



National Aeronautics and  
Space Administration

**John C. Stennis Space Center**  
Stennis Space Center, MS 39529-6000

**SPR 8730.1 Rev. E**  
**July 2017**

## **COMPLIANCE IS MANDATORY**

### **John C. Stennis Space Center Control of Nonconforming Product**

Stennis Procedural Requirements	SPR 8730.1	E
	<i>Number</i>	<i>Rev.</i>
	Effective Date:	July 28, 2017
	Expiration Date:	July 28, 2022
Responsible Office: Safety and Mission Assurance Directorate		
<b>SUBJECT: Control of Nonconforming Product</b>		

## Document History Log

Revision	Change Date	Originator / Phone	Description
Basic	May 15, 2008	Ralph Gonzalez / 228-688-2101	Initial Release Supersedes SLP 13, Control of Nonconforming Product
Rev. A	May 22, 2009	Ralph Gonzalez / 228-688-2101	<ul style="list-style-type: none"> <li>• Changed reference for SSC-STD-99-021 to SSTD-8070-0008-CONFIG</li> <li>• Added NASA MRB membership, Para. 4.4c.</li> <li>• Updated references to E&amp;TD</li> <li>• Added clarification to Para. 2.4 (b &amp; c), 2.5, 3.2 (a), 4.1 (a) and 4.4 (a).</li> <li>• Updated Para. 2.2 – areas of responsibility.</li> </ul>
Rev. B	April 21, 2011	Ralph Gonzalez / 228-688-2101	<ul style="list-style-type: none"> <li>• Added reference to NASA MRB SPR 8730.5. Added para. 4.4.</li> <li>• Updated SMA acronym</li> </ul>
Rev. C	December 13, 2011	Ralph Gonzalez / 228-688-2101	<ul style="list-style-type: none"> <li>• 1.3, 1.4, 2.5, Appendix A1: Removed reference to Hardware Assurance Testing Contract.</li> <li>• Deleted 1.5, 2.2c: Items pertained to Hardware Assurance Testing Contract.</li> <li>• 4.4b: Added NASA SMA.</li> </ul>
Rev. D	February 6, 2014	Ralph Gonzalez / 228-688-2101	<ul style="list-style-type: none"> <li>• Global: Updated SMA references to Director/Directorate</li> <li>• 1.1a &amp; 1.4b updated to improve MRB membership approval process.</li> <li>• Clarified to ensure that proper authorization is obtained. Para. 2.1a.</li> <li>• 3.3d: Updated disposition requirements</li> <li>• Added requirement to have NASA SMA MRB personnel listing. Para. 1.1c and 4.4c.</li> <li>• Added requirement to ensure proper SRP archival. Para. 1.3c and 4.2a.</li> <li>• Additional type of Preliminary Review Disposition added. Para. 3.2a.</li> <li>• Clarified NASA personnel required to support contractor MRB. Para 4.4b.</li> </ul>
Rev. E	May 31, 2017	Christina Zeringue / 228-688-3169	<ul style="list-style-type: none"> <li>• Removed references to TOC and FOSC contracts and clarified para 2.3 for types of nonconformance systems including Corrective Action process. Updated references, removed duplicated information about MRB process covered in SPR 8730.5. Removed MRB details from Appendix C flowcharts.</li> </ul>

Stennis Procedural Requirements	SPR 8730.1	E
	<i>Number</i>	<i>Rev.</i>
	Effective Date:	July 28, 2017
	Expiration Date:	July 28, 2022
Page 3 of 15		
Responsible Office: Safety and Mission Assurance Directorate		
<b>SUBJECT: Control of Nonconforming Product</b>		

