Post Insertion

STS-127

Mission Operations Directorate
Operations Division

Final
April 29, 2009
PCN-1 (May 20, 2009) Sheet 1 of 1

List of Implemented Change Requests (482s):

PI-00864

Incorporate the following:

1. Replace iii and iv
2. Replace 1-13 thru 1-16, 1-25 and 1-26
3. Replace CC 3-3 thru CC 3-6

Prepared by: [Signature] 5/18/09
Publication Manager

Approved by: [Signature]
Manager, Flight Procedures

Accepted by: [Signature]
PDF Manager

Encl: 12 pages

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

POST INSERTION
STS-127

FINAL
April 29, 2009

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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:

| 482#:   | PI-00860 | REF-01120 |

## AREAS OF TECHNICAL RESPONSIBILITY

<table>
<thead>
<tr>
<th>Area</th>
<th>Contact</th>
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<tbody>
<tr>
<td>Publication Manager</td>
<td>DO3/C. Simon</td>
<td>281-483-0656</td>
</tr>
<tr>
<td>Alternate Publication Manager</td>
<td>DO3/A. Valle</td>
<td>281-244-6401</td>
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<tr>
<td>INCO</td>
<td>DS23/J. Williams</td>
<td>281-483-8100</td>
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<td>DS44/K. Rogers</td>
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<td>DO4/R. Garcia</td>
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## POST INSERTION CUE CARDS

<table>
<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/127/O/C</td>
</tr>
<tr>
<td>AFT FLIGHT DECK RECONFIGURATION (Back)..........</td>
<td>CC 3-4</td>
<td>PI-1b/127/O/B</td>
</tr>
<tr>
<td>MIDDECK RECONFIGURATION (Front)..................</td>
<td>CC 3-5</td>
<td>PI-2a/127/O/A</td>
</tr>
<tr>
<td>MIDDECK RECONFIGURATION (Back)...................</td>
<td>CC 3-6</td>
<td>PI-2b/127/O/B</td>
</tr>
</tbody>
</table>

* – Omit from flight book
NOTE

The STS-127 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-127 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>FAILED GPC</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<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>
</tr>
<tr>
<td>3</td>
<td>G2</td>
<td>FD</td>
<td>SM</td>
<td></td>
</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

   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
   PL, GPC/CRT G2FD GPC/X EXEC

POST INSERTION

- 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

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 | SINGLE  G2
   CONFIG  | 2       | 2
   GPC     | 12000   | 10000
   STR 1   | 1       | 1
   2       | 2       | 1
   3       | 1       | 1
   4       | 1       | 1
   PL 1/2  | 0       | 0
   CRT 1   | 1       | 1
   2       | 2       | 1
   3       | 3       | 2
   4       | 4       | 0
   L 1     | 0       | 0
   2       | 1       | 2
   MM 1    | 1       | 1
   2       | 2       | 1

5. TURN OFF BFC LT
   BFC CRT DISP – ON
   BFS, MSG RESET
   BFC lt – off
   CRT DISP – OFF
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(5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPS</td>
<td>G1, G6</td>
<td>G2</td>
<td>G3</td>
<td>SM</td>
</tr>
<tr>
<td>GPC SEL</td>
<td>1,2,3,4</td>
<td>1,2</td>
<td>1,2,3,4</td>
<td>4</td>
</tr>
<tr>
<td>STR</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
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<td>3</td>
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<td>4</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>P/L</td>
<td>1/2</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CRT</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
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<td></td>
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<td>2</td>
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</tr>
<tr>
<td>L</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>MM</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>

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

**C, P**

**CONFIG GPCs FOR OPS 2 1-2**

(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 - OFF (tb-ON)
  - AUX - OFF
  - AFT MNB - ON
  - MNC - ON

