NON-CONFORMING MATERIAL
AND
NONCONFORMING MATERIAL REPORTS

1.0 SCOPE

This document describes the procedure used in determining the disposition of nonconforming items associated with MIT/CSR parts, materials, processes, or equipment. The documentation required on nonconforming flight material and hardware is defined, as identified in the sponsored project Performance Assurance Implementation Plan.

2.0 APPLICABLE DOCUMENTS

Not identified.

3.0 FAILURE REPORTING

The reporting of failures, although closely related, is not a subject of this procedure.

4.0 MATERIAL REVIEW BOARD

The MIT/csr Material Review Board (MRB) consists of the Performance Assurance Manager, the appropriate Design or Test Engineer, and the Government (ONR) Representative if required, as a minimum. This board may be augmented with knowledgeable individuals who are intimately involved with a specific discrepancy. The GSE Engineer, Systems Engineer, Project Engineer, Project Manager, and Manufacturing Manager are examples of such augmentation.

5.0 MATERIAL DISPOSITION

5.1 INITIAL DISPOSITION

Initial material disposition will be performed by Quality Assurance and Engineering. They will review all non-conformances and assign one of the following dispositions:

Rework to specification Nonconforming material that can be reworked without adverse effect on safety, performance, interchangeability, reliability, or quality may be dispositioned for rework. Material that has been satisfactorily reworked is returned to the normal flow of material.

Return To the Vendor (RTV) Purchased nonconforming material may be dispositioned "Return to Vendor" This is done when the discrepancy is clearly the suppliers responsibility and MIT rework, scrap, or MRB action are not recommended.

Scrap Nonconforming material is scraped when the item is unusable on flight projects and the dollar value is low. Scrap material is identified and segregated from all other material.

Material Review Board (MRB) Nonconforming material not recommended for disposition as "rework to specification", "RTV", or "scrap" is refereed to the Material Review Board. If there is question or disagreement regarding disposition of any material, it is refered to the MRB.

5.2 FINAL DISPOSITION

The MRB will make final disposition of non-conforming material submitted to the board. The decisions of the MRB shall be unanimous or the matter will be referred to the sponsoring Project Office for adjudication. The MRB may disposition hardware as above, or may additionally specify the repair of the hardware, or determine it to be suitable for "use-as-is".

6.0 DOCUMENTATION

A Nonconforming Material Report (Figure 7-1) will be completed for all nonconformances of flight hardware. The decisions of the Material Review Board shall be supported by records of all cases submitted for action, as documented in the nonconforming material report. Figure 6-1 details the distribution of nonconformance reports. The "official records" of all nonconformance reports are the QA File/MRB File, maintained by Performance Assurance.

DISPOSITION	TO VENDOR	QA FILE/ MRB FILE 1/	WITH AWO	WITH BONDED STOCK 2/
RTV	X	X		
SCRAP		X		
REWORK TO SPEC.		X	X	X
REPAIR		X	X	X
USE AS IS		X	X	X

1/ The Quality Assurance files of nonconformance reports include the reports of the Material Review Board

2/ Nonconformance reports for incoming material (other than scrap and RTV)are kept with the item in bonded stores. When the item is kitted, the nonconformance report is kept with the Assembly Work Order (AWO).

Figure 6-1

Copies of nonconformance reports and MRB actions are available for review by the cognizant Government representative.

7.0 NONCONFORMING MATERIAL REPORT

7.1 INSTRUCTIONS

7.1.1 ENTRIES

A. Incoming/Receiving personnel will make entries in blocks *1* through *4* and *6* and *8* through *18* when purchased material is found to depart from specification.

B. Fabrication,Quality Assurance, or Engineering personnel will make entries in blocks *1* through *7* and *16* through *18* when work in process or final assemblies are found to depart from specification.

NOTE: Block *20* should be completed as soon as the information becomes available.

C. The fabrication supervisor shall complete Block *24* to describe the necessary rework operations. Block *23* must be signed by Engineering to approve the rework plan.

D. Members of the Material Review Board (MRB) shall Complete Blocks *21* and *22* for any items submitted to MRB for disposition

7.1.2 DETAILED INSTRUCTIONS

The following details the entries for blocks *1* through *27* on the Nonconforming Material Report, Figure 7-1.

Block 1 Part Description Enter the name of the part or assembly for which the nonconformance is being written.

Block 2 Part No, Rev. Enter the complete number and revision of the part, subassembly, or assembly.

