AXAF COMMAND ACTION PROCEDURE

CAP # 754:
DATE: 6 Nov 2001

ORIGINATOR: Paul Plucinsky
COMMANDS CHECKED BY:
Time of CAP Execution (GMT): 2001:311:00:00

DESCRIPTION/RATIONALE

This CAP will dump diagnostic parts of the ACIS Back-End processor memory to support the ACIS threshold plane latchup anomaly diagnosis. Since the BEP memory has not been written to since the last science run which had a latchup, there may be useful diagnostic information for the ACIS Flight SW team. We plan to dump the BEP D-cache, BEP I-cache, EEPROM, and bulk memory. If the dumps look complete, we will then warm boot the BEP processor and re-start DEA Housekeeping. If the dumps look incomplete, due to TLM dropouts, we may decide to re-dump the data. After we have warm-booted the BEP, we will dump the memory contents again to provide the flight SW with a version of these memories right after startup of the flight SW.

RESTRICTIONS/WARNINGS/NOTES/SCHEDULE REQT:

FMT 2 is required. We expect that there will be no load running on the spacecraft so there is no danger of conflicting with the load.

STEP	INSTRUCTIONS (Command/Script)	RESPONSE (TLM Verifier)
	EXECUTE:	
1	Uplink Loads:	
	1A_RBDCA_201.CLD	80A4095
	1A_RBICA_202.CLD	B0A4216
	1A_RB000_196.CLD	40E372D
	1A_RB002_189.CLD	B0C352F
2	Set the TLM FMT to 2, if necessary.	
3	Enable and Activate SCS 201	RB_D_CACHE (command ID = 2022)
4	ACIS confirms complete dump, expect 90 s.	
	If severe dropouts, repeat step #3	
5	Enable and Activate SCS 202	RB_I_CACHE (command ID = 2025)
6	ACIS confirms complete dump, expect 5 min	
	If severe dropouts, repeat step #5	
7	Enable and Activate SCS 196	RBROMDUMP1 (command ID = 306)
8	ACIS confirms complete dump, expect 5 min	
	If severe dropouts, repeat step #7	
9	Enable and Activate SCS 189	RB_BEPBULK (command ID = 4441)
10	ACIS confirms complete dump, expect 5 min	
	If severe dropouts, repeat step #9	
11	Execute SOP 61070 Warm Boot BEP	ACIS verifies
12	SOP 61010 Start DEA Hkp	ACIS verifies
13	Enable and Activate SCS 201	RB_D_CACHE (command ID = 2022)
14	ACIS confirms complete dump, expect 90 s.	
	If severe dropouts, repeat step #12	

15	Enable and Activate SCS 202	RB_I_CACHE (command ID = 2025)
16	ACIS confirms complete dump, expect 5 min If severe dropouts, repeat step #14	
17	Enable and Activate SCS 196	RBROMDUMP1 (command ID = 306)
18	ACIS confirms complete dump, expect 5 min If severe dropouts, repeat step #16	
19	Enable and Activate SCS 189	RB_BEPBULK (command ID = 4441)
20	ACIS confirms complete dump, expect 5 min If severe dropouts, repeat step #18	
21	Clear and Disable 202, 201, 196, and 189	

Approved:

Subsystem Engineer:
TST Manager/Lead:
SOT Lead:

Flight Director:
Program Manager: