



# PURCHASE ORDER QA REQUIREMENTS CORONA & SAN DIEGO

Suppliers shall comply with the Quality requirements that are identified below when they are specifically included as Clauses or Attachments to the Purchase Order. All accompanying documents submitted to us by the supplier shall be of a nature which will allow legibility and reproduction.

**QNR Quality Not Required:** This note requires no Quality Management System or action by the supplier.

**QS Quality System:** The supplier shall maintain a documented Quality System (Manual). The Quality System shall address as a minimum: Receiving and Final Inspection. Calibration of measuring equipment (except Distributors). Retention of Quality Records shall be 7 years minimum.

**Calibration Service** - Suppliers of Calibration services shall maintain a Quality System in accordance with one of the following: ISO 10012, ISO 17025, ANSI Z540-1.

**Fastener Manufacturers** must be 'Accredited Laboratories' and shall comply with the 'Fastener Quality Act (FQA), Public Law 101-592'.

**Non Conformances** - The supplier must notify the Buyer of product or process anomalies, and changes in product definition. All nonconformance's to requirements shall be promptly reported to the Buyer.

**Changes** - The supplier must notify the buyer if there are any changes to products that include but are not limited to 'Manufacturing Location, Process, Equipment, Sub-tier Suppliers or Base/Raw Materials'.

**Flow Down** - The supplier shall flow all applicable P.O. Quality Clauses (if any) to sub-tier suppliers.

**Right of Access** - ATK, its customers, and regulatory agencies reserve the right of access to the supplier's facility at any reasonable time during performance of the Purchase Order.

**Prohibited Materials** - The use of unalloyed tin, cadmium or zinc is prohibited in the construction and surface finish of space hardware. Parts with tin alloys containing **97%** tin or less by weight are acceptable. Parts containing cadmium alloys or zinc alloys (e.g. brass) must be completely over-plated with an approved metal. Parts shall contain no corrosive solder flux. Any exceptions to these prohibitions must be approved by ATK in writing.

**Q1 CERTIFICATE OF CONFORMANCE:** The Supplier shall provide a Certificate of Conformance with each shipment (A .PDF file sent to Receiving and QC is Preferred). The Certificate shall include as a minimum:

- Supplier's name and location
- Manufacture's name and location (if different)
- Date of Manufacture / **expiration if applicable**
- Date of Certification
- ATK Part Number, Revision level, and Description
- ATK Purchase Order Number
- Quantity
- Identification of the lot, batch, serial number **if applicable**.
- All required Governing specifications and revisions as specified on the ATK Purchase Order Notes.
- A statement of conformance indicating that all requirements have been met.

**Q2 CHEMICAL TEST REPORT - RAW MATERIAL:** A test report must accompany each shipment. The report must indicate the actual percentage of each element that makes up the chemical composition properties of the raw materials. The report shall specifically identify the material by indication of the number of the melt, batch, lot, or other designators, as well as the applicable specification and revision.



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- Q2A PROHIBITED MATERIAL CERTIFICATION:** Certify per Q2 and provide an XRF or equivalent test or mill report. The report should quantify the prohibited materials if present. A statement that the supplied product either contains no prohibitive materials and or meets the specific limits of the prohibitive materials noted in Quality Clause QS.
- Q3 PHYSICAL/MECHANICAL TEST REPORT - RAW MATERIAL:** A test report must accompany each shipment. The report must indicate the actual physical and/or mechanical properties of the raw materials. The report must specifically identify the material by indication of the number to the melt, heat, batch, lot, or other designators, as well as the applicable material and/or process specification and revision.
- Q4 DIMENSIONAL INSPECTION REPORT:** The supplier shall submit dimensional inspection acceptance data, identifiable to the material supplied, with each shipment made. Data is to include sampling plan (if applicable), actual dimensions, and quantities inspected, accepted and rejected. Unless otherwise specified, 100% inspection of all materials, notes, and features required on all parts. Sampling plan, if approved, must be specified in the ATK Purchase Order Line Item Detail Notes.
- Q6 MATERIAL SAFETY DATA SHEET:** A Material Safety Data Sheet (MSDS) must accompany initial shipment made against this Purchase Order.
- Q7 MANDATORY INSPECTION POINT - Completed items:** require inspection and test verification by ATK Quality at the Supplier's facility prior to shipment. Supplier shall provide 72 hours advance notice of activities to the ATK Buyer to permit scheduling of Source Inspection. ATK source inspector shall provide Q7 document as Evidence of compliance that shall accompany each shipment made.
- Q7A MANDATORY INSPECTION POINT - In-Process:** verification required by ATK Quality at the Supplier's facility, see ATK Purchase Order Line Item Detail Notes for specific requirement. Supplier shall provide 72 hours advance notice of activities to the ATK Buyer to permit scheduling of Source Inspection. ATK source inspector shall provide Q7 document as Evidence of compliance that shall accompany each shipment made.
- NOTE: Any source inspection by ATK or its customer does not absolve the supplier of the responsibility to provide acceptable products.
- Q8 GOVERNMENT SOURCE INSPECTION:** Items are subject to Government Source Inspection at the Supplier's facility prior to shipment. On receipt of this order, promptly furnish a copy to the Government Representative who normally services your facilities, or, if none, to the nearest Defense Supply Agency Inspection Office. In the event the Office can not be located, contact the ATK Buyer immediately.
- Q9 FIRST ARTICLE INSPECTION:** A First Article Inspection Report is required. A part representing the tooling and methods to be used shall be inspected by the Supplier, and documented in accordance with AS 9102. The report must include dimensional and functional data as required. The First Article Inspection Report shall accompany each shipment. A new or revised First Article Inspection Report is required when a change in design, tooling, or methods of the production process occurs.
- Q10 FIRST ARTICLE INSPECTION-SUPPLIER'S FACILITIES:** A First Article Inspection Report is required. A part representing the tooling and methods to be used shall be inspected by the supplier, and documented in accordance with AS 9102, and witnessed by a ATK Quality Representative or designee. The report must include dimensional and functional data as required. Determination of Acceptability will be made by the ATK representative and shall be noted on the report. A new or revised First Article Inspection Report is required when a change in design, tooling, or methods of production process occurs.



