

ACIS Verification Summary Report

Specification:	ACIS Contract End Item Specification
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Requirement Number/Title:	3.7.1.1.1 Instrument Mounting (VRSD 3.7.1.1.1)
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Requirement Statement:	The instrument shall provide mounting provisions for all components and subsystems in accordance with paragraph 3.2.1.2.1 the Observatory to Science Instrument ICD.
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Verification Method:	Test
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Procedure Number:	N/A
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Configuration:	Individual major assemblies
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Cycle Time:	
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Verification Discussion/Results:

Mounting of the Detector Assembly and the Support Assembly has been produced with the aid of the BASD/COI provided templates. The mounting has been further verified by mounting to the LMA provided SIM-Sin. The mounting of the PSME has been verified by mounting on the MIT provided T-V test plate and on the BASD provided XRCF electronics plate.

Peter C. Zippin
ACIS Cognizant Engineer

5-6-97
Date

3.2: MECHANICAL INTERFACES

3.2.1: Focal Plane Science Instrument Interfaces

3.2.1.1: Focal Plane Science Instrument Descriptions

3.2.1.1.1: AXAF CCD Imaging Spectrometer

The ACIS is comprised of the equipment shown in Table 3.2-3. Figure 3.2-1 shows the configuration of the ACIS detector (radiators not shown). The ACIS warm radiator supports the cold radiator and interfaces with the SIM.

3.2.1.1.2: High Resolution Camera

The HRC is provided as a single assembly containing imaging and spectroscopy microchannel plate detectors; associated electronics and power supplies; a shutter assembly; and anti-coincidence shield. The HRC mounts to the SIM kinematically via three bipods which are part of the instrument. Figure 3.2-2 shows the HRC assembly.

3.2.1.2: FPSI Mounting

The observatory Science Instrument Module (SIM) shall provide mounting structure for the HRC and for the various components of ACIS. Any shims necessary to properly align the FPSI with the observatory shall be provided by the SI contractor. Mounting hardware shall be supplied by the SIM contractor.

3.2.1.2.1: Mechanical Interface Mounting Details

ACIS static envelope and mechanical interface details are defined in Drawing 301475, Appendix G. HRC static envelope and mechanical interface details are defined in Drawing 301476, Appendix G.

3.2.1.2.2: Harness Mounting

The Observatory's SIM shall provide all interface harnesses and associated harness and cable clamps for SI to Observatory electrical interfaces.

The Observatory's SIM shall also provide harness clamps for harnesses (provided as part of the SI) between SI assemblies.