

# Appendix QJ

## QCS-001 Process Source Quality Requirements

### SCOPE

This document contains the minimum quality requirements for QCS-001 Process Sources. It is emphasized that the quality system requirements specified in this document are complementary (not alternative) to the contractual and applicable law and regulatory requirements

### TABLE OF CONTENTS

TITLE	PAGE
<a href="#"><u>DEFINITIONS AND APPLICABILITY</u></a>	2
<a href="#"><u>GENERAL REQUIREMENTS AND CONFORMANCES</u></a>	2
<a href="#"><u>1.0 Quality Management System (QMS) Requirements</u></a>	2
<a href="#"><u>1.1 Quality Requirements</u></a>	3
<a href="#"><u>1.2 Notification of QMS Changes, Customer Findings, Sale, Relocation or Transfer</u></a>	3
<a href="#"><u>1.3 Language</u></a>	4
<a href="#"><u>1.4 Counterfeit Parts / Materials Prevention</u></a>	4
<a href="#"><u>1.5 Certificate of Conformance</u></a>	5
<a href="#"><u>1.6 Quality and Processing Records</u></a>	6
<a href="#"><u>1.7 Buyer-Specified Materials</u></a>	6
<a href="#"><u>1.8 Calibration</u></a>	7
<a href="#"><u>1.9 Foreign Object Damage (FOD) Prevention</u></a>	7
<a href="#"><u>1.10 Facility Access</u></a>	7
<a href="#"><u>1.11 Corrective Action, Preventive Action, Request and Reporting</u></a>	7
<a href="#"><u>2.0 Special Process Requirements for Buyer-Designed Items</u></a>	8
<a href="#"><u>2.1 Competence Operator Self-Verification</u></a>	10
<a href="#"><u>REFERENCES</u></a>	10
<a href="#"><u>Appendix A</u></a>	12

## **DEFINITIONS AND APPLICABILITY**

The latest issue of this document is the version available on the Lockheed Martin Aeronautics website. (<http://www.lockheedmartin.com/us/aeronautics/materialmanagement.html>)

**A.** Within Quality Appendix QJ, “**Seller**” is defined as the Purchase Order (PO) recipient.

**B.** The terms “**Item(s)**,” “**Work**” and “**Buyer’s Product**” are synonymous with Lockheed Martin Aeronautics.

- **QCS-001 Process Source:** A processing source listed in QCS-001 that performs one or more of the special process specifications listed in QCS-001
- **Special Process Quality Engineer (SPQE)**
- **Engineering Materials and Approved Products (EMAP):** On-line qualified products list of approved material manufacturers and products. To be used as required by Program specifications.
- **Buyer:** Lockheed Martin Aeronautics
- **buyer:** Lockheed Martin Aeronautics Subcontract Management employee or Global Supply Chain personnel
- **Customer/customer:** U.S. Government or owner of Purchase Order (PO)
- **Key Personnel:** The responsible Seller management representative who has the responsibility and authority for oversight of all matter relating to Buyer's Product.
- **QCS-001:** Web-based, real-time database which lists special processes / specifications and approved sources for special processes / specifications. The list of both Buyer-controlled processes and Buyer-approved QCS-001 sources can be found on Buyer’s Internet home page at: <http://www.lockheedmartin.com/us/aeronautics/materialmanagement.html>. Select Quality Requirements > Supplier Quality Management System > QCS-001 Directory” and follow instructions.
- Any printed version of the output from QCS-001 is considered as Reference.

## **GENERAL REQUIREMENTS AND CONFORMANCE**

### **1.0 Quality Management System (QMS) Requirements**

For all products/services, the Seller shall have a third-party certified AS/EN9100 Quality Management System (QMS), except as defined below:

- A.** Sellers certified to AS9100 or AS9110 who are not providing COTS hardware, shall have a current third-party certification from an accredited registrar listed the “Online Aerospace Supplier Information System” (OASIS). Seller shall permit Buyer access to Seller’s Tier 2 data in OASIS in accordance with AS9104, and to Seller’s Nadcap data, including registration documentation, certification, audit reports, findings, corrective actions, etc.
- B.** Sellers not holding the accreditation in section A above will have their QMS validated using the checklist that supports [Appendix A Quality Management System Requirements Checklist](#).

### **1.1 Quality Requirements**

Seller shall meet the applicable requirements of the latest revision of Appendix QJ in effect as of the date of the receipt of purchase order from customer..

- A. Ensure all applicable QJ requirements herein and other quality requirements in this PO are imposed upon Sellers' external providers at all tiers working on Buyer's product. Seller is expected to utilize its approved QMS, processes and documentation to meet the applicable requirements of QJ. Seller shall flow down its own unique quality requirement document(s) to their external providers.
- B. Ensure that Seller personnel are aware of:
  - 1. their contribution to product or service conformity;
  - 2. their contribution to product safety;
  - 3. the importance of ethical behavior.

## 1.2 Notification of OMS Changes, Customer Findings, Sale, Relocation or Transfer

Seller shall utilize Buyer's Notification Form available at [Supplier Risk Event Notification | Lockheed Martin](#) to inform the Buyer of events described below.

- A. For the following events, Seller shall notify their assigned SPQE within ten (10) business days of occurrence:
  - 1. Change in Seller's Quality Management System, such as loss of third-party system certification, changes to Quality organization, processes or procedures that could affect conformity of Buyer Item, adverse action by US or International Government entity/agency, or Nadcap.
  - 2. Issuance of any Level II or Level III government-issued Corrective Action Request associated with Quality Management System, processes or conformity of Buyer Item.
  - 3. Issuance of a major finding by a third-party registrar.
  - 4. Nadcap accreditation is withdrawn expires, failed audit or scope of accreditation is changed,
  - 5. Process Source, Process Source's sub-tiers are disapproved by a Government Agency
  - 6. Change in key personnel, including those who have been granted access to Lockheed Martin Aeronautics online systems
  - 7. Issuance of any Level II or Level III Supplier Corrective Action Request ("SCAR") associated with Buyer Items, Quality Management System or processes associated with Buyer Items
  - 8. Process Source shall notify Buyer and Special Process Quality Engineer, in writing, at least 90 days in advance of any sale, relocation (including internal special process equipment relocations), or transfer of Process Source's processing operations. Process Source shall include the following, as a minimum, in the written notification
    - i. purpose of the relocation,
    - ii. address of the new location(s),
    - iii. assessment of actual or potential impact to current POs,
    - iv. risk mitigation plan to ensure compliance to existing requirements,
    - v. master schedule and timeline of relocation activities, and

vi. relocation Coordinator/Point of Contact

**NOTE:** Seller shall provide within 30 calendar days of the written notification the approved corrective actions taken in response to any adverse actions reported in paragraph 1.1.A above.

- B.** Seller shall submit-in writing their assigned SPQE 180 calendar days in advance of the following:
1. Sale, relocation or closure of Seller's facility (subject to any legal or regulatory restrictions). \**Relocation* includes reassignment of all or select products to new location (location other than stipulated on PO).
    - a. Seller shall provide risk mitigation plan that includes: Actual/Potential impact to PO schedule/performance; and record retention/transfer plan.

### 1.3 Language

- Seller documents and records submitted to Buyer shall be in English.

### 1.4 Counterfeit Parts / Materials Prevention

#### **Definitions:**

- “**Original manufacturer**” (OM) means the original component manufacturer, the original equipment manufacturer or the contract manufacturer.
- “**Authorized supplier**” includes OM-authorized suppliers, distributors, or aftermarket manufacturers (including Mills and foundries) to produce, buy, stock, repackage, sell or distribute the part.
- For purposes of this clause, “**Work**” consists of those parts/materials delivered under this Contract that are the lowest level of separately identifiable items (e.g., articles, components, Commercial Off-the-Shelf items, standard hardware, goods, raw materials and assemblies).
- “**Counterfeit Work**” means Work that is or contains unlawful or unauthorized reproductions, substitutions, or alterations that have been knowingly mismarked, misidentified, or otherwise misrepresented as Work from an OM or OM-authorized supplier. Unlawful or unauthorized substitution includes used Work represented as new, or the false identification of grade, serial number, lot number, date code or performance characteristics.
- “**Suspect Counterfeit Work**” means Work for which credible evidence (including, but not limited to, visual inspection or testing) provides reasonable doubt that the Work part/material is authentic.
- “**Commercial Off-the-Shelf**” (COTS) describes Products/items sold to commercial users for non-governmental purposes.

