Post Insertion

STS-126

Mission Operations Directorate
Operations Division

Basic
March 28, 2008

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
PCN-3 (Oct 17, 2008) Sheet 1 of 1

List of Implemented Change Requests (482s):

PI-0843
PI-0844
PI-0845
PI-0847

Incorporate the following:

1. Replace iii and iv
2. Replace 1-5 and 1-6, 1-17 and 1-18, 1-25 thru 1-28

Prepared by:  
Publication Manager

Approved by:  
Manager, Shuttle Procedures Management

Accepted by:  
FDF Manager

Encl: 10 pages

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List of Implemented Change Requests (482s):

- PI-0837
- PI-0839
- PI-0841

Incorporate the following:

1. Replace iii and iv
2. Replace 1-5 thru 1-10, 1-15 and 1-16, 1-25 and 1-26
3. Replace CC 3-5 and CC 3-6

Prepared by: [Signature] 9/25/08
Publication Manager

Approved by: [Signature]
Manager, Shuttle Procedures Management

Accepted by: [Signature]
FDP Manager

Encl: 14 pages

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PCN-1 (July 14, 2008)  Sheet 1 of 1

List of Implemented Change Requests (482s):

PI-0835

Incorporate the following:

1. Replace Signoff thru iv (4 pages)
2. Replace 1-5 & 1-6, 1-13 & 1-14
3. Replace CC 3-3 & CC 3-4

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Publication Manager

Approved by: ________________________________
Manager, Shuttle Procedures Management

Accepted by: ________________________________
FDF Manager

Encl: 10 pages

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MISSION OPERATIONS DIRECTORATE

POST INSERTION
STS-126

BASIC
March 28, 2008

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Publication Manager

APPROVED BY:

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Flight Data File Manager

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Incorporates the following:

482#: NONE – Establishes baseline

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<th>Areas of Technical Responsibility</th>
<th>Contact Name</th>
<th>Phone Number</th>
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<td>DO3/C. Simon</td>
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# POST INSERTION

## STS-126

### LIST OF EFFECTIVE PAGES

<table>
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<th>PCN-2</th>
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### POST INSERTION CUE CARDS

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<td>CC 3-3</td>
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<td>CC 3-4</td>
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<td>CC 3-6</td>
<td>PI-2b/126/O/B</td>
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* – Omit from flight book
## CONTENTS

<table>
<thead>
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<th>PAGE</th>
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<tbody>
<tr>
<td>POST INSERTION PROCEDURES</td>
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<tr>
<td>ON-ORBIT SWITCH LIST</td>
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<tr>
<td>ORBIT 5/6 DEORBIT</td>
<td>2-1</td>
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<tr>
<td>CUE CARD CONFIG</td>
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NOTE

The STS-126 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-126 flight phases are conducted using the Ascent Checklist, Flight Plan, Deorbit Prep Book, Entry Checklist, EVA Checklist, and Rendezvous Book.
POST INSERTION PROCEDURES
### CONFIG GPCs FOR OPS 2

For single PASS GPC failure, build PASS set as follows:

<table>
<thead>
<tr>
<th>GPC</th>
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<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>4</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

#### 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 It flash):
       - BFC CRT DISP – ON
       - BFS, GNC I/O RESET
       - BFC CRT DISP – OFF

2. **MODE G2FD GPC TO OPS 0**
   - **GPC MODE G2FD – STBY (tb-bp)**
   - **RUN (tb-RUN)**

3. **LOAD MC 2 INTO G2FD GPC**
   - **CRTX**
     - **PL, GPC/CRT G2FD GPC/X EXEC**
     - **X: PL GPC MEMORY**
     - **CONFIG – ITEM 45 +2 EXEC**
     - **GPC – ITEM 46 +(G2FD) EXEC**
     - **STORE – ITEM 47 EXEC**
     - Store complete when MC = 02

---

**TRANSITION TO GNC OPS 2**

<table>
<thead>
<tr>
<th>DUAL G2</th>
<th>SINGLE G2</th>
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<tr>
<td>12000</td>
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</tr>
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<tr>
<td>3 2</td>
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<td>4 4</td>
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<td>PL 1/2</td>
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<tr>
<td>2 0</td>
</tr>
<tr>
<td>MM 1</td>
</tr>
<tr>
<td>2 2</td>
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- 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 to GPC 1, 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