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**Q11 SPECIAL PROCESS SUPPLIERS:** ATK Suppliers and supplier Sub-Tiers who perform special processes or tests as identified below must assure personnel are qualified/certified as required. They shall include with each shipment:

Supplier or Sub-Tier Certification and/or Test report identifying the specifications and revision to which they conform. Certification shall include;

- Name and location of the process facility
- Date of service
- ATK Part Number, Revision level, and Description
- ATK Purchase Order number
- Quantity
- Identification of the lot, batch, serial number if applicable.
- Materials used and Processes performed
- All required processing specifications and revisions as specified, see ATK Purchase Order Line Item Detail Notes for specific requirement.
- Supporting Test data, Oven Charts, Time/Temperature Charts, Point maps, Data Files, etc. as applicable.
- A statement of conformance indicating that all requirements have been met.

Examples of Special Processes are: Firing, Pyrolysis, Autoclave cure, Flame/Metal Spraying, Welding, Heat Treatment, Plating and Coatings, Etching and priming, Nondestructive Testing (i.e. Ultrasonic, Magnetic Particle, Dye Penetrate, and X-ray inspections, etc.), Environmental and Laboratory Testing, De-scaling, Bronzing, etc.

**Q11A SPECIAL PROCESS SUPPLIERS - Customer Approved:** ATK Suppliers and supplier Sub-Tiers, who perform special processes or tests as identified in Q11, must be approved by ATK's customer. Contact the ATK Buyer for a list of customer approved special process suppliers. Certification shall be per Q11

**Q11B SPECIAL PROCESS SUPPLIERS - Boeing Approved.** ATK Suppliers and supplier Sub-Tiers who perform special processes shall be approved per Boeings D1-4426. Certification shall be per Q11 and list the Boeing Process code and the supplier Processor Code number. Contact the ATK Buyer if assistance is needed locating and approved supplier.

**Q12 PART IDENTIFICATION:** Minimum identification shall consist of the Manufacturer's part number, and trademark if applicable, on each part. If the part does not lend itself to stamping due to size, composition, etc., the container or tags shall bear appropriate identification. Parts manufactured to ATK drawings shall be identified as specified on the drawings.

**Q13 CONTAINER IDENTIFICATION:** Supplier shall identify each unit and multiple overpack container with the Part Number, ATK P.O. #, Traceability number, recommended storage conditions, and hazardous warnings as applicable. If not otherwise specified, all items shall be protectively packaged to prevent contamination and damage during handling, shipping, and storage.

**Q14 HANDLING & PACKAGING:** When Purchase Order, drawing, and/or specifications do not otherwise specify, at a minimum all items shall be enclosed with wrappings, bags, cartons, boxes, or other container, as applicable to the extent necessary to provide protection from hazards of static electricity, contamination, and physical damage encountered in general handling, shipping, and storage. Material indirect contact with metal surfaces shall not cause or promote corrosion. Packaging material used shall be non-abrasive, chemically neutral (ph 6.5 to 7.5) and have a water-soluble acidity of not more than .02% equivalent sulfur trioxide.

**Q14A HANDLING & PACKAGING of CRITICAL HARDWARE -** The supplier shall provide a Critical Hardware plan indicating special precautions to be taken to meet Q14 on Critical Hardware.



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- Q16 CUSTOMER FURNISHED MATERIAL** – Verify quantity received, paperwork matches, visual inspection for identification and possible transit damage.
- Q18 WEIGHT**-The supplier shall provide a weight report for each individual item procured on the PO. Traceability shall be maintained to all Part No's, serial/lot numbers, materials designations, and/or any other specified data/information.
- Q22 MATERIAL RETENTION:** The Supplier shall retain for a period of at least 12 months from the date of shipment, sufficient material of the same lot of each shipment to perform 2 sets of certifiable tests as required by specifications and/or drawings pursuant to this Purchase Order.
- Q25 INSPECTION REQUIRED AT ATK:** This note requires no action by the supplier. This purchase requires specific inspection(s) upon receipt at ATK. A supplemental inspection plan shall be provided by the Quality Engineer.
- Q28 CALIBRATION:** Supplier shall provide a calibration certificate. The calibration standards used shall be traceable to NIST or other standard. Supplier shall notify ATK of any gages found to be "significantly" (more than 25%) out of tolerance prior to performing the calibration process. Note to ATK Receiving - New Gages/ Tools and Records etc shall be forwarded to Calibration Dept. for identification and entry into the calibration traceability database.
- Q29 STATISTICAL PROCESS CONTROL:** Statistical Process Control (SPC) techniques must be used on *Key Characteristics* on this part. See ATK Purchase Order Line Item Detail Notes for specific requirement.
- Q30 LIFE LIMITED MATERIAL:** The Supplier shall identify the material and the Certificate of Conformance with the date of expiration, including (if applicable) out-time requirements. At the time of shipment, at least 90% of the Shelf Life must be remaining. Life Limited Materials shall be packaged to assure required storage temperatures and life limited requirements are not adversely affected by the transport and/or interim storage prior to deliver. When required by specification, temperature recorders shall be included.
- Q31 MATERIAL CERTIFICATIONS:** Supplier shall provide a Certificate of Conformance for all raw materials purchased from a sub-tier used in deliverable items to ATK. See ATK Purchase Order Line Item Detail Notes for specific requirement.



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## Cross Reference

**Form 1095M-6-7-07 to New Clauses (Ref Rev Dated 6-7-07)**

1095M-6-7-07 Clause	Description	New Clause	Description
1	Material Certifications Required	Q2	Chemical Test Report –Raw Material
		Q3	Physical Test Report-Raw Material
		Q30	Life Limited Material
		Q31	Material Certifications
2	Dimensional Inspection Report Required	Q4	Dimensional Inspection Report
3	Special Process Certifications Required	Q11	Special Process Suppliers
		Q11B	Special Process Suppliers-Boeing Approved
4	ATK Supplied Material	Quality Clause Table**	ATK Supplied Material
5	Certificate of Conformance Required	Q1	Certificate of Conformance
6	First Article Inspection Required	Q9	First Article Inspection
		Q10	First Article Inspection-Supplier's Facilities
7	Source Inspection Required	Q7	Mandatory Inspection Point-Completed Items
		Q7A	Mandatory Inspection Point-In Process
8	Nondestructive Test Requirements	Q11A	Special Process Suppliers-Customer Approved
9	Right of Access	QS	Quality System
10	Critical Hardware	Q14 (Q14A)	Handling and Packaging (Critical Hardware)
11	Certificate of Calibration	Q28	Calibration
12	Customer Furnished Material	Q16	Customer Furnished Material
13	Testing	Q11	Special Process and Testing
14	Weight	Q18	Weight
15	Customer Approved Special Process	Q11A	Special Process Suppliers-Customer Approved
		Q11B	Special Process Suppliers-Boeing Approved
16	Quality System	QS	Quality System
17	Prohibitive Materials	Q2A	Prohibited Materials Certification



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## SUGGESTED CLAUSES

PRODUCT/SERVICE	STANDARD CLAUSES	SPECIAL CLAUSES (As Applicable)
Generic Program P.O.'s – Unless QNR is Specified	QS, Q1, Q13,	Q14
Fasteners (MS, NAS Parts etc)	QS, Q1, Q13 & Q14	Q14A, Q2A
Machining/Machined Details	QS, Q1, Q4, Q13, Q14, Q25 and Q31** – Q25 is not required if Q7 is imposed.	Q2, Q2A, Q3, Q7, Q7A, Q9, Q10, Q12, Q14A, Q18
Special Processes	QS, Q11, Q13 and Q14 - Q11 is often Added to Machined Detail Clauses	Q2A, Q7, Q7A, Q9, Q10, Q11A, Q14A
Tooling	QS, Q1, Q4, Q25, Q31 – Q4 & Q31** are often waived on minor tool orders and Q25 is not required if Q7 is imposed	Q2, Q2A, Q3, Q7, Q7A, Q14, Q14A, Q18
Testing	QS, Q11, Q13 and Q14	Q7, Q7A, Q11A, Q14A
Prepreg *	QS, Q1, Q13, Q14, Q30 and Q31	Q3, Q6, Q7A
Core	QS, Q1, Q13, Q14, Q25, Q31**	Q2, Q2A, Q3, Q7, Q14A
Other Life Limited Materials (Adhesives, Kapton etc)	QS, Q1, Q13, Q14, and Q30	Q6, Q31, Q14A
Primary Raw Materials *	QS, Q1, Q6 and Q31	Q2, Q2A, Q3, Q22,
Chemicals	QS, Q1, Q6 and Q31	
Calibration & Thermocouples	QS, Q28	

\* If Purchase is for Material, specified by an ATK Material Specification, do not add Notes Q2, Q3

\*\* Not required if ATK supplied material