

DATA ITEM DESCRIPTION

Title: Request for Use of Government-Owned Shock Test Facilities

Number: DI-ENVR-80707A

Approval Date: 20190723

AMSC Number: N10053

Limitation: N/A

DTIC Applicable: No

GIDEP Applicable: No

Preparing Activity: SH

Project Number: ENVR-2019-003

Applicable Forms: N/A

Use/relationship: The Request for Use of Government-Owned Shock Test Facilities provides detailed item descriptive data, shock-testing requirements, and scheduling requirements. It is used to support selection of the appropriate test facility and to ensure orderly scheduling of Government facilities.

a. This data item description (DID) contains the format, content, and intended use information for the data deliverable resulting from the work task described in 3.1.15 of MIL-DTL-901.

This request applies whenever the contractor certifies that commercial shock test facilities are not available, or upon certification that applicable acquisition documents require testing by a Government-owned facility.

b. This DID supersedes DI-ENVR-80707.

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 request shall be in the contractor's format.

3. Content. The request shall include the following information:

3.1 Certification. The request shall include certification that suitable commercial facilities are not available, or certification that applicable acquisition documents require testing by a Government-owned facility.

3.2 Equipment Identification. The request shall include the following identification information:

a. Item

(1) Name

(2) Type

DI-ENVR-80707A

- (3) Nomenclature
 - (4) Rating
 - (5) Service
 - (6) Military specification and technical manual numbers
- b. Manufacturer (name and address).
 - c. Model number, part number, and serial number (as applicable).
 - d. Size or capacity (if applicable).
 - e. Plan numbers (sectional assembly and outline; revision and date).
 - f. Approximate overall dimensions of the equipment.
 - g. Weight (wet, dry, and total weight including test fixture, wet and dry).
 - h. Height of center-of-gravity above base of equipment.
 - i. Contract or purchase order number.
 - j. Description of external and internal resilient mounts, if used.
 - (1) Size(s)
 - (2) Type(s)
 - (3) Location(s)
 - (4) Specification(s)
 - (5) Mount manufacturer(s)
 - k. Major components and attached items in test (name, identification, and manufacturer).
- 3.3 Outline Drawing. Include an outline drawing of the item to be tested.
- 3.4 Test and Installation Requirements. The following information shall be included in the request:
- a. Test laboratory and address.
 - b. Applicable shock grade.

DI-ENVR-80707A

- c. Equipment type.
- d. Equipment class.
- e. Shock test type. If type B tests are required because the principal unit is too large or too heavy to permit shock testing, describe how the principal unit shall be broken down into shock-testable groups of subsidiary components.
- f. Shock test category.
- g. Equipment mounting location, i.e., plane and orientation aboard ship.
- h. Method of mounting items for tests. Designate standard test fixtures to be used or describe the design of the required test fixture. Grade, size, material, and other specification data for hold-down bolts (and any other hold-down or locating devices) shall be included. Include requirements for torqueing of hold-down bolts.
- i. Method of simulating shipboard connections.
- j. Operating conditions of equipment to be represented during tests (energized, de-energized [or both], pressurized, rated speed, temperatures, or other operating conditions). For lightweight shock tests, state the operating condition to be represented during each of the series of blows. For medium weight shock tests, state the operating condition to be represented during group I and II blows and the operating condition or conditions to be represented during group III blows. For heavyweight shock tests, state the operating condition to be represented during each test shot. For medium weight deck simulating shock tests, state the appropriate operating condition key in accordance with MIL-DTL-901 (i.e., primary operating condition, operating condition 2, or operating condition 3).
- k. Shock test acceptance criteria and associated post-test functional testing and inspection requirements. Define minimum acceptable performance of grade A items during and following shock tests, such as extent of momentary malfunction, if permitted, and degree of permanent functional impairment allowed. State requirements applicable to important characteristics, such as alignment, dielectric strength, and pressure-tight integrity. Furnish supplemental grade B acceptance criteria, if applicable. Identify requirements for monitoring equipment during tests and for functional testing and inspection after tests as required to demonstrate compliance with acceptance criteria.
- l. Activity designated as Technical Authority(ies).

3.5 Supplemental Data. The following supplemental requirements data, if such data is furnished by applicable purchase documents, shall be included in the request:

- a. Shock test category or limitations upon selection of shock test category.

DI-ENVR-80707A

- b. Requirements for Technical Authority approval of ordering data developed by the contractor for lightweight or medium weight shock tests.
- c. Permission or requirements to utilize the large floating shock platform or other Government-owned shock test facilities.
- d. Additional requirements for selection of standard test fixtures or for design of nonstandard test fixtures by the contractor, including specific criteria to simulate shipboard mounting conditions.
- e. Permission to shock test class III items in the rigidly mounted configuration only.
- f. Specific requirements for weight or design of dummy masses.
- g. Permission or requirements to simulate one or more of a group of identical subsidiary components or subassemblies.
- h. Requirements for additional heavyweight shock test shots at standoff distances greater than shot 1 standoff (defined in MIL-DTL-901).
- i. Specific requirements for partial simulation of operating conditions during shock tests in cases where it is not practical to fully simulate shipboard operating conditions.
- j. Additional limitations upon allowable loosening of fasteners.
- k. Special post-shock test noise and vibration criteria.
- l. Requirements for supplemental pre-delivery testing or examination of shock tested items.
- m. Requirements for disposition of shock tested items.
- n. Additional criteria applicable to shock test extension.
- o. Special requirements for marking of drawings.
- p. Number of articles requiring tests.
- q. Requirements for witnessing of lightweight or medium weight shock tests or associated post-test inspections.
- r. Requirements for additional distribution of high-impact shock test procedures.

DI-ENVR-80707A

s. Requirements for additional distribution of shock test reports.

t. Requirements for additional distribution of shock test extension requests.

3.6 Scheduling Requirements. The request shall include scheduling requirements pertaining to equipment delivery, pre-test inspections, installation, inspections between tests, post-test inspections, post-test operating tests (if to be conducted at a Government facility), and shipment of equipment from the test facility.

3.7 Unusual Requirements. State unusual or special precautions associated with the shock test, if any.

3.8 Shock Test Instrumentation. State requirements for shock test instrumentation, if any.

End of DI-ENVR-80707A.