PREPARED BY:	***Multiband Imaging Photometer for SIRTF***	NUMBER M43P10	
C. DAVIDSON		TYPE PROCEDURE	
APPROVALS			
ENGINEERING	University of Arizona Steward Observatory, IR Group	DATE 04/27/98	
QUALITY	**SPECIFICATION**	SUPERSEDES SPEC. DATED 02/08/98	
PI/DEPUTY PI		REV. C	PAGE 1 OF 5

TITLE

CONFIGURATION MANAGEMENT AND CONTROL OF ENGINEERING DOCUMENTS

1.0 **SCOPE**

This document provides the requirements and procedures by which configuration management and document control will be accomplished during the manufacturing phase of the MIPS Ge:Ga focal plane arrays for the Space Infrared Telescope Facility (SIRTF).

2.0 **PURPOSE**

The purpose of this procedure is to provide a system by which:

- new engineering drawings, specifications and procedures may be released for manufacturing of flight hardware,
- revisions of those documents may be released in a controlled manner, to ensure traceability and representation to flight hardware
- required signatures for the documents are established
- a document identification numbering method is defined

3.0 **APPLICABLE DOCUMENTS**

These documents form a part of this procedure to the extent specified herein. In the event of conflict between the requirements of the documents and those referenced, the provisions described herein shall prevail.

MIPS

MIPS-0033A Quality Control Plan

4.0 **PROVISIONS**

4.1 CONFIGURATION MANAGEMENT PROVISIONS

4.1.1 Hardware configuration shall be controlled and governed by a series of unique engineering drawings. These engineering drawings shall describe the detail parts and assemblies in sufficient detail to enable manufacture of flight hardware meeting all design requirements. Engineering drawings shall be identified with a unique drawing number, in the format MIPSD - XXX, and each drawing number shall be detailed on the engineering drawing tree for each focal plane array to be manufactured.

4.1.2 Engineering drawings shall describe all characteristics of the hardware in detail, using as many views as are required to adequately convey design requirements. All applicable information should be presented including, but not limited to, dimensions, surface conditions, material, finish, tolerances, detailed parts lists, manufacturers and suppliers, scale, interfacing and joining surfaces, used on and next assemblies, tooling and equipment.

4.1.3 Original engineering drawings shall be reviewed for compliance with performance requirements by the Principal Investigator or Deputy P.I., the lead Development/Test Engineer, the lead Process Engineer, and the Quality Representative. All approval signatures shall be obtained prior to release of the drawing for manufacturing of flight hardware. Changes and revisions to existing engineering drawings shall require the same approval cycle prior to release.

4.1.4 Manufacturing and test procedures shall be governed and controlled by a series of specifications and travelers, which shall describe in detail the requirements and procedures used in the manufacture of flight hardware. These documents shall be identified using the document numbering system described in Figure 1.

4.1.5 All new specifications, travelers and other engineering documents, and any revisions or changes thereto, shall be subject to review and approval prior to release, as described in paragraph 4.3 herein.

4.1.6 A master list shall be kept, along with any other necessary and applicable records, describing the current revision of all engineering drawings and documents.

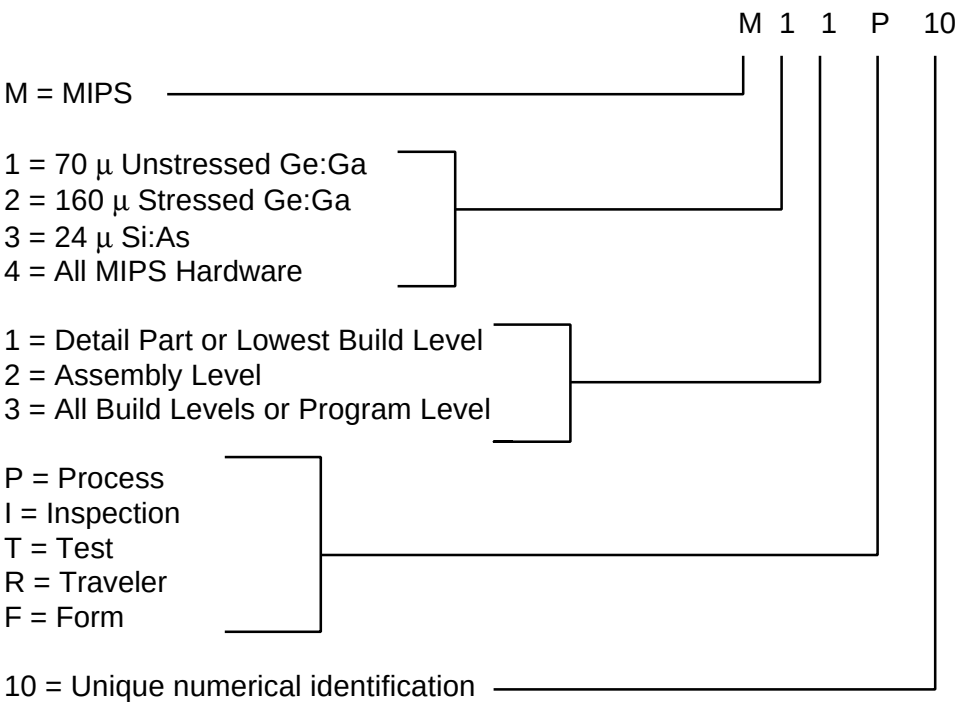
4.2 DOCUMENT CONTROL PROVISIONS

4.2.1 A controlled master file shall be kept by the lead Process Engineer containing all original approved engineering drawings and documents, as well as the original of each superseded revision. Superseded documents shall be clearly and indelibly marked as such.

4.2.2 Team members will be assigned a numbered manual containing a copy of each released drawing and document in its current revision. Changes and revisions to the drawings and documents will be forwarded to each team member with instructions to destroy or return the superseded documents.

4.2.3 Process Engineering will perform the function of Document Control, will act as the focal point for obtaining approvals and releasing new or revised documents, and will assume the responsibility for distributing the document manuals and any new or revised documents.

FIGURE 1
DOCUMENT IDENTIFICATION



Example: M43P10 is a process specification created for use in building all MIPS hardware at all build levels. M12I30 is an inspection procedure created for a 70μ unstressed array subassembly.

APPENDIX A

DRAWING AND SPECIFICATION MANUALS

MANUAL NUMBER	MIPS TEAM MEMBER
1	D. WILSON
2	
3	E. YOUNG
4	G. WINTERS
5	M. BRADLEY
6	J. CADIEN
7	J. DAVIS
8	T. MCMAHON
9	G. RIVLIS
10	R. SCHNURR
11	C. THOMPSON
12	C. DAVIDSON
13	T. HORNE
14	D. STRECKER – BALL AEROSPACE
15	D. STRECKER – BALL AEROSPACE
16	D. KNIGHT