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Revision History is on final page(s)

QS1- Quality System

Manufacturing supplier's quality systems must comply with one of the following:

- ISO9001
- AS9100/EN9100
- NADCAP
- OEM approved quality system
- *PAH Approved Quality Management System*

Distributor's quality systems shall be compliant to one of the following:

- AS9120/EN9120
- AS7103/AS7104
- Voluntary Industry Distributor Accreditation Program per FAA AC 00-56, such as ASA100
- An approved alternate.

The supplier shall notify Proponent of all changes in product and/or process, changes of suppliers, and where required, obtain organization approval. Also, the supplier shall notify Proponent of any significant changes to the supplier's quality system. Significant changes may include but are not limited to:

- Change in location of facility
- Change in company name
- Change in quality system approval status

Supplier's Statement of Corrective Action

Upon request from Proponent, supplier shall complete a supplier corrective action notification (SCAN) and return within the period stated on the SCAN. Corrective action statements shall be furnished at no additional cost to Proponent.

Sub-Tier Supplier Communication

The supplier shall ensure that all relevant purchase order requirements are communicated to all sub-tier suppliers and that all requirements are met. Sub-tier suppliers are responsible for compliance with all Proponent purchase order requirements.

For issues of non-conformance where corrective action is necessary:

If it has been determined that a sub-tier supplier is ultimately responsible for any non-conforming product provided to Proponent, the Proponent direct supplier will be responsible for obtaining corrective action from the sub-tier supplier as required.

Deviation from Requirements

Suppliers are required to notify Proponent promptly of any deviations from compliance with engineering and/or PO requirements and obtain approval prior to manufacturing and delivery. The supplier shall submit proposed changes to the Proponent buyer or Proponent Supplier Quality.

Right of Entry

Proponent suppliers and their facilities are hereby subject to FAA surveillance and investigation. A "Right of Entry" clause is in effect for all contracts. This provision shall allow for Proponent, its customers, and regulatory agencies to determine and verify the quality of work, records and material at any place, including the plant of the sub-contractor.

Calibration

If the supplier is using measuring tools and equipment to determine product conformance then a calibration system in compliance with ISO 10012-1 or ANSI/ASQC Z540 shall be utilized.

Statistical Sampling

Supplier shall have a Statistical Sampling in accordance with ANSI/ASQC-Z1.4, Boeing D1- 8007, or other statistically sound sampling plan. If non-conforming product is found during sampling inspection, or if sampling inspection is not utilized, 100% inspection must be performed equivalent to a sampling plan of C=0 as applicable.

Lot/Batch/Heat Traceability

If the shipment contains multiple processed lots/batches/heats within each manufactured lot/batch, then each processed lot/batch/heat must be segregated and identified to maintain complete traceability in each shipment. (This requirement does not apply to vendor proprietary catalog items)

Mercury-Free

Products/Material provided under this order/contract:

- Shall be free from mercury contamination.
- Mercury bearing instruments and equipment which might have caused mercury contamination shall not be used in the manufacture, fabrication, and assembly or testing.

Record Retention

The supplier shall retain product quality/inspection and process control records per the following:

- Non-serialized parts and radiographic film, fifteen (15) years unless an alternate term is approved.
- Serialized parts, thirty (30) years.

Quality records must be available to Proponent **within 48 hours from request Proprietary Data**

Protection

Prior to Proponent's release of proprietary information to a supplier, all suppliers must review, sign, and return Form QC-603 (Proprietary Agreement Acknowledgement).

Non- Conforming Product

The supplier shall ensure that nonconforming product is identified and controlled to prevent its unintended use or delivery.

If non-conforming product is identified after delivery to Proponent, the supplier must notify Proponent within 24 hours of discovery and disclose the nonconformance. At a minimum, a description of the nonconformance,

the part number, PO number, and the date shipped shall be provided to Proponent.
If non-conforming product is identified prior to delivery, the Proponent buyer must be immediately notified and written authorization obtained, prior to delivering to Proponent.

First Article Inspection Report (FAIR)

The supplier shall ensure a current FAIR is kept on file.

QS2- Source Delegation Program

This clause indicates that the supplier is designated as a Proponent approved delegated supplier, and has accepted participation under the program terms, conditions and responsibilities detailed in agreement QC-200SD, Proponent Source Delegation Agreement. In the instance of going out of business, the supplier shall provide digital or hard copies of all documentation packages that were not sent along with the product delivered to Proponent as authorized by the Source Delegation Program. This documentation will include Certificate of Conformance, Test Reports, Material and Process Certs, etc. as applicable.

