

REVISIONS

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NAME	DATE	MASSACHUSETTS INSTITUTE OF TECHNOLOGY CENTER FOR SPACE RESEARCH			
Drawn: M. Smith <i>M. Smith</i>	<i>12-31-96</i>	Handling Specification for IR and DWV Testing of ACIS Cables at MSFC			
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Handling Specification for IR and DWV Testing of ACIS Cables at MSFC

1.0 SCOPE

This specification provides the handling, packaging and shipping requirements for the IR and DWV testing to be performed on ACIS cables, at MSFC.

1.1 Introduction

These cables have been cleaned and vacuum conditioned in preparation for MSFC-SPEC-1238 Vacuum Bake Certification. These cables must remain clean and contamination-free during handling, testing, and shipping.

2.0 Applicable Documents

36-02016 Cleantent Dressing, Behavior and Material Handling Procedure

3.0 Specifications

3.1 Packaging Prior to Shipment to MSFC

Prior to packaging, the cables shall be inspected for damage and contamination. Clean, clear bubble pack shall be taped around the connectors, using Kapton tape. The Kapton tape shall not touch any part of the connectors or cables. The cable shall be placed inside a clean Nylon 6 bag exposing only those connectors that will need to be accessed during testing. The Nylon 6 bag shall be secured with Kapton tape near the back shells of the exposed connectors. When taping the bag, tape over the bag only. Do not tape the bag to any part of the connector or cable. A label must be placed on this bag stating that this bag is not to be removed and that all handling must be done with contamination-free, powder-free gloves. The bag shall also have an identification label identifying the part number(s), ACIS name, and other pertinent information.

This configuration shall then be double bagged using another clean, Nylon 6 inner bag and a clean Polyethylene or Aclarr 22C outer bag. Both bags are to be purged with grade 5 or better Nitrogen and sealed. A label stating that this material is cleanroom cleaned hardware and to handle with clean contamination, powder-free gloves shall be placed on the outer bag. The bag shall also have an identification label identifying the part number(s), qty, ACIS name, and other pertinent information. The bagged cables and connectors are to be restricted in a well cushioned box so that the cables and connectors don't bang around in the box. Attach NASA CRITICAL SPACE ITEM label number 1366, to the outside of the shipping box.

3.2 Unpacking and Testing at MSFC.

These cables have been cleaned and vacuum conditioned in preparation of MSFC-SPEC 1238 Vacuum Bake Certification. Any handling of the cables must be done with contamination free powder free gloves. These cables are triple bagged and the inner most bag shall **NOT** be removed to expose the cables. Access to the cable

connectors shall be through the exposed connector ends only. If possible, the test should be performed in a Class 100 laminar flow clean bench per MIL-STD 1246A. The connectors are to be bagged or covered whenever left unattended at the end of the workday. If the inner protective bag needs to be removed for any reason permission from the MIT Contamination Engineer is required.

- 3.3 Preparation for Shipment to MIT, after Testing is Complete
Reattach clean, clear bubble pack around the exposed connectors. Do not attach tape to any part of the cable. The cables, with the protective bag, should then be double bagged, with an Inner bag of clean Nylon 6 or equivalent and outer bag of polyethylene, with a grade 5, or better, dry nitrogen purge. The bagged cables and connectors are to be restricted in a well cushioned box so that the cables and connectors don't bang around in the box. Attach NASA CRITICAL SPACE ITEM label number 1366, to the outside of the shipping box.

- 3.4 Incoming Inspection at MIT.
Remove bags per procedures 36-02016 and inspect the cables for visible damage and contamination in the cleanroom.

- 4.0 Quality Assurance
Quality Assurance shall ensure compliance to this specification.