

DATA ITEM DESCRIPTION			Form Approved OMB No. 0704-0188	
2. TITLE PRODUCTION INSPECTION EQUIPMENT TEST SYSTEMS ENGINEERING DESIGN DATA		1. IDENTIFICATION NUMBER DI-RELI-80261		
3. DESCRIPTION/PURPOSE 3.1 Engineering design data provides information pertinent to the design of components, equipment, or software and necessary for the understanding of these items during subsequent test. The data is used for analytical evaluation of the inherent ability of the test systems to attain the required performance.				
4. APPROVAL DATE (YYMMDD) 861117	5. OFFICE OF PRIMARY RESPONSIBILITY (OPR) N/FLTAC 3241	6a. DTIC APPLICABLE	6b. GIDEP APPLICABLE	
7. APPLICATION/INTERRELATIONSHIP 7.1 This 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. 7.2 This DID is applicable to all systems or equipment contracts requiring certification of inspection test equipment.				
8. APPROVAL LIMITATION		9a. APPLICABLE FORMS		9b. AMSC NUMBER N3997
10. PREPARATION INSTRUCTIONS 10.1 <u>Content and format.</u> The design data shall be in contractor format and shall include: 10.1.1 Interface schematics and block diagrams of all test stations that require certification, indicating the design and equipment to be used. 10.1.2 Detailed drawings, circuit schematics, and specifications required for non-commercial test equipment used in a test system. The schematic diagrams for each test system and items of special electrical test equipment shall disclose the electrical design of the equipment and the electrical interfaces between items of test equipment and unit-under-test. 10.1.3 Items of standard (commercial) electrical test equipment shall be represented in the diagram by appropriately identified blocks and manufacturer's calibration and user's manuals and procedures supplied. 10.1.4 The schematic diagram for each test system shall be suitable in denoting the various circuit configurations required to perform each of the various mandatory tests included in the contractor's prepared test and calibration procedures. 10.1.5 Test programs and test program translations when the test system employs automatic test equipment. The software documentation shall be suitable for analytical evaluation of the inherent ability of the programming to perform all test and calibration requirements with respect to specifications in accordance with contract requirements. The software data shall include the following:				
11. DISTRIBUTION STATEMENT <u>DISTRIBUTION STATEMENT A.</u> Approved for public release; distribution is unlimited.				

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Block 10, Preparation Instructions (Continued)

10.1.5.1 Explanation of all special purpose extensions for the program language.

10.1.5.2 Description of programs logic.

10.1.5.3 Detailed flow charts of the logic including definitions and programmer logic flow from which written.

10.1.5.4 Manuals for the system software denoting system performance.

10.1.5.5 Flow charts for each of the various mandatory tests with a detailed explanation of how program accomplishes each test with references to test circuits denoted in the schematics of above.

10.1.5.6 Program parameter data that applies to all test parameters required by specifications including all stimuli, simulations and measured values. A list in columns comparison chart form shall contain the following:

- a. Each parameter required per specifications.
- b. Parameter tolerances required per specifications.
- c. Each parameter controlled or measured in program.
- d. Tolerance limits in program for each parameter.
- e. Accuracy of each standard used by contractor to calibrate the test and/or measurement network for each parameter.