



PROCUREMENT QUALITY PROVISIONS

Revision Q

October 3, 2023

NOTICE:

The quality provisions below are part of the Purchase Order to the extent applicable. Supplier shall NOT disposition nonconforming material “use-as-is” or “repair” without the written permission of Fatigue Technology (FTI) Quality Assurance. Nonconforming items received are subject to rejection and return to the Supplier at no cost to FTI.

DEFINITIONS:

Flying Parts – Parts that are assembled on an Aircraft. Parts are identified by starting with a 4xxx-xxx, 7xxx-xxx, 7xxx-xxx, or 5934-xxx and material for flying parts starting with 1066-xxx or 1068-xxx or as identified on the purchase order. See Section II for additional requirements.

Non-Flying Parts – Parts that do not start with a 4xxx-xxx, 7xxx-xxx, 7xxx-xxx, 5934-xxx, 1066-xxx or 1068-xxx or not identified on the purchase order.

Supplier – FTI’s direct sub-tier receiving this order.

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SECTION I (Applicable to All Procurements)

1. Quality Assurance Program

The Supplier's Quality Program shall be in accordance with one of the following quality standards: ISO 9001-2015, AS9100-D, NADCAP and/or internationally recognized quality system.

2. FTI Inspection Rights / Right of Access

FTI and its customers, reserve the right of access to inspect/audit any or all material or processes included in the Purchase Order/Subcontract at any level of the supply chain. FTI reserves the right to inspect the material purchased under this Purchase Order/Subcontract in the Supplier's plant in general conformance with FTI general specifications for source inspection, and may be accompanied by U.S. Government/customer Representatives. The Supplier at no charge, if required, will provide appropriate facility, equipment, and personnel assistance, to FTI.

3. Calibration Control

The Supplier shall control the calibration of all measuring and testing devices against certified standards traceable to the National Institute of Standards and Technology (NIST). The calibration program shall conform to specifications ISO 17025, general requirements for the competence of testing and calibration laboratories, or ANSI/NCSL Z540-1-1994 (or more recent version), Calibration Laboratories and Measuring and Test Equipment General Requirements, and/or industry standard within certification.

4. Specialty Metals Provision

When this provision is invoked on the purchase order, no foreign melted specialty metals may be used as the raw material for products listed on the purchase order. Material certification must state the country of origin of the raw material. Certain qualified countries are excepted as listed in DFARS 225.872-1. DFARS 252.225-7009 provides a definition for "Specialty Metals."

This requirement may be called out in FTI raw material specification listed on the drawing or order.

5. Raw Material Identification and Certification

- A. All raw material must be identified with applicable specification, nomenclature, type of material, condition, and manufacturer. The Supplier shall submit with each lot a copy of the mill test reports, a copy of the manufacturer's certification, and any other reports required by the drawing or purchase order.
- B. All materials purchased shall be traceable from the manufacturing mill, to heat treat, to distributor, and to FTI.
- C. All materials heats / lots shall be clearly marked and identified to prevent mixing.
- D. For materials produced per an Aerospace Material Specification (AMS), they shall be procured and delivered in compliance with AS6279, Standard Practice for Production, Distribution, and Procurement of Metal Stock.

6. Statement of Work

This Purchase Order is not complete without a Statement of Work (SOW). The SOW defines the goods and services to be furnished by the Supplier. The SOW takes precedence over all other documentation.

7. Fastener Material Identification and Certification

If this Purchase Order is for procurement of ASTM, ASME, SAE, MS, BAC, AN, or NAS specification fastener(s) (bolts, nuts, screws, studs, washers, rivets, pins, etc.), the following applies.

The approved manufacturer shall include with each shipment:

- A. Test reports from a U.S. Government accredited laboratory that substantiates qualification and/or acceptance.
- B. Certification of Compliance signed by an officer of the company declaring that the items conform to all requirements specified in applicable standard and/or specification documents, manufacturer's identity and lot number, and that an original copy of the accredited laboratory report, if applicable, is on file for inspection and review by FTI.
- C. Items that are individually or intermediately packaged within a container shall be marked on the exterior of each package with the manufacturer's identity, lot number, and purchase order number.
- D. Evidence that all fasteners are in compliance with the Fastener Quality Act.

The distributor shall include with each shipment:

- E. The approved manufacturer's certification statement as noted in 7.A and 7.B above.
- F. Certification of compliance signed by an officer of the company declaring:
 - 1. That the items were manufactured by a manufacturer listed as approved for the item.
 - 2. Conformity to all requirements based on the distributor's evaluation and review of the items and accompanying manufacturer and laboratory test reports.
 - 3. The manufacturer's identity and lot number.
 - 4. That no rework or alterations have been performed.
 - 5. Evidence of compliance with the Fastener Quality Act.
- G. Items that are intermediately packaged with a container shall be marked on the exterior of each package with the manufacturer's identity and lot number, the distributor's identity and purchase order number.

8. Specification Control Drawing

Acceptance test and inspection for material purchased to FTI part numbers will be according to the values and requirements of the FTI specification control drawing or functional test procedure unless otherwise specified on the Purchase Order.

9. Product/Process Changes and Transfer of Work

Supplier shall obtain FTI written consent before making any of the following changes:

- Design, configuration, and performance characteristics of the supplies to be delivered under this Purchase Order.
- Materials, manufacturing processes, or special processes utilized in the production of such goods.

Supplier does not have authority to deviate or substitute material or material properties on an FTI drawing.

The Supplier will not, and the Supplier will ensure its supply chain will not, initiate a movement or transfer of the work from the location without FTI's prior written approval. Supplier shall contact FTI and may need to complete the appropriate documentation required by end customer.

10. General Compliance

Supplier shall provide appropriate certification with each lot of material delivered certifying that all materials, processes, and/or finished items supplied under this order were inspected, tested, and found to comply with the requirements of the Purchase Order.

All lots shall be segregated appropriately to prevent mixing and ensure traceability.

11. Records Retention Requirements

All records of supplier processing (including but not limited to inspection data, test results, routings, process certifications, material certifications, and any other data/documentation generated while processing FTI purchase orders) shall be maintained for a minimum of the calendar year plus 10 years, and are subject to FTI, U.S. Government, or customer examination upon request. After this calendar year plus 10 years period and if the supplier intends to destroy or delete these records, the supplier shall notify FTI of its intention to destroy the records. If FTI requires these records, the supplier shall supply the original or copies of these complete records.

All other Quality Records shall be maintained for a minimum of the calendar year plus 10 years, and are subject to FTI, U.S. Government, or customer examination upon request.

12. Workmanship / FOD

All items delivered on this order shall be fabricated and finished in a thorough, high quality, workmanship-like manner. Particular attention shall be given to blemishes, cleaning, removal of foreign material, identification, and general appearance.

Foreign Object Debris (FOD) will be handled in accordance with NAS 412 and/or AS9146 as applicable. AS9146 is preferable.

13. Sub-Tier Suppliers – Flowdown

Sub-tier Suppliers are required to meet the requirements of FTI purchase orders, drawings, and related specifications. Suppliers are responsible for flowing down applicable procurement quality provisions to sub-tier Suppliers.

14. Mercury Contamination

By certification of conformance, the seller certifies that the material furnished herewith has not been in direct contact with mercury or any of its compounds nor with any mercury-containing device employing only a single boundary of containment.

15. Identification of Limited-Calendar-Life Materials

The Seller shall maintain adequate procedures for control of limited-calendar-life materials and/or if Purchase Order requires delivery of limited-calendar-life material, the Seller must identify each item, package, or container with the expiration/manufacture date, storage temperature, and special handling conditions. In addition to the normal identification, special handling conditions shall be recorded on certifications and shipping documents for the material. Safety Data Sheets (SDS) shall be supplied with each shipment. The product must have a minimum of 90% of its intended shelf life remaining when received at FTI.

16. Process Control

The Supplier shall maintain control and approval of all manufacturing and inspection processes used in the performance of this order. The Supplier shall maintain objective evidence of process qualification in accordance with applicable specifications. The approval status shall be subject to review and approval/disapproval by FTI.

17. Packaging for Shipment

Parts:

All parts should be packaged for shipment in the manner they were received. If multiple lots are being shipped in one box, the part(s) must be clearly marked or segregated to ensure no mixing.

Otherwise, all fabricated metal parts shall be packaged to prevent part-to-part contact. Individually bagging, wrapping, and rolling in paper, dividers, or separators, and other appropriate methods must be utilized to accomplish this requirement. Small screw machine type parts and similar sized items may be bagged only.

Raw material bars must be palletized or in crates and must be secured safely to prevent rolling. Unsecured loads will be returned to Supplier at Supplier's expense.

Equipment shall be packaged and/or coated to provide protection against damage and/or corrosion in transit and storage. Packaging shall have external marking for special handling required. Otherwise, packaged parts will be returned if not in compliance with above requirements.

18. Resubmission of Rejected Material

All items rejected by FTI and later resubmitted by the Supplier shall bear an adequate indication of such resubmission on those items or on the shipping document. Reference shall be made to the FTI rejection document and evidence given that the causes for rejection have been corrected.

19. Notification of Changes

Supplier shall notify FTI when changes occur that will affect the Quality System, such as changes of address/location, ownership, company name, Quality Manager, Quality Management System (QMS), or QMS approvals.

Supplier shall also notify FTI in writing if there are any changes to any process that may affect form, fit, or function. These changes would require FTI approval.

20. Counterfeit Parts / Material Prevention

Seller shall establish and maintain a Counterfeit Parts / Material Prevention and Control Plan using AS5553 and or AS6174 to ensure Counterfeit Work is not delivered to FTI.

21. Contractor Lockout/Tagout

FTI follows lockout/tagout procedures as defined by OSHA 29CFR 1910.147. All contractors working on or near machines or equipment at FTI that can potentially discharge a hazardous amount of stored energy must be properly trained in OSHA 29CFR 1910.147. In addition, any restrictions or prohibitions of the outside employer's energy control program will be properly communicated to FTI. All contractor work involving lockout/tagout will be coordinated with the Maintenance/Facilities Supervisor prior to commencing work.

22. Nonconforming Product – In process / Notice of Escapement

If suspected or known nonconformances or discrepancies are discovered while processing a part for FTI (processes include but are not limited to outside machining, outside processing, etc.), the supplier shall notify FTI of the nonconformance and await FTI's disposition.

If it is suspected or known that nonconforming product has been delivered to FTI, the supplier must immediately notify FTI, followed by a letter to FTI procurement. The letter will at a minimum contain the following information:

- Number of parts shipped.
- Date parts shipped.
- Packing slip and Purchase Order parts shipped against.
- Job Number(s).
- Discrepancy to Engineering / Purchase Order requirements.
- Immediate correction to prevent additional nonconforming product from being manufactured.

23. Corrective Action

Upon written notification from FTI, the supplier must provide written response to Corrective Action Requests (CARs) no later than the date indicated on the request. FTI reserves the right to reject any root cause and/or corrective action determination provided by the supplier, and may request subsequent investigation and/or corrective action to either FTI or supplier-initiated corrective action requests. If the supplier is late in responding to corrective action requests by FTI, or if FTI requires subsequent corrective action, FTI reserves the right to withhold acceptance of shipments until supplier corrective action is submitted to FTI's satisfaction. FTI may dictate the format of the CAR to be an 8D per RM13000.

24. Records of Certification/Registration

If certified to AS9100, AS9110, AS9120, and/or NADCAP, supplier must maintain objective evidence of CRB certification or registration on file at supplier's facility. Objective evidence shall include:

- A. The accredited AQMS certificate(s) of registration.
- B. The audit report(s), including all information pertaining to the audit results in accordance with the applicable certification or registration scheme.
- C. Copies of all CRB finding(s), objective evidence of acceptance of corrective action(s), and closure of the finding(s).

25. Right of Access to CRB

FTI reserves Right of Access to all CRB records, applicable accreditation body, applicable Registrar Management Committee (RMC) and other regulatory or government bodies for the purpose of verifying CRB certification or registration criteria, and verifying that methods are in accordance with the applicable IAQG certification or registration scheme.

26. Audit Results/Data Reporting to IAQG

- The CRB has supplier's written permission to provide audit results or data to IAQG membership as required by the applicable IAQG certification or registration scheme.
- Provision of FTI Quality Data to CRB: FTI-identified findings and supplier's quality performance data shall be provided to the CRB during certification or registration and surveillance activity upon request by FTI.
- CRB Access to Proprietary Data: The CRB shall be provided access to proprietary data applicable to FTI products, including FTI Proprietary Information and Materials, to the extent necessary to assess supplier's compliance to AQMS requirements. The CRB shall agree to keep confidential and protect FTI proprietary information under terms no less stringent than supplier's contractual agreement with FTI. Supplier will assure that such information is conspicuously marked "FTI PROPRIETARY."
- Supplier Compliance with CRB Requirements: Supplier shall comply with all CRB requirements imposed to issue and maintain certificate or registration.

27. NADCAP Registered Special Processors - Boeing

If Purchase Order is associated with a Boeing aircraft, supplier shall be NADCAP accredited for equivalent or similar technologies/processes as required by Boeing document D1-4426, "Approved Process Sources."

28. Operator Self-Verification Program

If the supplier uses an Operator Self-Verification (OSV) program, supplier shall comply with the requirements in AS9162 "Aerospace Operator Self Verification Programs". FTI shall retain all rights to conduct surveillance at supplier's facility to determine supplier's compliance to the requirements of AS9162.

29. Statistical Sampling Plans – AS9138

If Purchase Order is associated with a Boeing aircraft, supplier must either employ 100% inspection of applicable design characteristics or an inspection sampling plan that meets the requirements of AS9138 *Quality Management Systems Statistical Product Acceptance Requirements* as defined by X31764.

For all other orders unless an inspection plan is called out on the purchase order or drawing, supplier must either employ 100% inspection of applicable design characteristics or an inspection sampling plan that meets the requirements of AS9138 *Quality Management Systems Statistical Product Acceptance Requirements*.

30. Use of Acceptance Authority Media (AAM)

Use of Acceptance Authority Media (AAM) shall be considered as a personal warranty of compliance and conformity. Reference Boeing PO Note Q29 and Form X31764.

31. Awareness

The supplier shall ensure that persons who may affect the quality of the product / service provided to FTI are aware of:

1. Their contribution to product or service conformity,
2. Their contribution to product safety, and
3. The importance of ethical behavior.

32. Delegated Product Release Verification

AS9117 Delegated Product Release Verification (Flow-down to Supply Chain): When Supplier delegates product verification, Supplier shall conform to the requirements of AS9117, "Delegated Product Release Verification," as may be amended from time to time. FTI reserves the right to conduct surveillance at Supplier's facility to determine that Supplier's quality system conforms to the requirements of AS9117.

AS9117 establishes minimum requirements for Supplier's delegation of product verification. When delegating product verification, Supplier is not relieved of its obligations under this contract.

Aerospace standards such as AS9117 can be obtained from SAE International at: <http://standards.sae.org>.

33. FAA-PMA Marking – Boeing End Use

Unless explicit contractual direction is given to the contrary, no articles (or constituent parts thereof) ordered by FTI shall contain any Federal Aviation Administration- Parts Manufacturer Approval (FAA-PMA) markings and the accompanying paperwork (e.g., packages, shippers, etc.) shall not contain any FAA-PMA markings.

THE SUPPLIER WILL PLACE THE FOLLOWING STATEMENT ON THE SHIPPING DOCUMENTATION OF ALL SHIPMENTS TO FTI:

"Boeing End Use only: Seller hereby acknowledges that the parts and/or materials being shipped under this order are intended for use under Boeing's Federal Aviation Administration (FAA) issued Production Certificate 700 and no articles (or constituent parts thereof) or the accompanying paperwork (e.g., packages, shippers, etc.) contain any Federal Aviation Administration- Parts Manufacturer Approval (FAA-PMA) markings."

34. DPAS Rated Order - 15 C.F.R. Part 700

If so identified, this Order is a "rated order" certified for national defense use, and Seller shall follow all the requirements of the Defense Priorities and Allocation System Regulation (15 C.F.R. Part 700).

-Section II continues on next page -

SECTION II (Applicable for all *Flying Parts*)

1. Supplier and Subcontractor Product Quality Program

Supplier or subcontractor shall in the performance of this Purchase Order/Subcontract provide and maintain a product quality program that is in conformance with adequate supporting documentation. U.S. Government/customer and FTI representatives may review your facilities to establish conformance to the applicable quality control requirements. At a minimum, the Supplier will maintain material identification, records of inspections and traceability to the National Institute of Standards and Technology (NIST) for all equipment used for quality conformance and acceptance.

2. Special Process Certification

- A. The Supplier shall submit with each lot / job, copies of the certification for all special processes/tests performed in fabricating or processing material for FTI.
- B. If the drawing requires qualification, the supplier shall retain evidence of the qualification. FTI may ask for a copy of this qualification.

3. Approved Supplier

The items on the purchase order shall be provided by a Supplier who is currently approved by one or more of the following:

- A. FTI Approved/Preferred Supplier List.
- B. Suggested Supplier on a Source Controlled Drawing (SCD) for the part being ordered.
- C. Supplier approved by the customer and required to be used by contract.
- D. Distributor catalog items in accordance with MIL SPEC and applicable "Qualified Products List" (QPL).
- E. When in question, contact FTI Purchasing.

4. NADCAP Registered Special Processors

For special processing all other *flying parts* not defined in Section 1, the supplier is required to hold valid NADCAP accreditation for the special process they are providing if applicable; customer approval is required for special processing to a customer specification if applicable.

Examples include heat treat, chemical processes, NDT, shot peening, material testing, composite manufacturing and testing.

Flying part raw material must be heat treated at NADCAP approved sources.

5. First Article/Piece Requirements AS9102

For suppliers that are manufacturing build-to-print to an FTI drawing, a first article per AS9102 (current revision) shall be maintained on file at the Supplier per the documentation requirements of this document. FTI may request the FAI report or an FAI for the order per Section III of this document or at any point after the completion of the contract.

Per AS9102 Rev C, suppliers performing special processes (as defined in AS9102 Rev C), are also required to meet the requirements of AS9102. External suppliers providing special process(es) can satisfy this requirement by either:

- Documenting the design characteristics and associated results on a First Article Inspection Report (FAIR).
- Documenting the design characteristics and associated results on a detailed CoC.
 - This option is preferred by FTI

The supplier shall perform a full FAI or a partial FAI for affected characteristics, when any of the following occurs:

- 1. A change in engineering definition affecting design characteristics.
- 2. A change in manufacturing source(s), process(es), inspection method(s), tooling, materials/alternate materials, or location of manufacture.
- 3. A change in the numerical control program or translation to another media.
- 4. A natural or man-made event, which can adversely affect the manufacturing process.
- 5. An implementation of corrective action required to complete a previous FAI, as defined in 4.5 of AS9102.
- 6. A lapse in production for two years for any characteristics that may be impacted. This lapse is from the completion of the last production operation to the actual restart of production.

