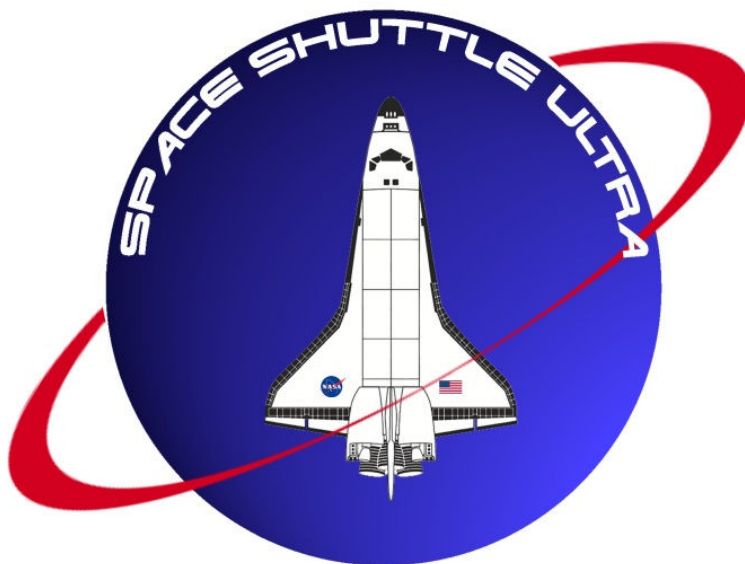


# Post Insertion Checklist

**Generic  
Rev 1.0  
Sep 2017**



**Space Shuttle Ultra 4.2  
Orbiter 2010-2016**

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### NOTE

Post Insertion contains the nominal procedures from:  
MET(DAY/HR:MIN) 000/00:51 TO 000/02:30

## POST INSERTION PROCEDURES

## OPS 2 CONFIG

### CRT DISPLAYS SETUP

CRT1: GNC OPS 106 PRO (OMS2 MNVR COAST)  
CRT2: GNC OPS 106 PRO (OMS2 MNVR COAST)  
CRT3: BFS, GNC SYS SUMM 2

### 00:55 TRANSITION TO GNC OPS 2

CRT1 GNC OPS201 PRO (UNIV PTG)

### RECONFIG MEDs

C2 IDP/CRT 3 PWR – OFF

R11L √ IDP/CRT 4 PWR – ON

F6,F7,F8 Power off MDUs as desired

### RECONFIG GPCs

O6 GPC MODE 5 – HALT  
OUTPUT 5 – NORM

### 00:55 PLDB BUS ACTIVATION

R1 PL CAB – MNA  
PRI MNC – ON  
AUX – ON  
AFT MNB – ON

O6 GPC MODE 5 – SBY

### TURN OFF BFC LT

C3 BFC CRT DISP – ON

CRT3 BFS, MSG – RESET

C3 BFC CRT DISP – OFF

01:00      CONFIG FOR PLDB OPENING ATT (-ZLV -XVV)

CRT1	√TGT ID	+2
	BODY VECT	+3
	√P	+90
	√Y	+0
	OM	+0

CRT1              DAP: A5/AUTO/ALT

GNC SPEC 20 PRO (DAP CONFIG)  
ROT RATE    - 0.2 (ITEM 10)  
ATT DB       - 5.0 (ITEM 11)

GNC OPS 201 PRO (UNIV PTG)  
Initiate TRK  
ITEM 19 – EXEC (\*)

MANUAL PLBD OPENING PROCEDURE

R13L	√PL BAY DR	– STOP
	PL BAY DR SYS (two)	– ENA
	PL BAY DR	– OP
	When PL BAY DR tb	– OP
	PL BAY DR	– STOP
	PL BAY DR SYS (two)	– DSBL

CONFIG FOR PLBD OPERATIONS

Set up lights  
A6U              √ANNUN BUS SEL – MNC

A7U	PL BAY FLOOD AFT (two)	– OFF
	PL BAY FLOOD MID (two)	– ON
	PL BAY FLOOD FWD (two)	– ON
	PL BAY FLOOD FWD BHD	– N/A

## KU OPS

01:35      KU-BD ANT DEPLOY

### **CAUTION**

If OBSS cradled, OBSS must be stowed  
prior to KU-band antenna deploy to  
prevent antenna/OBSS contact

A1U	√KU BD PWR	– OFF
	CNTL	– PNL
R13L	√KU ANT DIRECT STO	– OFF
	PL BAY MECH PWR SYS 1,2 (two)	– ON
	KU ANT	– DPY
	When KU ANT tb – DPY (~23 to 46 sec)	
	KU ANT	– GND
	PL BAY MECH PWR SYS 1,2 (two)	– OFF

