Post Insertion

STS-119

Mission Operations Directorate
Operations Division

Final
October 17, 2008

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MISSION OPERATIONS DIRECTORATE

POST INSERTION
STS-119

FINAL
October 17, 2008

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Incorporates the following:

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**AREAS OF TECHNICAL RESPONSIBILITY**

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<td>DO35/C. Simon</td>
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### POST INSERTION CUE CARDS

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<tr>
<th>Title</th>
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<tr>
<td>(Back)</td>
<td>CC 3-4</td>
<td>PI-1b/119/O/B</td>
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<tr>
<td>MIDDECK RECONFIGURATION (Front)</td>
<td>CC 3-5</td>
<td>PI-2a/119/O/B</td>
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<td>(Back)</td>
<td>CC 3-6</td>
<td>PI-2b/119/O/B</td>
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* – Omit from flight book
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<tr>
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<th>PAGE</th>
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<tr>
<td>ON-ORBIT SWITCH LIST</td>
<td>1-17</td>
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<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-119 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-119 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>
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<tbody>
<tr>
<td>1</td>
<td>G2</td>
<td>FD</td>
<td>SM</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>G2</td>
<td>FD</td>
<td>SM</td>
<td></td>
</tr>
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<td>3</td>
<td>G2</td>
<td>FD</td>
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<td>4</td>
<td>G2</td>
<td>SM</td>
<td>FD</td>
<td></td>
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</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

   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

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]

   CONFIG GPC
   DUAL G2
   SINGLE G2
   12000
   10000

   STR
   1  1  1  1
   2  2  1  1
   3  2  1  1
   4  4  1  1

   PL
   1/2 0 0 0

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

   L
   1  0  0  0
   2  0  0  0

   MM
   1  1  1  1
   2  2  1  1
Ref ASC for activities from 00:00-00:50 MET

### MEMORY CONFIGURATION TABLE

<table>
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<tr>
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<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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### 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

### PRELIM MIDDECK CONFIG

- **C,P**
  - CONFIG GPCs FOR OPS 2
    - 1-2

### AFT STATION CONFIG

- **C,P**
  - (AFT Cue Card)
  - 1-13

---

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

- **CRTX**
  - SM, GPC/CRT SM GPC/X EXEC
  - MODIFY MC 4(5) per table
  - CONFIG – ITEM 1 +4(5) EXEC
  - NOTE
    - Expect multiple msgs, Master Alarm, SM Alert

7. **SECURE BFS**

- **C3**
  - BFS CRT DISP – ON
  - BFS CRT DISP – OFF
  - All IDPs deassigned from BFS

8. **RECONFIG MEDs**

- **C2**
  - IDP/CRT 3 PWR – OFF
  - GPC/CRT SM GPC/4 EXEC
  - Power off MDUs as desired

9. **LOAD ORBIT TFLs**

- **C3**
  - (O1 PCMMU FORMAT – GPC
  - SM 62 PCMMU/PL COMM
  - FORMAT:
    - CRT
      - FXD – ITEM 1 EXEC (*)
      - SEL ID – ITEM 3 +1 8 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

---

1-3

PI/119/FIN
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)
– HALT (tb-run)
– HALT (tb-bp)

If single G2 reqd:

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

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

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

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-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

**MET**

**DAY 000**

**01:00**

A1(B1)

AUTO

PRI

RT 0.2

DB 5.0

**01:05**

MS

**CONFIG FOR PLBD OPERATIONS (AFT Cue Card)**

4, 1-14

**01:10**

A5(B1)

AUTO

PRI

RT 0.2

DB 5.0

**01:15**

MS

**WCS CONFIG/ACT (MID Cue Card)**

5, 1-16

**01:20**

P

**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: 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

Wait 90 sec

RAD BYP VLV tb (two) – RAD

* If RAD BYP VLV 1(2) tb – BYP:
  * RAD CNTLR LOOP 1(2) – AUTO B
  * 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 still BYP or 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

* If RAD BYP VLV 1(2) tb – RAD:
  * 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
  * RAD CNTLR LOOP 1(2) – AUTO B
  * After 10 sec, RAD BYP VLV MODE 1(2) – AUTO
  * Wait 90 sec