**NOTE:** Extending the functionality of COTS hardware products via customer development should be carefully considered due to the increased complications of: proper integration, long term support and maintenance implications, inconsistent and short-term availability, obsolescence of components, and essential additional integration and testing requirements.

- A.** Seller shall establish and maintain a Counterfeit Prevention and Control Plan (CPCP) in accordance with AS5553, ARP6328, AS6496, DFARS 252.246-7007, IDEA-STD-1010, DFARS 252.246-7008, AS6174, AS6081 and/or AS6171, as applicable.
- B.** For parts/materials to be delivered to Buyer as Work, the Seller shall only purchase from Authorized Sources of Supply including EMAP as applicable base on program as defined in

LMA-D0006. 1. If Seller is unable to acquire parts/materials from the OM/AAM/AS, or EMAP Seller is required to have an ESPAR submitted by one of their customers. Seller may incorporate parts/materials from a Seller-approved source into Buyer's Product only if Seller has received advanced written approval from the Buyer.

1. Seller's processes shall include the means to provide to the SQE and Buyer, upon request, the supply chain traceability from OM/AAM, including mills and foundries, to produce acceptance by Buyer, including the name and location of all supply chain intermediaries.
2. Work containing suspect counterfeit parts/materials shall be treated as nonconforming Work and the Seller shall utilize the notification process within Appendix QJ para 1.14 to remedy the nonconformances.

**NOTE:** Authorized Sources of Supply include: The Original Manufacturer (OM) of the parts/materials, including mills and foundries, and Authorized Aftermarket Manufacturer (AAM) of the parts/materials, their Authorized Suppliers (AS), or suppliers that obtain such parts/materials exclusively from the OM/AAM/AS.

- C. Sellers shall, upon request from the SQE and Buyer, provide traceability from the OM/AAM/AS, to the Seller's Work.
- D. Seller shall notify the SPQE and Buyer of noncompliance to these requirements in accordance with Appendix QJ para 1.14.
- E. Sellers eligible for membership in Government-Industry Data Exchange Program ("GIDEP") per Appendix QX para 1.7 shall utilize the GIDEP process to alert the Buyer and industry of counterfeit parts/materials.
- F. Seller shall include this clause, or equivalent provisions, in parts/materials/service subcontracts for items included in or furnished as Work to Buyer.
- G. Engineering Materials and Products (EMAP)

## 1.5 Certificate of Conformance

Seller shall:

- A. Prepare a Certificate of Conformance (CoC) asserting that the Items contained within this shipment meet all requirements of this PO.
- B. The CoC prepared for each shipment shall include at minimum the following data:
  - Seller Facility name
  - Seller Facility address
  - Seller's unique Lockheed Martin Aeronautics identification number ("vendor code")
  - Date issued
  - PO/Contract number
  - Part number
  - Specification, Revision level, and associated process code of all special processes performed
  - Traceability Data if applicable (e.g., serial number, date code/production lot number)
  - Quantity of parts Accepted and or Rejected

- Signature and title of authorized Seller Representative (Electronic Signatures are acceptable)
- Seller Representative printed name adjacent to the signature
- Include ANY portion of the specification that was NOT completed.

### **1.6 Quality and Processing Records**

#### **Seller Shall:**

- A. Maintain complete records of the following:
  1. all manufacturing, inspection, test, process capability (if applicable), CoC, and
  2. all nonconforming material, dispositions, corrective and preventive actions, assignable causes and effectiveness of corrective actions.
- B. Make such records available for at least three (3) years after final payment of this PO or for longer periods if specified elsewhere in their customer's PO.
- C. Maintain records of all Special Process "Work" performed or procured in accordance with Appendix QJ para 2.1 and 2.2 for at least seven (7) years after final payment from their sub-tier supplier's PO or for longer periods if specified elsewhere in this PO.
- D. Provide an electronic copy of quality and processing records upon Buyer's request.

