Q-1

Section A: Aircraft Assemblies, Parts and Materials

Supplier shall only deliver aircraft assemblies, parts and materials that comply with the following requirements for new, surplus, used and or repaired articles. Concessions to these requirements may be granted, but only by the following:

a. Written authorization following review by the Government's Ops Engineering

b. Procurement/Project specific Quality Assurance

c. Contracting Officer's Technical Representatives.

Unless otherwise specified for delivery to the Government, all applicable material test reports, processing, overhaul, repair and maintenance certifications, inspection, test and non-destructive examination results shall be retained for at least 10 years by the supplier, and made available upon request.

Supplier shall ensure that articles conform to all original design and manufacturing requirements for materials, processing, inspection, test, non-destructive examination, marking, packaging, preservation and transportation.

For each article (New, Surplus, Used and/or Repaired) the supplier shall identify:

a. Manufacturer's part number, and heat, batch or serial number (when applicable).

b. Manufacturer's name, date of manufacture and street address of production facility and/or article's maintenance, repair or overhaul facility.

c. Proof of serviceability by the appropriate depot serviceable tag

d. FAA Parts Manufacturing Approval (PMA)

e. Technical Standard Order Authorization (TSO), Manufacture authorized to make item

f. FAA Form 8130-3

g. Verify that articles conform to all applicable requirements for materials, processing, inspection, test, non-destructive examination, marking, packaging, preservation and transportation.

h. Identify any article (if applicable) obtained from an aircraft that was subjected to extreme environmental or operational stress, suffered a major failure or accident or was operated by a non-U.S. entity.

i. Provide the implementation status of each applicable FAA Airworthiness Directive and manufacturer's Service Bulletin.

j. Ensure that each component with a shelf life has been identified, including associated expiration dates.

Q-3

A. SOURCE INSPECTION AND/OR TEST IS REQUIRED BY NASA QUALITY REPRESENTATIVE

1. Articles and materials ordered by this contract are subject to NASA Quality inspection or test at the Contractor facility prior to delivery. Contact your NASA Buyer for the name and phone number of your NASA Quality Assurance Representative (QAR). The NASA QAR will provide a list of the mandatory inspection points (MIP) or test requirements for this contract. Do not start work on this order until the mandatory inspection points are established and understood. Verification of material or properties may be the first MIP. The Contractor shall notify NASA QAR at least 2 days prior to completion of work requiring NASA inspection or test. A seven work day notification is required prior to the completion on the work requiring NASA QA inspection when the facility is out of the commuting area of NASA DFRC. The NASA mandatory inspection points were established at contract award. The advance notice is to permit the NASA QAR adequate scheduling of required contractual inspection and/or testing at the Contractor facility or other site as applicable.
At the time of such source inspection and/or test by NASA QAR, the Contractor shall provide the NASA representative with verifiable quality evidence to assure that the items meet the requirements of the contract.
2. The source inspection and/or test provided herein shall not constitute final acceptance of the items unless it is specifically stated in contract documents that final acceptance by NASA QAR will be performed at the Contractor facility.
3. Each shipment against this contract shall include objective evidence that NASA QAR has completed source inspection or test prior to shipment from the contractor's facility or site as applicable.
4. Please contact one of these individuals to schedule a visit of a NASA Quality Assurance Representative.

Approved Sept 2011

Jaime Garcia

Steve Foster

Q-10

Process Qualification and Control

For key processes, the supplier and its sub-suppliers shall qualify and control processing equipment and processing parameters, and shall train and certify associated personnel.

Key processes include:

- Special Processes (e.g. weld, solder, heat treatment, composite lay-up, bonding, etc.).
- Non-Destructive Examination (e.g. radiography, dye penetrant, ultrasonic, etc.).

The supplier and its sub-suppliers shall have defined programs for the qualification, release for production, and ongoing control of key processes, including:

- Defined process qualification and requalification acceptance criteria.
- Under what circumstances process requalification is necessary.

The supplier and its sub-suppliers shall have defined training programs leading to the certification of personnel that implement key processes, including:

- Satisfactory completion of an examination and/or a demonstration of proficiency.
- Defined certification and recertification acceptance criteria.
- Under what circumstances personnel recertification is necessary.

The supplier and the Government's QA Representative shall jointly review the supplier / sub-supplier's production planning documents in order to identify those process qualification and personnel certifications to be reviewed by the Government.

Approved Sept 2011

Jaime Garcia

Steve Foster

Section B: Counterfeit Prevention of Electronic Parts

Supply Chain Traceability for Electronic Parts

In order to minimize the risk of procuring counterfeit product, the supplier shall ensure conforming, authentic material is provided. The supplier shall meet or provide the following:

a. The supplier shall provide full traceability for the parts being purchased, including names and addresses of prior sources (if any) to the buyer. The supplier shall maintain records containing date and/or lot codes, and any serialization associated with the purchase order and invoice according to DFRC Requirements.

b. Supplier shall provide documentation on product authenticity, including accept/reject criteria and qualification of test/inspection personnel. The supplier shall provide inspection and test reports demonstrating product conformance to NASA specified criteria.

c. The supplier will be in compliance or certified to at least one of the following Quality Management Standards (e.g., AS9100, AS9120, ISO 9001, and AS9003).

d. NASA is not under obligation to return suspect or confirmed counterfeit products. These parts will be processed under the disposition instructions of NASA, GIDEP and/or FAA A/C 21-29 guidance.

e. The supplier shall provide certificates of conformance and test/inspection data upon delivery and prior to NASA acceptance of supplies ordered.

Section C: Certification of Conformance

As part of each shipment, the supplier / manufacturer shall certify contract / order conformance to the Government.

Supplier / manufacturer shall identify the shipped product in a manner that is traceable to the included Certification of Conformance.

The Certification of Conformance shall:

a. Confirm that the supplier / manufacturer has verified the acceptability of all articles before shipment – by completion of the necessary inspections, tests, audits, process controls and records reviews.

b. Identify the contract / order number, and relevant line item number.

c. Identify the manufacturer's part number, and heat, batch or serial number (when applicable).

d. Identify the shipped quantity and unit of measure.

e. Be signed by a duly authorized officer or quality representative of the supplier / manufacturer – whose name and title shall be legible.

Section D: Process Qualification and Control (Calibration)

For each ***calibrated tool, gauge, instrument or other calibrated device*** purchased by the Government, the manufacturer's certified calibration report and Certification of Conformance shall be provided.

Each calibration report shall:

a. Identify a unique calibration report / tracking number.

b. Be traceable to the customer contract / order number.

c. Identify the device's name, model number, and when applicable, its serial number.

d. Identify the manufacturer's recommended recalibration frequency.

e. List the date of initial calibration.

f. List the calibration technician's name.

g. List the relevant environmental conditions for each parameter calibrated.

h. Identify each standard that was used in the device's calibration, including:

   Each standard's unique identifier, with NIST traceability.

   The nominal value of each standard, as determined during its most recent calibration.

i. Record the value obtained by the device for each standard used in the calibration.

Section E: Delivery Requirements

To assure protection from damage during normal handling, transport, and storage after receipt, articles and materials shall be packaged and preserved in accordance with NPR 6000.1 – Packaging, Handling, and Transportation:

a. Level B – Preservation, Packaging, and Packing.

b. Class I – Shipping and Handling.

Marking shall include, as a minimum, nomenclature, part number, quantity, supplier, expiration date, temperature handling requirements and lot/batch information. A Certification of Conformance (CoC) is required.

Items containing hazardous materials shall have the manufacturer's Material Safety Data Sheet (MSDS) included.

Articles or materials which have shelf life limitations or storage control requirements imposed by the manufacturer, Government, NASA or the contractor shall be accompanied by positive indication of such limits. Examples include manufacturing date, cure date, assembly date or temperature storage limitation.

Articles and materials shall have a minimum of seventy-five percent of the manufacturer's designated shelf life remaining at the time of shipment.

Approved Dec 2012

Steve Foster

Jaime Garcia

Nadia Wright