

**QAP-CSI003827661**  
**DTD 26 MAR 08**

**DEFENSE SUPPLY CENTER PHILADELPHIA**  
**QUALITY ASSURANCE PROVISION**

**NSN: 5315-00-382-7661**  
**P/N: ST2053-022**

This Quality Assurance Provision (**QAP**) is to be used in conjunction with any orders/contracts for the cited NSN

**FIRST ARTICLE REQUIREMENTS**

(AFMCI 64-110, AFMCI 23-102 AND FAR Part 9, Sub Part 9.3) (Additional instructions on page 3)

1. DATE  
2 Apr 07

2. PR/MIPR NUMBER

3. PART NUMBER

ST2053-022

4. NSN

5306-00-382-7661

5. FIRST ARTICLE QUANTITY

THE FIRST ARTICLE IS 3 UNIT(S) OF LOT/ITEM I

AND WILL BE:  PART OF PRODUCTION QUANTITY  IN ADDITION TO PRODUCTION QUANTITY

6. ARTICLES

WILL  WILL NOT SERVE AS MANUFACTURING STANDARD

7. LONG LEAD TIME ITEMS

REQUIRED  NOT REQUIRED

(See FAR 52.209-3 or -4, alternate I)

8. SPECIAL REQUIREMENT/PRODUCTION FACILITIES (See FAR 52.209-3 or -4 Alternate I)

REQUIRED  NOT REQUIRED

"The First Article offered must be manufactured at the facilities in which that item is to be produced under contract, or if the First Article is a component not manufactured by the contractor, such component must be manufactured at the facilities in which the component is to be produced for the contract. A certification to this effect must accompany each First Article which is offered."

9. TEST/INSPECTION REQUIREMENTS

A.  CONTRACTOR TESTING  GOVERNMENT TESTING

Performance or other characteristics which the First Articles must meet are identified in drawing ST2053 and specifications identified therein.

B. The detailed technical requirements for First Article approval tests are contained in Block 12 of this form and LPE-QAR-003.

(Cite Spec and Para number)

C.  TEST PLAN REQUIRED

- (1) DD Form 1423 ELIN A001
- (2) Delivery due 30 calendar days from date of contract.
- (3) Number of days for government approval/disapproval 45 days.

D. Contractor's notification to ACO and PCO (Requesting Activity) of test time and location due 10 days prior to start of testing.

E.  TEST REPORT REQUIRED

- (1) DD Form 1423 ELIN A002
- (2) Due 175 calendar days from date of contract.
- (3) Forward to PCO and 558 CBSS/GBHBC, 3001 Staff Dr., Suite, 1AB85A, Tinker AFB, OK 73145-3041 Attn: FA Monitor
- (4) Government written notice of approval/disapproval due 60 days after receipt of contractor's report.

F. FIRST ARTICLE DELIVERY:

(1) Due within \_\_\_\_\_ calendar days from date of contract.

(2) Notify \_\_\_\_\_ calendar days prior to shipment.

(3) Delivered to government at \_\_\_\_\_

(Set Forth Consignee and Address)

(4) Government written notice of approval/disapproval within \_\_\_\_\_ days after receipt of first article package.

G. Estimated cost of government testing/inspection evaluation.

\$ 800

DODAAC: FA8111

10. DISPOSITION OF FIRST ARTICLES

Approved First Articles will be forwarded to Air Force Supply.

1 (insert quantity) First Articles will be expended in testing. Residual components of disapproved First Articles  will be returned to the contractor/ will be retained by \_\_\_\_\_ pending disposition instructions from the contractor.

First Articles will be installed on aircraft/equipment to determine Proper fit/function. Approved article will remain on the aircraft/equipment and will not be forwarded to USAF Supply, but will be considered part of the contract quantity.

Disapproved First Articles will be returned to the contractor/ will be retained by \_\_\_\_\_ pending disposition instructions from the contractor.

On purchase requests designated as direct shipments, the following disposition will apply. (NOTE: Always applicable on Foreign Military Sales (FMS)).

- a. Approved First Articles will be returned to the contractor for shipment with production item.
- b. Disposition of disapproved First Articles will remain the same as marked above.

Other Disposition: See Block 12 of this Form.

2. PR/MIPR NUMBER	3. PART NUMBER ST2053-022	4. NSN 5306-00-382-7661
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11. CONDITION(S) FOR WAIVER OF FIRST ARTICLE APPROVAL

- a.  Offerors who have previously furnished production quantities of the same or similar article to the prime contractor for delivery to the  X  Government,  X  DoD,  X  Air Force.
- b.  Offerors currently in production of the same or similar article for a \_\_\_\_\_ Government, \_\_\_\_\_ DoD, \_\_\_\_\_ Air Force contract and who have received First Article approval under the existing contract.
- c.  Offerors who have previously furnished production quantities of the same or similar article to the  X  Government,  X  DoD,  X  Air Force, provided articles thus furnished, have exhibited satisfactory performance in service in the opinion of the Air Force.
- d.  Provided not more than  36  months have elapsed since completion of the contract.
- e.  First Article testing will not be waived.
- f.  See Remarks in block 12 below.

NOTE TO BUYER: UNDER CONDITIONS A AND C ABOVE, THE COGNIZANT ENGINEERING ACTIVITY WILL DECIDE WHETHER OR NOT THE ITEM HAS EXHIBITED SATISFACTORY PERFORMANCE IN SERVICE AND PREPARE AND RETAIN SUPPORTING DOCUMENTATION TO FULLY JUSTIFY THE DECISION. The buyer must solicit dual prices *that is, both with and without requirement for first article approval* AND MUST FURNISH THE COGNIZANT ENGINEER ACTIVITY WITH THE FOLLOWING INFORMATION ON THE PREVIOUSLY SUPPLIED ARTICLE:

A. PROCURING OFFICE                      B. CONTRACT NUMBER                      C. DATE OF CONTRACT                      D. SPECIFICATION NUMBER AND REVISION

\_\_\_\_\_

12. REMARKS

9.B. First article test requirements shall be per LPF-QAR-003 and the following:

- a. All three first articles shall be inspected in accordance with the requirements of paragraphs 3.1, 3.2, 3.3, 3.4, and 3.5 of LPF-QAR-003.
- b. After completion of inspections per 9.B.a above, one article shall be destructively tested/evaluated in accordance with the requirements of paragraph 3.6 of LPF-QAR-003.

10. Disposition of first Articles:

- a. Approved first article(s) will be retained at the contractor's facility for reconditioning (if necessary) with final acceptance the same as for production items. If a first article is expended in testing, approval of first article will constitute acceptance.
- b. Disapproved first article(s) shall be retained at the contractor's facility, unless specified otherwise by the PCO.

11. The cognizant Government engineering authority shall be the final authority for determining if a contractor meets the conditions of waiver identified in 11.a or 11.c.

First article testing is waived if the offeror is the prime contractor, Pratt & Whitney.

This is a critical part used in the F100 series turbine engine. Poor quality parts will have an adverse effect on mission capability and system safety. For this reason, First Article Testing is required to insure first time manufacturers or manufacturers that have not produced the item within three years manufacture parts in accordance with the drawing and specification requirements.

13. COGNIZANT ENG ORGANIZATION RESPONSIBLE FOR CONDUCTING AND/OR APPROVING TEST (Name, Organization, Phone)	14. PR INITIATOR (Name, Organization, Phone)
Hank Schank, 540 CBSS/GBEAB, (405)734-8790, 4/2/07	



**CONTRACT DATA REQUIREMENTS LIST**  
(1 Data Item)

Form Approved  
OMB No. 0704-0188

The public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to the Department of Defense, Executive Services and Communications Directorate (0704-0188). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. Please do not return your form to the above organization. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