### **1.7 Buyer-Specified Materials**

- Seller shall establish and maintain controls to prevent the use of materials from unapproved sources when Buyer-Approved sources (e.g., Engineering Materials and Approved Products [EMAPs]) are required.

### **1.8 Calibration**

- Seller shall maintain a system for calibration and maintenance including instruments, gages used to control special process, inspection and test equipment that is compliant with an industry-recognized standard (e.g., ISO 17025, ISO 10012-1, ANSI Z540).

### **1.9 Foreign Object Damage (FOD) Prevention**

- A. Seller shall maintain a FOD Prevention Program compliant to Aerospace Standard AS9146, Foreign Object Damage (FOD) Prevention Program - Requirements for Aviation, Space and Defense Organizations.
- B. Whenever or wherever Foreign Object Debris (FOd) can be entrapped or Foreign Objects (FO) can migrate, Seller shall ensure that applicable FOD prevention requirements are flowed down to Seller's subcontractors at every tier.
- C. Prior to closing inaccessible or obscured areas and compartments, Seller shall inspect for FO/materials and ensure no protective devices (e.g., bags, caps, covers, plugs, masking materials) remain embedded. Seller shall ensure tooling, jigs, fixtures and test or handling equipment are maintained in a state of cleanliness and repair sufficient to prevent FOd and FOD.
- D. By delivering Items to Buyer, Seller shall be deemed to have certified to Buyer that such Items and packaging are free from any FO/FOD.

### 1.10 Facility Access

- A. Seller shall provide or obtain access to any and all facilities where work is being performed or is scheduled to be performed for Buyer, Buyer's customers and regulatory agency personnel, including those facilities of Seller's agents and subcontractors, in order to perform Item inspections, surveys or system/process surveillance as part of verification of conformance to the requirements of this PO. Seller shall include the provisions of this facility access requirement in its POs with its agents and subcontractors, for this PO.
- B. Seller shall provide the following to Buyer, Buyer's customers or regulatory agencies:
  - 1. Suitable facilities at Seller and Seller's subcontractors' manufacturing locations for Buyer, Buyer's representatives, Buyer's customer and regulatory agency representatives to perform Item inspections, surveys or system/process surveillance, and
  - 2. High-speed internet access for Buyer's SQE SPQE, Buyer's customers or regulatory agencies.

### 1.11 Corrective Action, Preventive Action, Request and Reporting

#### **Seller Shall:**

- A. Ensure effective corrective and preventive action is taken (including repetitive nonconformances dispositioned "**Use-As-Is**" or "**Repair**" by Buyer's actions) to prevent, minimize or eliminate nonconformances.

NOTE: Special Process sources are NOT allowed to disposition hardware as "Use-As-Is" or "Repair".

- B. Evaluate each nonconformance for its potential to exist in previously produced items and notify to their customer in writing on items in transit or delivered to Buyer or Buyer's customers in accordance with the following:
  - 1. Provide buyer with Initial notification within three (3) business days if Seller's assessment reveals it likely that an escape has occurred, except as noted below for flight safety and counterfeit. Provide preliminary disclosure information on the following, at a minimum: facility, part number(s), preliminary affected number of parts, discrepancy and containment action. a. Follow up with additional detail within five (5) business days after initial notification with supplemental details including: purchase order number(s), purchase order line item(s), affected Lockheed Martin program(s), preliminary root cause(s) and updated scope of escape.
  - 2. Notify their customer within 24 hours of the Seller's discovery if potential exists for a non-conformance escape to affect flight safety or if delivered product is Suspect Counterfeit Work. Provide preliminary disclosure information on the following, at a minimum: facility, part number(s), preliminary affected number of parts, discrepancy and containment action.
- C. Utilize the instructions located at the Lockheed Martin Aero Supplier Corrective Action page.
- D. Assess all Buyer and customer identified nonconformances, regardless if Item(s) was/were returned to Seller and take appropriate actions to ensure cause(s) of nonconformance are corrected.

