

DATA ITEM DESCRIPTION			Form Approved OMB No. 0704-0188	
1 TITLE Product Quality Assurance Test, Demonstration, and Evaluation Plan		2 IDENTIFICATION NUMBER DI-QCIC-81199		
3 DESCRIPTION/PURPOSE 3.1 The purpose of the Product Quality Assurance Test, Demonstration, and Evaluation Plan is to provide information regarding a contractor's test, demonstration and evaluation program. This information identifies the contractor policy, various tests, test and evaluation methods and procedures, and any critical issues to be resolved by testing during the manufacturing process. (Continued on Page 2)				
4 APPROVAL DATE (YYMMDD) 910503	5 OFFICE OF PRIMARY RESPONSIBILITY (OPR) A/SICET-RE	6a DTIC APPLICABLE	6b GIDEP APPLICABLE	
7. APPLICATION/INTERRELATIONSHIP 7.1 This Data Item Description contains the format and content preparation instructions for the data product generated by the specific and discrete task requirement as delineated in the contract. 7.2 This Data Item Description (DID) is related to DI-QCIC-81198 "Product Assurance Quality Program Plan" and DI-QCIC-81200 "Quality Inspection Test, Demonstration and Evaluation Report." If the data required under this DID is included as part of DI-QCIC-81198, this DID should not be required as a separate submission. (Continued on Page 2)				
8. APPROVAL LIMITATION		9a. APPLICABLE FORMS		9b. AMSC NUMBER A6124
10. PREPARATION INSTRUCTIONS 10.1 <u>Reference Documents.</u> 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. 10.2 <u>General.</u> The Product Quality Assurance Test, Demonstration, and Evaluation Plan shall be in distinct and sectionable parts as delineated below. Each specific section shall be complete and stand alone without referencing other sections and procedures for performance of the specified tests. 10.3 <u>Format.</u> The Product Quality Assurance Test, Demonstration, and Evaluation Plan shall be in a contractor selected format consistent with the following requirements for each section: 10.3.1 <u>Cover.</u> The Product Quality Assurance Test, Demonstration, and Evaluation Plan shall be bound with a material sufficient to protect the contents. Size of the bound plan shall be 8 1/2 x 11 inches. The front cover shall contain the following items: a. "Product Quality Assurance Test, Demonstration, and Evaluation Plan, First Article/Acceptance Inspection Procedure." b. Nomenclature (Item Name and Type Designation) c. Contract Number (Continued on Page 2)				
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3. Description/Purpose (Continued)

3.2 First Article (initial production samples) inspection and testing shall provide a means to evaluate the product for conformance with specified contract requirements prior to initial full scale production.

7. Application/Interrelationship (Continued)

7.3 Where serious considerations for cost, high technology, weight and volume, maintenance, ruggedness of materials, and long operational life exist, reliability and maintainability involvements should be integrated into the test plan.

7.4 This data item supersedes DI-R-1701 "Product Assurance Test, Demonstration and Evaluation Plan."

10. Preparation Instructions (Continued)

d. Contractor (Full Name and Address)

10.3.2 Title page. A title page shall be included under the cover and shall include same information as in 10.3.1 plus Date of Issue or Date of Revision (if applicable) and Prepared By and Approved By (names and signatures).

10.3.3 Introduction page. A short narrative shall delineate the purpose of this test plan, the First Article (FA) acceptance and inspection responsibilities, sampling plan tables, and whatever else the contractor considers important here.

10.3.4 Test Procedure page. This page shall delineate the following items:

- a. Test Procedure per DID Identification Number
- b. Section Number (eg., Section I, II, etc.)
- c. Title of Section
- d. Nomenclature (Title and Type Designation)
- e. Contract Number
- f. Contractor Name and Address
- g. Total Pages of Procedure

10.3.5 Table of contents page. List titles of all areas covered along with page numbers (upper caps preferable).

10.3.6 List of test equipment page. A table citing all test equipment employed to conduct tests shall be given. This table shall include equipment name, manufacturer, model, serial number, meter range, accuracy, date of last calibration, and if equipment is an alternate.

10.3.7 List of abbreviations and terms. A list of all technical abbreviations and terms used shall be included with their meaning. Common terms and abbreviations shall not be included.

10.3.8 Test procedure, body. The contents shall be prepared legibly and of sufficient character size to be easily read and reproducible. Diagrams, schematics, and pictorials employed shall be part of this area but included prior to the test data sheets. The test data sheets shall record all data resulting from the tests. Such data for inclusion shall consist of, but not be limited by, the following items: test equipment serial number(s), product type description, contract number, specification and any amendments and their respective dates of issue, number tested and accepted, tested by (name tester), supervised by (name supervisor), and the government quality assurance representative (QAR name). The test procedure itself shall be a detailed step-by-step course of test actions to be performed in proper sequence for determining conformance to specified contractual requirements.

10.4 Specific sections. The specific sections to be included within the test plan shall include but not be limited to those areas cited below.

10.4.1 Visual-Mechanical. This test area shall consist of inspections dealing with visual and mechanical requirements, construction and interchangeability.

10.4.2 Electrical/Mechanical performance. Complete performance requirements and test procedures shall be stated and referenced to the contractual documents.

10.4.3 Environmental tasks. All tasks within this area for test shall be accomplished in accordance with the contractual requirements.

10.4.4 Electromagnetic Interference (EMI). A separate test plan document shall be developed by the contractor in accordance with Notice 4 of MIL-STD-461A for such equipment qualified to EMI requirements. MIL-STD-461C shall be utilized for test plan development only when specified in the contractual documents.

All test setups and procedures shall be made in accordance with Notice 3 of MIL-STD-462. A list of all test equipment used shall be included in this test plan.

10.4.5 Reliability. If required by contractual documents, a separate reliability test plan and test procedures shall be prepared in accordance with Tasks 101 and 102 of MIL-STD-781D and 4.1.4 of MIL-HDBK-781. The reliability test plan(s) shall identify all the reliability tests required by the contract. Test procedures for each test shall be prepared and included within the reliability test plan. Included within the test procedures shall be an estimated test schedule (calendar time) for all tests to be performed during the course of the entire contract. Sample size, test frequency, test duration, and total samples rejected shall be given. Test facilities utilized shall include a diagram of same along with test equipment layouts.

10.4.6 Maintainability. If required by contractual documents, a separate maintainability verification and evaluation test plan shall be prepared in accordance with, but not be limited to, 4.2 of MIL-STD-471A. Maintainability test procedures shall be adhered to in accordance with 4.3 of MIL-STD-471A in order to determine that specified test requirements have been met and verified.

10.4.7 Computer software. If required by contract, a formal qualification test plan (FQTP) for conducting qualification testing shall be developed in accordance with 4.3 of DOD-STD-2167A.