<b>A. CONTRACT LINE ITEM NO.</b>	<b>B. EXHIBIT</b>	<b>C. CATEGORY:</b> TDP _____ TM _____ OTHER _____
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<b>D. SYSTEM/ITEM</b> ST2053-022	<b>E. CONTRACT/PR NO.</b>	<b>F. CONTRACTOR</b>
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<b>1. DATA ITEM NO.</b> A002	<b>2. TITLE OF DATA ITEM</b> FIRST ARTICLE TEST REPORT	<b>3. SUBTITLE</b> NOUN: Bolt - Machine, .190-32, Hex NSN: 5306-00-382-7661
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<b>4. AUTHORITY (Data Acquisition Document No.)</b> DI-NDTI-80809	<b>5. CONTRACT REFERENCE</b>	<b>6. REQUIRING OFFICE</b>
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<b>7. DD 250 REQ</b> YES	<b>9. DIST STATEMENT REQUIRED</b> A	<b>10. FREQUENCY</b> ONCE	<b>12. DATE OF FIRST SUBMISSION</b> SEE BLOCK 16	<b>14. DISTRIBUTION</b>		
		<b>11. AS OF DATE</b> SEE BLOCK 16	<b>13. DATE OF SUBSEQUENT SUBMISSION</b>	<b>a. ADDRESSEE</b>	<b>b. COPIES</b>	
					<b>Draft</b>	<b>Final</b>
						<b>Reg</b>
						<b>Repro</b>

<b>16. REMARKS</b>  <p>The First Article Test Report shall satisfy all requirements in the First Article Test Plan. All drawing requirements must be satisfied including dimensions, visual inspections, non-destructive inspections, manufacturing processes and material requirements. The test report shall indicate that any sources used to perform significant manufacturing processes are approved/certified by the OEM (PWA) or the CEA (540 CBSS/GBEA, formerly OC-ALC/LPFR). A copy of the process sheets used to manufacture the First Articles shall be included in the report. A Government representative must coordinate on the Test Report.</p> <p>Additional guidelines for the Test Report are contained in LPF-QAR-003.</p> <p>The First Article Test Report shall be received by the PCO 175 calendar days after award date or 120 calendar days after receipt of First Article Test Plan Approval, whichever occurs first.</p>	
<b>15. TOTAL</b> → 0 0 0	

<b>G. PREPARED BY</b> Aaron Friesenhahn	<b>H. DATE</b> 2 Apr 07	<b>I. APPROVED BY</b> C. Randy McIntosh	<b>J. DATE</b> 2 Apr 07
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<b>17. PRICE GROUP</b>
<b>18. ESTIMATED TOTAL PRICE</b>

# INSTRUCTIONS FOR COMPLETING DD FORM 1423

(See DoD 5010.12-M for detailed instructions.)

## FOR GOVERNMENT PERSONNEL

- Item A.** Self-explanatory.
- Item B.** Self-explanatory.
- Item C.** Mark (X) appropriate category: TDP - Technical Data Package; TM - Technical Manual; Other - other category of data, such as "Provisioning," "Configuration Management," etc.
- Item D.** Enter name of system/item being acquired that data will support.
- Item E.** Self-explanatory (to be filled in after contract award).
- Item F.** Self-explanatory (to be filled in after contract award).
- Item G.** Signature of preparer of CDRL.
- Item H.** Date CDRL was prepared.
- Item I.** Signature of CDRL approval authority.
- Item J.** Date CDRL was approved.
- Item 1.** See DoD FAR Supplement Subpart 4.71 for proper numbering.
- Item 2.** Enter title as it appears on data acquisition document cited in Item 4.
- Item 3.** Enter subtitle of data item for further definition of data item (optional entry).
- Item 4.** Enter Data Item Description (DID) number, military specification number, or military standard number listed in DoD 5010.12-L (AMSDL), or one-time DID number, that defines data content and format requirements.
- Item 5.** Enter reference to tasking in contract that generates requirement for the data item (e.g., Statement of Work paragraph number).
- Item 6.** Enter technical office responsible for ensuring adequacy of the data item.
- Item 7.** Specify requirement for inspection/acceptance of the data item by the Government.
- Item 8.** Specify requirement for approval of a draft before preparation of the final data item.
- Item 9.** For technical data, specify requirement for contractor to mark the appropriate distribution statement on the data (ref. DoDD 5230.24).
- Item 10.** Specify number of times data items are to be delivered.
- Item 11.** Specify as-of date of data item, when applicable.
- Item 12.** Specify when first submittal is required.
- Item 13.** Specify when subsequent submittals are required, when applicable.
- Item 14.** Enter addressees and number of draft/final copies to be delivered to each addressee. Explain reproducible copies in Item 16.
- Item 15.** Enter total number of draft/final copies to be delivered.
- Item 16.** Use for additional/clarifying information for Items 1 through 15. Examples are: Tailoring of documents cited in Item 4; Clarification of submittal dates in Items 12 and 13; Explanation of reproducible copies in Item 14.; Desired medium for delivery of the data item.