6. Flying Part Raw Material Requirements – Build to Print per FTI Drawing

- All raw material used to for flying part manufacturing shall be per the FTI drawing and as required FTI-8701. No deviations or substitutions are allowed unless in writing by FTI Engineering.
- Material must be certified to the required material specification by the original producer. Producer is defined in AS7766 *Terms Used in Aerospace Metals Specifications* and AS6279 *Standard Practice for Production, Distribution, and Procurement of Metal Stock*.)
- Material furnished by FTI for build to print meets this requirement and is to be returned if not used unless directed differently by FTI Purchasing or Engineering. Traceability of material furnished by FTI must be maintained.

-Section III continues on next page -

SECTION III (Special Provisions as Indicated on the Purchase Order)

1. Casting Identifications

All castings shall be identified by a permanent part number, lot number or by a method that will give complete traceability of chemical analysis, physical analysis, X-ray and heat treat.

2. Deliverable Documentation/Samples

- A. When functional tests are specified by this order or by the design documentation, a copy of the actual test results shall be submitted.
- B. All X-ray, chemical analysis, physical analysis, weld, or other reports as applicable.
- C. Pre-seal and bond inspection reports as applicable.
- D. A summary of all nonconforming material, process, or test deviations.
- E. A traceability list of all lot numbers of key parts and assembly dates.

3. First Article Per AS9102

A first article per AS9102 is required to be submitted to FTI prior to the first production run. Acceptance of all production shipments will be withheld until the first article is approved by FTI Quality Assurance Department. Part submitted for first article approval must have been manufactured on production tooling using production methods and techniques.

- A. The first article shall be inspected for compliance by the Supplier's Quality Control Department to all requirements specified in the applicable drawing, Source Control Drawing (SCD), and purchase order. The first article must be so marked and identified with the appropriate part number and shall be accompanied with a copy of the approved Quality Control Department's actual dimensional/test and special process certification data, if appropriate. Actual results should be documented in a format consistent with AS9102 (current revision).
- B. For first article/piece shall be submitted for each special process, including plating, painting, brazing, powder coat, welding, etc. performed on mechanical parts/assemblies, along with special process certifications in accordance with applicable specification.

FTI may request an FAI ship with the production run of parts.

4. Net-Inspect FAI Per AS9102

First Article Inspection per AS9102 Must be documented in the Net-Inspect Software.

Reference Boeing PO Note Q48.

5. Fatigue Technology Source Inspection

FTI will inspect the materials submitted in the performance of this Purchase Order/Subcontract at the Supplier's plant in conformance with FTI procedure for source inspection, applicable test procedures or inspection instructions. FTI's Quality Representative may elect to perform inspection/test either on a random basis or to the extent of 100-percent inspection. In any event, when the item(s) is ready for source inspection or when practical, 72 hours in advance, notify the FTI Purchasing Department that source inspection is needed. The Supplier shall furnish at no cost the necessary facilities and equipment, supply data, and perform tests as required by applicable drawings, specifications, and inspection instructions under the surveillance of the FTI Supplier Quality Representative.

6. Government Source Inspection

U.S. Government inspection is required before shipment from your plant. Upon receipt of this order, promptly notify the U.S. Government Representative who normally services your plant so that preparation can be made for U.S. Government inspection.

7. Acceptance by User (Internal Use Only)

Material ordered under this note is for maintenance or for evaluation and will be accepted by the user to his/her requirements. This material is not intended for delivery to FTI customers.

8. Advanced Product Quality Planning and Production Part Approval Process per AS9145

This is a first time build and requires Advanced Product Quality Planning (APQP) and Production Part Approval Process (PPAP) per AS9145.

-Change Log continues on next page -

CHANGE LOG

Revision Level	Change Description	Date
P	Complete rewrite of document	March 30, 2023
Q	Added Change Log, added AS6279 to Section I Note 5, clarified supplier requirements for product and process changes in Section I Note 9. Added Section 2 Note 6 Raw Material Requirements. Moved sentence in Section 2 Note 5. Added Section III Note 4 Net-Inspect FAI and renumbered original 4-7 to 5-8. Update FAIR per AS9102 in all sections to align with new revision of AS9102.	October 3, 2023