- **TURN OFF BFC LT**
  - **BFC CRT DISP – ON**
  - **BFS, MSG RESET**
  - **BFC lt – off**
  - **CRT DISP – OFF**

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

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<td>G2</td>
<td>G3</td>
<td>SM</td>
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1: GNC OMS 2 MNVR COAST 2: GNC OMS 2 MNVR COAST

6. TRANSITION TO SM OPS 201(401)
   CRTX SM, GPC/CRT SM GPC/X EXEC
   SM, GPC/CRT SM GPC/X EXEC
   SM, OPS 201(401) PRO
   SM ANTENNA
   C3 UPLK – ENA
   SM 1 DPS UTILITY
   UL CNTL AUTO – ITEM 35 EXEC
   CRT 1 4
   C3 4 4
   CRT3 BFS, GNC, OPS 000 PRO
   C3 4 4
   CRT 1 4
   C3 BFS, GPC MEMORY
   C3 BFS CRT DISP – OFF
   □ All IDPs deassigned from BFS
   L 1 4
   C3 BFS CRT DISP – ON
   O6 GPC MODE 5 – STBY (tb-RUN)
   C3 4 4
   CRT 1 4
   C3 4 4
   CRT 1 4
   C3 4 4
   CRT 1 4
   C3 4 4
   CRT 1 4
   C3 4 4
   CRT 1 4
   C3 4 4
   CRT 1 4
   C3 4 4
   CRT 1 4

7. SECURE BFS
   C3 BFS CRT DISP – ON
   CRT 1 4
   C3 4 4
   CRT 1 4
   C3 BFS, GPC MEMORY
   C3 BFS CRT DISP – OFF
   □ All IDPs deassigned from BFS
   L 1 4
   C3 BFS CRT DISP – ON
   O6 GPC MODE 5 – STBY (tb-RUN)
   C3 4 4
   CRT 1 4
   C3 4 4
   CRT 1 4
   C3 4 4
   CRT 1 4
   C3 4 4
   CRT 1 4
   C3 4 4
   CRT 1 4
   C3 4 4
   CRT 1 4
   C3 4 4
   CRT 1 4

8. RECONFIG MEDs
   GPC/CRT 0/3 EXEC
   C2 IDP/CRT 3 PWR – OFF
   □ 4 PWR – ON
   F6, F7, F8 GPC/CRT SM GPC/4 EXEC
   Power off MDUs as desired
   C3 GPC/CRT SM GPC/4 EXEC
   C3 4 4
   CRT 1 4
   C3 4 4
   CRT 1 4
   C3 4 4
   CRT 1 4
   C3 4 4
   CRT 1 4
   C3 4 4
   CRT 1 4
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   CRT 1 4
   C3 4 4
   CRT 1 4
   C3 4 4
   CRT 1 4
   C3 4 4
   CRT 1 4
   C3 4 4
   CRT 1 4
   C3 4 4
   CRT 1 4

9. LOAD ORBIT TFLs
   C3 OI PCMMU FORMAT – GPC
   SM 62 PCMMU/PL COMM
   FORMAT:
   CRT FXD – ITEM 1 EXEC (*)
   SEL ID – ITEM 3 + 188 EXEC
   LOAD – ITEM 4 EXEC
   □ 4 RUN, CPLT
   SEL ID – ITEM 3 + 103 EXEC
   LOAD – ITEM 4 EXEC
   □ 4 RUN, CPLT
   PGM – ITEM 2 EXEC
   □ 4 SM ANTENNA

C L4:B.Q,R All cs closed
L4:D,E All cs open
L4:J cb AC3 & SIG CONDR HUM SEP – cl
B SIG CONDR IMU FAN – cl
C.P SPECIALIST SEAT EGRESS
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
PL BUS ACTIVATION
R1 PL CAB – MNA
AUX – ON
AFT MNB – ON
MNC – ON
P L4:BQ,R All cs closed
L4:D,E All cs open
L4:J cb AC3 & SIG CONDR HUM SEP – cl
B SIG CONDR IMU FAN – cl
C SPECIALIST SEAT EGRESS
PRELIM MIDDECK CONFIG
(MID Cue Card) 2 1-15
AFT STATION CONFIG
(AFT Cue Card) 3 1-13
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
- 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-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**

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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
1: GNC UNIV PTG  2: SM ANTENNA

MS CONFIG FOR PLBD OPERATIONS (AFT Cue Card) 4, 1-14

MS RCS CONFIG/ACT (Mid Cue Card) 5, 1-16

MS SWITCH CONFIG/GALLEY ACT (Mid Cue Card) 6, 1-16

C,P DON/CONFIG COMM

O5,09 AUD A/G 2 – RCV, tw – 2
XMIT/COM MODE sel – PTT/VOX (recommended)

LOAD DAP A5

MNVR TO PLBD OPENING ATT (-ZLV -XV)

CRT1
√TGT ID +2
BODY VECT +3
√P +90
√Y +0
OM +0
DAP: A/AUTO/ALT
Initiate TRK

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
     CNTLR 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) – MAN
     * 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:
     * \RAD BYP VLV tb (two) – RAD

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 DYP METHODS</td>
</tr>
<tr>
<td>1 OMS Eng &amp; 1</td>
<td>3 RGAs</td>
<td>Both RFCAs</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 ADTAs</td>
<td>3 of 6 Av Bay Fans</td>
<td>FAILURE</td>
</tr>
<tr>
<td>OMS Prop Tk Leak</td>
<td>3 Elevon or 2 Fcs</td>
<td>2 Fcs</td>
<td></td>
</tr>
<tr>
<td>Aft RCS He or BF Pos Fdbks</td>
<td>Any MN or 34 AC Bus</td>
<td>3 GPs</td>
<td></td>
</tr>
<tr>
<td>Prop Leak</td>
<td>(same surface)</td>
<td>Any CNTL or MFC Bus</td>
<td>2 PL MDMs</td>
</tr>
<tr>
<td>COMM</td>
<td>2 FCS Ch</td>
<td>3 IMU Fans</td>
<td>2 FF or FA MDMs</td>
</tr>
<tr>
<td>No Voice and No CMD</td>
<td>(same surface)</td>
<td>2 APU/HD/WSB</td>
<td></td>
</tr>
</tbody>
</table>

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
     CNTLR 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) – MAN
     * 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:
     * \RAD BYP VLV tb (two) – RAD

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.
1-30
### 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
| R11L | SPLY H2O DUMP ISOL VLV – OP (tb-OP)
|      | ×OVR 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 |
| L1 CRT | If FREON EVAP OUT TEMP > 41 and ≤ 47 degF:
| L1 CRT | RAD CNTLR OUT TEMP – HI
| L1 CRT | When FREON EVAP OUT TEMP > 50 degF.
| L1 CRT | RAD CNTLR OUT TEMP – NORM, then immediately:
| L1 CRT | FLASH EVAP CNTLR PRI B – ON
| L1 CRT | If FREON EVAP OUT TEMP ≤ 41 or > 47 degF:
| L1 CRT | FLASH EVAP CNTLR PRI B – ON

1-6
MCC & CREW:  
GO for orbit ops  
C  UHF MODE sel – OFF  
MS  KU–BD ANT DEPLOY (ORB OPS, COMM/INST)  
KU–BD ANT ACTIVATION (ORB OPS, COMM/INST)  
C,P  SEAT EGRESS  

C 06

01:35

C,P  CLOTHING CONFIG  
MS  KU–BD ANT DEPLOY (ORB OPS, COMM/INST)  
KU–BD ANT ACTIVATION (ORB OPS, COMM/INST)  

C,P  CLOTHING CONFIG (MID,AFT Cue Cards)  

01:40

C,P  CLOTHING CONFIG  

01:45

ALL  QUICKDON MASKS SETUP  
If time permits: OCAC SETUP (ORB OPS, CREW SYS)

01:50

C  POST PLBD OPS RAD CONFIG  
MS  SPECIALIST SEAT REMOVAL/STOWAGE

01:55

C  STAR TRKR ACTIVATION/DOOR OPEN  
MS  ESCAPE POLE STOWAGE (MID Cue Card)

02:00

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  
√  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

AIRLOCK SETUP FOR INGRESS (MID Cue Card) 15, 1-16

W/B STEAM VENT HTR ACT
\BLR CNTLR/HTR (three) – A
PWR (three) – ON

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

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

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

SUPPLY WATER CONFIG 14, 1-6

RESET C/W (AFT Cue Card) 16, 1–14

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

### 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 SYS (two) – ENA
5. OP/CL STATUS (ten) – CL
6. PL BAY DR – OP
7. Deselect CENTER LATCHES 1-4,13-16 – ITEM 6,7 EXEC (no *)
8. Select CENTER LATCHES 5-8,9-12 – ITEM 4,5 EXEC (*)
9. PL BAY DR – STOP
10. Deselect CENTER LATCHES 5-8,9-12 – ITEM 4,5 EXEC (no *)
11. Select CENTER LATCHES 1-4,13-16 – ITEM 6,7 EXEC (no *)
12. PL BAY DR – STOP
13. Deselect CENTER LATCHES 1-4,13-16 – ITEM 6,7 EXEC (no *)
14. PL BAY DR – STOP
15. Deselect CENTER LATCHES 5-8,9-12 – ITEM 4,5 EXEC (no *)
16. Select CENTER LATCHES 1-4,13-16 – ITEM 6,7 EXEC (no *)
17. PL BAY DR – STOP
18. Deselect CENTER LATCHES 1-4,13-16 – ITEM 6,7 EXEC (no *)
19. Select CENTER LATCHES 5-8,9-12 – ITEM 4,5 EXEC (*)
20. PL BAY DR – OP
21. Deselect CENTER LATCHES 1-4,13-16 – ITEM 6,7 EXEC (no *)
22. Select CENTER LATCHES 5-8,9-12 – ITEM 4,5 EXEC (*)
23. PL BAY DR – STOP
24. Deselect CENTER LATCHES 1-4,13-16 – ITEM 6,7 EXEC (no *)
25. Select CENTER LATCHES 5-8,9-12 – ITEM 4,5 EXEC (*)
26. PL BAY DR – STOP
27. Deselect CENTER LATCHES 1-4,13-16 – ITEM 6,7 EXEC (no *)
28. Select CENTER LATCHES 5-8,9-12 – ITEM 4,5 EXEC (*)
29. PL BAY DR – STOP
30. Deselect CENTER LATCHES 1-4,13-16 – ITEM 6,7 EXEC (no *)
31. Select CENTER LATCHES 5-8,9-12 – ITEM 4,5 EXEC (*)

#### PSU
1. SM ANTENNA
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. PL BAY DR – OP
7. Deselect CENTER LATCHES 1-4,13-16 – ITEM 6,7 EXEC (no *)
8. Select CENTER LATCHES 5-8,9-12 – ITEM 4,5 EXEC (*)
9. PL BAY DR – STOP
10. Deselect CENTER LATCHES 5-8,9-12 – ITEM 4,5 EXEC (no *)
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29. PL BAY DR – STOP
30. Deselect CENTER LATCHES 1-4,13-16 – ITEM 6,7 EXEC (no *)
31. Select CENTER LATCHES 1-4,13-16 – ITEM 6,7 EXEC (no *)

#### POST-PLBD Opening Cleanup

8. AC POWER OFF – ITEM 2 EXEC (*)
9. SM, OPS 201 PRO (if PASS SM)
10. After floodlights ON > 10 min:
  - PL BAY FLOOD (all) – OFF

### Post-PLBD Opening Cleanup

- 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)
<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>
AFT FLIGHT DECK RECONFIGURATION

AFT STATION CONFIG

**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  
- \( \sqrt{\text{FWD,AFT RCS JET (ten)}} \) – AUTO

PDIP 1  
- KU BAND RATE – LOW

A12  
- APU HTR LUBE OIL LN (three) – A AUTO

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:

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  
- 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  
- 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)