## Table of Contents

<b>PREFACE</b> .....	<b>4</b>
<b>P.1 PURPOSE</b> .....	<b>4</b>
<b>P.2 APPLICABILITY</b> .....	<b>4</b>
<b>P.3 AUTHORITY</b> .....	<b>4</b>
<b>P.4 APPLICABLE DOCUMENTS</b> .....	<b>4</b>
<b>P.5 MEASUREMENT/VERIFICATION</b> .....	<b>5</b>
<b>P.6 CANCELLATION</b> .....	<b>5</b>
<b>CHAPTER 1. ROLES AND RESPONSIBILITIES</b> .....	<b>6</b>
1.1 NASA SMA Director.....	6
1.2 Management System Representative (MSR).....	6
1.3 Contractor Safety and Quality Assurance Manager.....	6
1.4 All Personnel.....	7
<b>CHAPTER 2. NONCONFORMANCE DOCUMENTATION</b> .....	<b>8</b>
2.1 General.....	8
2.2 Determination of Violated Document.....	8
2.3 Nonconformance Systems .....	8
2.4 Notification of Nonconformance .....	9
2.5 Segregation of Nonconforming Products.....	9
2.6 Control of Records.....	9
<b>CHAPTER 3. NONCONFORMANCE DISPOSITION</b> .....	<b>10</b>
3.1 Disposition Types .....	10
3.2 Preliminary Review/Evaluation .....	10
3.3 Minimum Requirements for Disposition .....	11
<b>CHAPTER 4. MATERIAL REVIEW BOARD (MRB)</b> .....	<b>12</b>
4.1 MRB Determination.....	12
<b>APPENDIX A – DEFINITIONS</b> .....	<b>13</b>
<b>APPENDIX B – ACRONYMS</b> .....	<b>14</b>
<b>APPENDIX C – PROCESSING OF NONCONFORMANCES</b> .....	<b>15</b>

Stennis Procedural Requirements	SPR 8730.1	E
	<i>Number</i>	<i>Rev.</i>
	Effective Date:	July 28, 2017
	Expiration Date:	July 28, 2022
Page 4 of 15		
Responsible Office: Safety and Mission Assurance Directorate		
<b>SUBJECT: Control of Nonconforming Product</b>		

## PREFACE

### P.1 PURPOSE

This Stennis Procedural Requirement (SPR) specifies the requirements for documentation and disposition of products at John C. Stennis Space Center (SSC) which fail to meet drawing, specification, or any other mandated set of requirements. This SPR is the governing document for managing the activities related to nonconforming products at SSC.

### P.2 APPLICABILITY

- a. This directive is applicable to all NASA personnel at SSC.
- b. This directive is applicable to NASA contractors at SSC to the extent specified in their contracts.
- c. This directive is applicable to all products that are designed, fabricated, manufactured, processed, tested or installed at SSC under control of NASA and their respective contractors.
- d. All document citations are assumed to be the latest version unless otherwise specified.

### P.3 AUTHORITY

- a. NPD 1280.1, NASA Integrated Management System Policy.
- b. NPD 8700.1, NASA Policy for Safety and Mission Success.
- c. NPD 8730.5, NASA Quality Assurance Program Policy.

### P.4 APPLICABLE DOCUMENTS AND FORMS

- a. NPR 1441.1, NASA Records Management Program Requirements.
- b. SPR 1280.1, SSC Management System Requirements.
- c. SPR 1440.1, Records Management Program Requirements.
- d. SPR 8730.5, SSC Material Review Board Procedural Requirements.
- e. SCWI-1280-0002, SSC Corrective Action Request Process.
- f. SOI-8080-0022, Engineering and Test Directorate (ETD) Control of Customer Property.

Stennis Procedural Requirements	SPR 8730.1	E
	<i>Number</i>	<i>Rev.</i>
	Effective Date:	July 28, 2017
	Expiration Date:	July 28, 2022
Responsible Office: Safety and Mission Assurance Directorate		
<b>SUBJECT: Control of Nonconforming Product</b>		

- g. SOI-8080-0027, Engineering and Test Directorate Operations Work Control.
- h. SSTD-8070-0007-CONFIG, Standard for Variance and Alternate Standard Requests.
- i. SSTD-8070-0008-CONFIG, Discrepancy and Correction Report.

#### **P.5 MEASUREMENT/VERIFICATION**

Compliance with this procedure will be monitored through the SSC Management System (SMS) and the Safety and Mission Assurance Directorate (SMA) by objective evidence, including NASA and contractor work authorizing documents, nonconformance documents, and variances.

