AXAF COMMAND ACTION PROCEDURE

CAP #:932
DATE: 08/02/04

ORIGINATOR: Shanil Virani
COMMANDS CHECKED BY:
Time of CAP Execution (GMT): 2004:215:19:00:00.00

DESCRIPTION/RATIONALE

Command ACIS to execute a CTI (I-array) measurement using an RTS.

RESTRICTIONS/WARNINGS/NOTES/SCHEDULE REQT:

If this science run is interrupted by a science mission resumption load, that load must contain commands to terminate, clear and disable SCS 131, as well as two ACIS stopScience commands 10 seconds apart to terminate the ACIS CTI measurement.
This CAP can NOT be run if there is a maneuver load already uplinked.
EPHIN rates are 1/3 of the SCS107 trigger levels.
RADMON will be enabled by this CAP.
SCS107 will be enabled by this CAP.
The TLM FMT will be changed to FMT 2 by this CAP if necessary.
The OBSID will be set to 62839 in this CAP.
This CAP must be activated no later than the end of the scheduled COMM pass at 2004:215:19:00, assuming there are no other contingency operations in progress at that time. Thus, the commanding will end no later than 2004:216:04:38:30. [Absolute time of RADMON DISABLE: 2004:216:02:00:00.000]
The CLD activated in Step 8 will disable RADMON 7 hours later (Step 12), execute an ACIS StopScience command 2hrs 38mins 20secs after RADMON has been disabled (Step 13), and prepare ACIS for radiation zone passage (Step 14) unless this SCS is terminated by commands in a science resumption load. (Steps 12-14 occur while out of communication contact.)
This CAP uses a CLD (1A_CTI_07HR_131.CLD) which bundles together 10 ACIS commands.
The checksum of this CLD is 3F55E2A.
SCS 131 will need to be disabled and cleared at the first available COMM opportunity after Step 14 if this CAP is not interrupted by a resumption load.

STEP	INSTRUCTIONS (Command/Script)	RESPONSE (TLM Verifier)
1	Verify that EPHIN rates are less than 1/3 of the SCS107 trigger levels.	E1300 $\leq$ 3.3; P4 $\leq$ 100; P41 $\leq$ 2.8
2	Ensure that the SIM is at HRC-S.	3TSCPOS = -99616 $\pm$ 1 step
3	Set the TLM FMT to 2, if necessary.	CTUFMTSL = 2
	Switch to EPS subformat to see the telemetry for Step 5.	COTLRDSF = EPS
4	Enable RADMON,	
	issue command OORMPEN	CORADMEN=ENAB OR RADMON=ENAB
	wait 60 sec (1 RADMON sample)	
5	Enable SCS107	COSCS107S = I (Inactive)
6	Set OBSID=62839	COBSRQID = 62839
7	Uplink Load:	
	1A_CTI_07HR_131.CLD	CHECKSUM=3F55E2A ONLMLDS1 = Increments by 1
8	Enable and Activate SCS 131	COSCS131S = A WSVIDALLDN (command ID = 1541)

		WSPOW0CF3F (command ID = 359) WT00216024 (command ID = 4536) XTZ0000005 (command ID = 58) RS_0000001 (command ID = 66) RH_0000001 (command ID = 68)
9	ACIS confirms normal science run remotely (calls the OC/CC cell phone at 617-594-3640 or the “black phone” at 617-496-7245). (NOTE: The OC/CC should monitor the DPA input currents [1DPICACU/1DPICBCU; should rise to 1.45/1.24 A] as well as the 1STAT1ST bit [it should change from 1 to 0] to ascertain whether the commands got to ACIS and if a science run is in progress.)	
10	IF THIS CAP IS INTERRUPTED BY A SCIENCE RESUMPTION LOAD, THEN that load must contain commands to terminate, clear and disable SCS 131, as well as two ACIS stopScience commands seperated by 10 seconds to terminate the ACIS CTI measurement. SKIP to end of the CAP after verifying load has terminated and cleared SCS 131.	
11	IF THIS CAP IS NOT INTERRUPTED BY A SCIENCE RESUMPTION LOAD, proceed to Step 12.	
12	Verify that RADMON is disabled 7 hours after activation of SCS 131 in Step 8	OORMPDS
13	Verify that StopScience occurs 2hrs 38mins 20secs after Step 12	AA00000000 (command ID = 1539)
14	Verify that the triplet of ACIS ERAD commands begins 10 seconds after Step 13	AA00000000 (command ID = 1539) WSVIDALLDN (command ID = 1541) RS_0000001 (command ID = 66)
15	Clear and disable SCS 131 at first comm opportunity after either Step 11 or 14 if a resumption load has not interrupted this CAP.	COSCS131S = D

Approved:

Subsystem Engineer:
FOT Manager:
SOT Lead:

Flight Director:
Program Manager: