

Title: Quality Program Requirements for Aerotronics Suppliers

Supplier must have as a minimum:

- Quality Management System
- Quality Manual
- Corrective Action Plan
- Final Inspection

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1.0 General

1.1 Intent. The intent of this document is best defined as Good Commercial Practice. The requirements herein can be readily and economically satisfied by competent suppliers.

1.2 Supplier Qualification. Qualified suppliers will be determined by capability surveys; product evaluation; compliance of procured material or services with Aerotrionics requirements, including on-time delivery; and the promptness and effectiveness of corrective actions taken by the supplier.

1.3 Aerotrionics Surveys and Audits. All new Aerotrionics suppliers for inventory material or operational services are required to submit completed questionnaires signed by an authorized quality representative.

Applicable Documents are:

- a) Supplier Data Sheet
- b) Supplier Quality Survey

Suppliers, who are certified to IS9000 or an equivalent standard, need only fill out a Supplier Data Sheet and submit it with a copy of their certification. Supplier facilities and operations may be surveyed either before or after the placement of purchase orders. The capability to meet Aerotrionics delivery requirements and to supply a product or service of consistent quality will be evaluated. Audits will be periodically conducted to determine compliance with our purchase requirements and the requirements of this document.

1.4 Deviation and Substitutions. Aerotrionics expect the suppliers to comply with the requirements of the purchase order. No deviation and/or substitutions in material, design, specifications, or operating performance are permissible unless documented by a purchase order change.

1.5 Rework. Suppliers do not have MRB disposition authorization for parts shipped to Aerotrionics. Aerotrionics must be notified of any nonconformance or rework request prior to the shipment of parts.

1.6 Lot Control. If parts are processed in more than one lot or on more than one machine, then these lots must be separated and clearly marked when shipped to Aerotrionics.

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1.7 Conflict Metals. Several metals commonly used in the electronic industry: gold (AU), tantalum (Ta), tungsten (W), and tin (Sn) have a variety of sources, including what has been termed as a “Conflict Region”.

Supplier must assure that any of these metals used in product or services provided to Aerotrionics are not procured as a “Conflict Metal.”

1.8 Preference for Domestic Specialty Metals. Specialty Metals must originate from “Qualifying countries” as listed in DFARS252.225.872-1

1.9 EU REACH Directive. Companies that use chemicals in their processes must meet the EU REACH Directive EC/1907/2006.

1.10 RoHS Compliance. Product or process must also meet RoHS Compliant Directive 2011/65/EU where applicable.

1.11 Denied Persons/Debarred Parties/SDN. All suppliers and subcontractors shall not conduct business with the “Denied Person List” published by the UD Department of Commerce; the “Denied Parties List” published by the Department of State”; and the “Special Designated Nationals List” published by the Department of Treasury, Foreign Assets Control.

2.0 Quality System Requirements

Suppliers of Aerotrionics products or services are expected to have established, documented, implemented and maintained a reasonable quality management system and continually improve its effectiveness.

2.1 Quality System. The quality system shall be documented in a quality manual and traceable to documented procedures/work instructions and engineering specifications.

Each inspection or testing activity shall have documentation that describes detailed requirements such as parameters to be checked, statistical methods, sampling plan, nonconformance criteria, etc. Personnel shall receive sufficient training on these procedures and work instructions to be qualified in carrying out their designated duties.

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2.2 Design Control (when applicable). A program shall be established and operational to ensure that all design changes are implemented in a smooth and timely manner and do not adversely affect quality or reliability.

A documented procedure shall exist to inform customers when a design change affects product features and performance.

2.3 Purchasing. Suppliers shall be subjected to requalification on a periodic basis. The requalification may be based on review of incoming inspection data or other analyses of performance.

2.4 Process Control. Inspection and testing results shall be recorded and analyzed using control charts or a similar technique as appropriate for the purpose of identifying problem areas and monitoring effectiveness of the quality system.

Each time any change is made in the established operation (for example, a new operator, new machine, new technique) a critical examination shall be made of the first parts processes after the change is implemented.

2.4.1 First Article Requirements. A 5 pieces first article must be carried out on all fabricated parts following a machine set-up. The supplier is responsible for meeting all requirements of the engineering specification, drawing and Purchase Order. This 100%-dimensional check as called out on the PO can be filed at the supplier and be available if requested by Aerotronics' QA.

2.4.2 Deviations to Specification. A request for deviation to a drawing or specification must be submitted and approved in writing by Aerotronics prior to the shipment of parts. Once approved, the deviation must be clearly documented and attached to the Certificate of Conformance.

2.5 Inspection, Measurement and Test Equipment. The Supplier's Quality Organization shall audit the procedures, records/equipment to assure all equipment used in inspection and test are calibrated. Calibration is to be performed in compliance with the equipment manufacturers' guidelines. Tools, gauges, test equipment, etc, that are inactive or do not require calibration, shall be so identified.

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2.6 Control of Nonconforming Product. Nonconforming product must be clearly marked and segregated to ensure that it cannot be used in production or mixed with conforming product.

Aerotrionics Quality Department must be contacted before any rework is carried out on nonconforming product that may be shipped to Aerotrionics.

2.7 Corrective and Preventative Action. Completed corrective action reports shall be maintained and referred to if a similar quality problem occurs. Preventative action shall be taken that assures the opportunity for recurrence is eliminated.

Initial response to nonconformance reports from Aerotrionics should be made within 20 days from the receipt of the report.

2.8 Handling, Storage, Packaging and Delivery. Areas for handling, storage, packaging, inspection and test of products shall be clean and well organized to ensure that they do not adversely affect the quality of the product.

Packaging shall be sufficient to prevent any damage to the product during transportation. If the supplier has a concern that damage may occur due to the length and diameter of parts with PC tails, they should contact Aerotrionics Quality department before shipping.

2.9 Quality Records. The supplier should maintain quality records for all parts shipped to Aerotrionics for a minimum of 7 years.

Revision History:

Rev.	Date	Description
1	10/05/09	original
2	12/20/09	Re-formatted
3	04/01/13	Added 1.6 Lot Control and section for Revision History
4	05/23/13	Added 1.7 Conflict Metals & 1.8 Domestic Specialty Metals
5	05/30/13	Changes 2.7 from 10 days to 20 days from receipt of the report
6	09/24/13	Added to 2.4.1 that F/A's can be maintained at the supplier
7	09/18/15	Corrected paragraph numbers to match Index. No content changes.
8	02/28/19	Added 1.9 and 1.10 to cover REACH & RoHS Compliance
9	05/11/20	Added 1.11 Denied Persona/Disbarred Parties/SDN
