

DATA ITEM DESCRIPTION

Title: Design Data and Calculations

Number: DI-GDRQ-80650

AMSC Number: N4493

DTIC Applicable: N/A

Office of Primary Responsibility: NAVSEA 55Z3

Applicable Forms: N/A

Distribution Statement A: Approved for public release, distribution is unlimited.

Approval Date: 18 July 1988

Limitation: N/A

GIDEP Applicable: N/A

Description/Purpose: This type data consists of graphs, mathematical curves, analysis, tables and empirical data which reflect quantitatively the design and capabilities of the equipment.

The purpose of this type data is to enable the Government to verify that the equipment being furnished and represented by this type data is in accordance with the requirements of the contract.

Application/Interrelationship: This Data Item Description (DID) contains the format and content preparation instructions for the data product generated by the specific and discrete task requirement as delineated in the contract. It is applicable to contracts for acquisition of items via a specification, prepared in accordance with MIL-STD-961, where it is necessary to specify detailed technical content requirements. It should be used in lieu of DI-MISC-80296 for these types of contracts.

The applicable specification containing the technical content for the design data and calculations shall be stated in Block 16 of the DD Form 1423, Contract Data Requirements List.

This DID is applicable whenever calculations are required for evaluation and verification of the design capabilities of equipment.

This DID supersedes: DI-MISC-80296

Requirements:

1. **Format.** The Design Data and Calculations shall be in contractor format.
2. **Content.**

General content. The Design Data and Calculations shall contain sufficient information to ensure that the contractor has met or exceeded all the requirements of the contract. Data shall include:

- a. Complete narrative
- b. Graphs
- c. Mathematical curves
- d. Tables
- e. Empirical data required to evaluate the equipment as specified in the contract.

Technical content. Technical content shall be in accordance with the Appendix entitled "Design Data and Calculations Technical Content Requirements" contained in the applicable military specification as stated in the DD. Form 1423, Contract Data Requirements List.

3. **End of DI-GDRQ-80650**

DATA ITEM DESCRIPTION

Title: Test/Inspection Report

Number: DI-NDTI-80809B

AMSC Number: N/A

DTIC Applicable: N/A

Office of Primary Responsibility: F/AFMC-DOP

Applicable Forms: N/A

Distribution Statement A: Approved for public release. Distribution is unlimited.

Approval date: 970124

Limitation: N/A

GIDEP Applicable: N/A

Description/Purpose: The test/inspection report is used to document test/inspection results, findings, and analyses that will enable the Government or Contracting Agency to evaluate compliance with system requirements, performance objectives, specifications, and test/inspection plans.

Application/interrelationship: This Data Item Description (DID) contains the format and content preparation instructions for the data product generated by the specific and discrete task requirement as delineated in the contract.

This DID is applicable to engineering (developmental), preliminary qualification, qualification, and acceptance testing.

This DID supersedes DI-NDTI-80809A and DI-MISC-80653.

Requirements:

- 1 Format. Contractor format is acceptable. Organize the information required by paragraph 2 and its subparagraphs in a manner that facilitates presentation and understanding.
- 2 Content. The test/inspection report shall contain the following information, as applicable.
 - 2.1 The following information shall appear on the outside front cover and title page:
 - a. Report date
 - b. Report number (contractor or Government)
 - c. Contractor's name, address, and commercial and Government code
 - d. Contract number and contract line item number or sequence number (if applicable)
 - e. Type of test/inspection (for example, first article acceptance test, quality performance inspection, developmental test, qualification test, environmental test)
 - f. Identification of item tested/inspected
 - g. Date or period of test/inspection
 - h. Name and address of requiring Government activity
 - i. Security classification, downgrading and declassifying information, if applicable
 - 2.2 Table of Contents. The table of contents shall identify the following:
 - a. The title and starting page of each major section, paragraph, and appendix of report
 - b. The page, identifying number, and title of each illustration (for example; figure, table, photograph, chart, drawing, etc.)
 - 2.3 Introduction. The introduction shall include the following information:
 - 2.3.1 Test/inspection objective(s). The specific test/inspection objective(s) as specified in the contract tasking document.
 - 2.3.2 Item(s) tested/inspected. Complete identification of the item(s) tested/inspected including the following:
 - a. Nomenclature
 - b. National stock number
 - c. Model number, part number, and serial number