**2.0 Additional Special Process Requirements for Buyer-Designed Items and Alternate Repair Sources repairing OEM items**

- A.** Seller, its agents and subcontractors at all tiers working on Buyer's product (Build To Print) shall meet all requirements of the latest version of Appendix QJ in effect as of the date of the receipt of the purchase order from their customer.
- B.** Seller's utilization of Buyer-approved or Nadcap-accredited sources does not relieve Seller from the obligations to ensure subcontracted sources are in full compliance with applicable process specifications and to deliver conforming Items. Upon Buyer's request, Seller shall provide objective evidence that compliance was attained and that delivered items were conforming.
- C.** Buyer authorizes Seller to use Nadcap-accredited special process sources for industry standard specifications only. Seller may access Nadcap approved sources at <http://www.pri.sae.org> or <http://www.eauditnet.pri.sae.org>. Buyer shall have the right to validate any Nadcap-approved source or process using normal survey practices and shall have the right to disapprove Seller's use of any such source relating to this PO.
- D.** Seller shall be responsible for providing special process source with the appropriate revision level of the process standards/specifications prior to performing processing on Buyer's product.
- E.** Seller shall ensure all Seller sub-tier POs or associated PO documents for Buyer-controlled processes include the following data elements:
  - 1. Seller's unique Lockheed Martin Aeronautics identification number ("vendor code"); and
  - 2. All QCS-001-controlled specifications, including revision, for which processing will be performed; and
  - 3. Buyer-unique "process codes" for each Buyer-controlled special process to be performed; and
  - 4. Applicable program Finish Specification and revision; and
  - 5. A statement with the words, "Processing directly related to a Lockheed Martin Aeronautics Company Purchase Order (PO) must be accomplished in accordance with process specifications in this PO and Lockheed Martin Aeronautics Company Appendix QJ;" and
  - 6. A statement that Seller's sub-tier must file and maintain a copy of all POs containing the above statement and make these available for review by Buyer, upon request; and
  - 7. A statement that Seller's sub-tier must submit a CoC with a unique certification number which contains the elements listed in Appendix QJ; and
  - 8. Fracture durability classification or serialization, when required; and
  - 9. A statement to ensure Seller's sub-tiers suitably wraps, boxes or racks parts to guard against shipping damage and to apply rust or corrosion protection; and
  - 10. Maintain and provide records of all QCS-001 "Work" performed in accordance with Quality Appendix QJ Section II, paragraph G
- F.** Seller shall maintain special processing activity data on each Buyer-approved process performed for Buyer including processes performed by Seller on Buyer Items, or any Special Process source utilized, and Seller shall compile a quarterly Usage Report of this activity data and submit it to Buyer from the link at Lockheed Martin Aero Supplier Quality Management

System. Seller shall also complete any special process source data collects that are part of the inspection lot that is created prior to shipment of product to Lockheed Martin Aeronautics. Seller shall maintain their log-in accesses to the Lockheed Martin Aero Supplier Quality Management Systems to prevent the automated 30 day account inactivation.

Seller shall also include all special processing activity accomplished in this Usage Report. Seller shall submit the Quarterly Usage Report within fifteen (15) calendar days after the end of each calendar quarter, even if no Special Process sources were utilized during a calendar quarter. Usage Reports shall not be input prior to the end of each calendar quarter. Seller's Usage Report shall consist of processing activity accomplished in the following activity categories:

1. Seller subcontracting special processing activity to Special Process or Nadcap approved sources, or
  2. Seller performing special processes on Buyer Items for other Buyer suppliers, or
  3. Seller performing special processes on Buyer Items the Seller manufacturers, or
  4. Seller's sub-tier manufacturing sources who subcontract special processing activity to Special Process or Nadcap approved sources.
- G. Usage Reporting is not required when Seller is performing Special Processes for non-Buyer PO's

### **2.1 Competence Operator Self-Verification**

- A. When Seller utilizes Operator Self-Verification, the Seller shall develop and implement an Operator Self-Verification program compliant with AS9162.