Block 3 Originated by & Date The name of the initiator of the nonconformance report and the date.

Block 4 Serial/Lot no Enter the serial number of the part, subassembly, or assembly. In cases of unserialized items, the lot or batch number may be used. If neither are applicable, enter N/A.

Block 5 Operation Number Enter the operation number from the Assembly Work Order (AWO) wherein the discrepancy was discovered, if applicable.

7.1.2 DETAILED INSTRUCTIONS (continued)

Block 6 Project Name Enter the name of the project from the AWO or purchase order account number.

Block 7 Quality Assurance & Date The QA individual will review the form and signify his/her approval of the necessary contents by signature and entering the date.

Block 8 Suppliers Name/Location Enter manufacturer's name and location, if known, as it appears on the purchase order or packing list.

Block 9 Quantity Received Enter the quantity received as identified on the packing list or from the actual receiving count.

Block 10 Sample Size Enter the size of the sample taken if applicable.

Block 11 100% Check this block if 100% test or inspection was performed.

Block 12 P.O. Number Enter the purchase order number

Block 13 Requisitioner Enter the requisitioner's last name

Block 14 Quantity Accepted To be filled in upon completion of inspection of the lot

Block 15 Quantity Rejected To be filled in upon completion of inspection of the lot

Block 16 Item Designate an item number for each discrepancy

Block 17 Quantity Enter number of parts, subassemblies, or assemblies applicable to each discrepancy

Block 18 Discrepancy Enter the description of the nonconformance. Be brief but be specific. Show the tolerance or specification limit. Identify drawing or specification requirement .

Block 19 Disposition To be used by authorized individuals making dispositions for discrepancies reported in block 18.

7.1.2 DETAILED INSTRUCTIONS (continued)

Block 20 Corrective Action Statement Identify cause of discrepancy(s) and action(s) taken to prevent recurrence. Statement should be provided by individual deemed responsible for discrepancy(s) reported.

Block 21 MRB Approval Sign-off by appropriate Material Review Board Members

Block 22 Material Review Disposition Indicate disposition of material referred to MRB by item per disposition.

Block 23 Preliminary Review/Action The Engineer initially making disposition signs and dates in this block. (Approval of instructions in Block 24).

Block 24 Operation Instruction All routing and detailed rework or repair instructions should be recorded here. Instructions normally provide for re-inspection or follow-up review by the MRB.

Block 25 Operator Name of the individual performing the task and the date.

Block 26 Inspection Signature or stamp of QA inspector approving work performed on each individual item.

Block 27 QA Close out Signature or stamp of QA Inspector performing inspection and/or review of documentation verifying that all specified reprocessing is complete.

Block 28 N M R Serial Number Enter the sequential serial number, which is obtained from the nonconforming material report log book when the N M R is initiated.

NONCONFORMING MATERIAL REPORT

MASSACHUSETTS INSTITUTE OF TECHNOLOGY CENTER FOR SPACE RESEARCH	NMR SERIAL NUMBER 28

PART DESCRIPTION 1	PART NO. REV. 2	ORIGINATED BY 3	DATE

SERIAL/LOT NO 4	OPERATION NO 5	PROJECT NAME 6	QUALITY ASSURANCE 7	DATE

SUPPLIER NAME/LOCATION 8	QTY REC'D 9	SAMPLE SIZE 10	100% 11

P.O. NUMBER 12	REQUISITIONER 13	LOT DISPOSITION	QTY ACCEPT 14	QTY REJECT 15

ITEM	QTY	DISCREPANCY (BRIEF BUT SPECIFIC; INCLUDE TOL. OR SPEC. LIMIT)	DISPOSITION
16	17	18	19

CAUSE/DIAGNOSIS & CORRECTIVE ACTION (ITEMIZE):

20

22

MRB APPROVAL 21		MATERIAL REVIEW DISPOSITION					
ENGINEERING	DATE	RTV	ITEM	RWK TO SPEC	ITEM	SCRAP	ITEM
QUALITY ASSURANCE	DATE	USE AS IS	ITEM	REPAIR	ITEM	OTHER	ITEM
GOVERNMENT REPRESENTATIVE	DATE	NO REJ.	ITEM	*INVALID OR NOT RELEVANT TO ITEM			

PRELIMINARY REVIEW/ACTION (SIGNATURE & DATE): 23

QTY	OPERATION INSTRUCTION	OPER	DATE	INSP
	24	25		26

Q A CLOSE OUT_____27

Figure 7-1