

<b>AXAF Standard Operating Procedure</b>	DATE: 07/14/99    REV: 2.1  SOP_61070_WARMBOOT.doc
--	--

**PURPOSE: Warm Boot the ACIS BEP**

**PARTICIPANTS: OC/CC, SOT**

**PROCEDURE: warmboot.ps rev 2.0**

### 61070.1 OVERVIEW

This is an "atomic" procedure which warm boots the ACIS BEP. ACIS flight software can be booted in either cold or warm. The warm boot reloads the flight code, applies patches and bad pixel/column lists, and cleans up memory buffers.

### 61070.2 SUPPORT SUMMARY

<b>SUMMARY</b>	Set the boot-from-uplink flag to zero(should already be zero) Set the warm boot flag on Halt the active BEP Restart the active BEP Verify BEP booted from SW TLM verifiers Check HW LEDs Check SW LEDs
<b>CONSTRAINTS</b>	This procedure does not change the active BEP, whichever BEP is selected gets warmbooted. Requires FMT 1 or 2 to verify telemetry
<b>INITIAL CONDITIONS</b>	
<b>DISPLAYS</b>	F_OPERATIONS_COMMAND
<b>COMPS</b>	None
<b>COMMAND GROUPS</b>	None
<b>PIX MAPS</b>	None
<b>COMMAND LOADS</b>	None
<b>SCRIPTS</b>	I_1_WARMBOOT

### 61070.3 CONFIGURE COMMAND SYSTEM

A. Set the following command system configuration parameters:

Clear To Send Mechanism	= FSV
CAR Processing	= Enabled
FSV Processing	= Enabled
CRR Processing	= Disabled
Output Format	= NRZM
Minimum Time Delay (sec)	= 3
CAR Time-out (sec)	= 40
FSV Time-out (sec)	= 45
Blocking Factor	= 90
Burst Factor	= 1

#### 61070.4 WARM BOOT BEP {1.0}

A. SOT authorizes OC to begin script I\_1\_WARMBOOT.

Script will buffer command:

1BMODIBM (with command field 1BMODIBM set to '0') {1.1}  
 [set FS Boot modifier off]

Script will send buffer

Script will buffer command:

1WRMBTSB (with command field 1WRMBTSB1 set to '1') {1.2}  
 [set warm boot flag on]

Script will send buffer

Script will buffer command:

1RSETIRT (with command field 1RSETIRT1 set to '1') {1.3}

[Halt BEP]

Script will send buffer

Script will buffer command:

1RSETIRT (with command field 1RSETIRT1 set to '0') {1.4}  
[Restart BEP]

Script will send buffer

B. OC informs SOT that script is complete.

### 61070.5 VERIFY TELEMETRY

A. SOT verifies telemetry:

Description	MSID	Value	Script Verification
BEP Select	1STAT4ST	0 or 1	N
BEP FIFO Not Full	1STAT6ST	1	N
BEP FIFO Not Empty	1STAT7ST	0	N
BEP Initialization	1STAT3ST	0	N
Watchdog Boot	1STAT2ST	1	N
Science Run Status	1STAT1ST	1	N
Science Run Status	1STAT0ST	0 or 1	N

{1.5}

{1.6}

{1.7}

END OF PROCEDURE

---

<b>Author:</b> A. Northrup	<b>EST. Time :</b> 00:05
----------------------------	--------------------------

---

```
;$Revision: 2.0A $  
;$Date: 1999/07/06 12:46:57 $  
;=====;  
; NAME: I_1_WARMBOOT  
;  
; DESCRIPTION:  
;     Commands the ACIS pressure transducers off.  
;  
; ARGUMENTS: None  
;  
; EXECUTED BY: SSE or OC  
;  
; AUTHORIZED BY: SOT or OC  
;  
; CAUTIONS/RESTRICTIONS: None  
;  
; REFERENCES:  
;     warmbootf.ps rev 2.0  
;  
; HISTORY:  
; Date           Author           Description  
; -----  
; 07/14/99      A. Northrup           original version  
;=====;
```

BEGIN\_SCRIPT I\_1\_WARMBOOT

DECLARATIONS  
 SYSTEM\_SECTION  
 GLOBAL\_SECTION  
 LOCAL\_SECTION

END\_DECLARATIONS

STEP OFF

WAIT ; A pause to go to an appropriate line,  
; if necessary.  
; Wait for SOT authorization to continue.

```
;-----  
; WARM BOOT BEP  
;-----
```

BUFFER CLEAR ALL

BUFFER COMMAND 1BMODIBM 1BMODIB1=0 ; Set boot modifier off

WAIT 1

BUFFER SEND  
BUFFER CLEAR ALL

BUFFER CLEAR ALL

BUFFER COMMAND 1WRMBTSB 1WRMBTS1=1 ; Set warm boot flag on

WAIT 1

BUFFER SEND  
BUFFER CLEAR ALL

BUFFER CLEAR ALL

99/07/19  
12:07:08

# I\_1\_WARMBOOT.ssc

2

```
BUFFER COMMAND 1RSETIRT 1RSETIR1=1      ; Halt BEP
```

```
WAIT 1
```

```
BUFFER SEND  
BUFFER CLEAR ALL
```

```
BUFFER CLEAR ALL
```

```
BUFFER COMMAND 1RSETIRT 1RSETIR1=0      ; Restart BEP
```

```
WAIT 1
```

```
BUFFER SEND  
BUFFER CLEAR ALL
```

```
WAIT 1
```

```
;------  
; End of script.  
;------
```

```
WRITE "Exiting script I_1_WARMBOOT"
```

```
END_SCRIPT
```