Based on LM Document Appendix QX

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Appendix QX Supplier Quality Requirements

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GENERAL REQUIREMENTS AND CONFORMANCE

1.1 Notification of OMS Changes, Customer Findings, Sale, Relocation or Transfer

- **A.** For the following events, Seller shall submit Buyer's Notification -within ten (10) business days of occurrence:
 - 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. Suspension of Government Source Inspection of Buyer's Items due to adverse cause.
- **B.** Seller shall submit Buyer's Notification Form 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; record retention/transfer plan; FAI (PPV/MPV) recovery plan; Inventory line of balance (LOB); Work In Progress (WIP); and Master schedule detailing timeline of critical changes, in accordance with guidance from the Buyer's Notification Form.

1.2 <u>Counterfeit Parts / Materials Prevention</u>

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.

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- "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.
- **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.

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.

- 1. If Seller is unable to acquire parts/materials from the OM/AAM/AS, 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.
- **C.** Sellers shall, upon request from the SQE and Buyer, provide traceability from the OM/AAM/AS, to the Seller's Work.
 - 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.
- **D.** Seller shall notify the SQE and Buyer of noncompliance to these requirements
 - 1. Work containing suspect counterfeit parts/materials shall be treated as nonconforming Work and the Seller shall notify Buyer
- **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.

1.3 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 elements / information, or equivalent forms (e.g., FAA Form 8130, EASA Form 1):
 - Seller Facility name
 - Seller Facility address

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- Date issued
- PO/Contract number
- Part number
- Traceability Data if applicable (e.g., serial number, date code/production lot number)
- Quantity of parts
- Variance Number and details of variance, if applicable, and applicable SQAR number(s)
- Special Handling (e.g., Hazmat, temperature sensitive, shelf life limited, etc.), if applicable
- Signature and title of authorized Seller Representative (Electronic Signatures are acceptable)
- Seller Representative printed name adjacent to the signature
- C. If Seller's Item manufacture, acceptance or shipment occurs at location other than the contracted PO address, include that Supplier name and location in addition to Seller's information on the shipping document and CoC.
- **D.** Include a copy of the CoC inside the box even if a copy is included with shipping details on the outside of the box.

1.4 Government-Industry Data Exchange Program (GIDEP) Membership

- If Seller is eligible for GIDEP membership, Seller is required to be a member of GIDEP.
- The Seller shall implement a process for reviewing and evaluating problems identified in GIDEP alerts.

1.5 Calibration

 Seller shall maintain a system for calibration and maintenance of tools, jigs, inspection and test equipment that is compliant with an industry-recognized standard (e.g., ISO 17025, ISO 10012-1, ANSI Z540).

1.6 Tooling

A. Seller shall include in its documented quality system written procedures for the control, maintenance, and calibration of special tooling, jigs, inspection and test equipment and other devices used in manufacturing processes.

1.7 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.

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- **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 during assembly, Seller shall inspect for FO/materials and ensure no protective devices (e.g., bags, caps, covers, plugs) 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.

1.8 Facility Access

- A. Regardless of Buyer's or Buyer's Customer Point of Acceptance in this PO or whether Buyer's customer has issued a delegation for this PO, 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:
 - Suitable facilities at Seller and Seller's subcontractors' manufacturing locations for Buyer, Buyer's SQE, Buyer's customer and regulatory agency representatives to perform Item inspections, surveys or system/process surveillance, and
 - High-speed internet access for Buyer's SQE, Buyer's customers or regulatory agencies.
- **C.** Seller and Seller's sub-tier shall comply with Buyer's inspection requirements. Product acceptance inspection may require up to 100% for all characteristics. See Buyer's additional requirements document, if applicable, as specified elsewhere in the PO (e.g., per drawing, per Program Direction, PPV, Flight Safety Items).
- **D.** Seller shall ensure sampling is performed per AS9100 paragraph 8.5.1.c.2 to ensure that when sampling is used as a means of product acceptance, the sampling plan is justified on the basis of recognized statistical principles and appropriateness of use (per ANSI Z1.4, ANSI Z1.9 and MIL-STD-105E, as applicable; i.e., matching the sampling plan to the criticality of the product and to the process capability).
- **E.** Buyer's inspection plan requirements may require the Seller to request and obtain approval of alternate inspection frequency plans. See Buyer's additional requirements document(s) if applicable as specified elsewhere in the PO (e.g., per drawing, Per Program Direction, PPV, Flight Safety Items). Additional documents may be included in plans (i.e., AS13002 as a quide).

1.9 Corrective Action. Preventive Action. Request and Reporting

Seller Shall:

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

- **B.** Evaluate each nonconformance for its potential to exist in previously produced items and notify Buyer by submitting a Supplier Disclosure Letter (SDL) on items in transit or delivered to Buyer or Buyer's customers in accordance with the following:
 - 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. Design authority Sellers are required to provide disposition recommendation for product. Lockheed Martin shall have final authority for all delivered products.
 - 2. Notify Buyer 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.
 - a. Follow up for additional detail is required 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. Design authority suppliers are required to provide disposition recommendation for product. Lockheed Martin shall have final authority for all delivered product.
- D. Ensure employees that are leading continuous improvement projects, resolving customer complaints, etc. are properly trained in the execution of Problem-Solving techniques, provide effective corrective and preventive action upon request by Buyer and, when requested by Buyer, provide trend data and perform a Problem-Solving analysis using AS13000 or ARP9136 as guidance.
- **E.** Assess all Buyer-identified nonconformances, regardless if Item(s) was/were returned to Seller and take appropriate actions to ensure cause(s) of nonconformance are corrected.

1.10 Control of Nonconforming Product / Material Review Process

A. Buyer and Buyer's customers have the right to refuse to accept all Seller nonconformances.

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2.0 <u>Special Process Requirements for Buyer-Designed Items and Alternate Repair Sources repairing OEM items</u>

- A. QCS-001 sets forth both the special process sources and the special processes that require Buyer approval prior to use for Items delivered to Buyer. Special Process documentation is located at Lockheed Martin Aeronautics Supplier Portal (<u>qcs-001.pdf (lockheedmartin.com)</u>). For special processes not covered by QCS-001, the Seller shall have a system for approving and controlling special process sources. Seller is not required to utilize QCS-001 sources or provide Special Process Quarterly Usage Reports when processing the following:
 - 1. standard hardware (nuts, bolts, washer, etc.) ordered to military, federal or industry specifications or standards (e.g., MS, AN, NAS, etc.); or
 - 2. metallic raw material (plate, sheet, bar, extrusion, etc.); or
 - 3. perishable tooling and Tool Service Requirements List ("TSRL") Items
- **B.** Seller, its agents and subcontractors at all tiers working on Buyer's product shall meet all requirements of the latest version of Appendix QJ in effect as of the date of the Request for Proposal (RFP) unless otherwise amended by Buyer and Seller prior to PO issuance when performing any Buyer-controlled process identified in QCS-001.
- C. 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.
- D. Buyer authorizes Seller to use Nadcap-accredited special process sources. 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.
- **E.** 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.
- **F.** 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 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

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- 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
- G. 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 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:

- 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.

NOTE: Usage Reporting is not required when Seller is performing Special Process processes for non-Buyer PO's.

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