Q307 Quality Requirements - rev 4/26/01

The supplier shall establish and maintain a system for the calibration of all measurement and test equipment and measurement standards in compliance with MIL-STD-45662A.

Personnel performing or inspecting special processes shall be trained and certified. Evidence of personnel certification shall be available in the area where duties are being performed. Personnel shall be recertified as a result of unsatisfactory performance, changes in techniques or required skills, and/or training, testing and certification status of personnel shall be maintained and shall be available for review by Boeing.

Records shall be maintained in a safe accessible location. This requirement shall apply to lower tier suppliers. Organizations shall be responsible for assuring that applicable records are not destroyed unless authorized in writing by Boeing.

Seller shall identify the true manufacturer's traceability number on each unit/package. Each packing slip and statement of certification shall identify the trace number as follows: "True Manufacturing Trace Number_____". (trace numbers may be serial or batch numbers, date, lot or heat codes or whatever relates the parts or materials to the manufacturing process. They may be abbreviated, DC for Date Code, LC for Lot Code, HN for Heat Treat Number, etc.).

A system of control for high strength threaded fasteners will be documented and implemented (as applicable). High strength threaded fasteners are defined as 0.190 inch diameter or larger and 150 KSI or greater tensile strength. This system will provide for:

- A. Approved manufacturers and distributors.
- B. Lot traceability to true manufacturers.
- C. Manufacturers/distributors material and test reports.
- D. Vendor certification documentation.
- E. Physical and chemical testing at receiving inspection.
- F. Fastener lot control and traceability through deliverable items.
- G. Disposition of scrap and surplus fasteners.

Prior to release, applicable procurement documents shall be approved by quality personnel to ensure inclusion of appropriate quality requirements and associated documentation.

Quality assurance shall verify, prior to acceptance, the accuracy of production jigs, fixtures, tooling masters, templates, patterns and other devices used for fabrication/inspection and establish a plan to periodically reinspect those tools used as a "media of inspection" to verify they maintain their design integrity. Records of verification of all activities shall be available for Boeing and/or government review.

The supplier shall submit procurement documents to the designated government quality representative for GSI determination prior to procurement release for the following purchase types: 1) purchases for products or services that are either complex or have critical application and which conformance to contract requirements cannot or should not, for economical reasons, be fully determined on receipt, or 2) purchases requiring direct shipment from the suppliers to the government. However, procurement quality documentation for products or services for which conformance to contractual requirements may be adequately determined by the supplier upon receipt do not require submittal to the government quality representative prior to release, but shall be available for review. Source inspection performed by and for the convenience of the government shall not replace contractor source inspection or relieve the contractor of the responsibility for ensuring product quality.

Data shall be maintained for articles identified as having characteristics of quality degradation or drift with age and/or use. The date, time or cycle at which the useful life will be expended, and the incurred operating time or cycles shall be recorded.

Controls shall be established for the handling, storage, packaging, and packing of articles and materials. The controls shall be documented and implemented throughout all operations. The controls shall prevent damage, deterioration or improper substitution of articles or materials. Cleanliness levels for articles and materials shall be maintained as provided in the purchase contract or engineering documentation.

The supplier shall prepare, maintain and deliver an Acceptance Data Package (ADP) for each hardware and software deliverable item. Questions concerning contents shall be directed to Boeing Missiles and Space Group, Huntsville, Alabama, Procurement Quality Assurance. The ADP shall include the following as applicable:

- Any waivers/deviations
- Nonconformances
- Shortages
- As built configuration
- Expended and remaining age/time cycle information applicable to the item being delivered
- 100% actual recorded measurements during the first piece inspection and recorded measurements of critical/key characteristics, interface control dimensions, and all dimensions of 4 decimal places or greater, on all subsequent parts of the same configuration.
- Where a specification allows for the selection of an optional or substitute part or material, or selection of a part, material, or finish from a qualified parts list or qualified products list, the acceptance data package as-built configuration data shall detail the actual part, material, or finished used.

For Space Station hardware, authorized markings are contained in and controlled by engineering drawings. No other markings, including quality acceptance stamps, date stamps, build paper numbers, are allowed to be stamped directly on Space Station hardware.