### NOMINAL DEOBT BIT OVERVIEW OF CONFIGURATION MANAGEMENT

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#### Note:
FLT CMTR PWR will be turned off following OPS 8 C/O and mnrs in OPS 301

---

DATE 03/02/81
### NOMINAL DEORBIT PREP OVERVIEW OF CONFIGURATION MANAGEMENT (CONT)

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**DATE** 03/02/81
DEORBIT ON FLT DAY 2 (REH) FOR FOLLOWING FAILURES

APU/HYD
1 APU/HYD/WSB

COMM/INST
2 Voice (S-Band 1 & 2, UHF)
2 Command
2 ACCU
2 ATU (PL, CDR & MS)
2 PCMMUs
2 FDAs (SM & BFS)
2 SM (Ops 2/BFS)

C/W
2 C/W (Pri & B/U)

DPS
1 GPC*
1 FF, FA or PL MDM
2 Fwd DEU/CRTs*
1 Fwd KYBD*
2 MMUs

ECLS
1 Freon Loop/Rad FES
2 FES Conts
1 NH3 Boiler Sys
1 H2O Loop or Cab Fan
1 Av Bay 1 & 2 Fan

ECLS (Cont)
2 Av Bay 3 Fans
2 IMU Fans
1 O2 or H2 Cryo Tk
2 Sply/Waste H2O Tks

EPS
1 FC
1 Main Bus
1 Cntl AB1,AB2,BC1,BC2,CA1,CA2
1 Ess Bus
1 AC Bus (2φ)

GNC
SENSORS
1 AA, RGA or IMU
2 ST/COAS
2 Tacan Range or ADTAs

CONTROLLERS & SWITCH CONTACTS
3 L, R HHC*
4 L, R RPTA
4 L, R SBTC
2 L, R Bdy Flip
2 L, R Panel Trim (reqd in Roll only)
4 L, R FCS Mode Auto, Gain Ena
or Bdy Flip
2 Control Effector or Alpha Bias
2 Gains, Pitch or R/Y

GNC (Cont)
DEDICATED DISPLAYS
1 L or R ADI*, HSI, AMI, AVVI

AERO SURFACES
1 Act Ch Elev (per actuator),
Rud, SBTC or Bdy Flp
1 Pri AP
1 FDBK (Elev & Bdy Flp)

MECH
2 Ldg Gear Dply (Hyd or Pyro)
1 PLBD or Gang Latch Drive Mtrs
for close Critical Latch

OMS
2 He Tks
1 Prop Tk
1 OMS Eng
1 Critical Pod Htr
1 OMS TVC

RCS
1 Aft Pod Fu or Ox Tk
1 Aft Manifold (Pri)
2 OMS/RCS Xfeed (Htr/Flow Paths)
1 Aft Jet L, R, UP, DN (Pri)

*If good replacement unit not available

DATE 03/02/81
**OPS 2 DAP CONFIG (GNC 20)**

**TRANSITION**

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**CIT TIMERS SETUP 1**

- SET CRT TIMER TO COUNT DOWN TO TIG (repeat for GNC & SM)

**REHEARSAL DAY**

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**ENTRY DAY**

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**24 HOUR LATE DELAYED DEORBIT**

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**ENTRY STOWAGE 2**

**B PERSONAL HYGIENE SYS STOWAGE**

- Stow:
  - MF14H: Personal Hygiene Kit - CDR
  - MF20H: - PLT
  - Wet: Towels
  - Trash: Washcloths
  - MF280: Trash (replace Liners MF43E)
  - MF43E: Mirror
  - Towel Restraints
  - Trash Bag

**AIR SAMPLES/COAS STOWAGE**

- WCS: Disconnect Hose from Vacuum Vent
- AIR SAMPLER: - DAY OFF
- MAOL: Slow Air Sampler/Vent Filter, Vent Hose
- FI41: Air Bottle #4 (3 Reh Day)
- AL7: Slow COAS

---

Ref CAP, FLT DAY 3, 2-39 for activities prior to 002/23:12/MET
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**Legend:**
- **B**: Display Entry Comp (1)
- **C**: Display Entry Comp (2)
- **D**: Display Entry Comp (3)
- **E**: Display Entry Comp (4)
- **F**: Display Entry Comp (5)
- **G**: Display Entry Comp (6)
- **H**: Display Entry Comp (7)
- **I**: Display Entry Comp (8)
- **J**: Display Entry Comp (9)
- **K**: Display Entry Comp (10)
- **L**: Display Entry Comp (11)
- **M**: Display Entry Comp (12)
- **N**: Display Entry Comp (13)
- **O**: Display Entry Comp (14)
- **P**: Display Entry Comp (15)
- **Q**: Display Entry Comp (16)
- **R**: Display Entry Comp (17)
- **S**: Display Entry Comp (18)
- **T**: Display Entry Comp (19)
- **U**: Display Entry Comp (20)
- **V**: Display Entry Comp (21)
- **W**: Display Entry Comp (22)
- **X**: Display Entry Comp (23)
- **Y**: Display Entry Comp (24)
- **Z**: Display Entry Comp (25)
ON ORBIT FCS CHECKOUT, PART 1

1. Perform Part 1 on FLT DAY 1; Part 2 on FLT DAY 2 & 3.

2. Only one APU will be used for the FCS C/O. Selection of APU will be made real time and MCC will provide APU number.

3. Continue FCS C/O for APU alarms except as follows:
   * If WB REG PRESS '++',
   * If OTL OUT P < 25 & GBX P < 5; shut down APU
   * If [APU OVERSPEED] or [APU UNDERSPEED]
   * Confirmed overspeed or if APU has shut down
   * If [APU TEMP]
   * Overtemp confirmed by SM APU B/U EGT:
   * Affected APU CNTL - OFF
   * FUEL TK VL V - CL

FCS C/O PREP

EVENT TIMER & DFI RCDR SETUP

C2 EVENT TIMER MODE - UP
   TIMER SET tw = 00:00

R112:E /DF1 WB MSN PWR - ON
   /RCDR - FWD CNTL

APU PRESTART

1: GNC FCS/DED DIS C/O  2: SM 86 APU/HYD  3: OFF

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CRT2 /APU, HYD, WB status no ‘++’ or ‘++’
R4 /HYD LG RET/CIRC VL V - CL
R2 BLR N2 SPL Y X - ON
   /CNTLR (three) - ON
   /PWR/HTR (three) - A
   /APU FUEL TK VL V (three) - CL
   /CNTLR PWR X - ON
   /HYD CIRC PUMP (three) - OFF
   /MN PUMP PRESS X - LO
   /APU AUTO SHUT DOWN - ENA
   /SPEED SEL (three) - NORM
   /CNTL (three) - OFF

FCS C/O

Inform MCC: READY FOR APU START (AOS 07:45 MET, FLT DAY 1)

Wait for MCC GO

C3 DFI RCDR5 PCM - CONT RCD (tb-gray)
   WB MSN - CONT RCD (tb-gray)

C C2 EVENT TIMER CNTL - START (at APU START)
APU START

P R2 APU FUEL TK VL X - OP
/ APU/HYD RDY X tb - gray

* If tb-bp, consult MCC *

00:00

R2 APU CNTL X - START/RUN
F8 / APU/HYD RDY X tb - bp

* If APU did not start normally: APU CNTL - START ORIDE/RUN *
* (wait 3.5 min for APU start)
* If still no start: APU AUTO SHUT DN - INH
* If still no start: APU CNTL - OFF
* FUEL TK VL - CL

R2 HYD MN PUMP PRESS X - NORM
F8 / HYD PRESS ind X - HI green
R4 / HYD LG HYD ISOL VL X - CL (tb-CL)

CRT2 / SW VL ELVN (four) | IF HYD SYS 1 | IF HYD SYS 2 | IF HYD SYS 3
RUD/SPDBK | 1(*) | 2(*) | 3(*)

INITIATE AEROSURFACE DRIVE

C CRT1 SURF OR START - ITEM 9 EXEC

Verify all surfaces cycling for 5 seconds

NOTE
POS '4' may be indicated until HYD SYS is warm

* If FCS CH failure ('4' port status), reset affected FCS CH:
* FCS CH - ORIDE, then
* - AUTO

TERMINATE AEROSURFACE DRIVE

C CRT1 SURF OR STOP - ITEM 10 EXEC

After 5 seconds of aerosurface drive,

SECONDARY ACTUATOR CHECK

FLT DAY 1 FLT DAY 2/3

NOTE
/ surfaces not moving

<table>
<thead>
<tr>
<th>MET</th>
<th>TIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOS 07:45</td>
<td>AOS -5:33</td>
</tr>
<tr>
<td>LOS 07:58</td>
<td>LOS -5:17</td>
</tr>
</tbody>
</table>

C C3 1. / FCS CH 1,2,3,4 - AUTO

CRT1 2. SEC ACT CK:

CH 1 - ITEM 14 EXEC

CRT1 3. / all CH 1 ports trip ('4')

STOP - ITEM 18 EXEC

C3 4. FCS CH 1 - ORIDE

CRT1 / all CH 1 ports reset (no '4')

C3 FCS CH 1 - AUTO

CRT1 5. CH 2 - ITEM 15 EXEC

CRT1 6. / all CH 2 ports trip ('4')

STOP - ITEM 18 EXEC

C3 7. FCS CH 2 - ORIDE

CRT1 / all CH 2 ports reset (no '4')

C3 FCS CH 2 - AUTO

8. Repeat steps 5 thru 7 for CH 3 & 4

04:55 (EVENT TIMER)

APU SHUTDOWN

On MCC GO for APU SHDN:

R2 BLR CNTLR (three) - OFF
APU CNTL X - OFF
FUEL TK VL X - CL
BLR NZ SPLV X - OFF
APU FUEL PUMP/VLV COOL A - AUTO

C3 DFI RCDRS WB MSN - STBY (tb-bp)

DATE 03/02/81
ON ORBIT FCS CHECKOUT, PART 2

SENSOR TEST - MLS, TAC, RA, AA

* During MLS/TAC/RA/AA test, deselect LRU for failure *
* Indicated: *
* MLS,TAC,RA, AA - 'I' or 'Q'
* or AA - BIAS/MULT limits exceeded *
* Record values of failures defined *

1: GNC FCS/DEA DSS C/O 2: SM 86 APU/HYD 4: OFF

/DES: (no *)
/STAT: blank
/RNG,AZ,EL: no M
/Y,Z: dynamic data

CONFIG FOR FREE DRIFT (Omit if GG)

F6 ADI RATE - LO
DAP: B/MAN/VERN
R,P,Y rates 0 ± 1 deg/sec then:
DAP ROT: PULSE/PULSE/PULSE

AA BIAS/MULT SHIFT TEST

CRT2 /Y,Z within limits: Y - .3 to +.3
Z - .9 to +.9

MLS,TAC,RA,AA TEST

CRT2 START - ITEM 13 EXEC

NOTE
'*' blanks when test is complete
/* no 'I' or 'Q'

CRT2 STOP - ITEM 14 EXEC

LIMIT VALUES TABLE

<table>
<thead>
<tr>
<th>MLS</th>
<th>RNG</th>
<th>AZ</th>
<th>CL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>15.0</td>
<td>+.2.9</td>
<td>5.9</td>
</tr>
<tr>
<td></td>
<td>15.4</td>
<td>to 3.1</td>
<td>to 6.1</td>
</tr>
<tr>
<td></td>
<td>(+ for -10 sec, then -)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TAC</td>
<td>0 to</td>
<td>177.5</td>
<td>182.5</td>
</tr>
<tr>
<td></td>
<td>.5</td>
<td>to 1100</td>
<td></td>
</tr>
<tr>
<td>RA</td>
<td>900</td>
<td>17.80</td>
<td>71.10</td>
</tr>
<tr>
<td></td>
<td>to 1100</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

AA |
Y  | +14.40 to +57.70 |
Z  | 17.80 to 71.10 |

DATE 03/02/81
SENSOR TEST - RGA, ADTA

* During RGA, ADTA test, deselect LRU for failure indicated:
  * RGA: bias null limits exceeded or 'f' or '+'
  * ADTA: any 'f' or '+' except temp ('T')
  * ADTA BITe: Perform memory read
* Record values of failures defined

C CRT2 /DES: (no *)
/STAT: blank
/R,P,Y: dynamic data
/PS,PaC,PaU,PaL,T - no M

CONFIG FOR FREE DRIFT (Omit if GG)
/DAP: B/MAN/VERN
/R,P,Y rates 0 ±1 deg/sec then:
  DAP ROT: PULSE/PULSE/PULSE

RGA BIAS/NULl SHIFT TEST

CRT2 /R,P,Y within limits: -.2 to +.2

HIGH TEST
TEST HI - ITEM 9 EXEC (*) (after 10 sec, no *)
   /no 'f' or '+'
   If ADTA BITe, ref MEMORY READ TABLE
TEST STOP - ITEM 11 EXEC

LOW TEST
TEST LOW - ITEM 10 EXEC (*) (after 10 sec, no *)
   /no 'f' or '+'
   If ADTA BITe, ref MEMORY READ TABLE
TEST STOP - ITEM 11 EXEC

* If RGA does not respond to HIGH or LOW TEST:
  * Null vehicle rates
  * Maneuver at 0.50/sec (DAP: B/NORM) about failed axis, monitor RGA data
  * If RGA responds, self test circuity is failed
  * If no RGA response, deselect sensor

ADTA MEMORY READ TABLE

* DATA - ITEM 20 EXEC
  * HEX - ITEM 27 EXEC
  * ADD ID - ITEM 28 +________ (see below)

* ADTA 1 BITE 0 7 5 6 8
* ADTA 2 BITE 0 7 5 7 8
* ADTA 3 BITE 0 7 6 7 8
* ADTA 4 BITE 0 7 6 8 8

* If data in actual column (last 3 char)
  * is not equal to -FDC, -FF8, -FDB, -FFC,
  * deseTest failed ADTA

LIMIT VALUES TABLE

<table>
<thead>
<tr>
<th>RGA</th>
<th>HIGH TEST LIMITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
<td>P</td>
</tr>
<tr>
<td>+17.9 to</td>
<td>+9.2 to</td>
</tr>
<tr>
<td>+22.1</td>
<td>+10.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PS</th>
<th>PaC</th>
<th>PaU</th>
<th>PaL</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>.813</td>
<td>5.473</td>
<td>2.740</td>
<td>1.708</td>
<td>173.56 to</td>
</tr>
<tr>
<td>.815</td>
<td>5.477</td>
<td>2.744</td>
<td>1.712</td>
<td>173.70</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RGA</th>
<th>LOW TEST LIMITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
<td>P</td>
</tr>
<tr>
<td>-17.9 to</td>
<td>-9.2 to</td>
</tr>
<tr>
<td>-22.1</td>
<td>-10.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PS</th>
<th>PaC</th>
<th>PaU</th>
<th>PaL</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>24.887</td>
<td>29.527</td>
<td>21.708</td>
<td>14.713</td>
<td>18.50 to</td>
</tr>
<tr>
<td>24.889</td>
<td>29.531</td>
<td>21.712</td>
<td>14.717</td>
<td>18.54</td>
</tr>
</tbody>
</table>

DATE 03/02/81
DAP CONFIG (Omit if GG)

C3  DAP: B/MAN/VERN
    DAP ROT: DISC/DISC/DISC

DFI RCDRS CONFIG

C3  DFI RCDRS PCM - HI SAMP (~15 min after APU SHUTDOWN)

Cont 3-15
FCS MODE/CH SWITCH TEST

* During tests,
  * FCS CH & down moving sw:
    * Fall op - 2 op or 1 op/1 cl contacts
    * 3rd failure, deselect all contacts
  * ENTRY ROLL MODE:
    * Fall op or cl - 1st, 2nd failure, deselect contact
    * 3rd failure, deselect all contacts
  * FCS MODE:
    * Fall op - 2 op or 1 op/1 cl contacts precludes use of sw
    * Fall cl - 1st failure, deselect failed contact
    * 2nd failure (L(R)), deselect all L(R) contacts
  * SURF TEST: deselect feedback if limit exceeded

C 2: GNC 42 SWITCH/SURF

CRT2 * During following tests verify 'X' appears
  * except as noted. If 'X' remains after releasing pb,
  * contact is failed closed

C C3 FCS CH (four) - ORIDE
  - AUTO (no *)

B F2/F4 PITCH pb - AUTO
  - CSS
  - GAIN ENA
ROLL/YAW pb - AUTO
  - CSS
  - GAIN ENA
SPD/BK/THRT pb - AUTO
BODY FLAP pb - AUTO

B L2/C3 SBTC TAKEOVER pb - push

FCS MODE/CH SWITCH TEST (Cont)

<table>
<thead>
<tr>
<th>FLY DAY 1</th>
<th>FLY DAY 2</th>
<th>TIE</th>
</tr>
</thead>
<tbody>
<tr>
<td>MET</td>
<td>TIE</td>
<td></td>
</tr>
<tr>
<td>AOS 07:45</td>
<td>AOS 05:33</td>
<td></td>
</tr>
<tr>
<td>LOS 07:58</td>
<td>LOS 05:17</td>
<td></td>
</tr>
<tr>
<td>AOS 07:59</td>
<td>AOS 05:12</td>
<td></td>
</tr>
<tr>
<td>LOS 08:02</td>
<td>LOS 05:06</td>
<td></td>
</tr>
</tbody>
</table>

SURF TEST
Verify no single surf feedback exceeds average of other three
feedbacks greater than:

- Elevons (A1.3 deg)
- Rudder (A1.2 deg)
- SPD BK (A2.2 %)
- BDY FLP (A6.3 %)

2: GNC 44 SWITCHES

During following switch test verify 'X' appears

C F6 CONTROL EFFECTORS - NO Y JET
- ALPHA BIAS - POS
  - NEG
- GAIN P - HI FWD
  - MIN FB
  - R/Y - HI FWD
  - LO FWD

C L2 ENTRY R MODE - YAW JET/RUD
  - AIL

Return switches to Nominal Entry configuration

C F6 CNTL EFF - NORM
- ALPHA BIAS - ZERO
- GAIN P - LO FWD
  - R/Y - NOM

C L2 ENTRY R MODE - AUTO
CONTROLLER & SWITCH TEST

* During controller/switch test,
  * THC: One TX(TY,TZ) failure - reselect all contacts
  * Multi-TX,TY,TZ, TY, TZ, - reselect good contacts only
  * TY, TZ failures
  * SPDDBK L(R): Deselect failed xdcrs
    After 2nd L(R) failures, use other side
  * RUD PED L(R): One failure - deselect failed xdr
    Multi L(R) failures - deselect all L(R) xdcrs
  * RHC L(R): One xdr failure - reselect good xdcrs only
    Multi L(R) failures - reselect good xdcrs L(R)
    & F6(F8) FLT CNTLR PWR - OFF
  * BDY FLP L(R): Fail close, deselect L(R) all contacts
  * RHC TRIM L(R): If contact failed open;
    deselect failed contact row, then
    TRIM RHC L(R) - INH, use other side
  * PNL TRIM L(R): If contact failed open;
    deselect failed contact row, then
    TRIM PNL L(R) - OFF, use other side

C

CRT2 1. THC
Deselect L THC:
  THC L DES - ITEMS 1,2,3 EXEC (*)
  L THC - push in each axis
  √THC - '+' & '-'
Reselect THC contacts:
  THC L - ITEM 1,2,3 EXEC (no *)

2. L SBTC
CRT2 L SBTC - full aft; √ > 95X
  - full fwd; √ < 5%

4. L BODY FLAP SWITCH
C

L2 BDY FLP - UP
  - DN
  √BDY FLP UP, DN - '**'
  √ If FF MDM COMFAULTED, R BDY FLP indication may be incorrect

5. L RHC
C

CRT2
√RHC L DES - ITEMS 23,24,25 EXEC (*)
RHC L DES - defct to hardstop in each axis
Y - > 88%
Reselect RHC Chs:
RHC DES - ITEMS 23,24,25 EXEC (no *)

6. L RHC TRIM SWITCH
C

CRT2
√RHC TRIM L: R - R/L
  P - U/D

7. L PANEL TRIM SWITCHES
C

L2
ROLL TRIM - R_2 then L
PITCH TRIM - UP, then DN
YAW TRIM - R, then L

CRT2
√PNL TRIM L: R,Y - R/L
  P - U/D

P

8. Repeat Steps 2 & 4 through 7 for R controllers switches
L RHC DES - ITEMS 26,27,28

DATE 03/02/81
DEDICATED DISPLAY CHECK

**C** CRT1
- FM D - ITEM 1 EXEC
- LOW - ITEM 4 EXEC

**B** F6/F8 → Readouts for DATA BUS 1,2,3,4
- CRT1 \_HIGH\_ - ITEM 3 EXEC
- CRT1 \_HIGH\_ - ITEM 3 EXEC

*For ADI failure, consult MCC for possible replacement*

### DEDICATED DISPLAY INPUT CHECKOUT VALUES TABLE

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>LOW VALUE</th>
<th>HIGH VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>F6/F8 ADI:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R,P,Y ATT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 deg</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>300 deg</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>R,Y RATE</td>
<td>2 ticks L</td>
<td>3 ticks R</td>
</tr>
<tr>
<td>P RATE</td>
<td>2 ticks D</td>
<td>3 ticks U</td>
</tr>
<tr>
<td>R,Y ATT ERR</td>
<td>2 ticks L</td>
<td>3 ticks R</td>
</tr>
<tr>
<td>P ATT ERR</td>
<td>2 ticks D</td>
<td>3 ticks U</td>
</tr>
<tr>
<td>AMI: ALPHA</td>
<td>+2 deg</td>
<td>+30 deg</td>
</tr>
<tr>
<td>ACCEL</td>
<td>+20 fps²</td>
<td>+30 fps²</td>
</tr>
<tr>
<td>M/VEL</td>
<td>20,000 fps</td>
<td>MACH 3</td>
</tr>
<tr>
<td>EAS</td>
<td>20 kts</td>
<td>300 kts</td>
</tr>
<tr>
<td>AVVI: ALT ACCEL</td>
<td>-2 fps²</td>
<td>+3 fps²</td>
</tr>
<tr>
<td>ALT RATE</td>
<td>-200 fps</td>
<td>+300 fps</td>
</tr>
<tr>
<td>ALT</td>
<td>200 ft</td>
<td>+300K ft</td>
</tr>
<tr>
<td>RDR ALT</td>
<td>200 ft</td>
<td>+3000 ft</td>
</tr>
<tr>
<td>HSI: SEL COURSE</td>
<td>200 deg</td>
<td>30 deg</td>
</tr>
<tr>
<td>HEADING</td>
<td>20 deg</td>
<td>300 deg</td>
</tr>
<tr>
<td>PRI BEAR</td>
<td>20 deg</td>
<td>30 deg</td>
</tr>
<tr>
<td>SEC BEAR</td>
<td>200 deg</td>
<td>300 deg</td>
</tr>
<tr>
<td>PRI, SEC MILES</td>
<td>200 nm</td>
<td>3000 nm</td>
</tr>
<tr>
<td>COURSE DEV</td>
<td>1 tick L</td>
<td>1 tick R</td>
</tr>
<tr>
<td>G/S DEV</td>
<td>1 tick D</td>
<td>1 tick U</td>
</tr>
<tr>
<td>SPI: ELEV</td>
<td>U20 deg</td>
<td>U30 deg</td>
</tr>
<tr>
<td>BOY FLP</td>
<td>20%</td>
<td>30%</td>
</tr>
<tr>
<td>RUD</td>
<td>20 deg L</td>
<td>3 deg R</td>
</tr>
<tr>
<td>ALILERON</td>
<td>2 deg L</td>
<td>3 deg R</td>
</tr>
<tr>
<td>SPD BK</td>
<td>20%</td>
<td>30%</td>
</tr>
<tr>
<td>SPD BK CMD</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

### FLAG TEST

**CRT1**
- FLAG - ITEM 5 EXEC

**AMT** 4

**AVVI** 4

**HSI MILES** 2
- CDI 1
- BRG 1
- GS 1 (pointer stowed)
- ADI 1 (rate/err needle stowed)

**TEST TERMINATE**

**CRT1**
- DED DIS OFF - ITEM 6 EXEC

### MODE/SEQ·LAMP TEST

**TEST START**

**CRT1**
- MODE/SEQ LT ON - ITEM 7 EXEC

**B** F2/F4 → EVENT SEQ lt (five)
- PITCH AUTO, CSS, GAIN ENA lt (three) - on
- ROLL/YAW AUTO, CSS, GAIN ENA lt (three) - on
- SPD BK/THROT AUTO & MAN lt (two) - on
- GY FLP AUTO & MAN lt (two) - on

**TEST TERMINATE**

**CRT1**
- MODE/SEQ LT OFF - ITEM 18 EXEC

**B** F6/F8 → FLT CNTRLR PWR - OFF

**DATE 03/02/81**
IMU ACCELEROMETER CAL

1. IF ATO, delete *

/\DAP: B/MAN/VERN
  DISC/DISC/DISC
\ROT RATE < 0.1
\no dumps in progress
Prior to IOS AOS (TIG -04:54)

ESTABLISH FREE DRIFT

L1 FLASH EVAP CNTLR PRI A - OFF
C3 DAP ROT: PULSE/PULSE/PULSE
  DAP: B/MAN/VERN
Prepare to remain still for - 6 minutes after AOS

AT AOS

Inform MCC configured for IMU CAL
Remain still until LOS

VEHICLE RECOVERY AND FES RESTART

DAP ROT: DISC/DISC/DISC

If EVAP OUT T < 47:
  L1 RAD CNTLR OUT TEMP - HI
    When EVAP OUT T = 50 + 2:
      L1 FLASH EVAP CNTLR PRI A - ON
        RAD CNTLR OUT TEMP - NORM

If EVAP OUT T > 47:
  L1 FLASH EVAP CNTLR PRI A - ON
ON-ORBIT FCS CHECKOUT TESTS (Cont)

C3 √DPI RCDB PGM - HIBAMP
√WBM SH - STBY (tb-bp)

IMU ACCELEROMETER CAL

A MAN
VERN
DISC
RT .2
DB 1.0

-04:15

P DPS ON-ORBIT CONFIG ②

1: GNC ORBIT
2: GNC ORBIT

AUTO MNVR TO TAIL SUN ATT

INRTL ATT: R + 1 7 6
P + 7 6
Y + 3 4 9

(04:40) DAP: B/AVTO/VERN

B AUTO
VERN
RT .2
DB 1.0

-04:35

P CABIN TV DEACT (Reh Day only)
019 TV PWR - OFF
A7U TV PWR CNTL - PNL
CONT-UNIT - OFF
CNTL - CMD
A3 √MON 1(2) PWR (two) - OFF

P TV STOWAGE (Reh Day only)
Slow: TV 1(2) (MF57, MF57E)
Camm Mt & Adapters (MF146, MF57E)
Aux It (A7)

C 16MM/03 (LANDING) ③

DPS ON-ORBIT CONFIG ②

TFL FOR ON-ORBIT OPS

P

C3 √DPI POWER FORMAT - GPC
CRT1 √SM COM BUFF 'RDY'

FORMAT:
FXD - ITEM 1 EXEC
SEL ID - ITEM 3 +3 EXEC
LOAD - ITEM 4 EXEC
/RUN, CPLT
SEL ID - ITEM 3 +1 6 1 EXEC
LOAD - ITEM 4 EXEC
/RUN, CPLT
PGM - ITEM 2 EXEC

TRANSITION TO GNC OPS 2

GNC O GPC MEMORY
CONFIG - ITEM 1 72 EXEC
Verify MC 2 per Table

GNC, DPS 201 PRO
[GPC ORBIT]

If in G6,
DAP: PULSE/PULSE/PULSE

CONFIG CRTs

GPC/CRT 03 EXEC
24 EXEC
44 EXEC

If interconnect, reinitialize CMS gauging

[MIX 23 RCS]

[GO-PRO] OSM PRESS EMA:

L(R) OMS - ITEM 5(6) EXEC
[GNC ORBIT]

16MM/03 (LANDING) ③

F1 /DC UTIL PWR MNB - ON

✓Full Mag (both camrs)
✓16mm Camr installed
WI & W6 (pointed outboard)
✓Settings

Lens
10mm
15mm

MFD
12 fps
12 fps

SPEED
1/125
1/125

APERTURE
16
16

FOCUS
∞
∞

DATE 03/16/81
CONFIG CABIN TEMP CNTRL/CO2 ABSORBERS

L1 CAB TEMP CNTRL - OFF
MD44F Pin CAB TEMP CNTRL in FULL COOL position
Remove CO2 Absorbers; rebag & stow (Ent Day only)

WCS DEACTIVATION

WCS VAC VALVE - CL
Foot restraints - up & locked
Seat belt - fastened
Stow:
MF43E Wet Wipe dispenser
WCS Wipes/Cleanser
Mirror
WNC Close & latch door

FDF/RAD INST. CONFIG

Unstow, install:
C6 Entry & Deorbit Burn Cue Cards
C6/ ENT C/L (2) w/ether
R5 ENT PKT C/L (2) w/ether
\*/Stowed in A16:
 Data Card Kit 3 (MALF (1) & REF DATA (1))
 Data Card Kit 4 (empty)
\*/Stowed in C6:
 Data Card Kit 1 (Orbit Burn Cue Cards, Sw Caps)
 LOG SITE CHARTS
 OMS RCS Slide Rule
 SYSTEMS TROUBLESHOOTING GUIDE Cue Card
 STAR CHART & BACKUP STAR PAIRS Cue Card
\*/Stowed in R5:
 UPDATES BK
 Handheld Radio
\*/Unstowed in FD:
 Orbit Cue Cards
 DEORBIT POP (2)
 ORBIT PKT C/L (2)
 REF DATA
 Crew Note Bk (2)
\*/Stowed in L FD/FDF:
 CAP
 CONT PDP
 MALF
 ORBIT OPS C/L
 CREW SYS C/L
 POST INSERT PDP
\*/Stowed in R FD/FDF:
 EVA OPS BK
 EVA C/L
 CAP
 CONT PDP
 DPS DICT
 ORBIT OPS C/L
 CREW SYS C/L
 PHOTO/TV C/L
 POST INSERT PDP
On MCC GO, if FCS C/O Part 1 performed:
P R2 APU FUEL PUMP/VLV COOL (two) - OFF
CNTL PWR X - OFF
C 35mm/70mm CREW SYS DEACT (Reh Day only)
(Pho/TV C/L, 35mm SCenes. 0-2)
Subj: PLT
Interdeck access xfer
Deact activities
Use flash

B CREW SYS DEACT

ML3IC VAC VENT ISOL VLV CNTL - CL (tb-CL)
B SEAT/POS CONFIG

C PRESS CNTL SYS ENTRY CONFIG

B Unstow & prepare Snack (Day 2/3) Meal B or Pantry

MF2BE Transfer, stow:
"FD/DFD (2)
Map Kit
FD Dosimeters (3)
6 (above R11)
5 (above L10)
4 (med of OS floor)
MD Dosimeters
1 (front of airlock)
2 (behind DFL)
3 (above hatch)
/\Deployed: CONTINGENCY/PANTRY LIST Cue Card
/\Stowed in MD/DFD:
Data Card Kit 2 (MD Orbit, EVA Cue Cards)
EVA OPS BK
EVA C/L
EVA Cuff C/L (2)
MED C/L
ORB SYS C/L
ORB SYS DATA
Stow MD/DFD

ENTRY STORAGE
ML3IC Stow FMD/AFT Shades/Filter
M7/M8 Install overhead shades ^
A17 Stow 35mm Cam

SEAT/POS CONFIG

C2 Attach SUIT Cue Card to locker
Stow Helmet Bags near seat
Vent Hose connected to seat
Configure seats
/\POS (two) stowed
C9 SEAT 02 - OP
A16 Connect Vent Hose Extension (2), snap
Stow misc equip except:
70mm Cam w/80mm Lens & Mag CH OL yellow
VTR Cassette
/\Modular locker, floor compartments secure

PRESS CNTL SYS ENTRY CONFIG

C ML1OW 14.5 PSI CAB REG INLET SYS (two) vlv - CL
PR02 CNTL SYS (two) - EMER
H20 TK N2 REG INLET SYS 1,2 (two) vlv - OP

NOTE
Ref 5-26 for resultant configuration

L2 02 SYS (two) SPLY - OP (tb-OP)
R02R SYS (two) - OP
/\N2 SYS (two) SPLY - OP (tb-OP)
(two) REG INLET - OP (tb-OP)
02/N2 CNTL VLV SYS (two) - AUTO

DATE 03/02/81
**RAD BYP CONFIG**

**FLASH EVAP CONFIG**

C L1 /FLASH EVAP CNTRL PRI A - ON

/PRI B - OFF

/VSEC - OFF

HI LOAD DUCT HTR - B

EVAP - ENA

RAD BYP

NOTE

Perform RAD BYP - 15 min prior to PLBD closing per FTD

C3 /DFR/RCDS/PCM - HI 8 AMP

L1 RAD BYP VLV MODE (two) - MAN

MAN SEL (two) - BYP (after - 3 sec, tb-BYP)

Wait - 90 sec,

RAD CNTRL LOOP (two) - OFF

Q1 /FREON EVAP OUT TEMP ind - 39 ± 1° (after - 2.5 min)

H2O STORAGE SYS CONFIG

R12L SPLY H2O XVR VLV - OP (tb-OP)

**SUIT FAN ACT**

B Connect Vent Hose Extension to suit

C9 L/R suit fan (two) - on

Vent Controller - adjust flow

**CONFIG RODs**

C O14:F RJDA 1A L2/R2 DRIVER - ON

2A L4/R4 DRIVER - ON

RJDF 1B F1 DRIVER - ON

Q15:F RJDF 1A F2 DRIVER - ON

**DPS ENTRY CONFIG**

* If IMU or RHE dilemma, do not proceed with OPS 3 Transition *
* If non-nominal landing site, prior to OPS 3 Transition *
* perform LAND SITE UPDATE - ITEM 13,14 [GNC cnfg]. Go to *
* CLS DATA, 12-1, for input value

/Alt mnvr complete, RGA, AA IMU configured for OPS 3

ALT SITE UPDATE: [GNC cnfg], ALT ITEM 15 + 1 3 EXEC (+ENW3); /PRI, SEC

VERIFY CONFIG

P O5 /GCP (five) - ON

/OUTPUT 1,2 - NRM (tb-gray)

/3,5 - NRM (tb-bp)

/4 - TMR (tb-bp)

/MODE 1,2,4 - RUN (tb-RUN)

/3 - STBY (tb-bp)

/5 - STBY (tb-RUN)

RECONFIG CRTs/UPLK BLK

C3 UPLK BLK - ALL

CRT8 PWR - ON

R12L CRT4 PWR - ON

GCP/CRT 04 EXEC

GCP/CRT 43 EXEC

TRANSITION GPC 1 & 2 TO GNC OPS 3

| GNC O GPC MEMORY |
| CONFIG - ITEM 1 + 3 EXEC |
| Modify ME 3 per Table |

GNC, OPS 301 PRO

[DEORB MNVR COAST]

STR 1 1 2 2 3 3 4 4

PL 1/2 0 0 0 0

TRANSITION BFS GPC TO GNC OPS 3

C3 BFC CRT DISP - ON

/SEL - 3+1

3: BFS, MEMORY or THERMAL

O6 GPC OUTPUT 5 - B/U (tb-bp)

CRT3 BFS, GNC, OPS 301 PRO

3: BFS, DEORB MNVR COAST

LOAD ENTRY TFL

| SM 8 Z PCMD/PL CONN |
| GT PCHM FORMAT - GPC |
| /SM COM BUFF 'ROD' |

FORMAT:

FXD - ITEM 1 EXEC

SEL ID - ITEM 3 + 4 EXEC

LOAD - ITEM 4 EXEC

/ROU, CPLT

SEL ID - ITEM 3 + 4 + 4 EXEC

LOAD - ITEM 4 EXEC

/ROU, CPLT

PGM - ITEM 2 EXEC

DATE 03/02/81.
Suit Downing Cue Card, (Cont)

C. Meddeck Switch Verification, 5-23 thru 5-27

Auto Mwtr To Top To Sun Att

Dap B: Rot Disc Rate Vern - 0.20/s

Dap: B/Auto/Vern

Dap Entry Config

B. Suit Fan Act

Config RUps

Trans Dap Auto RT DB 3,5

C. Rad Byp Config

B. Auto Vern RT DB 1.0

SM2 Checkpoint

C3. BFC CRT Disp - Off

Crt3. MMU Assign 2 SM - Item 4 Exec

Crt1. Checkpt Initiate - Item 18 Exec

Crt3. MMU Assign 1 SM - Item 3 Exec

Crt1. Checkpt Initiate - Item 18 Exec

Crt3. Checkpt Retrv Enh - Item 12 Exec (*)

UL Cntl Enh/Bfs Tfl

Crt3. Ul Cntl Enh - Item 36 Exec

C3. BFC CRT Disp - On

Crt3. Tfl Enh Item 28 (*)

Transition Gpc 1, 2, 3, 4 To Gnc Ops 3

Gpc/Crt 54 Exec

Crt4 Pwr - Off

Reconfig Crt4 For Plbd Ops

Reconfig Mwtr Table (Mwtr 9) For Post Landing

Retention Req'd Memory On Crt2 Until Dump Completed
CONFIG PWR PLBD CLOSING

SET UP LIGHTS, CAMS, MON & VTR

P R12L CRT4 PWR - ON
AIR AUD CTR PL BAY OUTLETS ICOM A - ON
AGU ANNUN BUS SEL - MNC
A7U PL BAY FLOOD FWD, AFT (four) - ON (-3 min to full bright)
FWD BHD - ON (-3 min to full bright)
L12 Install VTR Cassette
Use TV Cue Card and power up FWD, AFT, RMS STBD Camr, MON, & VTR
Record all PLBD Ops continuously on VTR

STOW RADIATORS

P R13L RAD LAT CNTL SYS (two) - OFF (tb-REL)
/CNTL SYS (two) - OFF (tb-DPY)

* If tb not bp after 10 sec, or if tb not STO
* In 40 sec and no motion determined visually:
* R13L RAD CNTL SYS (two) - OFF
* Go to MALF, MECH, 9.2b or 9.2d (Stbd) or
* MECH, 9.2f or 9.2h (Port)

PL BAY MECH PWR SYS (two) - ON
RAD CNTL SYS (two) - STOW (concurrently)
- tb-bp - 40 sec, STO
- OFF

RAD LAT CNTL SYS (two) - LAT (concurrently)
- tb-bp - 25 sec, LAT
- OFF

PL BAY MECH PWR SYS (two) - OFF

SINGLE RAD Ops

(Requires opening MAJ/3:CD PWR LOGIC PWR AC cis)

STOW: STBD RAD cis PORT RAD cis
AC1MID3 AC1MID1
AC3MID2 AC3MID4

LATCH: AC1MID3 AC1MID1
AC2MID2 AC2MID4
AC3MID2 AC3MID4

CLOSE PLBD

CAUTION
If BFS GPC fails during this operation:
- MND PL1,2 (two) - OFF
GPM MODE 5 - STBY, HALT
MON PL1,2 (two) - OFF
Perform BFS GPC FAILURE (G3/BFS) (ORBIT PKT C/L, BPS, 3-10), then use new BFS to close PLBDs

When closing any PLBD latch set:
- If no CL after 40 sec C/L (60 sec bld), and latch visually closed with at least one microswitch closed indication occurring at dual mtr close time, continue PLBD procedures; otherwise wait for MCC

If latches close on single mtr
(40 sec C/L, 60 sec bld), wait for MCC

Always note any single mtr latch operations
If no latch or door motion within - 10 sec after cmd,
(no motion determined visually)
PL BAY DR - STOP, wait for MCC

When closing PLBD:
- If door motion stops and no RDY status,
PL BAY DR - STOP, wait for MCC
If door closes on single mtr (~120 sec), do not reopen
PLBD, wait for MCC