**MS**

**SPECIALIST SEAT EGRESS**

**C, P**

**PRELIM MIDDECK CONFIG** (MIDDECK RECONFIGURATION
Cue Card) 2 1-15

**MS**

**AFT STATION CONFIG** (AFT FLIGHT DECK
RECONFIGURATION Cue Card) 3 1-13

**6. TRANSITION TO SM OPS 201(401)**

**CRT**

**SM, GPC/CRT SM GPC/X EXEC**

**CONFIG - ITEM 1 +4(5) EXEC**

Modify MC 4(5) per table

SM, OPS 201(401) PRO

- STR 1 0
- 2 0
- 3 0
- 4 0

C3

- UPLK – ENS
- PL 1/2 4

**SM 1 DPS UTILITY**

UL CNTL AUTO – ITEM 35 EXEC

- CRT 1 4
- 2 4
- 3 0
- 4 4

C3

- BFS CRT DISP – ON

**CRT**

**BFS, GNC, OPS 000 PRO**

- L 1 4
- 2 0

C3

- BFS CRT DISP – OFF

- All IDPs deassigned from BFS

- MM 1 4

O6

- GPC MODE 5 – STBY (tb-RUN)

**F6,F7,F8**

- GPC/CRT SM GPC/4 EXEC

Power off MDUs as desired

**C3**

- IDP/CRT 3 PWR – OFF

- ¬4 PWR – ON

**RECONFIG MEDs**

- GPC/CRT 0/3 EXEC

- IDP/CRT 3 PWR – OFF

- ¬4 PWR – ON

**9. LOAD ORBIT TFLs**

- GPC/CRT SM GPC/4 EXEC

- SM ANTENNA

- OI PCMMU FORMAT – GPC

- SM 62 PCMMU/PL COMM

**FORMAT:**

- CRT
  - FXD – ITEM 1 EXEC (*)
  - SEL ID – ITEM 3 +1 8 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
10. RECONFIG GPCs

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

WCS CONFIG/ACT (MIDDECK RECONFIGURATION)
Cue Card) 5, 1-16

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

C,P DON/CONFIG COMM
O5,09 AOD A/G 2 – RCV, tw – 2
XMIT/ICOM MODE sel – PTT/VOX (recommended)

LOAD DAP A5

MNVR TO PLBD OPENING ATT (-ZLV -XVV)

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

RAD ACT

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) – 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 DEORB

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

12

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

14

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)
   √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:  
C  GO for orbit ops  
C  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

C,P  CLOTHING CONFIG

MS  CLOTHING CONFIG (MIDDECK, AFT FLIGHT DECK RECONFIGURATION Cue Cards)  
ALL  QUICKDON MASKS SETUP

C, P, MS  SPECIALIST SEAT REMOVAL/STOWAGE

C  POST PLBD OPS RAD CONFIG  
MS  ESCAPE POLE STOWAGE (MIDDECK RECONFIGURATION 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)

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

1: GNC UNIV PTG

QUICKDON MASKS SETUP  
Connect QDM COMM to HIU  
Connect QDM O2 to LEH hose  
Verify operation  
Temp stow QDM/HIU assembly
<table>
<thead>
<tr>
<th>MET</th>
<th>02:00</th>
<th>1: GNC UNIV PTG</th>
<th>2: SM ANTENNA</th>
<th>4: SM ANTENNA</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS</td>
<td>AIRLOCK SETUP FOR INGRESS (MIDDECK RECONFIGURATION Cue Card) 15, 1-16</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| P   | W/B STEAM VENT HTR ACT
BLR CNTLR/HTR (three) – A
PWR (three) – ON |
| C   | CONFIG VERNIER CONTROL
MCC GO for vernier control
O16: F
RJD MANF L5/F5/R5 DRIVER – ON, wait 5 sec
DAP: A/AUTO/VERN |
|     | 02:05 | 02:10 |
| ALL | CONFIG CONTROLS FOR ON-ORBIT
Perform actions on 1-17 thru 1-27
Unstow, install HUD covers (two) |
|     | 02:15 | 02:20 | 02:25 |
| L2  | Remove, stow (on panel L2/FDF FD locker)
NWS sw flex extension |
| R2  | HYD THERMAL CONDITIONING-ENABLE
HYD CIRC PUMP (three) – GPC |
| P   | SUPPLY WATER CONFIG 14, 1-6 |
| MS  | RESET C/W (AFT FLIGHT DECK RECONFIGURATION Cue Card) 16, 1-14 |
| MS  | FUEL CELL VI PERFORMANCE PLOT (ORB OPS, EPS) |
|     | STow POST INSERTION, go to FLIGHT PLAN, FLT DAY 1 |
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**DETAILED PLBD OPENING PROCEDURES**