A15  
- cb CNTL PWR PTU 1,2 (two) – cl  
- PTU/MAIN BUS A,B (two) – ON (tb-ON)  
- OPCU 1,2 V-ADJ (two) – CMD

O17:A  
- ATVC (four) – OFF

:B  
- EIU (three) – OFF

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

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

L12  
- cb PDIP 1 PWR 2/KU BAND RLY – cl  
- PDIP 1 PWR S1 – cl  
- CB2 – cl

SSP1  
- cb PDIP 2 PWR 2 – cl  
- PDIP 2 PWR 1 – cl  
- CB2 – cl

SSP2  
- MPLM KEEL CAM HTR/ILLUM PWR – ON

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 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  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>R13U</th>
<th>PARAMETER NAME</th>
<th>C/W CH</th>
<th>UPPER LIMIT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FREON LOOP EVAP OUT T1</td>
<td>107</td>
<td>1.90V/64.8 deg</td>
</tr>
<tr>
<td></td>
<td>T2</td>
<td>117</td>
<td>1.90V/64.8 deg</td>
</tr>
<tr>
<td></td>
<td>CABIN PRESS</td>
<td>4</td>
<td>3.80V/15.22 psia</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>R13U</th>
<th>PARAMETER NAME</th>
<th>C/W CH</th>
<th>ENA/INH</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MPS He TK P C</td>
<td>9</td>
<td>INH</td>
</tr>
<tr>
<td></td>
<td>L</td>
<td>19</td>
<td>INH</td>
</tr>
<tr>
<td></td>
<td>R</td>
<td>29</td>
<td>INH</td>
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<tr>
<td></td>
<td>MPS He REG P C</td>
<td>39</td>
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<td>HYD P 1</td>
<td>99</td>
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<td>2</td>
<td>109</td>
<td>INH</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>119</td>
<td>INH</td>
</tr>
</tbody>
</table>
# 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:
  - 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

- ML86B:C: cb MNA EXT ARLK HTR LINE ZN1,2 (two) – 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

- 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

#### WCS CONFIG/ACT 5

<table>
<thead>
<tr>
<th>WCS SWITCH CONFIGURATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>ML86B:A</td>
</tr>
<tr>
<td>cb MNA H2O LINE HTR A   – cl</td>
</tr>
<tr>
<td>:B</td>
</tr>
<tr>
<td>WASTE H2O DUMP ISOL     – cl</td>
</tr>
<tr>
<td>MNA,MNB VAC VENT ISOL VLV (two) – cl</td>
</tr>
<tr>
<td>WCS CNTRL (two)         – cl</td>
</tr>
<tr>
<td>MNB VAC VENT NOZ HTR    – cl</td>
</tr>
<tr>
<td>:F</td>
</tr>
<tr>
<td>MNA FLOODS WMC/MO13Q    – cl</td>
</tr>
</tbody>
</table>

MA73C:E  
All cbs closed except:  
  cb AC3 PL 3φ – op

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

* If VAC VENT ISOL VLV CNTRL tb – CL or bp:  
* VAC VENT ISOL VLV BUS SEL – MNB  
* CNTRL – OP (tb-OP)  
* If VAC VENT ISOL VLV CNTRL 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 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 6

<table>
<thead>
<tr>
<th>MA73C:F</th>
</tr>
</thead>
<tbody>
<tr>
<td>cb AC1 MAR 3φ – cl</td>
</tr>
<tr>
<td>:G</td>
</tr>
<tr>
<td>cb AC3 GALLEY FAN (three) – cl</td>
</tr>
</tbody>
</table>

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 CNTRL, 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 SPALY VLV – OP (tb-OP)