#### **P.6 CANCELLATION**

SPR 8730.1, Rev. D, Control of Nonconforming Product dated March 2014.

*Signature on File*

Richard J. Gilbrech, Ph.D.  
Center Director

#### **DISTRIBUTION**

Approved for public release via NODIS and TechDoc; distribution is unlimited.

Stennis Procedural Requirements	SPR 8730.1	E
	<i>Number</i>	<i>Rev.</i>
	Effective Date:	July 28, 2017
	Expiration Date:	July 28, 2022
Responsible Office: Safety and Mission Assurance Directorate		
<b>SUBJECT: Control of Nonconforming Product</b>		

## CHAPTER 1. ROLES AND RESPONSIBILITIES

### 1.1 NASA SMA Director

#### 1.1.1 The NASA SMA Director:

- a. Ensures the contractor Material Review Board (MRB) membership listing has been received from contractor SMA Management (See Appendix A for “MRB” definition).
- b. Assures that clearly defined processes and procedures are in effect to ensure nonconformances are properly documented and dispositioned (See Appendix A for “Nonconformance” definition).
- c. Develops and maintains a list of NASA SMA personnel authorized to sign MRB dispositions.

### 1.2 Management System Representative (MSR)

#### 1.2.1 The MSR:

- a. Identifies nonconformances that are systemic in nature and implements Corrective Action in accordance with SCWI-1280-0002.
- b. Performs audits of nonconformances on a periodic basis to ensure nonconformances are minimized and prevented.

### 1.3 Contractor Safety and Quality Assurance Manager

#### 1.3.1 The Contractor Safety and Quality Assurance Manager:

- a. Implements internal procedures for controlling nonconformances in accordance with this procedure, SPR 8730.5, SOI-8080-0027, and SSTD-8070-0008-CONFIG.
- b. Develops and maintains quality records for the control of nonconforming product in accordance with SPR 1440.1, Records Management Program Requirements, and internal procedures.
- c. Ensures a designated area is identified and maintained for the control and segregation of nonconforming articles and material (Refer to Section 2.5).
- d. Evaluates all nonconformances within their area of responsibility for potential corrective action, and reports any recurring or systemic nonconformances to the NASA MSR for input into

Stennis Procedural Requirements	SPR 8730.1	E
	<i>Number</i>	<i>Rev.</i>
	Effective Date:	July 28, 2017
	Expiration Date:	July 28, 2022
Page 7 of 15		
Responsible Office: Safety and Mission Assurance Directorate		
<b>SUBJECT: Control of Nonconforming Product</b>		

the Corrective/Preventive Action and Improvement Program in accordance with SCWI-1280-0002.

#### 1.4 All Personnel

All personnel, regardless of position of responsibility, are required to ensure nonconformances are documented. If unable to personally document the nonconformance, personnel should ensure the applicable information is disseminated to the appropriate individuals for documentation.

Stennis Procedural Requirements	SPR 8730.1	E
	<i>Number</i>	<i>Rev.</i>
	Effective Date:	July 28, 2017
	Expiration Date:	July 28, 2022
Page 8 of 15		
Responsible Office: Safety and Mission Assurance Directorate		
<b>SUBJECT: Control of Nonconforming Product</b>		

## CHAPTER 2. NONCONFORMANCE DOCUMENTATION

### 2.1 General

2.1.1 When a product is found to be nonconforming, inadvertent and/or unauthorized use of that product shall be prevented.

2.1.2 Procedures shall be established and maintained to determine which products are nonconforming and to clearly document the nonconformances.

2.1.3 Procedures shall define the process for disposition and subsequent re-inspection of those nonconforming products.

2.1.4 Nonconformance processing shall be in accordance with flowchart listed in Appendix C, Processing of Nonconformances.

### 2.2 Determination of Violated Document

2.2.1 The requirements for a product are typically specified in specifications and drawings. Additional requirements may also be levied by engineering orders, work authorizing documents, vendor specifications and drawings, Engineering Modification Instruction packages, or other technical requirement documents.