NOTE
Ref DETAILED PLBD CLOSING PROCEDURES (3-40) if reqd
**PLBD cB FUNCTIONS**

<table>
<thead>
<tr>
<th>FUNCTION</th>
<th>MCA LOGIC POWER</th>
<th>AC cBS</th>
<th>MTR 1/MON</th>
<th>MTR 2/MON</th>
<th>MTR 1</th>
<th>MTR 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>LATCH 5-8</td>
<td>AC3M103/1</td>
<td>AC3M102/2</td>
<td>AB 3</td>
<td>CA 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9-12</td>
<td>AC3M103/1</td>
<td>AC3M102/2</td>
<td>AB 3</td>
<td>CA 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-4</td>
<td>AC3M103/1</td>
<td>AC3M102/2</td>
<td>AB 3</td>
<td>CA 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13-16</td>
<td>AC3M104/2</td>
<td>AC2M102/1</td>
<td>CA 3</td>
<td>BC 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R FWD</td>
<td>AC3M101/1</td>
<td>AC2M104/2</td>
<td>AB 3</td>
<td>BC 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R AFT</td>
<td>AC3M104/2</td>
<td>AC2M104/2</td>
<td>CA 3</td>
<td>BC 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R DOOR</td>
<td>AC3M101/1</td>
<td>AC2M104/2</td>
<td>AB 3</td>
<td>BC 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>L FWD</td>
<td>AC3M101/1</td>
<td>AC2M104/2</td>
<td>AB 3</td>
<td>BC 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>L AFT</td>
<td>AC3M103/1</td>
<td>AC2M102/2</td>
<td>AB 3</td>
<td>CA 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>L DOOR</td>
<td>AC3M104/2</td>
<td>AC2M102/1</td>
<td>CA 3</td>
<td>BC 3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**70mm/01 PAD**

SUBJ: c/l Defl vs Latch Config

LENS: 80mm MAG: CH 01 (yellow)

FOCUS: -20 ft

**APERTURE/SHUTTER SPEED:**

<table>
<thead>
<tr>
<th>CONDITION</th>
<th>APERTURE</th>
<th>SHUTTER SPEED</th>
</tr>
</thead>
<tbody>
<tr>
<td>both doors closed or night</td>
<td>F/4</td>
<td>1/60</td>
</tr>
<tr>
<td>Sunlit PLBD</td>
<td>F/22</td>
<td>1/500</td>
</tr>
</tbody>
</table>

---

**PLBD CLOSING**

CLOSE RIGHT DOOR TO PROXIMITY OF CLOSED POSITION.

**VERIFY 2 MOTORS**

* Alternately start & stop PLBD until near closed
* Determine c/l latch # that will make contact first
* Record this latch # & its expected contact point on NO GO DIAGRAM, 3-33

* If NO GO for CLOSE PLBD and Entry reqd,
* perform MALF, MECH, SSR-4 (SIMO PLBD CLOSE)

CLOSE RIGHT DOOR TO 'RDY' (if not already at 'RDY')

(70mm/01)

CLOSE RIGHT FWD/AFT LATCH GROUPS & DOOR (70mm/01)

---

**DATE** 03/20/81 (P-1)
CLOSE c/l LATCH GROUPS (1-4 & 13-16) (70mm/01),
then (5-8 & 9-12) (70mm/01)

RAD HEAT SINK FTR 63VW02

POST CLOSING CONFIG
CRT4 AC PWR OFF - ITEM 2 EXEC
KL2L CRT4 PWR - OFF
A3 M1.2 PWR (two) - OFF
A7U PL BAY FLOOD (all) - OFF
TV CAM R PWR BAY (three) - OFF (th-OFF)
PWR CNTRL - PNL
CNTRL - CMD
L12 VTR pb - STOP, wait 5 sec
PWR - OFF
AL7 Stow VTR Cassette
AL6 Stow 70mm Camr
3. IMU ALIGN ATT (pad)

CRT1 4. S TABLE CLR - ITEM 20 EXEC

CRTI 5. Enable Star Tracker:
STAR TRK - ITEM 3,4 EXEC

6. Verify S TABLE:
TRK ID 1,2 = STAR n° (pad)
ANG ERR ≤ .09

* If after 3 min no data (or bad data) in S TABLE:
* √STAR TRK - ITEM 3,4
* √ATT/STARS/TIME
* √S TRK: TRK ID - STAR ID (pad)
* Do S TRK Self Test
* If no success:
* MMVR to Verification Att - repeat steps 3,4,6

NOTE
For 1 S TRKR ALIGN:
TERM/IDLE -Y(?) - ITEM - 9(10) EXEC
MMVR to 2nd Att (Single S TRK): Do not clear S Table
Repeat steps 3,5,6 with 2nd Star ID

CRT1 7. S TABLE SEL - ITEM 17,18 (*)

CRT 3 IMU ALL - ITEM 13 (*)
√IMU ALIGN - ITEM 14 (*)
√IMU 1,2,3 - ANG ΔX,ΔY,ΔZ < 0.80

* If ANG ΔX,ΔY,ΔZ > 0.80 for two IMUs, do not torque:
* MMVR to Verification Att & repeat steps 3 thru 7 once.
* If still > 0.80, report to MCC

CRT3 8. Record ANG ΔX,ΔY,ΔZ & execute time (use pad)
EXEC - ITEM 17 EXEC (*)
Alignment complete when:
EXEC - ITEM 17 (no *)

IMU ALIGN VERIFICATION

9. MMVR to IMU VERIFICATION STAR ALIGN ATTITUDE PAD, DAP: MAN

10. Perform steps 3,4,5 & 6 using appropriate stars (pad)
11. √IMU 1,2,3 ANG ΔX,ΔY,ΔZ < 0.1

* If ANG ΔX,ΔY,ΔZ > 0.1, perform step 8;
* report to MCC

12. BFC CRT DISPLAY - ON

3: BFS, GNC DEORB MMVR COAST
1: GNC DEORB MMVR COAST

APU STEAM VENT HTR ACT ①
P R2 ② /BLR CNTRL PWR/HTR (three) - A
CNTRL (three) - ON
NOTE
HTR reqd to be on 2 hrs prior to APU act

IMU ALIGNMENT ②

NOTE
Procedure applies for 1 or 2 S TRKR aligns
For 1 S TRKR, a 2nd Att MMVR is reqd between data takes
See pad for att & stars

C 1. √/REQD ID - ITEM 11,12 - 0
√STATUS (two) - NO BITE
√SHUTTER (two) - OP

CRT 1 IMU 1,2,3:
√STAT - blank
√OPER - ITEM 4,5,6 (*)

3-34
FLEX CELL PURGE

P

√FC PURGE HTA on > 27 min

NOTE
FCs must be purged separately

R12U
FC PURGE VLV 1 - OP for 2 min, then
- GPC
Repeat for FC 2(3)
FC PURGE HTA
√VLV (three) - GPC

BEALY STAR TRACKERS & CLOSE DOORS

C D6
STAR TRKR PWR (two) - OFF
DR CNTL SYS (two) - CL (tb-bp - 8-12 sec, then CL)

* If either S TRK door closing (tb-bp) time > 12 sec, *
* door is closing on single mtr *
* If either tb-bp > 24 sec, *
* S TRKR DR CNTL SYS 1 or 2 - OFF *

STAR TRKR DR CNTL SYS (two) - OFF (tb-CL)

PRE INGRESS CONFIG

P

MP5/H2 PURGE PREP

* Per MCC UPDATE or NO COMM, perform additional steps for *
* closing PREVLYs (H2 Only Purge Prep)

* R2
MP5 PNEU He ISOL - OP

* R4
MP5 L0Z, L1Z PREVLY (six) - OP, wait 3 sec, then - CL

* wait 2 sec, then - GPC *

* R2
MP5 PNEU He ISOL - CL

R2
MP5 HE ISOL (two) L - OP
"C/N CNTL L - IN OP
CTR,R - IN CL

R4
MP5 MANF PRESS (two) - OP
FILL/Drain LH2 LHBD - OP

MLS CH/TCAN CH/DATA BUS

D8
√MLS CH (three) tw - B (EDM RWY 23)

TACAN (three) CH tw - 1111X (EDM)
(three) MODE - T/R

* For CLS go to CLS DATA, 12-1 *
F6/
√DATA BUS - 3
F8
-4

DATE 03/16/31
SEAT INGRESS, 6-2 (Cont)

* If SM GPC retained due to both MMUs failed, *
  * go to OPS 3 TRANSITION (BOTH MMUs FAILED), *
  * HALF, OPS, FQP-15, step g

Stow ORBIT PKT C/L (2) & Orbit Cue Cards
Transition to ENT PKT C/L
Go to ENT C/L, DEORBIT BURN, 3-1
DETAILED PLBD CLOSING PROCEDURES

CAUTION
If BFS GPC fails during this operation:
- In MON 1.2 (two) - OFF
- GPC MODE 5
- STBY, HALT
- Perform BFS GPC FAILURE (63/BFS) (ORBIT PKT C/L, DPS, 3-10), then:
  - Use new BFS to close PLBDs

When closing any PLBD latch set:
- If no CL after 40 sec c/t (60 sec bhd), and latch visually closed with at least one micro switch closed indication occurring at dual mtr close time, continue PLBD procedures; otherwise wait for MCC
- If latches close on a single mtr (40 sec c/t, 60 sec bhd), wait for MCC
- Always note any single mtr latch operations

If no latch or door motion within 10 sec after cmd,
- (no motion determined visually)
- PL BAY DR - STOP, wait for MCC

When closing PLBD:
- If door motion stops and no RDY status,
  - PL BAY DR - STOP, wait for MCC
- If door closes on a single mtr (-120 sec), wait for MCC

SET UP LIGHTS, MON & VTR

P R12L CRT4 PWR - ON
AIR AUD CLR PL BAY OUTLETS ICOM A - ON
AGU ANNUN BUS SEL - MNC
A7U PL BAY FLOOD FWD, AFT (four) - ON (3 min to full bright)
FWD BHD - ON (3 min to full bright)
TV PWR_CNTL - PNL
CTRL UNIT - MNC
_CNTL - CMD
CMR PWR BAY FWD, BAY AFT, RMS STBD (three) - ON (tb-ON)
V N/RLK - ENA
V SYNC - NORM

A3 MON 1.2 SOURCE (two) - PNL
- MODE - NORM
- SCAN - NORM
- DATA - ON
- SYNC - EXT
- X-HAIR - ON
- PWR - ON

A7U VID OUT pb - MON 1
- IN pb - TEST
- Adjust monitor PI test pattern (contrast/brightness)
- VID OUT pb - MON 2
- IN pb - TEST
- Adjust monitor PI test pattern (contrast/brightness)
- VID IN pb - FMDS BAY BAY, AFT, RMS STBD
- Adjust CMR CMD controls for each camera

VTR - VID IN pb
- VTR VID IN pb - B&M/FSC
- PWR - 240V
- N VIDEO 1 - OFF
- EOT 1 - OFF
- TAPE POSITION cmd is zero
- Record all PLBD OPS continuously on VTR

R13L BAY, SW, 63 PL BAY DOORS
- POWER ON - ITEM 1 EXEC
- PBD SW - STOP
- GP/CL STATUS (ten) - OP
- W/RA C: LATCHES (four) - (no *)
- LATCHES & DOOR (three) - (no *)
- PL BAY DR - STOP (stop timer)
- Replace: ITEM 17 for R13 PL BAY DR - CL
- ITEM 16 for R13 PL BAY DR - STOP

CLOSE LEFT DOOR
- Select L DR
- PL BAY DR - CL (start timer)
- L DR - blank
- When L DR - RDY (- 60 min):
- PL BAY DR - STOP (stop timer)
- Record L Door closing elapsed time: _________
(70nm/01)

CLOSE LEFT FWD & AFT LATCHES
- Select L DR
- PL BAY DR - CL (start timer)
- L DR - RDY, CL
- L FWD & AFT LATCHES (two) - blank - 30 sec, CL
- PL BAY DR - STOP
- Deselect L FWD, AFT LATCHES & L DOOR
- Cont 3-41
CLOSE RIGHT DOOR TO PROXIMITY OF CLOSED POSITION
VERIFY 2 MOTORS

Select R DR
PL BAY DR - CL (start timer)

Alternately start & stop PLBD until nearly closed
Determine c/latch # that will make contact first
Record this latch # & its expected contact point
on NO GO DIAGRAM, 3-33
Close R DOOR to 'RDY' (if not already at 'RDY')

CLOSE RIGHT FWD & AFT LATCHES

Select R FWD, AFT LATCHES
PL BAY DR - CL
√R DR - RDY CL
√R FWD & AFT LATCHES (two) - blank - 30 sec, CL
PL BAY DR - STOP

Deselect R FWD, AFT LATCHES & R DOOR (70mm/01)

CLOSE c/latch GROUPS

Select CENTER LATCHES 1-4 & 13-16
PL BAY DR - CL
√SELECT LATCHES 1-4 & 13-16 (two) - blank - 20 sec, CL
PL BAY DR - STOP

Deselect CENTER LATCHES 1-4 & 13-16

Select CENTER LATCHES 5-8 & 9-12
PL BAY DR - CL
√SELECT LATCHES 5-8 & 9-12 (two) - blank - 20 sec, CL
PL BAY DR - STOP (70mm/01)
√PLD SHL - STOP
√OP/CL STATUS (ten) - CL

AC POWER OFF = ITEM 2 EXEC

R1ZL CR74 PWR OFF (slow) - CB

DEACT LIGHTS, MDM & VTR

A3 MDM 1,2 PWR (two) - OFF
A7U PL BAY FLOOD (all) - OFF
TV CAM PWR BAY (three) - OFF (all-off)
CAM TILT - OFF
CAMER TILT - OFF
CAM DPT - OFF

L12 VTR POWER STOP
A7U POWER OFF - OPM/42C
A1975 STBY VTR/TAPE
A16 STBY 70mm/01 PWR OFF

DATE 03/02/81