

DATA ITEM DESCRIPTION

Title: FIRST ARTICLE TEST/INSPECTION PROCEDURES AND PLAN (FAT/IPP)

Number: DI-NDTI-82327

Approval Date: 20200820

AMSC Number: F10194

Limitation: N/A

DTIC Applicable: No

GIDEP Applicable: No

Preparing Activity: 184 (AFLCMC/WLE)

Project Number: NDTI-2020-004

Applicable Forms: N/A

Use/Relationship: The First Article Test/Inspection Procedures and Plan (FAT/IPP) is used to establish the test and inspection procedures, test and inspection equipment and tooling requirements and setup, inspection criteria, and method of documentation that shall be used by the contractor for first article testing and inspection.

This Data Item Description (DID) contains the format, content, and intended use information for the data deliverable resulting from the work task described in the contract.

This DID can be used in conjunction with DI-NDTI-82326, *First Article Test/Inspection Procedures and Report (FAT/IPR)*, or DI-NDTI-80809, *Test/Inspection Report*. (Copies of these documents are available online at <https://quicksearch.dla.mil>.)

Requirements:

1. Reference documents. The applicable issue of the documents cited herein, including their approval dates and dates of any applicable amendments, notices, and revisions, shall be as specified in the contract.
2. Format. The FAT/IPP shall be in the contractor's format with the following exceptions:
 - a. Text of body paragraphs shall be in Helvetica typeface and 11-point font.
 - b. A Table of Contents shall be on its own dedicated page(s) located just after the Cover Page.
 - c. A table of FAT/IPP revisions shall be on a separate page(s) located just after the Table of Contents.
3. Content. The FAT/IPP shall include the following:
 - 3.1 Cover Page. The Cover Page shall include the following information:
 - a. Contractor's company name and logo.
 - b. Contractor's company address and phone number.
 - c. Contractor's Commercial and Government Entity (CAGE) code where the First Article (FA) is to be manufactured.
 - d. The item name under contract. The item name shall be the same as the name listed in the title block on the engineering drawing for the FA item.
 - e. The Cover Page shall identify that the document is a First Article Test/Inspection Procedures and Plan. The document title shall be as follows: "First Article Test and Inspection Procedures and Plan," or, if an actual test is not required by the Technical Data Package (TDP), "First Article Inspection Procedures and Plan".
 - f. A "Submitted For" section, which shall contain the following information:

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- (1) The National Stock Number (NSN) for the FA.
 - (2) The contract number.
 - (3) The FA part number as shown in the contract, along with the revision letter of the engineering drawing that the FA is being manufactured to.
 - (4) The software version and license information of any software that is tested.
 - (5) The Serial Number (SN). The SN shall be listed on the Cover Page in the exact configuration it is delivered to the contractor from the procuring Program Manager as required by the contract and Item Unique Identification (IUID) Contract Data Requirements List (CDRL).
 - (6) The CDRL Item Number (e.g., A001).
- g. The date the FAT/IPP was submitted to the Government, the contractor document number, and the document revision letter. See 3.3.a below for revision letter requirements.
- h. A "Submitted To" section listing the Procurement Contracting Officer (PCO) and the Government office and address listed on the contract.
- i. List the name and title of the document preparer and contractor Quality Assurance (QA) representative with places for each person's signature and the date it is signed.
- j. A Distribution Statement and Export Control Notice, in accordance with Department of Defense Instruction (DoDI) 5230.24, *Distribution Statements on Technical Documents*, shall be located in the footer in accordance with contract requirements. (Copies of this document are available online at <https://www.esd.whs.mil/>.)
- k. A Destruction Notice shall be located in the footer in accordance with contract requirements: "DESTRUCTION NOTICE: For classified documents, follow procedures in DoD 5220.22-M, *National Industrial Security Program Operating Manual*, Chapter 5, Section 7, or DoDM 5200.01, Vol 2, *DoD Information Security Program Marking of Information*. For unclassified, limited documents, destroy by any method that will prevent disclosure of contents or reconstruction of the document." (Copies of these documents are available online at <https://www.esd.whs.mil/>.)
- 3.2 Table of Contents, which shall identify the following:
- a. The title and starting page of each major section, paragraph, and appendix of the plan.
 - b. The page, identifying number, and title of each illustration (for example: figure, table, photograph, chart, and drawing).
- 3.3 Table of FAT/IPP revisions, which shall include the following:
- a. The base FAT/IPP designation. The initial designation shall be "-". The subsequent revision designations shall begin with the letter "A". Letters I, O, Q, S, X, and Z shall not be used as, or in, the revision designation of the FAT/IPP (e.g., I and AI shall not be used).
 - b. The specific revision(s) made to the document stating specifically what was changed from the previous revision.
 - c. The date the revision(s) was (were) made.

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- 3.4 Purpose of the test and inspection, to include the method(s) by which the contractor satisfies the requirements of the item's TDP and any applicable requirements set forth in the related standards, processes, and documents referenced therein.
- 3.5 FAT notification requirements, based on the contract-required timeline for the Test and Inspection notification to the procuring office, shall be stated in the FAT/IPP.
- 3.6 List of applicable documents, to include: Government, commercially available, and non-commercially available documents listed in the engineering drawings or models that are planned to be used in the manufacture of the FA. The Government, commercially available, and non-commercially available documents shall be listed in their own separate subsections.
- 3.7 Complete identification of tools and equipment that may be used by QA for the inspection and for the testing of the FA, including the following:
- a. Drawings, schematics, and photographs of the tools and equipment
 - b. Nomenclature
 - c. Tool and equipment range data in imperial units
 - d. Accuracy data in imperial units
 - e. A brief description of the tools and equipment
- 3.8 Description of FA. The description shall include drawings, figures, diagrams, software version, and photos, if available.
- 3.9 Test and Inspection Instructions, which shall contain the following:
- a. The address of the physical location where the test and inspection is accomplished. The test and inspection instructions shall state if the address is the same as the company address on the Cover Page.
 - b. Detailed step-by-step procedures that the individual conducting the test shall follow outlining how the FA test is to be accomplished.
 - c. Test tool and equipment set up. Drawings, schematics, models, and photographs showing the test setup shall be included.
 - d. One set of FA drawings or model(s) with all inspection points circled and numbered.
 - e. The method for recording the test and inspection results, which shall contain the following:
 - (1) The forms found in SAE International AS9102, *Aerospace First Article Inspection Requirement*, or equivalent. (Copies of these forms are available online at <https://www.sae.org>.)
 - (2) Any Pass or Fail test result forms, other test result forms, and the criteria by which the tests are to be assessed shall be included in the FAT/IPP. Test result forms included in Acceptance Test Procedures (ATP), that are part of the TDP provided to the contractor, shall be included.
 - f. The plan to document and address any test and inspection failures and the root cause corrective actions necessary to prevent future failures. The SAE International AS9131, *Aerospace Series – Quality Management Systems – Nonconformity Data Definition and Documentation, Appendix B - Nonconformity Form*, or equivalent form, shall be used to document the failures and corrective actions. (Copies of this form are available online at www.sae.org.)

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3.10 The FAT/IPP shall contain the following appendices:

- a. The FAT/IPP shall contain an appendix providing documentation showing that the contractor meets the quality standards as required by the contract.
- b. The FAT/IPP shall contain an appendix providing a Requirements Traceability Matrix or diagram to track all requirements planned for testing.

End of DI-NDTI-82327.