L2

FREON ISOL MODE – AUTO

**ORB 3 DEORB 8**

If NO-GO for RAD/PLBD OPS due to 2 FCs failed:

Go to CONT DEORB, LOSS OF 2 FC ORB 2 OR 3,

at TIG-1:30

If NO-GO due to any other failure:

Go to CONT DEORB, LAUNCH DAY ORBIT 3,

at TIG-2:00

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

MS

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

**NOTE**: CAUTION BLOCK on 1-11
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 22S TRK/COAS CNTL
STAR TRK – ITEM 3.4 EXEC
1:  GNC 21 IMU ALIGN
RESUME
MCC & CREW:
- Go for orbit ops
- C O6 UHF MODE sel – OFF
- MS KU–BD ANT DEPLOY (ORB OPS, COMM/INST)
- MS KU–BD ANT ACTIVATION (ORB OPS, COMM/INST)
- C,P SEAT EGRESS
- C,P CLOTHING CONFIG
- MS CLOTHING CONFIG (MID, AFT Cue Cards)
- 10, 1-14, 1-15
- ALL QUICKDON MASKS SETUP
- If time permits: OCAC SETUP (ORB OPS, CREW SYS)

CLOTHING CONFIG 9

C
- 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
  - 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 19

C
- POST PLBD OPS RAD CONFIG
- MS SPECIALIST SEAT REMOVAL/STOWAGE
- C STAR TRKR ACTIVATION/DOOR OPEN
- MS ESCAPE POLE STOWAGE (MID Cue Card)
- 1: GNC UNIV PTG
- 2: SM PL BAY DOORS
- 4: SM PL BAY DOORS

A5(B1) AUTO
ALT
RT 0.2
DB 5.0
1: GNC UNIV PTG
2: SM ANTENNA
4: SM ANTENNA

MS
AIRLOCK SETUP FOR INGRESS 15, 1-16

P
W/B STEAM VENT HTR ACT
R2
\BLR CNTLR/HTR (three) – A
PWR (three) – ON

02:05
A5 (B1)
AUTO
ALT
RT 0.2
DB 5.0

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

02:10

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

02:15

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

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

02:20

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

02:25

P
SUPPLY WATER CONFIG 14

02:30

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

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)
\OXVR 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

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
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.
- If latch not 'OP' in single mtr time, PL BAY DR – STOP, perform MAL, MECH.
- If door motion stops and not 'OP', PL BAY DR – STOP, perform MAL, MECH.
- 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.

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. PL BAY DR – STOP
   6. PL BAY DR – STOP
   7. Deselect CENTER LATCHES 1-4,13-16 – ITEM 4,5 EXEC
   8. Select CENTER LATCHES 5-8,9-12 – ITEM 6,7 EXEC
   9. PL BAY DR – OP
   10. PL BAY DR – STOP
   11. Deselect CENTER LATCHES 5-8,9-12 – ITEM 4,5 EXEC
   12. Select STBD FWD,AFT LATCHES – ITEM 8,9 EXEC
   13. PL BAY DR – STOP
   14. Deselect STBD FWD,AFT LATCHES – ITEM 8,9 EXEC
   15. Select PORT FWD,AFT LATCHES – ITEM 10 EXEC
   16. PL BAY DR – STOP
   17. Deselect PORT FWD,AFT LATCHES – ITEM 10 EXEC
   18. Select PORT DOOR – ITEM 13 EXEC
   19. PL BAY DR – STOP
   20. Deselect PORT DOOR – ITEM 13 EXEC
   21. PL BAY DR – STOP
   22. AC POWER OFF – ITEM 2 EXEC
   23. SM, OPS 201 PRO (if PASS SM)
   24. PL BAY FLOOD (all) – OFF

A7U 31. 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>
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<tbody>
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<td>AB3/AB2</td>
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## AFT FLIGHT DECK RECONFIGURATION

### AFT STATION CONFIG

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<thead>
<tr>
<th>Time</th>
<th>MS AFT ACTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>00:51</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>02:21</td>
<td>RESET C/W</td>
</tr>
</tbody>
</table>

### 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

- Add headset (if req’d)
- If WCCS flown, perform STD WCCS CONFIG (ORB OPS, COMM/INST)
- If flight deck handheld mic/speaker operation:

<table>
<thead>
<tr>
<th>Time</th>
<th>MS AFT ACTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>R10</td>
<td>MS AUD PWR – AUD/TONE</td>
</tr>
<tr>
<td>A/G1</td>
<td>– T/R, tw – 2</td>
</tr>
<tr>
<td>A/G2</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 sel – PTT/PTT</td>
<td></td>
</tr>
</tbody>
</table>

- A11 | MS COMM CCCU PWR – OFF |
- R6, L5 | CCU PWR – OFF |
- A13 | OS AUD SPKR PWR sel – SPKR |
- R6, L5 | HIU VOL (two) – minimum, full ccw |
- A1L | MSTR SPKR VOL sel – as reqd |
- A1R | S-BD PM MODE – TDRS DATA |
- S-BD FM DATA SOURCE sel – MMU 2 (rot) |
- AUD CTR VOICE RCD SEL CH 1 sel – OFF |
- 2 sel – OFF |

### PL BUS ACTIVATION COMPLETE

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

<table>
<thead>
<tr>
<th>Time</th>
<th>MS AFT ACTIONS</th>
</tr>
</thead>
<tbody>
<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>02:21</td>
<td>RESET C/W</td>
</tr>
</tbody>
</table>
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 (two) – OFF

Mid (two) – ON

FWD (two) – ON

BHD – N/A

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), AUTO

OPS only for camera A(D)

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**

**PARAMETER NAME**

<table>
<thead>
<tr>
<th>R13U</th>
<th>PARAMETER NAME</th>
<th>C/W CH</th>
<th>UPPER LIMIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1</td>
<td>FREON LOOP EVAP OUT</td>
<td>107</td>
<td>1.90V/64.8 deg</td>
</tr>
<tr>
<td>T2</td>
<td>FREON LOOP EVAP OUT</td>
<td>117</td>
<td>1.90V/64.8 deg</td>
</tr>
<tr>
<td></td>
<td>CABIN O2 FLOW</td>
<td>24</td>
<td>4.65V/4.65 LBM/HR</td>
</tr>
</tbody>
</table>

**PARAMETER NAME**

<table>
<thead>
<tr>
<th>R13U</th>
<th>PARAMETER NAME</th>
<th>C/W CH</th>
<th>ENA/INH</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>MPS He TK P C</td>
<td>9</td>
<td>INH</td>
</tr>
<tr>
<td></td>
<td>MPS He TK P L</td>
<td>19</td>
<td>INH</td>
</tr>
<tr>
<td></td>
<td>MPS He REG P C</td>
<td>39</td>
<td>INH</td>
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<tr>
<td></td>
<td>MPS He REG P L</td>
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<td>INH</td>
</tr>
<tr>
<td></td>
<td>MPS He REG P R</td>
<td>59</td>
<td>INH</td>
</tr>
<tr>
<td></td>
<td>HYD P 1</td>
<td>99</td>
<td>INH</td>
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<tr>
<td></td>
<td>HYD P 2</td>
<td>109</td>
<td>INH</td>
</tr>
<tr>
<td></td>
<td>HYD P 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

- SPLY H2O GN2 Tk VENT vlv – PRESS
- A SPLY vlv – OP

### NOTE

Disregard possible ‘S66 WASTE H2O PRES’ fault msg

### COMM CONFIG

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

#### MO42F

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

#### MO39M

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

### 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

#### ML86B:C

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

#### :E

- cb MNA FC PCM – op
- cb MNB MAR 2 – cl

Unstow VW Bags

<table>
<thead>
<tr>
<th>MET</th>
<th>MS AFT ACTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>00:51</td>
<td>SPECIALIST SEAT EGRESS</td>
</tr>
<tr>
<td>00:58</td>
<td>PRELIM MIDDECK CONFIG 2</td>
</tr>
<tr>
<td>01:06</td>
<td>WCS CONFIG/ACT 5</td>
</tr>
<tr>
<td>01:07</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**

**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
- WCS CNTRL (two) – cl
- :F MNA VAC VENT NOZ HTR – cl
- cb MNA,MNB VAC VENT ISOL VLV (two) – cl
- cb MNA,MNB WCS CNTLR (two) – cl
- cb MNA,MNB VAC VENT NOZ HTR – cl
- ML86B:F cb MNA FLOODS WMC/MO13Q – cl