### KU-BD ACTIVATION

A1U	√SLEW RATE	– SLOW
	√KU BD SCAN WARN tb	– bp
	√KU BD TRACK tb	– bp
	√KU BD SEARCH tb	– bp
	√KU BD Sel	– MAN SLEW
	√RDR OUTPUT	– HI
	√KU BD MODE	– RDR PASSIVE
	KU BD PWR	– ON
	√CNTL	– PNL
A2	DIGI DIS SEL	– EL/AZ
	√R/EL ind:	+000.0
	√RR/AZM ind:	+000.0
	DIGI DIS SEL	– R/R
A1U	KU BD MODE	– COMM
	KUBD sel	– GPC DESIG
	CNTL	– CMD

## KU-BD ANT STOW

### **CAUTION**

If OBSS cradled, OBSS must be stowed prior to KU-band antenna stow to prevent antenna/OBSS contact

R13L	√PL BAY MECH PWR SYS 1,2 (two)	– OFF
A1U	√CNTL	– CMD
	√RADAR OUTPUT	– LOW
	KU BD PWR	– ON
	KUBD MODE	– RDR PASSIVE
	CNTL	– PNL
	KU BD sel	– MAN SLEW
A2	√DIGI DIS SEL	– EL/AZ
A1U	SLEW RATE	– as reqd
A2	R/EL ind:	-27.0 (± 1°)
A1U	SLEW AZM	– as reqd
A2	RR/AZM ind:	-123.0 (± 1°)

## LOCK GIMBALS

### **NOTE**

KU ANT sw must remain in STOW until STOW DEPLOYED ASSEMBLY complete

DAP: VERN(FREE)

R13L	KU ANT – STO
A2	√R/EL ind: -29.0 (± 1°) √RR/AZM ind: -125.0 (± 1°)
	00:00 Start Event Timer
A2	Monitor KU ANT gimbal angles for 50 sec (gimbal lock test), then:  DAP: as reqd

## STOW DEPLOYED ASSEMBLY

R13L	PL BAY MECH PWR SYS 1,2 (two)	– ON
	√KU ANT tb	– STO (~23 to 46 sec)
A1U	KU BD PWR – OFF (Expect ‘BCE BYP KU’ msg)	
R13L	PL BAY MECH PWR SYS1,2	– OFF
	KU ANT	– GND

## **RAD OPS**

### RAD DEPLOY

#### 1.UNLATCH PANELS

R13L	√RAD LAT CNTL SYS A,B (two)	– OFF
	√RAD CNTL SYS A,B (two)	– OFF
	√RAD,LAT PORT,STBD tb (four) match current RAD config	
	PL BAY MECH PWR SYS 1,2 (two)	– ON
	RAD LAT CNTL SYS A,B (two)	– REL
	(√Deploying RAD LAT tb(s)-bp, ~30 sec REL)	
	RAD LAT CNTL SYS A,B (two)	– OFF

If deploying RAD LAT tb not REL in 30 sec:

RAD LAT CNTL SYS A,B (two)	– OFF *
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#### 2. DEPLOY PANELS

RAD CNTL SYS A,B (two)	– DPY
(√Deploying RAD tb(s)-bp, ~50 sec DPY)	
RAD CNTL SYS A,B (two)	– OFF

If deploying RAD tb(s) not bp after 10 sec and no motion,  
or

If RAD panel(s) in transit and no motion,  
or

If deploying RAD tb not DPY within 50 sec:

RAD CNTL SYS A,B (two)	– OFF
PL BAY MECH PWR SYS 1,2 (two)	– OFF



## RAD STOW

## 1.STOW PANELS

R13L	√RAD LAT CNTL SYS A,B (two)	– OFF
	√CNTL SYS A,B (two)	– OFF
	√RAD,LAT PORT,STBD tb (four) match current RAD config	
	PL BAY MECH PWR SYS 1,2 (two)	– ON
	RAD CNTL SYS A,B (two)	– STO
	√Stowing RAD tb-bp, ~50 sec STO	
	RAD CNTL SYS A,B (two)	– OFF

If stowing RAD tb(s) not bp after 10 sec and no motion,  
or  
If RAD panel(s) in transit and no motion,  
or  
If stowing RAD tb(s) not STO within 100 sec and no motion:

RAD CNTL SYS A,B (two) – OFF

## 2. LATCH PANELS

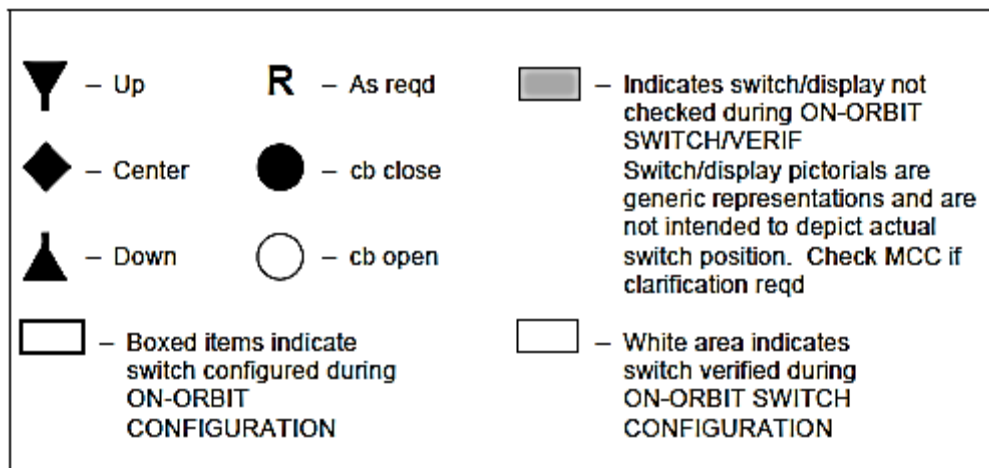
R13L	RAD LAT CNTL SYS A,B (two)	– LAT
	√Stowing RAD LAT tb-bp, ~30 sec, LAT	
	RAD LAT CNTL SYS A,B (two)	– OFF
	If stowing RAD LAT tb not LAT in 60 sec:	
	RAD LAT CNTL SYS A,B (two)	– OFF
	PL BAY MECH PWR SYS 1,2 (two)	– OFF

01:55

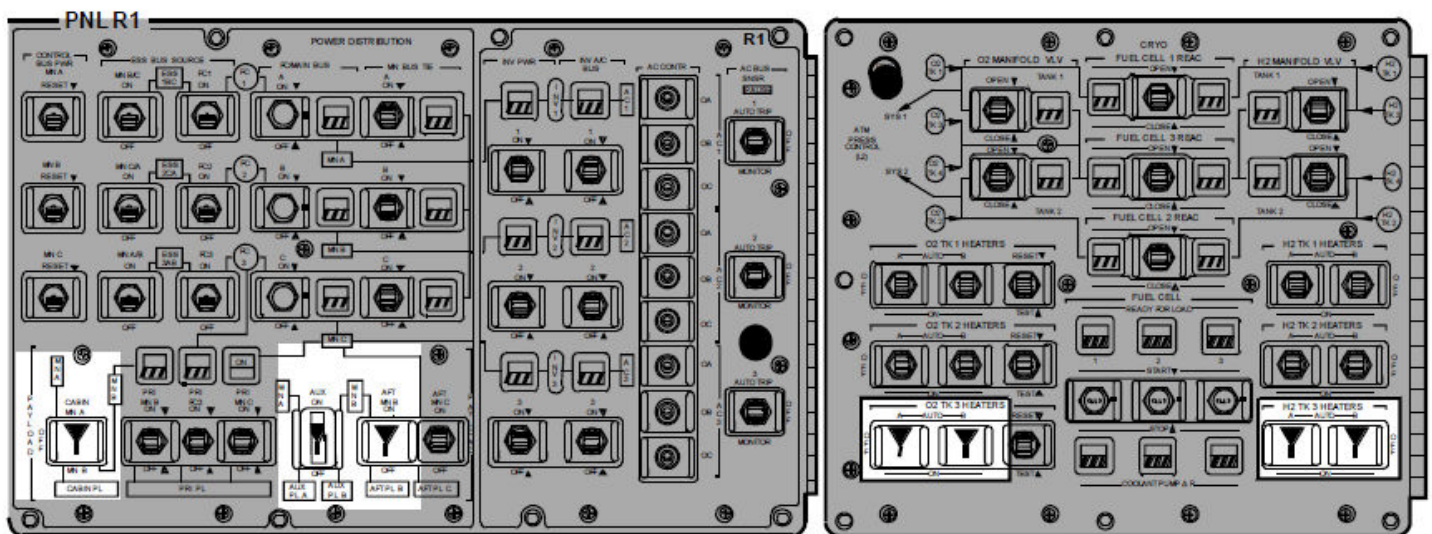
## STAR TRKR ACTIVATION/DOOR OPEN

O6 S TRK DR CNTL SYS (two) – OP  
√POS tb (two) – bp

## ON-ORBIT SWITCH LIST



### ALL VEH





<b>POST INSERTION CHECKLIST</b>
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<b>STS ALL</b>
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BACK COVER