- a. When a product does not meet specified requirements, it shall be immediately documented in the applicable nonconformance system.
- b. The nonconformance shall be clearly and concisely written and include all pertinent details.

### 2.3 Nonconformance Systems

2.3.1 Facilities and products which fall under the control of the ETD, as well as the Test Complex Support areas (High Pressure Gas Facility, High Pressure Industrial Water Facility, Cryogenic Transfer Facility) and the Component Processing Facility, shall document nonconformances per SOI-8080-0027.

2.3.2 Operations/maintenance of other facilities and products, which fall under the control of the Center Operations Directorate, shall document nonconformances per SSTD-8070-0008-CONFIG.

2.3.3 Process nonconformances (as opposed to product nonconformances) shall be documented in accordance with SCWI-1280-0002.



Stennis Procedural Requirements	SPR 8730.1	E
	<i>Number</i>	<i>Rev.</i>
	Effective Date:	July 28, 2017
	Expiration Date:	July 28, 2022
Responsible Office: Safety and Mission Assurance Directorate		
<b>SUBJECT: Control of Nonconforming Product</b>		

## 2.4 Notification of Nonconformance

After the nonconformance has been documented in the applicable system, designated personnel who are responsible for disposition shall be notified using the most efficient means available to ensure a timely and cost effective disposition and to prevent unintended use of nonconforming products.

## 2.5 Segregation of Nonconforming Products

2.5.1 When a product is discovered to be nonconforming, it shall be conspicuously marked or tagged (or otherwise identified if marking or tagging is inappropriate).

2.5.2 The responsible organization shall maintain complete control over the nonconforming product to preclude its unauthorized use until appropriate disposition is complete.

2.5.3 Nonconforming products not currently in use or installed in a component, facility or system shall be stored in a protected holding area. This area, as designated by the responsible organization, shall be utilized to prevent unauthorized removal of nonconforming products.

## 2.6 Control of Records

All records of the nonconformance, including MRB actions, shall be maintained per the requirements of NPR 1441.1 and SPR 1440.1.

Stennis Procedural Requirements	SPR 8730.1	E
	<i>Number</i>	<i>Rev.</i>
	Effective Date:	July 28, 2017
	Expiration Date:	July 28, 2022
Responsible Office: Safety and Mission Assurance Directorate		
<b>SUBJECT: Control of Nonconforming Product</b>		

## CHAPTER 3. NONCONFORMANCE DISPOSITION

### 3.1 Disposition Types

The disposition addressing the nonconformance shall be classified as either a partial or a final disposition.

#### 3.1.1 Partial Disposition

The process of dispositioning a nonconformance may require one or more stages, known as partial dispositions. Partial dispositions may be used to acquire additional information; perform rework or repair; defer rework or repair of product to a later date; document MRB actions and requirements; or perform any other interim action leading to the final nonconformance resolution.

#### 3.1.2 Final Disposition

If only one disposition is needed, or after the partial disposition stages have been satisfied, a final disposition shall be utilized. This disposition, after completion, shall have fully addressed the nonconforming product.

### 3.2 Preliminary Review/Evaluation

3.2.1 A preliminary review performed by the responsible organization shall be completed for the nonconforming product to determine if it should be:

- a. Eliminated by rework
- b. Repaired per MRB approved Standard Repair Procedure (SRP)
- c. Returned to the vendor/supplier
- d. Removed and replaced
- e. Informational Disposition – Meets Requirements

The preliminary review dispositions noted above will result in an authorized disposition of the nonconformance without submittal to the MRB (See Appendix A for “Preliminary Review,” “Standard Repair Procedure,” and “Rework” definitions).

3.2.2 All nonconforming products not addressed at the preliminary review shall be submitted to the MRB, which shall be invoked as noted in Chapter 4.

