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Corrective Action Webinar

Lesson 1 - Corrective Action: Command Media Expectations



Overview



- **Introduction**
- **Reference Documents**
- **AS9100**
- **Corrective Action and Quality**
- **QX**
- **AC 2018**
- **Frequently Asked Questions**
- **Summary**



Introduction

- **Corrective Action Requests (CARs) are a vital part of continuous process improvement**
 - Formally request “Corrective Action”, defined by ISO 9000 as action to remove the cause of a nonconformity
- **CARs perform several functions within Lockheed Martin and Supplier Quality Management**
 - Communicate issues to responsible parties
 - Serve as documentation to customers (Lockheed Martin or USG) about what was found
 - Spur creation of a Corrective Action Plan (CAP) to actually solve the problem



Normative References

- **ISO 9001:2008 – Quality Management Systems - Requirements**
 - Basic outline for a Quality Management System
 - Wholly incorporated into AS9100
- **ISO 9000:2005 – Quality Management Systems – Fundamentals and Vocabulary**
 - Vocabulary and explanation of ISO 9001
 - Indispensable for application of ISO 9001:2008
- **SAE AS9100C – Quality Management Systems – Requirements for Aviation, Space, and Defense Organizations**
 - Required Certification for most Lockheed Martin suppliers
 - Adds aerospace specific requirements to ISO 9001

Corrective Action in AS9100



SAE AS9100C, 8.5.2 Corrective Action

The organization shall take action to eliminate the causes of nonconformities...A documented procedure shall be established to define requirements for

- a) reviewing nonconformities (including customer complaints),
- b) determining the causes of nonconformities,
- c) evaluating the need for action to ensure that...do not recur,
- d) determining and implementing action needed,
- e) records of the results of action taken (see 4.2.4),
- f) reviewing the effectiveness of the corrective action taken,
- g) flowing down corrective action requirements to a supplier when it is determined that the supplier is responsible...**
- h) specific actions where timely and/or effective corrective actions are not achieved, and**
- i) determining if additional nonconforming product exists...and taking further action when required.**

Corrective Action in AS9100



SAE AS9100C, 8.2.1, Customer Satisfaction

As one of the measurements...the organization shall monitor information relating to customer perception as to whether the organization has met customer requirements. The methods for obtaining and using this information shall be determined.

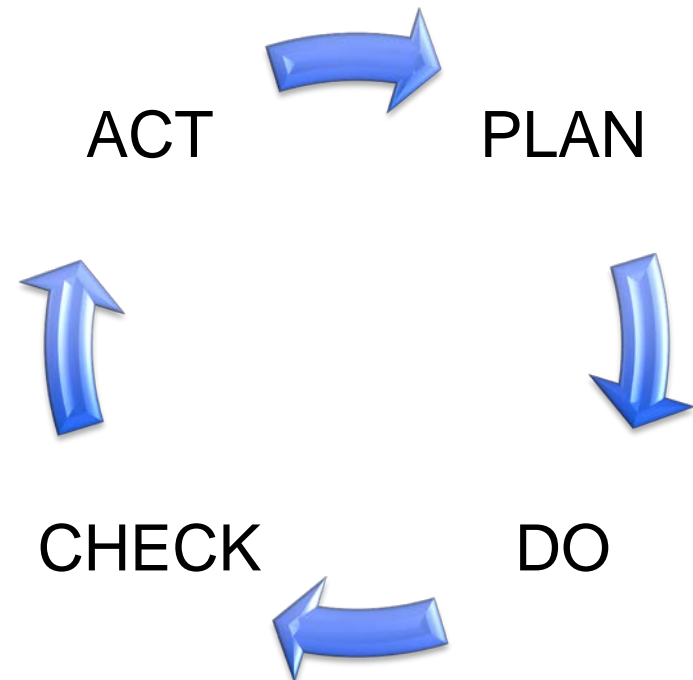
Information to be monitored and used for the evaluation of customer satisfaction shall include, but is not limited to, product conformity, on-time delivery performance, customer complaints and corrective action requests. Organizations shall develop and implement plans for customer satisfaction improvement that address deficiencies identified by these evaluations, and assess the effectiveness of the results.

Corrective Action and Quality



- **AS9100 and ISO 9001 present a structured process**
 - Define the problem
 - Determine action to take
 - Review actions for effectiveness
 - Make changes as needed

**Shewhart Cycle /
Deming Cycle /
Plan Do Check
Act (PDCA) Cycle**





Corrective Action in QX

- QX requires AS9100 Certification, so 8.2.1 applies to suppliers, with Lockheed Martin (and typically DCMA) as customers
- Additionally QX requires CAR response directly:

Clause QX, Section 2.2, Corrective Action, Preventive Action, Request and Reporting: Seller shall:

d. provide effective corrective and preventive action upon request by Buyer...

Suppliers are required to respond

Aero Code 2018



- **AeroCode 2018, Section 3.B.1, Issue 25, 8/6/13, authorizes and directs SQM to issue CARs to suppliers based on:**
 - Supplier responsible issue affects Safety of Flight (SOF)
 - Nonconformance is repetitive as defined in AC-3031 [*Per AC 3031, Issue 42, 14 Aug 13, more than once in a 90-day period*]
 - Request is made by Customer, LM Aeronautics Engineering or SQM Management
 - Significant findings are deemed supplier responsible
 - Systemic issues (a problem that exists beyond the scope of where the actual non-conformance occurred, which if not corrected will continue to recur at the same or varying degrees of severity)
 - CPI [*Critical Program Impact per AC 2018, 3.A.1, Issue 25, 8/6/13*]

Frequently Asked Questions



- **Are CAR's required with an SDL?**
 - Not always. Per AC 6130. 9/3/13, "Issue Corrective Action Request (CAR), **as applicable**, in accordance with AC-2018, Supplier Approval and Control, to formalize validation of Corrective Action Plan (CAP)." The SDL itself does not drive the CAR, but the nonconformities within should be evaluated against the criteria in AC 2018 to determine if a CAR is warranted.

Summary



- **Introduction**
- **Normative Documents**
 - AS9100, ISO 9000, ISO 9001
- **AS9100**
 - Corrective action is required in an aerospace QMS
- **Corrective Action and Quality**
 - Corrective Action is a subset of Continuous Improvement, and follows the PDCA process
- **QX**
 - Flows requirements down to every sub-tier
- **AC 2018 – Supplier Approval and Control**
 - LM Internal command media includes the CAR process

