36-07001

Rev. 21

AXAF Standard Operating Procedure	DATE: 07/14/99 REV: 2.1 SOP_61071_COLDBOOT.doc

PURPOSE: Cold Boot the ACIS BEP

PARTICIPANTS: OC/CC, SOT

PROCEDURE: coldboot.ps rev 2.0

61071.1 OVERVIEW

This is an "atomic" procedure which cold boots the ACIS BEP. ACIS flight software can be booted in either cold or warm. The cold boot means that ACIS will be booted from EEPROM .

61071.2 SUPPORT SUMMARY

SUMMARY	Set the boot-from-uplink flag to zero(should already be zero) Set the warm boot flag on ie: do a cold boot Halt the BEP Restart the BEP Verify BEP booted from SW TLM verifiers Check HW LEDs Check SW LEDs
CONSTRAINTS	
INITIAL CONDITIONS	
DISPLAYS	F_OPERATIONS_COMMAND
COMPS	None
COMMAND GROUPS	None
PIX MAPS	None
COMMAND LOADS	None
SCRIPTS	I_1_COLDBOOT

61071.3 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

61071.4 COLD BOOT BEP {1.0}

A. SOT authorizes OC to begin script I_1_COLDBOOT.

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 '0') {1.2}
[set warm boot flag off]

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.

61071.5 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

Author: A. Northrup	**EST. Time :** 00:05

```
;$Revision: 2.0A $
;$Date: 1999/07/06 12:46:57 $
;==============================================================================
;  NAME: I_1_COLDBOOT
;
;  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_COLDBOOT

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=0      ; Set warm boot flag off

WAIT 1

BUFFER SEND
BUFFER CLEAR ALL

BUFFER CLEAR ALL
```

```
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_COLDBOOT"

END_SCRIPT
```