Stennis Procedural Requirements	SPR 8730.1	E
	<i>Number</i>	<i>Rev.</i>
	Effective Date:	July 28, 2017
	Expiration Date:	July 28, 2022
Responsible Office: Safety and Mission Assurance Directorate		
<b>SUBJECT: Control of Nonconforming Product</b>		

### 3.3 Minimum Requirements for Disposition

3.3.1 When the nonconformance has been corrected, the product shall be re-verified or re-inspected to ensure it now conforms to the original specified requirements.

3.3.2 When the nonconforming product has been discovered after delivery or while in use, the disposition shall take into consideration the effects or potential effects of the nonconformance on the system.

3.3.3 When a nonconforming product has been dispositioned to scrap, it shall be conspicuously marked and controlled until it can be physically scrapped and made unusable.

3.3.4 The personnel responsible for disposition of the nonconforming product shall evaluate the disposition in terms of its effect on safety, hardware configuration, dependability, and performance at a minimum.

Stennis Procedural Requirements	SPR 8730.1	E
	<i>Number</i>	<i>Rev.</i>
	Effective Date:	July 28, 2017
	Expiration Date:	July 28, 2022
Responsible Office: Safety and Mission Assurance Directorate		
<b>SUBJECT: Control of Nonconforming Product</b>		

## CHAPTER 4. MATERIAL REVIEW BOARD (MRB)

### 4.1 MRB Determination

4.1.1 When a nonconformance cannot be eliminated by the preliminary review process, it shall be addressed by the contractor MRB or NASA MRB in accordance with SPR 8730.5.

4.1.2 The MRB shall classify the disposition and determine the proper course of action as defined in SPR 8730.5 Section 2.3.2.

4.1.3 When the nonconformance has been assessed as requiring MRB action, the MRB shall be notified using the most efficient means available.

Stennis Procedural Requirements	SPR 8730.1	E
	<i>Number</i>	<i>Rev.</i>
	Effective Date:	July 28, 2017
	Expiration Date:	July 28, 2022
Responsible Office: Safety and Mission Assurance Directorate		
<b>SUBJECT: Control of Nonconforming Product</b>		

## APPENDIX A – DEFINITIONS

Material Review Board (MRB) - A board, consisting of contractor personnel from Operations, Engineering and SMA disciplines, responsible to address nonconforming products that cannot be returned to their original specified requirements.

Nonconformance - Non-fulfillment of a specified requirement established by specifications, drawings, standards, procedures, or other technical requirements.

Preliminary Review - An evaluation to determine the disposition of the nonconformance after its initial discovery and prior to submittal to the MRB. Preliminary review may result in an authorized disposition of the nonconformance with referral to the MRB.

Rework - Action taken on a nonconforming product to make it conform to the original specified requirements.

Standard Repair Procedure (SRP) - A documented technique for repair of a type of nonconformance which has been demonstrated to be an adequate and cost effective method for repair. SRPs are developed by the contractor and are reviewed and approved by the MRB and are approved for recurrent use under defined conditions.

Stennis Procedural Requirements	SPR 8730.1	E
	<i>Number</i>	<i>Rev.</i>
	Effective Date:	July 28, 2017
	Expiration Date:	July 28, 2022
Responsible Office: Safety and Mission Assurance Directorate		
<b>SUBJECT: Control of Nonconforming Product</b>		

## APPENDIX B – ACRONYMS

ETD	Engineering and Test Directorate
MRB	Material Review Board
MSR	Management System Representative
NPD	NASA Policy Directive
NPR	NASA Procedural Requirements
SCWI	Stennis Common Work Instruction
SOI	Stennis Organizational Instruction
SMA	Safety and Mission Assurance Directorate
SMS	Stennis Management System
SPR	Stennis Procedural Requirements
SRP	Standard Repair Procedure
SSC	John C. Stennis Space Center
SSTD	Stennis Standard

Stennis Procedural Requirements	SPR 8730.1	E
	<i>Number</i>	<i>Rev.</i>
	Effective Date:	July 28, 2017
	Expiration Date:	July 28, 2022
Responsible Office: Safety and Mission Assurance Directorate		Page 15 of 15
<b>SUBJECT: Control of Nonconforming Product</b>		