- If no motion determined visually or ‘OP/CL’ not blank within 10 sec.
- After cd.
- 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
- 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 gang fails:
- PL BAY DR – STOP
  - MCC

**AUTO PLBD OPENING PROCEDURE**

<table>
<thead>
<tr>
<th>MS</th>
<th>CRT4</th>
<th>1. SM, OPS 202 PRO or BFS, SM 63 PL BAY DOORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>R13L</td>
<td>√PL BAY DR – STOP</td>
<td></td>
</tr>
<tr>
<td>CRT4</td>
<td>√PBD SW – STOP</td>
<td></td>
</tr>
<tr>
<td></td>
<td>√MAN SEL (ten) – (no *)</td>
<td></td>
</tr>
<tr>
<td>R13L</td>
<td>√PBD SW BYPASS – (no *)</td>
<td></td>
</tr>
<tr>
<td>CRT4</td>
<td>2. AC POWER ON – ITEM 1 EXEC (*)</td>
<td></td>
</tr>
<tr>
<td>CRT4</td>
<td>3. AUTO MODE SEL – ITEM 3 EXEC (*)</td>
<td></td>
</tr>
<tr>
<td>R13L</td>
<td>4. PL BAY DR SYS (two) – ENA</td>
<td></td>
</tr>
<tr>
<td>CRT4</td>
<td>√OP/CL STATUS (ten) – CL</td>
<td></td>
</tr>
<tr>
<td>R13L</td>
<td>5. PL BAY DR – OP</td>
<td></td>
</tr>
<tr>
<td>CRT4</td>
<td>√CENTER LATCHES 5-8,9-12 (two) – blank,OP (~20 sec)</td>
<td></td>
</tr>
<tr>
<td>CRT4</td>
<td>√1-4,13-16 (two) – blank,OP (~20 sec)</td>
<td></td>
</tr>
<tr>
<td>CRT4</td>
<td>√STBD FWD, AFT LATCHES (two) – blank,OP (~30 sec)</td>
<td></td>
</tr>
<tr>
<td>R13L</td>
<td>√DOOR – RDY, blank,OP (~63 sec)</td>
<td></td>
</tr>
<tr>
<td>CRT4</td>
<td>√PORT FWD, AFT LATCHES (two) – blank,OP (~30 sec)</td>
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</tr>
<tr>
<td>R13L</td>
<td>√DOOR – RDY, blank,OP (~63 sec)</td>
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<tr>
<td>R13L</td>
<td>6. PL BAY DR – STOP</td>
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</tr>
<tr>
<td>POST-PLBD OPENING CLEANUP</td>
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</tr>
<tr>
<td>CRT4</td>
<td>7. PL BAY DOOR SYS (two) – DSBL</td>
<td></td>
</tr>
<tr>
<td></td>
<td>√OP/CL STATUS (ten) – OP</td>
<td></td>
</tr>
<tr>
<td>CRT4</td>
<td>8. AC POWER OFF – ITEM 2 EXEC (*)</td>
<td></td>
</tr>
<tr>
<td>CRT4</td>
<td>9. SM, OPS 201 PRO (if PASS SM)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4: SM ANTENNA</td>
<td></td>
</tr>
<tr>
<td>A7U</td>
<td>10. After floodlights ON &gt; 10 min:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PL BAY FLOOD (all) – OFF</td>
<td></td>
</tr>
</tbody>
</table>

**MANUAL PLBD OPENING PROCEDURE**

<table>
<thead>
<tr>
<th>MS</th>
<th>CRT4</th>
<th>1. SM, OPS 202 PRO or BFS, SM 63 PL BAY DOORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>R13L</td>
<td>√PL BAY DR – STOP</td>
<td></td>
</tr>
<tr>
<td>CRT4</td>
<td>√PBD SW – STOP</td>
<td></td>
</tr>
<tr>
<td></td>
<td>√MAN SEL (ten) – (no *)</td>
<td></td>
</tr>
<tr>
<td>R13L</td>
<td>√PBD SW BYPASS – (no *)</td>
<td></td>
</tr>
<tr>
<td>CRT4</td>
<td>2. AC POWER ON – ITEM 1 EXEC (*)</td>
<td></td>
</tr>
<tr>
<td>CRT4</td>
<td>3. AUTO MODE SEL – (no *)</td>
<td></td>
</tr>
<tr>
<td>R13L</td>
<td>4. PL BAY DR – OP</td>
<td></td>
</tr>
<tr>
<td>CRT4</td>
<td>√CENTER LATCHES 5-8,9-12 (two) – blank,OP (~20 sec)</td>
<td></td>
</tr>
<tr>
<td>R13L</td>
<td>5. PL BAY DR – STOP</td>
<td></td>
</tr>
<tr>
<td>CRT4</td>
<td>6. Select CENTER LATCHES 5-8,9-12 – ITEM 4,5 EXEC (*)</td>
<td></td>
</tr>
<tr>
<td>R13L</td>
<td>7. Deselct CENTER LATCHES 5-8,9-12 – ITEM 4,5 EXEC (no *)</td>
<td></td>
</tr>
<tr>
<td>R13L</td>
<td>8. Select CENTER LATCHES 1-4,13-16 – ITEM 6,7 EXEC (*)</td>
<td></td>
</tr>
<tr>
<td>R13L</td>
<td>9. PL BAY DR – OP</td>
<td></td>
</tr>
<tr>
<td>CRT4</td>
<td>10. PL BAY DR SYS (two) – ENA</td>
<td></td>
</tr>
<tr>
<td>CRT4</td>
<td>11. Deselct CENTER LATCHES 1-4,13-16 – ITEM 6,7 EXEC (no *)</td>
<td></td>
</tr>
<tr>
<td>R13L</td>
<td>12. Select STBD FWD, AFT LATCHES – ITEM 8,9 EXEC (*)</td>
<td></td>
</tr>
<tr>
<td>R13L</td>
<td>13. PL BAY DR – OP</td>
<td></td>
</tr>
<tr>
<td>CRT4</td>
<td>14. PL BAY DR – STOP</td>
<td></td>
</tr>
<tr>
<td>R13L</td>
<td>15. Deselct STBD FWD, AFT LATCHES – ITEM 8,9 EXEC (no *)</td>
<td></td>
</tr>
<tr>
<td>R13L</td>
<td>16. Select STBD DOOR – ITEM 10 EXEC (*)</td>
<td></td>
</tr>
<tr>
<td>R13L</td>
<td>17. PL BAY DR – OP</td>
<td></td>
</tr>
<tr>
<td>CRT4</td>
<td>18. STBD DOOR – RDY, blank,OP (~63 sec)</td>
<td></td>
</tr>
<tr>
<td>R13L</td>
<td>19. PL BAY DR – STOP</td>
<td></td>
</tr>
<tr>
<td>CRT4</td>
<td>20. Deselct STBD DOOR – ITEM 10 EXEC (no *)</td>
<td></td>
</tr>
<tr>
<td>R13L</td>
<td>21. PL BAY DR – OP</td>
<td></td>
</tr>
<tr>
<td>CRT4</td>
<td>22. PORT FWD, AFT LATCHES (two) – blank,OP (~30 sec)</td>
<td></td>
</tr>
<tr>
<td>R13L</td>
<td>23. Deselct PORT FWD, AFT LATCHES – ITEM 11,12 EXEC (no *)</td>
<td></td>
</tr>
<tr>
<td>R13L</td>
<td>24. Select PORT DOOR – ITEM 13 EXEC (*)</td>
<td></td>
</tr>
<tr>
<td>R13L</td>
<td>25. PL BAY DR – OP</td>
<td></td>
</tr>
<tr>
<td>CRT4</td>
<td>26. PORT DOOR – RDY, blank,OP (~63 sec)</td>
<td></td>
</tr>
<tr>
<td>R13L</td>
<td>27. PL BAY DR – STOP</td>
<td></td>
</tr>
<tr>
<td>CRT4</td>
<td>28. Deselct PORT DOOR – ITEM 13 EXEC (no *)</td>
<td></td>
</tr>
<tr>
<td>POST-PLBD OPENING CLEANUP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRT4</td>
<td>29. PL BAY DR SYS (two) – DSBL</td>
<td></td>
</tr>
<tr>
<td></td>
<td>√OP/CL STATUS (ten) – OP</td>
<td></td>
</tr>
<tr>
<td>R13L</td>
<td>30. AC POWER OFF – ITEM 2 EXEC (*)</td>
<td></td>
</tr>
<tr>
<td>CRT4</td>
<td>31. SM, OPS 201 PRO (if PASS SM)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4: SM ANTENNA</td>
<td></td>
</tr>
<tr>
<td>A7U</td>
<td>32. After floodlights ON &gt; 10 min:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PL BAY FLOOD (all) – OFF</td>
<td></td>
</tr>
<tr>
<td>FUNCTION</td>
<td>PLBD CONTROL</td>
<td>PLBD DISPLAY MDM</td>
</tr>
<tr>
<td>-----------</td>
<td>--------------</td>
<td>-----------------</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

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>O14:D</td>
<td>cb MNA CAB VENT – op ISOL – op</td>
</tr>
<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>
<tr>
<td>PDIP 1</td>
<td>KU BAND RATE – LO</td>
</tr>
<tr>
<td>A12</td>
<td>APU HTR LUBE OIL LN (three) – A AUTO</td>
</tr>
<tr>
<td>ON-ORBIT CONFIG</td>
<td>Don headset (if reqd)</td>
</tr>
<tr>
<td>If WCCS flown, perform STD WCCS CONFIG (ORB OPS, COMM/INST)</td>
<td></td>
</tr>
<tr>
<td>If flight deck handheld mic/speaker operation</td>
<td></td>
</tr>
<tr>
<td>A11</td>
<td>MS COMM CCU PWR – OFF Connect HHMIC to MHA</td>
</tr>
<tr>
<td>R6,L5</td>
<td>MS COMM CCU PWR – ON CCU PWR – OFF</td>
</tr>
<tr>
<td>A13</td>
<td>OS AUD SPKR PWR sel – SPKR MSTR SPKR VOL sel – as reqd</td>
</tr>
<tr>
<td>R6,L5</td>
<td>HIU VOL (two) – minimum, full ccw</td>
</tr>
<tr>
<td>A1L</td>
<td>S-BD PM MODE – TDRS DATA NSP DATA RATE RCV – HI XMIT – HI CODING (two) – ON</td>
</tr>
<tr>
<td>A1R</td>
<td>S-BD FM DATA SOURCE sel – MMU 2 (rot) AUD CTR VOICE RCD SEL CH 1 sel – OFF 2 sel – OFF</td>
</tr>
<tr>
<td>R14:C</td>
<td>cb MNB KU ANT HTR – cl UHF EVA (two) – cl</td>
</tr>
<tr>
<td>:D</td>
<td>Close left to right all cbs</td>
</tr>
<tr>
<td>:E</td>
<td>Close left to right all cbs</td>
</tr>
<tr>
<td>L10</td>
<td>Remove, stow VIP, VTR covers</td>
</tr>
<tr>
<td>R11L</td>
<td>IDP/CRT 4 PWR – ON</td>
</tr>
<tr>
<td>R12</td>
<td>VPU PWR – ON (LED on) MDU AFD 1 – ON (if desired)</td>
</tr>
</tbody>
</table>

### 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>00:59</td>
<td>AFT STATION CONFIG</td>
</tr>
<tr>
<td>01:03</td>
<td>CONFIG FOR PLBD OPERATIONS</td>
</tr>
<tr>
<td>01:41</td>
<td>CLOTHING CONFIG</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</td>
</tr>
</tbody>
</table>
AFT FLIGHT DECK RECONFIGURATION

CONFIG FOR PLBD OPERATIONS

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

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>UPPER LIMIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREON LOOP EVAP OUT T1</td>
<td>107</td>
<td>1.90V/64.8 deg</td>
</tr>
<tr>
<td>T2</td>
<td>117</td>
<td>1.90V/64.8 deg</td>
</tr>
<tr>
<td>CABIN PRESS</td>
<td>4</td>
<td>3.85V/15.34 psia</td>
</tr>
</tbody>
</table>

R13U

<table>
<thead>
<tr>
<th>PARAMETER NAME</th>
<th>C/W CH</th>
<th>ENABLED/INHIBITED</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
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
: E STRUC Z1/2/3 – cl

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

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

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  5

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
  MNB VAC VENT NOZ HTR – cl
  MNA FLOODS WMC/MO13Q – cl

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 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 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

MA73C:F
  cb AC1 MAR 3Φ – 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
  MAR 1 – op
:F
  All cbs closed
:G
  All cbs closed except: ESS 1BC 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  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

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

**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

---

### 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>

- **Up**
- **Center** – cb close
- **Down** – cb open
- **Boxed items indicate switch configured during ON-ORBIT CONFIGURATION**
- **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
- **White area indicates switch verified during ON-ORBIT SWITCH CONFIGURATION**
OV103, OV105

PNL
MO32M

OPEN
CLOSE

80V64TP156

1 LEH O2,5

PNL
MO69M

DIRECT OXYGEN

OPEN
CLOSE

80V64TP157

1 LEH O2,6

OPEN
CLOSE

80V64TP158

1 LEH O2,7

OPEN
CLOSE

80V64TP159

1 LEH O2,8
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 Pwrdn
PRI RJDs DRIVER & LOGIC OFF in Group B Pwrdn

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</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)</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

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 – LO
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 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 FM 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
L10 Remove,stow VIP,VTR covers
R11L IDP/CRT 4 PWR – ON
R12 VPU PWR – ON (LED on)
MDU AFD 1 – ON (if desired)

CLOTHING CONFIG
01:41

SPECIALIST SEAT REMOVAL/STOWAGE
01:54

AIRLOCK SETUP FOR INGRESS
02:01

RESET C/W
02:24

(PI-1a/127/O/C)

CC 3-3

PI/127/FIN 1
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

R13U

<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>1.90V/64.8 deg</td>
</tr>
<tr>
<td>T2</td>
<td>117</td>
<td>1.90V/64.8 deg</td>
</tr>
<tr>
<td>CABIN PRESS</td>
<td>4</td>
<td>3.85V/15.34 psia</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>R13U</th>
</tr>
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<tbody>
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</tbody>
</table>

PI-1b/127/O/B

(reduced copy)
**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)

**MO42F**
- If middeck handheld mic/speaker ops:
  - 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
  - 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

<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</td>
</tr>
<tr>
<td>01:07</td>
<td>WCS CONFIG/ACT</td>
</tr>
<tr>
<td>01:08</td>
<td>SWITCH CONFIG/GALLEY ACT</td>
</tr>
<tr>
<td>01:41</td>
<td>CLOTHING CONFIG</td>
</tr>
<tr>
<td>01:45</td>
<td>QUICKDON MASKS SETUP</td>
</tr>
<tr>
<td>01:54</td>
<td>SPECIALIST SEAT REMOVAL/STOWAGE</td>
</tr>
<tr>
<td>01:59</td>
<td>ESCAPE POLE STOWAGE</td>
</tr>
<tr>
<td>02:01</td>
<td>AIRLOCK SETUP FOR INGRESS</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 S

ML86B:A
- cb MNA H2O LN HTR A – cl
- WASTE H2O DUMP ISOL – cl
- MNA, MNB VAC VENT ISOL VLV (two) – cl
- WCS CNTLR (two) – cl
- MNB VAC VENT NOZ HTR – 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

- 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 B

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

ML86B:A
- All cbs closed except:
  - MNB H2O LN HTR B – op

MA73C:B
- All cbs closed

MA73C:E
- All cbs closed except:
  - FLOOD TNL ADAPT (three) – op
  - CO2 SYS 1, 2 CNTLR, CO2 COM INSTR – op
  - FC PCM – op
  - MAR 1 – op

MA73C:F
- All cbs closed

MA73C:G
- All cbs closed except:
  - ESS 1BC FLOOD TNL ADAPT 1 – op

R111L: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 T

- 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 T

- MA73C:G
  1. cb AC 1, 2 ARLK TNL FAN A, B (six) – cl
  2. AIRLK 2 – ON/OFF
  3. Inner Hatch
  4. Open hatch per decal
  5. Equal vlv (two) – OFF, install caps
  6. Tunnel Ext
  7. Unstow Airlock Fan Inlet duct from Tunnel Extension wall
  8. MDDK
  9. Attach one end of Airlock Fan Inlet duct to Airlock Fan muffler inlet, attach free end to Air Middeck floor fitting
  10. AW18A
  11. LTG FLOOD 1(3,4) – ON (as reqd)
  12. EXT A/L
  13. NEG CAB PRESS RELIEF vlv cover (two) – CL (pushed in)

(reduced copy)