GALLEY  
H2O HTRS (two) – ON
OVEN/RHS – ON

Unstow, install Personal Hygiene Hose

### ESCAPE POLE STOWAGE 13

- 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 15

<table>
<thead>
<tr>
<th>MA73C:G</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. cb AC 1.2 ARLK TNL FAN A,B (six) – cl</td>
</tr>
<tr>
<td>MO13Q</td>
</tr>
<tr>
<td>2. ARLK 2 – ON/OFF</td>
</tr>
<tr>
<td>Inner Hatch</td>
</tr>
<tr>
<td>3. Equal vlv cap (two) – remove</td>
</tr>
<tr>
<td>4. Open hatch per decal</td>
</tr>
<tr>
<td>5. Equal vlv (two) – OFF, install caps</td>
</tr>
<tr>
<td>Tunnel Ext</td>
</tr>
<tr>
<td>6. Unstow free end of Bypass duct from Tunnel extension wall</td>
</tr>
<tr>
<td>7. Remove cap on Airlock Fan outlet and temp stow</td>
</tr>
<tr>
<td>8. Install free end of Bypass duct to Airlock Fan outlet</td>
</tr>
<tr>
<td>9. Unstow Airlock Fan Inlet duct from Tunnel Extension wall</td>
</tr>
<tr>
<td>MDDK</td>
</tr>
<tr>
<td>10. Remove diffuser cap from Aft Middeck floor fitting and temp stow</td>
</tr>
</tbody>
</table>
| 11. Attach one end of Airlock Fan Inlet duct to Airlock Fan muffler inlet.  
  Attach free end to Aft Middeck floor fitting  
  Remove Mylar sleeve/tape from outer screen of Fwd Middeck floor fitting and temp stow in ziplock |
| AW18A                    |
| 13. LTG FLOOD 1(3,4) – ON (as reqd) |
| MO13Q                    |
| 14. ARLK FAN A – ON      |
| EXT A/L                  |
| 15. Airflow at top of external airlock halo |
| 16. NEG CAB PRESS RELIEF vlv cover (two) – CL (pushed in) |
## 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......... 1-23</td>
<td>C5 .......... 1-23</td>
<td>ML86B ........ 1-26</td>
<td>MA73C .......... 1-26</td>
</tr>
<tr>
<td>L2......... 1-19</td>
<td>O8 .......... 1-21</td>
<td>C6 .......... 1-23</td>
<td></td>
<td>MO32M .......... 1-25</td>
</tr>
<tr>
<td>O6......... 1-19</td>
<td>R1 .......... 1-18</td>
<td>C7 .......... 1-23</td>
<td></td>
<td>MO69M .......... 1-25</td>
</tr>
<tr>
<td>O7......... 1-20</td>
<td></td>
<td>A11 .......... 1-24</td>
<td></td>
<td>MO63P .......... 1-27</td>
</tr>
<tr>
<td>O8......... 1-21</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>O14......... 1-22</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>O15......... 1-23</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 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</td>
<td>Always closed or as required</td>
</tr>
</tbody>
</table>

- Up
- Center
- Down
- Boxed items indicate switch configured during ON-ORBIT CONFIGURATION
- R - As reqd
- Indicates switch/display not checked during ON-ORBIT SWITCH/VERIF Switch/display pictorials are generic representations and are not intended to depict actual switch position. Check MCC if clarification reqd
- cb close
- cb open
- White area indicates switch verified during ON-ORBIT SWITCH CONFIGURATION
OV105

PNL O14

1-22 PI/126/BAS
OV103, OV105

PNL MO32M

- OPEN
- CLOSE
- LEH O₂,5

PNL MO69M

- OPEN
- CLOSE
- LEH O₂,7

DIRECT OXYGEN

MO32M

- OPEN
- CLOSE
- LEH O₂,6

MO69M

- OPEN
- CLOSE
- LEH O₂,8
OV105

PNL MO63P

MN C-DC UTILITY POWER

CB4/ J4
ON

CB3/ J3
OFF

CB2/ J2

15A
10A

ON

ON

ON

ON

J2

J3

J4

J5

CB5/ J5

CB6/ J6

RLY PWR

15A
10A

15A
10A

15A
10A

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, \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 Pwrdf
PRI RJDs DRIVER & LOGIC OFF in Group B Pwrdf

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 POST INSERTION FOR ORBIT 5/6 DEORBIT
## 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

POST SEAT EGRESS

AFT STATION CONFIG

O14:D  cb MNA CAB VENT – op
        cb MNA CAB VENT – ISOL – op

A14  RCS/OMS HTR FWD RCS (two) – 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

APU HTR LUBE OIL LN (three) – A AUTO

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:

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

A11  MS COMM CCU PWR – OFF
        Connect HMIC to MHA
        MS COMM CCU PWR – ON
        R6,L5  CCU PWR – OFF
        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
        NSF DATA RATE RCV – HI
        XMTR – 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

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AFT FLIGHT DECK RECONFIGURATION

CONFIG FOR PLBD OPERATIONS 4

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 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

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 | 3.80V/15.22 psia

R13U
PARAMETER NAME | C/W CH | ENA/INH
MPS He TK P C | 9 | INH
L | 19 | INH
R | 29 | INH
MPS He REG P C | 39 | INH
L | 49 | INH
R | 59 | INH
HYD P 1 | 99 | INH
2 | 109 | INH
3 | 119 | INH
**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

MICDECK 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

MICDECK COMM CCU PWR – OFF
Connect HHMIC to CCU
MICDECK COMM CCU PWR – ON

ML86B:C

cb MNA EXT ARLK HTR LINE ZN1,2 (two) – cl
STRUC Z1/2/3 – cl
 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**

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

---

**MET**

<table>
<thead>
<tr>
<th>MS AFT ACTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>00:53 SPECIALIST SEAT EGRESS</td>
</tr>
<tr>
<td>00:57 PRELIM MIDDECK CONFIG</td>
</tr>
<tr>
<td>01:07 WCS CONFIG/ACT</td>
</tr>
<tr>
<td>01:08 SWITCH CONFIG/GALLEY ACT</td>
</tr>
<tr>
<td>01:41 CLOTHING CONFIG</td>
</tr>
<tr>
<td>01:45 QUICKDON MASKS SETUP</td>
</tr>
<tr>
<td>01:54 SPECIALIST SEAT REMOVAL/STOWAGE</td>
</tr>
<tr>
<td>01:59 ESCAPE POLE STOWAGE</td>
</tr>
<tr>
<td>02:01 AIRLOCK SETUP FOR INGRESS</td>
</tr>
</tbody>
</table>

---

**TOP**

HOOK VELCRO

HOOK VELCRO

HOOK VELCRO

HOOK VELCRO

(reduced copy)
MIDDECK RECONFIGURATION

WCS CONFIG/ACT

WCS SWITCH CONFIGURATION

ML69:B
- cb MNA H2O LINE HTR A – cl
- WASTE H2O DUMP ISOL – cl
- MNA,MNB VAC VENT ISOL VLV (two) – cl
- WCS CNTLR (two) – cl
- 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

WCS
- 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, 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

ML69:B
- 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:
  - ESS18C 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)
- Remove Large Pin
- Release Locking Pin (Ring)
- Remove Stbd PIP Pin
- Stow Pole
- Reinstall Large Pin

AIRLOCK SETUP FOR INGRESS

MA73C:G
1. cb AC 1,2 ARLK TNL FAN A,B (six) – cl
2. AIRLK 2 – ON/OFF
3. Inner Hatch
   3. Equal vlv cap (two) – remove
   4. Open hatch per decal
   5. Equal vlv (two) – OFF, install caps
4. Tunnel Ext
   6. Unstow free end of Bypass duct from Tunnel extension wall
   7. Remove cap on Airlock Fan outlet and temp stow
   8. Install free end of Bypass duct to Airlock Fan outlet
   9. Unstow Airlock Fan Inlet duct from Tunnel Extension wall
10. MDDK
   10. Remove diffuser cap from Aft Middeck floor fitting and temp stow
   11. Attach one end of Airlock Fan Inlet duct to Airlock Fan muffler inlet.
       Attach free end to Aft Middeck floor fitting
   12. Remove Mylar sleeve/tape from outer screen of Fwd Middeck floor fitting and temp stow in ziplock
13. AW18A
   13. LTG FLOOD 1(3,4) – ON (as reqd)
14. MO13Q
15. AIRLK FAN A – ON
16. EXT A/L
   15. Airflow at top of external airlock halo
   16. UNEG CAB PRESS RELIEF vlv cover (two) – CL (pushed in)

(reduced copy)

CC 3-6
PI-2b/126/O/B

PI/126/BAS 2