RECONFIGURATION

**MIDDECK CONFIGURATION**

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

- MA73C:E All cbs closed except:
  - cb AC3 PL 3 – cl

- 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 to – CL or bp:
  * VAC VENT ISOL VLV BUS SEL – MNB
  * CNTL – OP (tb-OP)
  * If VAC VENT ISOL VLV CNTL to still CL or bp:
    * MCC for further actions

**WCS ACTIVATION**

- WCS
  - Food/Toe Restraints – down, locked
  - VAC VL – 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 – on
  - Stow hose in cradle
  - WCS ON – off
  - Unstow, install WCS Container, Bag & Hose, Mirror, Elbow Bag, Dispenser, First Day Clothing
  - Ventilator mated in aux Wet Trash
  - Perform URINE PRETREAT SETUP (Cue Card, URINE PRETREAT CHANGEOUT)

**SWITCH CONFIG/GALLEY ACT**

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

- ML86B:A All cbs closed except: MNB H2O LINE HTR B – op
- :B All cbs closed
- :E All cbs closed except:
  - FLOOD TUNNEL ADAPTER (three) – op
  - CO2 SYS 1,2 CNTLR, CO2 COMM INSTR – op
  - FC PCM – op
- :F All cbs closed
- :G All cbs closed except:
  - ESS1BC FLOOD TUNNEL ADAPTER 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**

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

**AIRLOCK SETUP FOR INGRESS**

- Inner Hatch
  1. Equal vlv caps (two) – remove
  2. Open hatch per decal
  3. Equal vlv (two) – OFF, install caps

- MDDK
  4. Remove diffuser from aft middeck floor fitting and temp stow

- EXT AIL
  5. Unstow duct from Tunnel extension wall
  6. Attach free end to aft middeck floor fitting

- MO13Q
  7. AIRLK 2 – ON/OFF

- AW19A
  8. LTG FLOOD 1(3,4) – ON (as reqd)
  9. Airflow at top of external airlock halo
  10. NEG CAB PRESS RELIEF vlv cover (two) – CL (pushed in)

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(reduced copy)