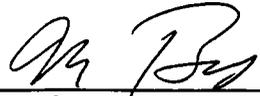


ACIS Verification Summary Report

Specification:	ACIS Contract End Item Specification
Requirement Number/Title:	3.1.3.2b Timing Mode (VRSD 3.1.3.2b-2)
Requirement Statement: Event amplitude and position information will be compressed to a level commensurate with the telemetry limit.	
Verification Method:	Test
Procedure Number:	
Configuration:	
Cycle Time:	
Verification Discussion/Results:	
Appropriate behavior was observed at XRCF under conditions of telemetry saturation; that is, the instrument produced data at the telemetry limit. See, for example, results of XRCF Test ID H-HAS-MC-3.010 .	


 ACIS Cognizant Engineer

19 June 87
 Date

Element:
ACIS

Requirement Number:
3.1.3.2

Verification Item:
3.1.3.2b-2

**AXAF-I
Verification
Requirement
Compliance Data
Submittal**

Evaluators:
CHE, DMS, IN&C, SAO

Type of Review:

Verification Item Closure

Multiple Verifications Req'd

Requirement Closure

Requirement Title:
Timing Mode

Compliance Data/Location:
MA-284/36-01510.034/Rm 522 Bldg 4200 (Closure Report)

Verification Method
Validation of Records

Comments:

IN&C - Disapprove: Provide data.

SW - Disapprove. Concur with IN&C. (R. Schrimsher)

See attached memo.

Data is at MSFC.

William Mayer 8/18/97

Status
Open

Recommendation:

Approve

Disapprove

Resubmittal

Other (explain)

Action Required for Closure:
Provide results of XRCF Test ID H-HAS-MC-3.010 referenced.

MSFC Evaluator: Ken Reed **Date:** 7/23/97 **Organization:** EJ32 **Phone Number:** 4-6560

Disposition:

Approve

Disapprove

Waiver

Pending Action

Action Required for Closure:
Provide results of referenced test.

Chief Engineer: Anthony R. Lavole **Date:** 8/15/97

Massachusetts Institute of Technology
Center for Space Research
Cambridge, Massachusetts 02139

Room NE80-6043

617-253-7552

Memorandum

To: Tony Lavoie
From: W Mayer *Bill Mayer*
Date: August 18, 1997
Subject: VTR 36-01510.034

The test data referenced is in the MSFC computer at XRCF. The nomenclature used is that of the XRCF (H-HAS-MC-3.010 refers to Phase H, HETG with ACIS in Spectroscopy, etc).

MIT doesn't have this data. Our EGSE was looking at the data in real time from the control and safety aspects. The data were being archived by Marty's group. Therefore, please consult the AXAF Science group to obtain the data from the MCC (Master Control Computer) or the ASC.

In fact, the verification could be done by inspection of the design or architecture. The ACIS data rate is determined by the RCTU interface protocol. Whenever the RCTU asks for a science frame, we give it one. The ACIS instrument doesn't know or care what the data rate is. If the RCTU wants data at 500 bps, it asks for science frames very infrequently. If the RCTU wants data at 24 kbps, it asks for frames more frequently. In fact, if the RCTU asked for data at 100 kbps, we could accommodate the data requests.

It is up to the observers to set up the ACIS operation such that the rate of science frame generation is about equal to, but slightly less than, the rate at which the RCTU is programmed to request data. If the scientist oversubscribes the downlink rate, we simply drop whole science frames.