**MA73C:E** All cbs closed except:
- cb AC3 PL 3φ – op
- MA73C:F cb AC1 MAR 3φ – 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
- FC PCM – op
- :F All cbs closed
- :G All cbs closed except: ESS1BC FLOOD TUNNEL ADAPTER 1 – op
- ML86B:B cb MNA WASTE H2O DUMP ISOL – cl
- ML86B:C cb MNA WASTE H2O DUMP ISOL VLV – OP (tb-OP)
- √ VAC VENT ISOL VLV BUS SEL – MNA
- √ VAC VENT ISOL VLV BUS SEL – MNB
- √ VAC VENT ISOL VLV BUS SEL – MNB
- √ VAC VENT ISOL VLV BUS SEL – MNB
- √ VAC VENT ISOL VLV CNTL – OP (tb-OP)
- √ VAC VENT ISOL VLV CNTL – OP (tb-OP)
- √ IF VAC VENT ISOL VLV CNTL tb – CL or bp: *
- √ IF VAC VENT ISOL VLV CNTL tb still CL or bp: *
- √ 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
- VAC VLV BUS SEL – MNA
- FAN SEP SEL sw – 1
- WCC ON it – on
- WCC ON it – off
- Unstow hose from Velcro strap, install hose in cradle
- 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 LINE HTR B – op
- :B All cbs closed
- :E All cbs closed except: FLOOD TUNNEL ADAPTER (three) – op
- FC PCM – op
- :F All cbs closed
- :G All cbs closed except: ESS1BC FLOOD TUNNEL ADAPTER 1 – op
- ML86B:B cb MNA WASTE H2O DUMP ISOL – cl
- ML86B:C cb MNA WASTE H2O DUMP ISOL VLV – OP (tb-OP)
- √ VAC VENT ISOL VLV BUS SEL – MNA
- √ VAC VENT ISOL VLV BUS SEL – MNB
- √ VAC VENT ISOL VLV BUS SEL – MNB
- √ VAC VENT ISOL VLV BUS SEL – MNB
- √ VAC VENT ISOL VLV CNTL – OP (tb-OP)
- √ VAC VENT ISOL VLV CNTL – OP (tb-OP)
- √ IF VAC VENT ISOL VLV CNTL tb – CL or bp: *
- √ IF VAC VENT ISOL VLV CNTL tb still CL or bp: *
- * * * * * 
- √ MCC for further actions

**ESCAPE POLE STOWAGE 13**

- Unstow, install Personal Hygiene Hose

**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 vlvl cap (two) – remove
- 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 vlvl cover (two) – CL (pushed in)
ON-ORBIT SWITCH LIST

LEFT SEAT
L1 .................. 1-19
L2 .................. 1-19
O6 .................. 1-19
O7 .................. 1-20
O8 .................. 1-20
O14 .................. 1-21
O15 .................. 1-22

RIGHT SEAT
O16 ................. 1-22
O8 ................. 1-20
R1 ................. 1-18

AFT
C5 ................. 1-22
C6 ................. 1-22
C7 ................. 1-22
A11 ................. 1-23

MIDDECK-FWD
ML86B ............. 1-25

MIDDECK-AFT
MA73C ............. 1-25
MO32M .......... 1-24
MO69M .......... 1-24
MO63P .......... 1-26

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>
OV103, OV104

OV7

OV8

RADAR ALTIMETER
12 ON
OFF
MLS
12
ON
3
OFF
CHANNEL
123
FIRE
HOLE
FIRE
HOLE
RIGHT SEAT/CTR CNSL FLOOD
DIM BRT
OFF
SEAT
OV103

PNL A11

CRYO TANK 4 HEATERS

A
AUTO

B
RESET \n
C

D

O2

A B
AUTO

ON

OF

OFF

ON

MS COMM
CCU PWR

ON

OF

OFF

MS BIOMED
DC UTILITY POWER

ON

OFF

MS BIOMED
DC UTILITY POWER

ON

OFF
OV103, OV105

PNL MO32M

CLOSE
OPEN
S80V841P156
S80V841P157
LEH O₂ 5
LEH O₂ 6

PNL MO69M

CLOSE
OPEN
S80V841P158
S80V841P159
LEH O₂ 7
LEH O₂ 8
ORBIT 5/6 DEORBIT
PEN AND INKS TO NOMINAL POST INSERTION FOR 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 Pwrdrn
PRI RJDs DRIVER & LOGIC OFF in Group B Pwrdrn

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

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

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

2:12
CONFIG CONTROLS FOR ON-ORBIT, 1-17 thru 1-26 (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 BV = 3 OM = 270
# PEN AND INKS TO NOMINAL D/O PREP FOR ORBIT 5/6 DEORBIT

<table>
<thead>
<tr>
<th>Time</th>
<th>Action</th>
<th>Procedures</th>
</tr>
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<tbody>
<tr>
<td>3:57</td>
<td>Delete</td>
<td>COLDSOAK INITIATE 2</td>
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<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 4a</td>
</tr>
<tr>
<td>3:15</td>
<td>Move to TIG-2:20</td>
<td>DED DISP ENT CONFIG 6</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 7</td>
</tr>
<tr>
<td>2:40</td>
<td>Delete</td>
<td>PLBD CLOSING 9</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 10</td>
</tr>
</tbody>
</table>
CUE CARD CONFIG
AFT FLIGHT DECK RECONFIGURATION

**AFT STATION CONFIG**

**3**

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

- **A14:**
  - 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

- **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 HMIC 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

**L10:**

- Remove, stow VIP, VTR covers

**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
  - C: MEC 1 – OFF, wait 2 sec, then
    - 2 – OFF

  - PL BUS ACTIVATION complete

**L12:**

- SSP1: cb PDIP 1 PWR 2/KU BAND RLY – cl
  - PDIP 1 PWR 1 – cl
  - SW PWR 2 – cl

- SSP2: cb PDIP 2 PWR 2 – cl
  - PDIP 2 PWR 1 – cl

- **R12 (OPP):**
  - cb OBSS SW PWR – cl
  - OBSS SW PWR – ON

- (OBSS): RSC PWR – ON

**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

- **R11L:**
  - IDP/CRT 4 PWR – ON

- **R12:**
  - VPU PWR – ON (LED on)
  - AFD 1 – ON (if desired)

- **R14:**
  - E: Close left to right all cbs

**L12:**

- SSP1: cb PDIP 1 PWR 2/KU BAND RLY – cl
  - PDIP 1 PWR 1 – cl
  - SW PWR 2 – cl

- SSP2: cb PDIP 2 PWR 2 – cl
  - PDIP 2 PWR 1 – cl

- **R12 (OPP):**
  - cb OBSS SW PWR – cl
  - OBSS SW PWR – ON

- (OBSS): RSC PWR – ON

- Unstow, deploy reqd FDF

**MET**

<table>
<thead>
<tr>
<th>Time</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>00:51</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>02:21</td>
<td>RESET C/W</td>
</tr>
</tbody>
</table>

**Pl-1a/119/O/B**

**PI/119/FIN**
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 AFT (two) – OFF
- MID (two) – ON
- FWD (two) – ON
- BHD – N/A

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), AUTO
OPS only for camera A(D)
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)

R13U

<table>
<thead>
<tr>
<th>PARAMETER NAME</th>
<th>C/W CH</th>
<th>ENA/INH</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPS He TK P C</td>
<td>9</td>
<td>INH</td>
</tr>
<tr>
<td>L</td>
<td>19</td>
<td>INH</td>
</tr>
<tr>
<td>R</td>
<td>29</td>
<td>INH</td>
</tr>
<tr>
<td>MPS He REG P C</td>
<td>39</td>
<td>INH</td>
</tr>
<tr>
<td>L</td>
<td>49</td>
<td>INH</td>
</tr>
<tr>
<td>R</td>
<td>59</td>
<td>INH</td>
</tr>
<tr>
<td>HYD P 1</td>
<td>99</td>
<td>INH</td>
</tr>
<tr>
<td>2</td>
<td>109</td>
<td>INH</td>
</tr>
<tr>
<td>3</td>
<td>119</td>
<td>INH</td>
</tr>
</tbody>
</table>

**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 O2 FLOW 2</td>
<td>24</td>
<td>4.65V/4.65 LBM/HR</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 viv - PRESS
  - A SPLY viv - OP

**NOTE**
Disregard possible 'S66 WASTE H2O PRES' fault msg

### COMM CONFIG

#### Unstow:
- Headsets, handheld mic, and/or wireless comm.

#### If WCSC flown, perform STD WCSCS CONFIG (ORB OPS, COMM/INST)

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
- 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

### 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

#### ML66B:C
- cb MNA EXT ARLK HTR LINE ZN1.2 (two) – cl
- cb MNA FC PCM – op
- STRUC Z1/2/3 – cl
- cb MNB MAR 2 – cl
- 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

### MS AFT ACTIONS

<table>
<thead>
<tr>
<th>Time</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>00:51</td>
<td>SPECIALIST SEAT EGRESS</td>
</tr>
<tr>
<td>00:58</td>
<td>PRELIM MIDDECK CONFIG 2</td>
</tr>
<tr>
<td>01:06</td>
<td>WCS CONFIG/ACT 5</td>
</tr>
<tr>
<td>01:07</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 13</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>
**MIDDECK RECONFIGURATION**

<table>
<thead>
<tr>
<th>WCS CONFIG/ACT</th>
<th>SWITCH Config/Galley ACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>WCS SWITCH CONFIGURATION</td>
<td>MA73C:F</td>
</tr>
<tr>
<td>ML86B:A cb MNA H2O LINE HTR A – cl</td>
<td>cb AC1 MAR 3# – cl</td>
</tr>
<tr>
<td>:B WASTE H2O DUMP ISOL – cl</td>
<td>:G cb AC3 GALLEY FAN (three) – cl</td>
</tr>
<tr>
<td>:MNA,MNB VAC VENT ISOL ISOL VLV (two) – cl</td>
<td>ML86B:A All cbs closed except: MNB H2O LINE HTR B – op</td>
</tr>
<tr>
<td>:WCS CNTLR (two) – cl</td>
<td>:B All cbs closed</td>
</tr>
<tr>
<td>:MNB VAC VENT NOZ HTR – cl</td>
<td>:E All cbs closed except: FLOOD TUNNEL ADAPTER (three) – op</td>
</tr>
<tr>
<td>:F MNA FLOODS WM/C/MO13Q – cl</td>
<td>:F All cbs closed</td>
</tr>
<tr>
<td>MA73C:E All cbs closed except:</td>
<td>:G All cbs closed except: ESS1BC FLOOD TUNNEL ADAPTER 1 – op</td>
</tr>
<tr>
<td>cb AC3 PL 3# – op</td>
<td>R11L:G SPLY H2O GALLEY SPLY VLV – OP (tb-OP)</td>
</tr>
<tr>
<td>ML31C WASTE H2O DUMP ISOL VLV – OP (tb-OP)</td>
<td>GALLEY H2O HTRS (two) – ON</td>
</tr>
<tr>
<td>√VAC VENT ISOL VLV BUS SEL – MNA</td>
<td>OVEN/RHS – ON</td>
</tr>
<tr>
<td>NOZ HTR – ON</td>
<td>Unstow, install Personal Hygiene Hose</td>
</tr>
<tr>
<td>ISOL VLV CNTL – OP (tb-OP)</td>
<td></td>
</tr>
<tr>
<td>* If VAC VENT ISOL VLV CNTL tb – CL or bp: *</td>
<td></td>
</tr>
<tr>
<td>* VAC VENT ISOL VLV BUS SEL – MNB *</td>
<td></td>
</tr>
<tr>
<td>* If VAC VENT ISOL VLV CNTL tb still CL or bp: *</td>
<td></td>
</tr>
<tr>
<td>* MCC for further actions</td>
<td></td>
</tr>
<tr>
<td>WCS ACTIVATION</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>V/CRADLE – AUTO</td>
<td></td>
</tr>
<tr>
<td>V/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 Dispenser, First Day Clothing</td>
<td></td>
</tr>
<tr>
<td>√Ventline mating in aux Wet Trash</td>
<td></td>
</tr>
<tr>
<td>Perform URINE PRETREAT SETUP</td>
<td></td>
</tr>
<tr>
<td>(Cue Card, URINE PRETREAT CHANGEOUT)</td>
<td></td>
</tr>
</tbody>
</table>

**ESCAPE POLE STOWAGE**

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

**AIRLOCK SETUP FOR INGRESS**

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. AIRLK 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) |

(reduced copy)
POST INSERTION STS 119