AXAF COMMAND ACTION PROCEDURE

CAP #591:
DATE: 6 April 2000

ORIGINATOR: Plucinsky
COMMANDS CHECKED BY:
Time of CAP Execution (GMT): 2000:98:23:30

DESCRIPTION/RATIONALE

This CAP executes the new "Squeegy" mode on the S0 CCD alone with a 16 row squeegy. This test will first be attempted during the 10ks period overlapping a CTI measurement on the out bound leg of the orbit. The test will consist of one science run with the new Squeegy mode and one with a normal clocking of the CCDs, each of roughly the same duration. The CAP installs and exercises PRAM and SRAM for test of Squeegy mode on the S0 CCD alone. Data will be collected for roughly half of the realtime contact in the squeegy mode and the rest of time will consist of a normal CTI run on S0 alone.

RESTRICTIONS/WARNINGS/NOTES/SCHEDULE REQT:

This commanding will be interleaved upon the daily load. There should be no potential conflicts except with ACIS, but the operators should be cognizant and somber nevertheless. The ACIS commanding should begin after the daily load has commanded the start of an ACIS science run. The second science run (normal CTI on S0 alone) will be stopped by a stopScience from the daily load.

STEP	INSTRUCTIONS (Command/Script)	RESPONSE (TLM Verifier)
1	Uplink Loads:	
	1A_AA000_191.CLD	502066E
	1A_WS007_164.CLD	7021872
	1A_WS041_252.CLD	50391DC
	1A_XB000_250.CLD	417494C
	1A_XB001_251.CLD	A0E1874
	1A_WB005_140.CLD	3A7E39E
	1A_WB006_141.CLD	772035A
	1A_WB007_145.CLD	4DF8BE2
	1A_WT04D_137.CLD	512549C
	1A_W2008_159.CLD	25513F2
	1A_XT000_190.CLD	C421014
	1A_RYFS0_211.CLD	F423E81
	1A_RZFS0_217.CLD	4424581
	1A_RS000_207.CLD	4022412
	1A_RH000_151.CLD	601EE12
	1A_WT04F_139.CLD	50E019C
2	Wait for first bias packets from 1st CTI measurement which starts at 99:00:51.	dataTeBiasMap (cmdId = *any*)
3	Enable and Activate SCS 191	stopScience (cmdId = 1539)
4	Enable and Activate SCS 191 *AGAIN*	stopScience (cmdId = 1539)
5	ACIS confirms TLM buffers are clear, this should take $\sim$ 10 minutes	

6	Change OBSID to 62894	
7	Enable and Activate SCS 164	WSVIDALLDN (cmdId = 1541)
8	Enable and Activate SCS 252	WSPOW0103F (cmdId = 2163)
9	Enable and Activate SCS 250	executeBep, XB1SLOMO02 (cmd ID = 2166)
10	Enable and Activate SCS 251	executeBep, XB1SLOMO03 (cmd ID = 2160)
11	Enable and Activate SCS 140	writeBep, WBTSQUEEG1 (cmdId = 2858)
12	Enable and Activate SCS 141	writeBep, WBTSQUEEG2 (cmdId = 2860)
13	Enable and Activate SCS 145	writeBep, WB16SQUEEG (cmdId = 2854)
14	Enable and Activate SCS 137	loadTeBlock, WT00326014 (cmdId = 2842)
15	Enable and Activate SCS 159	load2dBlock, W20003D014 (cmdId = 2844)
16	Enable and Activate SCS 190	startScience (cmdId = 58)
17	If execution fails (immediate *scienceReport* with abnormal *terminationCode*), skip to step 25.	
18	Enable and Activate SCS 207	bepReadReply/Config (cmdId = 66)
19	Enable and Activate SCS 151	bepReadReply/Huffman (cmdId = 68)
20	ACIS confirms receipt of bias and data	dataTeBiasMap (cmdId = *any*)
21	ACIS confirms *fepTimestamp* increment of 0x528a0 (338080 decimal) per exposure	exposureTeFaint (cmdId = *any*)
22	collect data for $\sim$ 3ks	
23	On bad data, skip to step 24	
24	Enable and Activate SCS 191	stopScience (cmdId = 1539)
25	Clear and Disable SCSs 137, 159, 250, and 251	
26	ACIS confirms TLM buffers are clear	
27	Enable and Activate SCS 211	readPram (cmdId = 1613)
28	ACIS confirms receipt of PRAM dump	
29	Enable and Activate SCS 217	readSram (cmdId = 1602)
30	ACIS confirms receipt of SRAM dump	
31	Change OBSID to 62893	
32	Enable and Activate SCS 164	WSVIDALLDN (cmdId = 1541)
33	Enable and Activate SCS 252	WSPOW0103F (cmdId = 2163)
34	Enable and Activate SCS 139	loadTeBlock,WT0032C014 (cmdId = 2866)
35	Enable and Activate SCS 190	startScience (cmdId = 58)
36	Enable and Activate SCS 207	bepReadReply/Config (cmdId = 66)
37	Enable and Activate SCS 151	bepReadReply/Huffman (cmdId = 68)
38	ACIS confirms normal science run	
39	Clear and Disable SCS 191,164,252,140,141,145,190,211,217,207,151,139	
40	collect data for $\sim$ 1ks	

Approved:

Subsystem Engineer:
TST Manager/Lead:
SOT Lead:

Flight Director:
Program Manager: