



NASA Armstrong Flight Research Center
PROCUREMENT QUALITY REQUIREMENTS

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.



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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.

A certification of conformance is required for all custom parts. These parts require a Non Standard Parts Approval Report (NSPAR) prior to use. These parts are made from source control drawings (SCD). This type part includes any Electrical, Electronic or Electromechanical (EEE) part that that has been modified or is not used as intended. Custom parts require build records, test data and destructive physical analysis (DPA) data accompany the parts.

All EEE parts affected by this attachment require trace ability from the manufacturing location by Cage Code to where the parts were made. Parts require full trace ability to lot, date code, and batch code type data.

All EEE parts must be in compliance with NASA-STD-8739, NASA-STD-8739.4, IPC-J-STD-001E and ANSI/ESD S20.20. (See attached)

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 manufacturer.



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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.



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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 1 July 2014

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