**APPENDIX C – PROCESSING OF NONCONFORMANCES**

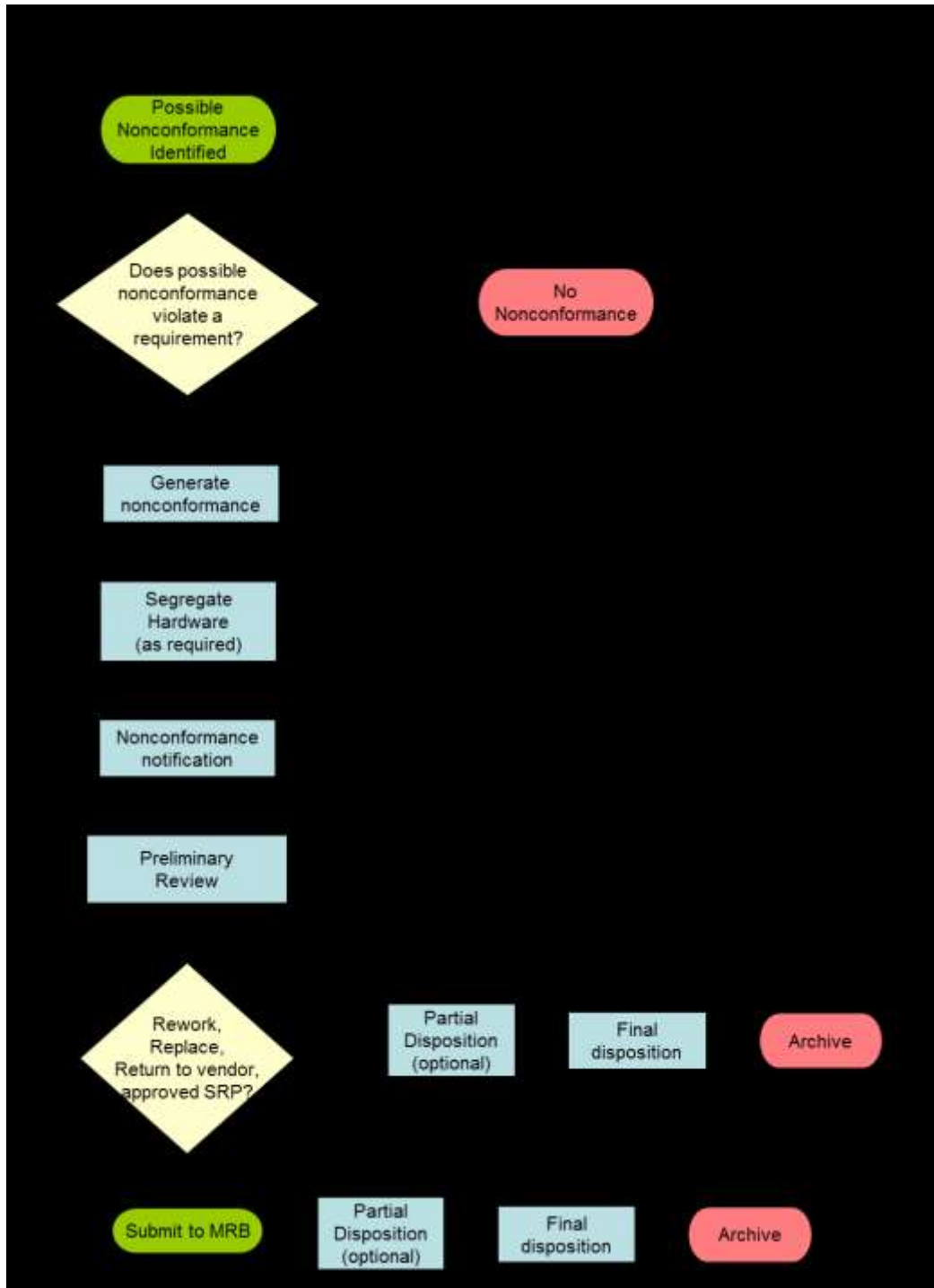


Figure 1, Nonconformance Processing Flowchart