## **REFERENCES**

- A. AS/EN/JISQ 9100 – Quality Management Systems – Requirements: For Aviation, Space and Defense Organizations
- B. AS/EN/JISQ 9110 – Quality Management Systems – Requirements: For Aviation Maintenance Organizations
- C. AS/EN/JISQ 9120 – Quality Management Systems – Requirements: For Aviation, Space and Defense Distributors
- D. ISO 9001 – Quality Management Systems Requirements
- E. ISO/IEC 17025 – General requirements for the competence of testing and calibration laboratories
- F. ISO 31000 – Risk management – Guidelines
- G. FAA 21.137 (c) – Supplier Control
- H. FAA 21.137 (c1) – Ensure that each supplier-furnished product or article conforms to its approved design
- I. FAA 21.137 (d) – Manufacturing Process Control
- J. FAA Form 8130
- K. EASA Part 21 – Initial Airworthiness - Commission Regulation (EU) No 748/2012 of 3 August 2012, Airworthiness and Environmental Certification

- L. EASA Part 145 – Continuing Airworthiness - Commission Regulation (EU) No 1321/2014 of 26 November 2014 – Continuing Airworthiness
- M. SAE AS5553 – Counterfeit Electrical, Electronic, and Electromechanical (EEE) Parts; Avoidance, Detection, Mitigation, and Disposition
- N. SAE AS6174 – Counterfeit Materiel; Assuring Acquisition of Authentic and Conforming
- O. SAE AS/EN/JISQ 9102 – Aerospace First Article Inspection Requirements
- P. SAE AS/EN/JISQ 9103 – Key Characteristics
- Q. SAE AS/EN/JISQ 9117 – Delegated Product Release Verification
- R. SAE AS9115 – Quality Management Systems - Requirements for Aviation, Space, and Defense Organizations - Deliverable Software
- S. SAE AS/EN/JISQ 9131 – Non-conformance Data Definition and Documentation
- T. SAE ARP 9134 – Supply Chain Risk Management Guideline
- U. SAE ARP 9136 – Root Cause Analysis and Problem Solving
- V. SAE AS/EN/JISQ 9145 – Requirements for Advanced Product Quality Planning and Production Part Approval Process
- W. SAE AS/EN/JISQ 9146 – Foreign Object Damage (FOD) Prevention Program
- X. SAE AS 9162 – Aerospace Operator Self-Verification Programs
- Y. SAE AS 13000 – Problem Solving Requirements for Suppliers
- Z. SAE AS 13002 – Requirements for Developing and Qualifying Alternate Inspection Frequency Plans
- AA. SAE AS 13003 – Measurement Systems Analysis Requirements for the Aero Engine Supply Chain
- BB. SAE AS 13004 – Process Failure Mode and Effects Analysis (PFMEA) and Control Plans
- CC. SAE AS 13006 – Process Control Methods

### Hyperlinks

- [Lockheed Martin Aeronautics website](https://www.lockheedmartin.com/en-us/suppliers/business-area-procurement/aeronautics/quality-requirements/quality-appendices.html): https://www.lockheedmartin.com/en-us/suppliers/business-area-procurement/aeronautics/quality-requirements/quality-appendices.html
- [Buyer's Supplier Quality Engineer \(SQE\)](https://www.lockheedmartin.com/en-us/suppliers/business-area-procurement/aeronautics/quality-requirements/information.html): https://www.lockheedmartin.com/en-us/suppliers/business-area-procurement/aeronautics/quality-requirements/information.html
- [Buyer's website](https://www.lockheedmartin.com/en-us/suppliers/business-area-procurement/aeronautics/quality-requirements.html): https://www.lockheedmartin.com/en-us/suppliers/business-area-procurement/aeronautics/quality-requirements.html
- [IAQG Supply Chain Management Handbook](https://iaqg.org/tools/scmh/): https://iaqg.org/tools/scmh/
- [Lockheed Martin Aero Supplier Quality Management System](https://www.lockheedmartin.com/en-us/suppliers/business-area-procurement/aeronautics/quality-requirements/supplier-quality-management-system.html): https://www.lockheedmartin.com/en-us/suppliers/business-area-procurement/aeronautics/quality-requirements/supplier-quality-management-system.html

- [Lockheed Martin Aero Supplier Corrective Action](https://www.lockheedmartin.com/en-us/suppliers/business-area-procurement/aeronautics/quality-requirements/corrective-action.html) https://www.lockheedmartin.com/en-us/suppliers/business-area-procurement/aeronautics/quality-requirements/corrective-action.html
- [Lockheed Martin Aero Supplier Portal](https://www.lockheedmartin.com/en-us/suppliers/business-area-procurement/aeronautics.html): https://www.lockheedmartin.com/en-us/suppliers/business-area-procurement/aeronautics.html
- [qcs-001.pdf \(lockheedmartin.com\)](https://www.lockheedmartin.com/content/dam/lockheedmartin/aero/documents/scm/Quality-Requirements/Control-Specs/qcs-001.pdf): https://www.lockheedmartin.com/content/dam/lockheedmartin/aero/documents/scm/Quality-Requirements/Control-Specs/qcs-001.pdf
- [IAQG SCMH](https://www.sae.org/servlets/registration?PORTAL_CODE=IAQG&OBJECT_PKG=iaqq.businessClasses&OBJECT_TYPE=SCMHGeneral&PAGE=gotoSCMH):  
[https://www.sae.org/servlets/registration?PORTAL\\_CODE=IAQG&OBJECT\\_PKG=iaqq.businessClasses&OBJECT\\_TYPE=SCMHGeneral&PAGE=gotoSCMH](https://www.sae.org/servlets/registration?PORTAL_CODE=IAQG&OBJECT_PKG=iaqq.businessClasses&OBJECT_TYPE=SCMHGeneral&PAGE=gotoSCMH)
- [Quality Requirements Documents](https://www.lockheedmartin.com/en-us/suppliers/business-area-procurement/aeronautics/quality-requirements.html): https://www.lockheedmartin.com/en-us/suppliers/business-area-procurement/aeronautics/quality-requirements.html

## **APPENDICES**

- A. Special Process Quality Management System Requirements Checklist

## **Appendix A**

### **QUALITY MANAGEMENT SYSTEM REQUIREMENTS CHECKLIST**

#### **A. Management Responsibility**

The Process Source's management shall define and document its policy for quality, including objectives for quality and commitment to quality. The Process Source shall also ensure that the policy is implemented and maintained at all levels of the organization, and accessible to all employees.

#### **B. Quality System**

The Process Source shall:

1. Establish, document and maintain a quality system as a means of ensuring that product conforms to requirements. The Process Source shall prepare a quality manual covering the requirements of this document. The quality manual shall include or reference the quality system procedures, and
2. Ensure that the quality system procedures are readily available to Process Source personnel who are responsible for ensuring compliance with requirements, and to customer and/or regulatory agency representatives.

#### **C. Contract Review**

The Process Source shall:

1. Establish and maintain a process for contract review. Before acceptance of a contract, contract change notice or other required change, the Process Source shall:
  - a. Determine that the requirements are defined and documented.
  - b. Determine that they have the capacity and capability to meet all contract requirements.
  - c. Main records of contract reviews

#### **D. Document / Data Control**

The Process Source shall:

1. Establish and maintain documented procedures to control all documents / data and approved, released and relevant revisions are available, including those in electronic format, and
2. Establish and maintain a system to prevent the use of obsolete documents, and
3. Establish a process to ensure the timely review, distribution, implementation, and maintenance of all authorized and released drawings, standards, specifications and planning, and
4. Maintain a record of change incorporation and, when required, shall coordinate these incorporations with the customer and / or regulatory authority, and
5. Be responsible for ensuring that sub-tier Process Source(s) have the appropriate revision level of the process standards / specifications prior to performing processing in connection with the Items listed on the purchase order, and
6. Ensure Process Source's unique written procedures are relevant to the processes performed within their facility.

#### **E. Purchasing**

The Process Source shall:

1. Ensure that the purchased product meets specified requirements, including, but not limited to, EMAP requirements, technical data sheets, etc., and
2. Ensure PO documents clearly define the product ordered, including the applicable drawings, specifications, specification revision, processing requirements, and other relevant customer-defined data, and

3. Have a process for evaluating and approving their sub-tier Process Source(s) and maintaining a list of those sub-tier processors, and
4. Perform reviews of sub-tier Process Source(s) quality performance to establish the level of controls to be implemented, and
5. Ensure, prior to use, sub-tier Process Source(s) use Buyer-approved special process sources listed in QCS-001, and
6. Ensure subcontracted sources are in full compliance with applicable process specifications and to deliver conforming Items as Process Source's utilization of Buyer-approved sources does not relieve Process Source from the obligations of the PO requirements.

#### **F. Product Identification and Traceability**

The Process Source shall:

1. Establish and maintain a process for identifying a product or lot by suitable means from receipt and during all stages of production and delivery, and
2. Maintain traceability throughout entire process when serialization is provided, and
3. Maintain accountability and configuration control of all parts during all phases of processing, and
4. Document and maintain control of split order quantities.

#### **G. Process Control**

The Process Source shall establish and maintain documented procedures which define the method for controlling processes (e.g., solution analysis and titration). Intervals for solution analysis shall not exceed requirements related to the specification for the process performed. Titration shall be performed at the interval required to maintain tank compliance.

#### **H. Verification and Validation of Product / Process**

The Process Source shall:

1. Establish and maintain a documented procedure for inspection and test activities that verify product / process compliance with specifications, and
2. Inspect the product / process to ensure compliance to the purchase order / contract, drawing and specifications, and
3. Ensure inspection activities are traceable to the individual performing the acceptance, and
4. Ensure that data in said reports are acceptable per applicable specifications when certification test reports are utilized to accept material, and
5. Establish appropriate controls for the media where operation acceptance media are used (e.g., stamps, electronic signatures, etc.),

#### **I. Control of Inspection, Measuring, and Test Equipment**

The Process Source shall:

1. Establish and maintain a documented calibration system to control, calibrate, and maintain all inspection, measuring, and test equipment that can affect product quality, including test software and personally owned equipment, and customer-supplied equipment, and
2. Ensure calibrations are traceable to internationally or nationally recognized standards, and
3. Document the basis used for calibration where no such standards exist, and
4. Identify equipment requiring calibration with suitable indicators / decals. If decal cannot be placed on equipment, the process source shall have an approved identification record of the calibration status, and

5. Assess the validity of previous inspection results when equipment is found to be faulty or out of calibration and shall recall the product for re-inspection when the assessment indicates the result may be a nonconforming product.

#### **J. Control of Nonconforming Product**

##### **The Process Source shall:**

1. Establish and maintain documented procedure for the identification, documentation, evaluation, segregation and for notification to customer of a nonconforming product, and
2. Evaluate each nonconformance for its potential to exist in previously produced Items and notify purchase order holder and assigned Special Process Quality Engineer, in writing, within 24 hours of potential or verified non-conformances on Items in transit or delivered. Notification shall include the concise description of discrepancy, parts and serial numbers affected, lot numbers, delivered quantities, and delivery dates, and
3. Maintain records of all nonconforming material, assignable causes, corrective actions, and effectiveness of corrective actions for the contractual period specified, and
4. Ensure disposition authority is limited to rework to engineering, or return to customer.

#### **K. Corrective Action**

##### **The Process Source shall:**

1. Establish and maintain a documented procedure for implementing corrective action, and
2. When written corrective action is requested, ensure the response addresses immediate containment / correction of the discrepancy, root cause, root cause correction, corrective action verification plan, and follow-up. The Process Source shall ensure corrective action responses requested from Buyer is submitted using the form located at:  
<http://www.lockheedmartin.com/us/aeronautics/materialmanagement.html>. Select Quality Requirements > Forms > Corrective Action Request (CAR) Response Form, and
3. Determine, collect and analyze corrective action data to evaluate the effectiveness of the corrective and preventive actions taken. When requested, the Process Source shall provide root cause trend data.

#### **L. Handling, Storage, Packaging, Preservation and Delivery**

##### **The Process Source shall:**

1. Establish and maintain a process for handling, storage, packaging, preservation, and delivery of a product to prevent damage or deterioration.