

The purpose of this brochure is to help the MSFC community become aware of the basic concepts of corrective/preventive action and to help assure their effective participation.

## **Background**

The effectiveness of the quality system can be directly correlated to the effectiveness of its corrective action system. This tool provides the mechanism for correcting quality, process and product problems in a healthy quality system by formally pursuing corrective action.

The effectiveness of MSFC's corrective action system depends on you. Everyone performing in-scope work at MSFC participates in the system with varying degrees of responsibility. These can include reporting quality system problems, customer complaints, nonconformances, performing root cause investigation, developing corrective/preventive action, implementing corrective/preventive action, and/or verifying its effectiveness.

While everyone at MSFC is not expected to be an expert on corrective/preventive action, everyone must be aware of how to participate in the process should the need to do so present itself.

## **Fundamentals of Corrective Action**

1. Document the nonconformance.
2. Determine the significance of the problem based on established criteria (MSFC P14.1 and related instructions) which include:
  - risk of not taking corrective action may have extreme consequences;
  - problem is significant in terms of resources, schedule, or safety;
  - trend indicators suggest the need for corrective/preventive action;
  - problem is a recurring problem;
  - problem is not clearly understood to be benign;
  - problem is an unexplained anomaly.
3. If the problem is significant, pursue corrective action in accordance with MSFC-P14.1.

## **Corrective Action Definitions**

**Nonconformance** - A condition in which one or more characteristics do not conform to requirements.

**Root Cause** - The underlying reason or cause for a nonconformance.

**Corrective Action** - Action taken to correct a nonconformance (remedial action) and to eliminate the cause to prevent recurrence (recurrence control).

**Preventive Action** - Action taken to eliminate the cause of a potential nonconformance in order to prevent occurrence.

## **When do I take Corrective Action?**

1. Upon detecting a product nonconformance (hardware, software)
2. When a Quality Management System deficiency is identified
3. When a customer complaint is received
4. When an adverse trend is detected
5. When an audit nonconformance is found

## **Where do I report the need for Corrective Action?**

1. Product nonconformance (hardware, software) - Nonconformances are documented on MSFC Form 460, **Discrepancy Report (DR)** per MSFC-P13.1 or **Inbound Discrepancy Report** in the Procurement Discrepancy Tracking System.
2. Quality System Deficiency - Quality System deficiencies are documented on MSFC Form 4335, **Quality System Deficiency Notice**.
3. Customer Complaint - Customer complaints are captured on MSFC Form 4306, **Quality Comment**.
4. Adverse Trend (Preventive Action) - Adverse process trends are investigated and the root cause determined. Preventive action is documented and implemented per MSFC-P14.2.
5. Audit Nonconformance - Corrective action for internal audit findings is documented per MSFC-P17.1 on the MSFC Form 4289 **Nonconformance Report (NCR)**.

## Potential Auditor questions

What is MSFC's Quality policy in your own words?

What do you do when your metrics indicate a problem with your process?

What do you do when you have a problem with your vendor?

What do you do when you have a problem with your product?

What criteria do you use to determine whether corrective action should be taken?

What is your role in the corrective action process?

Explain what you do when you do take corrective action.

What procedure governs your corrective action system?

**If you cannot answer one or more of these questions contact your immediate supervisor for assistance.**

## How to Submit a Quality System Deficiency Notice (QSDN)

- Go to Inside Marshall at:  
  
<http://inside.msfc.nasa.gov>
- Click on **QSDN** on the rotating bar at the top of the screen
- Click on **QSDN** again on the "Hot Topics" page
- Once at the QSDN Main Menu, click **New QSDN** and enter the information requested on the form, then hit the **Save** button

## ISO Organizational Points of Contact

ISO Organizational Representatives may be found on the MSFC ISO 9000 Homepage at:

<http://iso9000.msfc.nasa.gov:9001/>

## MSFC Quality Policy

MSFC policy is to provide quality products and services to our customers.

## NOTES:

# MSFC's Corrective Action System

Detailed requirements are documented in the following procedures and instructions, which are available on the MSFC ISO-9000 Document Library at:

<http://masterlist.msfc.nasa.gov/>

MSFC-P14.1, *Corrective Action System*

MSFC-P14.1-C01, *Quality Comments System*

MSFC-P14.1-C02, *Corrective/Preventive Action Notification System*

MSFC-P14.1-C03, *Quality System Deficiency Notification System*

MSFC-P14.2, *Preventive Action System*

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