QS3 - Acceptance at Supplier's Facility

Source inspection is required prior to shipment by a Proponent appointed source inspector.

The supplier shall arrange for source inspection at least five (5) days prior to the required ship date.

Please contact your company's Proponent buyer or Proponent Receiving Inspection to arrange for source inspection.

QS4- First Article Inspection Report (FAIR)

A FAIR in accordance with AS9102 requirements shall be provided to Proponent with the initial shipment of a product or upon any of the changes listed in the AS9102. The FAIR shall be maintained on file at the supplier's facility and be available upon request.

When Proponent places a PO with the supplier for tooling one FAIR for each cavity tool will be required.

If a FAIR is not available, it may be substituted with an inspection report containing the same information contained in the AS9102.


All OEM proprietary parts require a FAIR compliant to AS9102 requirements with the following exceptions/conditions:

For Boeing proprietary parts:

- Boeing-approved FAIR acceptable in lieu of AS9102 FAIR

General FAIR exceptions:

- Procured Standard Catalog hardware as defined in AS9102
- Bar, plate, sheet stock and other types of raw material, except for castings and forgings.
- Non-functional hardware and supplies (protective covers, shipping hardware/materials, tooling etc.)
- Product order under "U" or "Y" condition.

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QC-1- Certificate of Conformance

Supplier shall provide a manufacturer's certificate of conformance with each shipment.

Section 1. Manufacturing:

Manufacturer Certificates of Conformance supplied directly to Proponent shall include the following without exception:

- Proponent purchase order number (Section 1 requirement only)
- Part number as ordered on the Proponent purchase order
- Revision level as noted, unless not specified in Proponent purchase order. Proponent will assist supplier in obtaining current revision of all documentation otherwise it is the responsibility of the supplier to obtain current revisions of all documentation directly from the type design holder.
- Quantity shipped
- Lot/Batch number, Cure Date, and/or Date Code as applicable
- Serial number (If applicable)
- Statement of conformity indicating that the parts/material conform to all applicable purchase order, drawing and specification requirements
- Shelf life requirements (If applicable)
- Signature/Stamp of authorized organizational representative
- Statement of country of origin is required if manufactured outside of the United States
- Statement that Product is free from mercury contamination.

Section 2. Distribution:

If product is provided by a distributor, a distributor certificate of conformance showing traceability to the manufacturer certificate of conformance, as well as providing a copy of the manufacturer's certificate of conformance is required. Complete product traceability must be provided. Supplier will provide product per latest revision at the time of manufacture.

Section 3. Airworthiness Approval Tag:

If an Airworthiness Approval Tag (8130, EASA form 1, or equivalent) is provided, a Packing List can be provided in-lieu of an MFR C of C if the chain of custody is maintained.

All certificates of conformance shall be legible and reproducible.

Standard Hardware:

On all standard hardware if there is an approved ASL (Approved Supplier List) or (Qualified Product List), the delivered product must comply with this requirement at the time of manufacturing.

Proponent Quality Management has authorization to waive information required per Section 1.

QC2 - Material and Process Certifications

The supplier shall provide material, physical and chemical certifications with actual physical and/or chemical results with each shipment as required by the specification. The supplier shall also provide process certification for any special process (heat treat, plating, etc.) as required by the specification.

The certifications must meet the following requirements:

- Be on company letterhead
- Contain signature and title of an authorized representative of the organization
- Include specification(s)
- Revision level(s). Revisions must be the latest level at the time that the material or the process was completed unless current revision disallows a former revisions use.
- Certification statement showing conformance to applicable material and/or processes
- Lot/Heat number for material certs

All material and process certifications must be completely legible and reproducible.

Material will be procured and processes will be performed from an approved supplier when required by design authority.

If required Proponent Corporate Supplier Quality will assist supplier in determining approved sources.

The supplier shall ensure approved sources and specifications are used for each production run or shipment.

QC2 is not applicable to Supplier Control Drawings Parts or Non- Metallic Raw Material such as Rubber and Rubber-Like Products.

QC3- Test Report –Rubber or Rubber-Like Products

A test report in accordance with the material specification is required with each shipment.

Certifications/Test Reports must include the following:

- Lot/batch number
- Cure Date (example: 4Q08 format only)
- Shelf-life
- Expiration date (example: 4Q08 format only)
- Test reports must show actual values as required by the specification including applicable revision level
- Revisions must be to the latest level at the time that the material was completed unless current revision disallows a former revisions use.
- All lots/batches must be segregated and identified to maintain batch and cure date traceability
- Contain signature and title of an authorized representative of the organization performing the testing

Material will be procured from an approved supplier when required by design authority.

If required Proponent Corporate Supplier Quality will assist supplier in determining approved sources.

All material and process certifications must be completely legible and reproducible.

QC4- DPS 4.804 Processing

The parts identified on this purchase order require(s) DPS 4.804 processing. Suppliers providing this product shall be a Boeing approved DPS 4.804 supplier per D1-4426. Vendor shall have a Boeing approved DPS 4.804 master fabrication outline for this part, unless the Boeing approved Proponent master fabrication outline is provided.

Fabricate and process per requirements of the latest revision of the DPS 4.804.

A supplier material cover sheet and corresponding mill material certifications with proof of Boeing's acceptance must be included with each shipment per DPS 4.804.

***A copy of the Boeing approved master fabrication outline and a full certification package are required with shipment.**

*If manufactured to the Proponent approved planning, copy of master fabrication outline is not required.

QC5- Bar Coded Shipping Labels

Supplier shall provide a bar coded shipping labels with each shipment that includes the following data identifiers:

PO Number
Invoice Number
Part Number
Quantity
Data Type Date
Batch Number (If Applicable)
Lot Number (If Applicable) QTY
Per Batch/Lot

Suppliers may use the Proponent provided bar code generator found at:

<http://kapco-global.com/supplier-services/barcode-generator/>

If the supplier wishes to use their own bar coding method, a sample label must be provided to Proponent. If a custom bar coding mechanism is approved by Proponent, then such approval will be provided in writing.

QC6- Use of Material from Foreign Sources Boeing**South (Douglas Heritage)**

Procurement from foreign sources in support of this contract/PO is controlled by Boeing specification DMS2201. For materials listed in the DMS2201, procurement is only authorized from noted sources. For materials not listed in the DMS2201, procurement from foreign sources is only authorized from sources listed in the D1-4426 by material specification. For materials not listed, procurement from foreign sources is NOT allowed.

Boeing North

Procurement from foreign sources in support of this contract/PO is controlled by Boeing specification D1-4426. For materials listed in the D1-4426, procurement is only authorized from noted sources. For materials not listed, procurement from foreign sources is allowed.

QC7- Packaging and Preservation

The supplier must ensure that all items are packaged adequately to ensure that items are delivered to Proponent undamaged. The supplier will be responsible for repackaging at their expense if required. If there is damage due to inadequate packaging the items shall be subject to rejection.

The following requirements also apply to packaging:

- Product must be protected against corrosion, rust or any elements which may cause a visual rejection or product failure
- Silver plated parts or parts/assemblies containing silver components shall be protected from sulfur-laden fumes, or other sources that can tarnish
- Electro-static discharge (ESD) product must be protected in ESD packaging

Thread Protection

When print or specification requirements do not already mandate explicit thread or packaging protection, threads must then be sleeved or otherwise individually packaged to prevent damage.

Lubrication Requirements (Bearings/Pulleys/etc.)

If lubrication is required, all lubrication dates must be current within six (6) months of the shipping date to Proponent.

Shelf Life

If product is shelf life sensitive, there must be a minimum of 80% shelf life remaining on product at time of receipt at Proponent, unless waiver provided by Proponent in writing.

QC8 – Regulatory Approval of Articles – Documentation Requirements

(I) The item purchased herein was purchased to a civil government regulatory approval such as but not limited to: FAA approval (TSO, PMA, PC, Direct Ship Authority, etc.) or equivalent EASA (POA, ETSO etc.) or other National Aviation Authority approval, and requires an FAA Form 8130-3, EASA Form 1 or other NAA Airworthiness tag as applicable.

- (a) If tags are not available on a case by case basis, supplier must contact the Buyer prior to accepting PO for approval to avoid any possible difficulty upon receipt.

(II) All Aircraft Parts Documentation must be completely legible and reproducible.

(III) **FAA Form 8130-3 Airworthiness Approval**-Article(s) on this shipment certified under FAA PMA, may subsequently be “split” and exported to a European Union country and a certified true copy of your original airworthiness tag supplied with the split shipment. Therefore, we make the following optional request. We request, as required in the U.S. / European Union Aviation Safety Agreement Technical Implementation Procedures, if the 8130-3 Airworthiness Approval Tag your organization supplies with this shipment could contain in block 12 one of the following statements as applicable: "This PMA part is not a critical component" or "Produced under licensing agreement with the TC holder". We fully understand this is not an export tag but our experience has shown that one of the aforementioned statements in block 12 makes our certified true copy of the original airworthiness tag acceptable to most European customers. You may decline to add any of the statements requested, and follow normal protocol for block 12 on an airworthiness approval tag. Thank you for your consideration to this request.

QC8.1- Regulatory Approval of Articles

(I) The purpose of this clause is to ensure the products/parts/articles supplied under this purchase order have civil government regulatory approval such as but not limited to: FAA approval (TSO, PMA, PC, Direct Ship Authority, etc.) or equivalent EASA (POA, ETSO etc.) or other National Aviation Authority approval.

(II) All Aircraft Parts Documentation must be completely legible and reproducible.

(III) Parts must be factory new.

QC9- Parts to be made from one lot

Parts must be manufactured from ONE material heat lot and processed together in ONE lot. If parts do not comply with this requirement, they are subject to rejection, unless authorized in written by Proponent.

QC10- Dimensional and Visual Inspection Report

The supplier shall provide a Dimensional and Visual Inspection Report with this order.

QC11- Lockheed Quality Requirements flow down C001**QA022-01, Seller Quality Requirements:**

Seller shall comply with the requirements of Buyer's "Seller Quality Requirements" outlined in QA022-01 (latest revision). Copies of this document may be found on Lockheed Martin Supplier Net or contact the buyer. In the event of conflicting requirement(s) between QA022-01 and a specified requirement within the contract, the specified requirement(s) will take precedence. QA022-01 May be accessed at: <http://www.lockheedmartin.com/us/suppliers/bu-info/aeronautics/sustainment-services.html>

C011**Documented Traceability Requirement:**

- A. Items ordered on this purchase order require traceability. Seller must maintain a documented system for recording and controlling of traceable items in accordance with specified requirements with full connectivity to Original Equipment Manufacturer (OEM) or last Federal Aviation Administration (FAA) certified facility.
- B. Where no requirements are otherwise specified in the purchase order. The Seller must:
 - 1. Maintain records of each item to ensure traceability to parent material by heat/lot number and producer's name. Such data shall be identified on the shipper.
 - 2. Identify each item with buyer /manufacturer's part number, (as appropriate) heat/lot number, producer's name and grain direction. (When applicable).
 - 3. Associated documents must be maintained at least (7) years.
- C. As removed items require additional evidence of traceability. The Certificate of Conformance must contain the aircraft nomenclature and serial number (not tail number) of the donor aircraft.

C045**Government Approved Sources:**

Parts/Material shall be in compliance with requirements of the Contract Technical Data File (CTDF); Procurement Item Description (PID); this includes approved sources of supply. Seller must provide Original Equipment Manufacture (OEM) Certification with shipment.

G187**DLA Defense Supply Center Richmond Quality Clause CS187 Applies:**

"Class I Ozone depleting chemicals are not to be used nor incorporated in any items to be delivered under this contract. This prohibition supersedes all specification requirements but does not alleviate any product requirements. Substitute chemicals must be submitted for approval unless they are authorized by the specification requirements."

QC12 – Boeing Commercial Airplanes (BCA) Terms and Conditions

Current Text for all Long Beach Commercial Airplanes Terms and Conditions can be found at the Boeing external website: <http://www.boeingsuppliers.com/tc0692/>

6044- Boeing Quality Management Systems (BQMS) Requirements
Appendix A

6056- Boeing – Supplemental Quality Program Requirements

QC13 Fraudulent/Counterfeit Parts requirements

In response to a significant and increasing volume of fraudulent-counterfeit parts entering the aerospace chain, posing significant performance, reliability and safety risks. All product supplied on this Purchase Order are to meet all the requirements of AS5553, AS6081 and AS6174.

QC14 No FAA-PMA/TSO

Unless explicit direction is given to the contrary, no articles (or constituent parts thereof) ordered by Proponent shall contain any Federal Aviation Administration- Parts Manufacturing Approval (FAA-PMA/TSO) markings, the articles shall not be certified under an FAA-PMA/TSO approval, and the accompanying paperwork (e.g., packages, shippers, etc) shall not contain any FAA-PMA/TSO markings.

QC15 Boeing Quality Clause Q29

Q29

Seller shall comply with Boeing Form X31764, AS/EN/JISQ 9100 flow-down requirements and PO Note management requirements set forth below.

A. Boeing Form X31764

1. Seller shall comply with the requirements of Form X31764 (5/01/2017) "Boeing Quality Purchasing Data Requirements". To ensure Seller is performing to the latest Boeing Form X31764, Seller shall access this form by selecting "Supplier Quality" from the menu bar of "Doing Business with Boeing" home page located at the following URL address: <http://www.boeingsuppliers.com/>. When entering the URL, use lower case letters only. Seller shall flow-down to its Supply Chain the provisions/requirements of X31764.

2. For purposes of this PO Note, "Supply Chain" means Seller's complete network of material, equipment, information, and services integrated into deliverable products and services provided to Seller by Seller's direct first tier supply contracts and Seller's sub-tier or lower tier supply contracts.

B. AS/EN/JISQ 9100 Flow-Down Requirements

In accordance with AS/EN/JISQ 9100, Seller shall flow-down to its Supply Chain the applicable provisions/requirements of AS/EN/JISQ 9100.

C. PO Note Management Requirements

1. Seller shall comply with all PO Notes when required by applicable contractual agreement. Boeing PO Notes are supplemental terms and conditions that consist of both quality and non-quality assurance terms and conditions. Each PO Note is designated by code number, e.g., Q29, S68, A21, etc. PO Notes may apply to the Seller via Boeing Purchase Contract or Purchase Order, and may be referenced by Boeing solicitations and letter agreements. A PO Note may be referred to as "PO Note" or "Note".

2. Boeing may revise the PO Notes from time to time. To ensure Seller is performing to the latest Boeing PO Note, Seller shall access the latest PO Note revisions via the Boeing Partners Network (BPN) Supplier Portal View. "PO Notes" are listed under "My Products". When Seller reviews a PO Note revision, the PO Notes page will reflect the revision as 'Acknowledged' by Seller. Seller shall access on a quarterly basis the latest PO Note revisions via the BPN Supplier Portal by the following dates of the year: 1/15, 4/15, 7/15 and 10/15.

3. The latest PO Note revision identified by the BPN Supplier Portal is effective, and therefore applicable to the Boeing Order as of the revision date of the PO Note, unless otherwise agreed in writing by the parties for the applicable Order.

4. If Seller does not have BPN Supplier Portal access, Seller shall contact the Boeing Procurement Representative and request the latest PO Note text by specifying the applicable PO Note code number. Seller shall make such requests quarterly by the dates specified in above paragraph "2". Upon receipt of such request, Boeing will provide the applicable PO Note text to Seller. If Seller has an ERP purchase order, but no corresponding ERP purchase contract, upon request from Seller, Boeing will provide Seller the full text of each PO Note.

REVISION HISTORY

Date	Version	Descriptio	Author
10/14/15	16	Added revision history table. Removed (Teflon, silicone, etc.) from QC3	G. DePhillips
5/17/16	17	QS1: Record Retention for Non-serialized and radiographic was 10 years, now 11 years. QC5: Updated the Kapco Global website for the bar code generator. QC1: Added Manager authorization	G. DePhillips
8/14/17	18	Updated QC15-Boeing Q29	G. DePhillips
2/12/2018	19	Changed Kapco Global to Proponent, changed logo and revised record retention from 11 to 15 years. Removed rev reqmt.	K. Stibich
6/5/2018	20	Update nonconforming product notification requirements from 'immediately' to within 24 hours of discovery.	K. Stibich
11/18/2019	21	Update QC-1 signature or stamp are acceptable	K. Stibich
2/11/20	22	Update QC-1: If an Airworthiness Approval Tag (8130, EASA, equivalent) provided, a Packing List can be provided in-lieu of an MFR C of C if the Chain of Custody is maintained.	G. DePhillips