- d. Type of item (for example; prototype, production item, laboratory model)
 - e. Serial or lot number
 - f. Applicable engineering changes
 - g. Production item specification, if applicable
 - h. Date of manufacture
- 2.3.3 Test/inspection requirements. Complete identification of the test/inspection requirements correlated to contractual requirements including the following:
- a. Required test/inspection parameters
 - b. Performance requirements, acceptance or compliance limits, and environmental criteria
- 2.4 Summary. Complete test/inspection report summary including the following:
- a. A brief discussion of the significant test/inspection results, observations, conclusions, and recommendations covered in greater detail elsewhere in the report
 - b. Proposed corrective actions and schedules for failures or problems encountered
 - c. Identification of deviations, departures, or limitations encountered, referenced to the contract requirements
 - d. Tables, graphs, illustrations, or charts as appropriate to simplify the summary data
- 2.5 Referenced documents. Complete identification of all documents referenced in the test/inspection report including the following, as applicable:
- a. Prior test/inspection reports on the same item
 - b. Test/inspection plans and procedure documents
 - c. Prior certifications of compliance
 - d. Contractor's file designation where test/inspection records are maintained
 - e. Input parameters used

Note: The applicable issue of the documents cited therein, including their approval dates and dates of any applicable amendments, notices, and revisions, shall be as specified in the contract.

- 2.6 Body of report. The body of the test/inspection report shall be as follows:
- 2.6.1 Test equipment identification. Complete identification of each item of test equipment used in the test/inspection including the following:
- a. Nomenclature
 - b. Model number
 - c. Serial number
 - d. Manufacture
 - e. Calibration status
 - f. Accuracy data
 - g. Comments, if applicable
- 2.6.2 Test/inspection facility installation and set-up. Complete description of the physical set-up used in conducting the test/inspection to include the following:
- a. Location or orientation of the item
 - b. Location, orientation, or settings of test equipment and instrumentation
 - c. Location, orientation, or settings of sensors and probes
 - d. Location or orientation of interconnections, cables, and hoop-ups
 - e. Electrical power, pneumatic, fluidic, and hydraulic requirements

Drawings, illustrations, and photographs may be used for clarification

- 2.6.3 Test/inspection procedures. Complete description of the procedures used in conducting the test/inspection to include the following:

- a. Item selection and inspection that verified suitability for test/inspection
 - b. Summarized sequence of testing/inspection steps, including a description of how the item was operated during the test/inspection, and any control condition imposed
- 2.6.4 Test/inspection results and analysis. A copy of all test/inspection results and analysis to include the following:
- 2.6.4.1 Recorded data. The actual recorded data (for example, log book entries, oscillographs, instrument readings, plotter graphs). If the recorded data is extensive, it shall be provided in an appendix.
 - 2.6.4.2 Test/inspection results. Identification of all test/inspection results to include the following:
 - a. Matrices comparing results achieved against test/inspection objectives or requirements
 - b. A discussion of these matrices as to their significance, and how they compare to any prior test/inspection
 - c. Calculation examples
 - d. Discussion of any anomalies, deviations, discrepancies, or failures including their impact, causes, and proposed corrective actions. The discussion shall address discrepancies between design requirements and the tested/inspected configuration.
- 2.6.5 Conclusions. Test/inspection conclusions distinguished between objective and subjective to include the following:
- a. The effectiveness of the test/inspection procedures in measuring item performance
 - b. The success or failure of the item to meet required test/inspection objectives
 - c. The need for repeat, additional, or alternative tests/inspections
 - d. The need for item redesign or further development
 - e. The need for improved test/inspection procedures, techniques, or facilities
 - f. The adequacy and completeness of the test/inspection requirements
- 2.6.6 Recommendations. Recommendations appropriate to the test/inspection results and conclusions including the following:
- a. Acceptability of the item tested/inspected (pass or fail)
 - b. Additional testing/inspection required
 - c. Redesign required
 - d. Problem resolution
 - e. Test/inspection procedure or facility improvements
 - f. Disposition of items tested/inspected
 - g. Documentation changes required
 - h. Testing/inspection improvements
- 2.7 Authentication. The following certifications shall be included, as applicable:
- 2.7.1 Authentication of test/inspection results. A statement that the test/inspection was performed in accordance with applicable test/inspection plans and procedures, and that the results are true and accurate. The authentication shall include the signature of the contractor personnel that performed the test(s)/inspection(s), a contractor representative authorized to make such certification, and any Government witnesses.
 - 2.7.2 Authentication of prior validation. A statement identifying those requirements not tested/inspected or measured that were previously validated. Include identification of the data and method employed for such validation (for example, prior to test/inspection, analytical verification, equivalent item, etc.). The authentication shall include the signature of a contractor representative authorized to make such authentication and any Government witness.

2.7.3 Authentication of acceptability. A statement that the item tested/inspected either passed or failed item acceptability requirements. This authentication shall include the signature of a contractor representative authorized to make such authentication and any Government witness.

2.8 Appendices. Appendices shall be used to append detailed test/inspection data, drawings, photographs, or other documentation too voluminous to include in the main body of the report. This includes referenced documentation not previously provided by the Government, and test/inspection reports from any associated test/inspection activity that may have performed some of the testing/inspecting requirements.

3 End of DI-NDTI-80809B