

DATA ITEM DESCRIPTION**Title:** Shock Test Extension Request**Number:** DI-ENVR-80706A**Approval Date:** 20190723**AMSC Number:** N10052**Limitation:** N/A**DTIC Applicable:** No**GIDEP Applicable:** No**Preparing Activity:** SH**Project Number:** ENVR-2019-002**Applicable Forms:** N/A

Use/relationship: The Shock Test Extension Request provides information required to support approval of shock qualification for items in the basis of shock test extensions in accordance with the requirements of MIL-DTL-901.

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 3.2.2 of MIL-DTL-901.

This request applies whenever shock qualification on the basis of shock test extension is applied in accordance with the requirements of MIL-DTL-901. A single request may apply to a variety of similar new items provided that all items covered by the report yield readily to shock resistance comparisons.

Normally either 3.1 or 3.2 (in requirements below), but not both, will be applicable to a given extension request. Applicability depends on whether the item in question is identical (3.1) or similar, but not identical, (3.2) to the previously qualified item cited as the basis for extension. Both 3.1 and 3.2 may apply to a single extension request if it covers a variety of new items, some identical and some non-identical to previously qualified items.

b. This DID supersedes DI-ENVR-80706.

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 contain the following information:

3.1 Where the design and service of the new item is identical to that of a previously shock tested and approved item, or to an item that was previously approved on the basis of shock test extension, the request for approval of the new item shall include the following:

a. A copy of the original shock test report and post-shock test reports upon which the requested extension is based.

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- b. Identification of the facility that conducted the test.
- c. A copy of the Technical Authority correspondence that conveyed approval of the previously shock qualified item, if available. If not available, reference to the correspondence shall be provided.
- d. Documentation demonstrating that all applicable requirements for shock test extension contained in 3.2.1 of MIL-DTL-901 have been met.
- e. The source of any modified (non-MIL-DTL-901) shock test extension criteria, if any; evidence that these criteria have been complied with; and evaluation of the differences between these criteria and those of MIL-DTL-901.

3.2 Where the design or service of the new item is similar, but not identical, to that of a previously shock tested and approved item, or where the intended orientation or installation differences cannot be shown to be negligible from a shock standpoint, the request for extension shall include the following:

- a. Detail drawings of the tested and untested items, and delineation of shipboard installations and orientation of the items.
- b. A copy of the original shock test report and post-shock test reports upon which the request for extension is based.
- c. A copy of the Technical Authority correspondence that conveyed approval of the previously tested item, if available. If not available, reference to the correspondence shall be provided.
- d. A detailed evaluation of the design, service, orientation, and installation differences as required by 3.2.1 of MIL-DTL-901 and 3.3 below.
- e. Applicable military specifications and associated dates of issue for the original tested item.
- f. The source of any modified (non-MIL-DTL-901) shock test extension criteria, if any; evidence that these criteria have been complied with; and an evaluation of the differences between these criteria and those of MIL-DTL-901.

3.3 Comparison. The shock test extension request shall clearly identify all:

- a. Design and service differences between the new and previously shock tested item, including design differences introduced as a result of drawing revisions.
- b. Differences in shape, orientation, weight, and material composition of parts or assemblies and differences in fabrication or construction.

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- c. Differences in critical clearances.
- d. Service-related differences, such as rated pressure or rated torque.
- e. Drawings of the new and originally tested items (marked up to point out design differences).

3.3.1 The extent of design differences covered by the request for extension, such as range of piping support sizes, may be identified in lieu of identifying all design differences for each item as long as the extent of the design differences allows for evaluation of the extension in accordance with MIL-DTL-901.

3.3.2 For each difference (or range of differences) identified in 3.3 above, a comprehensive description of the methods, assumptions, and previous shock test evidence utilized by the contractor to establish compliance with all applicable shock test extension criteria specified herein shall be furnished.

3.3.3 The results of engineering calculations performed in support of the requirements for qualification by shock test extension in accordance with MIL-DTL-901 shall be furnished. Engineering assumptions attendant to these calculations shall be stated if not implicit. In general, sufficient information shall be provided to permit the Technical Authority to repeat or check the contractor's calculations.

3.3.4 Differences in the material composition and material properties of importance to the evaluation shall be cited.

End of DI-ENVR-80706A.