## FOR THE CONTRACTOR

**Item 17.** Specify appropriate price group from one of the following groups of effort in developing estimated prices for each data item listed on the DD Form 1423.

a. Group I. Definition - Data which is not otherwise essential to the contractor's performance of the primary contracted effort (production, development, testing, and administration) but which is required by DD Form 1423.

Estimated Price - Costs to be included under Group I are those applicable to preparing and assembling the data item in conformance with Government requirements, and the administration and other expenses related to reproducing and delivering such data items to the Government.

b. Group II. Definition - Data which is essential to the performance of the primary contracted effort but the contractor is required to perform additional work to conform to Government requirements with regard to depth of content, format, frequency of submittal, preparation, control, or quality of the data item.

Estimated Price - Costs to be included under Group II are those incurred over and above the cost of the essential data item without conforming to Government requirements, and the administrative and other expenses related to reproducing and delivering such data item to the Government.

c. Group III. Definition - Data which the contractor must develop for his internal use in performance of the primary contracted effort and does not require any substantial change to conform to Government requirements with regard to depth of content, format, frequency of submittal, preparation, control, and quality of the data item.

Estimated Price - Costs to be included under Group III are the administrative and other expenses related to reproducing and delivering such data item to the Government.

d. Group IV. Definition - Data which is developed by the contractor as part of his normal operating procedures and his effort in supplying these data to the Government is minimal.

Estimated Price - Group IV items should normally be shown on the DD Form 1423 at no cost.

**Item 18.** For each data item, enter an amount equal to that portion of the total price which is estimated to be attributable to the production or development for the Government of that item of data.

These estimated data prices shall be developed only from those costs which will be incurred as a direct result of the requirement to supply the data, over and above those costs which would otherwise be incurred in performance of the contract if no data were required. The estimated data prices shall not include any amount for rights in data. The Government's right to use the data shall be governed by the pertinent provisions of the contract.



U.S. AIR FORCE

# LPFR QUALITY ASSURANCE REQUIREMENTS FOR FIRST ARTICLE TEST PLANS & REPORTS



1. This document provides guidelines for the preparation of first article test plans/test reports for F100 engine parts where referenced within the first article data of a contract.

2. **FIRST ARTICLE QUANTITY.** The quantity of first articles shall be per the contract. The quantity of articles allowed for destructive testing, in accordance with the contract, shall be tested per the first article procedure in its entirety, to include the destructive testing. The remaining articles shall only be tested per the nondestructive portions of the procedure.

### 3. TESTING REQUIREMENTS.

3.1. Testing shall consist of, but shall not be limited to, the verification of the following.

3.1.1. Dimensional conformance including finish requirements.

3.1.2. Conformance to non-destructive inspection requirements (FPI, Ultra-sonic, Eddy Current, X-ray, visual)

3.1.3. Conformance of material properties to include mechanical, metallurgical and chemical.

3.1.4. Conformance to other required processes, specifications, and standards listed on the drawing including sub-tier specifications and standards, special requirements as described in the engineering instructions (EI), quality plans, etc.

3.2. First articles shall be serialized. Serial Numbers are to be identified prior to commencement of testing unless otherwise specified.

### 3.3. Dimensional Inspection.

3.3.1. All dimensions, as listed on the assembly drawing and detail drawings, to include drawing notes, shall be measured where possible on all first articles 100% (no sampling allowed).

3.3.2. A tabular format shall be used with drawing dimension, tolerance, measurement, and instrument/gage/tooling/serial number used.

3.3.3. All tooling and gaging used for inspection and acceptance/rejection of first articles shall have calibrations from a laboratory traceable to NIST and in

accordance with ISO 10012-1 (formerly MIL-STD-45662), listed in a (tooling & gaging table) table, table shall include nomenclature, serial number, calibration frequency, next calibration date, range, least increment, and accuracy. Listing shall also include alignment tools and constraint fixtures.

3.3.4. Inspection results shall be presented in a table showing the feature measured, dimension and tolerance, actual reading and gage serial number used.

3.4. Nondestructive Inspections (NDI), including Fluorescent Penetrant Inspections (FPI), Ultrasonic Testing (UT), Eddy Current (EC), Radiographic Testing (x-ray), and visual inspections, shall comply with LPR-QPR-018 and meet the following:

3.4.1. All first articles shall receive 100% of the inspections identified on the QAD. Sampling shall not be allowed.

3.4.2. NDI shall be per the applicable specification(s).

3.4.3. Sources used shall be Pratt & Whitney approved per the OC-ALC/LPFR letter granting source approval to the contractor.

3.4.4. NDI results shall be presented in a table showing the feature inspected, acceptance/rejection criteria used, results and gage/master serial number used. In cases where photographic standards within a VIS specification are applied to an NDI, the inspection report shall include a copy.

3.4.5. Inspection Masters/Transfer Masters shall have current calibrations. A copy of the calibration(s) shall be included into the report.

3.4.6. Level III or Level II inspectors, as applicable, shall be required. A copy of the inspector's certification(s) shall be included into the report.

3.5. Visual Inspections shall include:

3.5.1. Specific visual inspections per a Pratt & Whitney Visual Inspection Standard (VIS) document shall be called out of the applicable VIS and cited as specific inspections.

3.5.2. Visual inspection results shall be presented in a table showing the feature inspected, acceptance/rejection criteria used, results, and gage/master serial number used (as applicable).

3.5.3. In cases where photographic standards within the VIS are used, the inspection report shall include a copy.

3.6. Material properties testing shall include mechanical properties, metallurgical properties, and chemical composition tests, as applicable, per the material specifications and the following:

3.6.1. Composition, heat treat condition, and other characteristics/properties, as listed in the technical requirements section, acceptance section, and/or quality sections of the specification(s) so as to verify that the materials and processes are sound, clean, and free of imperfections detrimental to the performance of the part or assemblies.

3.6.2. In some cases a material suppliers certification will not be sufficient and the Contractor shall have redundant testing performed.

3.6.3. Metallurgical microanalysis, as applicable, for raw materials, welds, brazings, and coatings shall be conducted. Results shall include the complete laboratory report including photomicrographs.

3.6.4. Mechanical testing, as applicable, per manufacturing specifications and the drawing(s).

3.6.5. In cases where the applicable specifications require test reports, these shall accompany the First Article Test Report (FATR).

#### 4. SUBMITTAL.

4.1. The First Article Test Plan (FATP) shall be delivered to the Contracting Officer in accordance with the schedule as listed in the contract, or Form DD1423. The FATP shall provide a detailed description of specific testing instructions to be used. Generalized instructions will not be acceptable.

4.2. The First Article Test Report (FATR) shall be delivered to the Contracting Officer in accordance with the schedule as listed in the contract, or Form DD1423. All laboratory test results, including those resultant from testing conducted at the contractor's facility and including sub-vendor testing, shall be provided with the FATR in their complete form as provided by the testing laboratory(ies).

#### 5. DISPOSITION OF PARTS.

5.1. When required by the contract, the remnants from destructive testing shall be delivered with the First Article Test Report.

5.2. When required by the contract and following the completion of non-destructive testing, one article shall be delivered to the Contracting Officer and packaged in accordance with contract requirements. Marking on the package shall be

**UNSERVICEABLE - Condition Code "R"**. Deliver this part with the First Article Test Report. The other(s) shall be handled in accordance with the contract.

**6. GENERAL REQUIREMENTS.**

6.1. All First Articles and all Production Articles shall be fabricated from material whose metallurgical state is in compliance with the drawing requirements, as well as all sub-tier specifications and standards referenced therein.

6.2. All First Articles and all Production Articles shall be new manufactured under this contract. No items manufactured under previous contracts shall be delivered without approval.

6.3. The subcontractors previously identified by the contractor as sources to be employed, to include laboratory testing, shall be the only sources used. If the contractor wishes to employ a subcontractor other than previously identified, they shall substantiate that the new source is OEM approved for the specific testing required. A change in the address of a source shall be construed as a change of source. Employment of alternate sources shall only be authorized by OC-ALC/LPFR.

Engineering Instructions shall take precedence over all other technical instructions.



GRIZELDA LOY-KRAFT, Chief  
F100 Engineering Source Approval  
Fighter Propulsion Division  
Propulsion Directorate