

# DATA ITEM DESCRIPTION

**Title:** NUCLEAR SURVIVABILITY ASSURANCE PLAN

**Number:** DI-NUOR-80926A

**Approval Date:** 20130201

**AMSC Number:** F9321

**Limitation:**

**DTIC Applicable:** N/A

**GIDEP Applicable:**

**Preparing Activity:** 27 (AFNWC)

**Applicable Forms:** N/A

**Use/Relationship:** The Nuclear Survivability Assurance Plan describes the specific methods needed to preserve a system's nuclear weapons survivability during the production acquisition phase.

a. This Data Item Description (DID) contains the format and content preparation instructions for the data product generated by the specific and discrete task requirements as delineated in the contract.

b. This assurance plan is based on the *Nuclear Survivability Design Parameters Report*, DI-NUOR-80927, which shall also be listed on the Contract Data Requirements List (DD Form 1423).

(Copies of the DID are available online at <https://assist.dla.mil/quicksearch/> or from the Standardization Document Order Desk, 700 Robbins Ave., Bldg 4D, Philadelphia PA 19111-5094.)

c. Application. When a solicitation or contract contains a requirement for nuclear survivability, this DID shall be listed on the CDRL (DD Form 1423). The documents cited in this DID are to be used for guidance and are not mandatory for the CDRLs.

d. Air Force Instruction (AFI) 10-2607, *Air Force Chemical, Biological, Radiological, and Nuclear (CBRN) Survivability*, contains the AF policy applicable to nuclear survivability.

(Copies of the AF Instruction are available online at <http://www.e-publishing.af.mil/>.)

## 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 solicitation or contract.

2. General. The Nuclear Survivability Assurance Plan shall describe test procedures, test methods, test schedules, special test equipments, and data analysis methods that are required to ensure that the system's nuclear survivability is maintained at an acceptable level during production of the system. The assurance plan shall include all contractor furnished equipments including non-developmental items and proprietary designs, materials, components or equipments, and shall include the following information:

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

## DI-NUOR-80926A

- a. A discussion of how the system's nuclear survivability will be assured during production.
  - b. A statement of how this assurance plan relates to the quality assurance program, noting any incompatibility of these programs with the nuclear survivability assurance program.
  - c. A discussion of the most critical aspects of this assurance plan, the consequences of alternative approaches considered and the risks associated with the recommended approach.
3. Format: The Nuclear Survivability Assurance Plan shall be in contractor's format.
  4. Content.
    - 4.1 Specifics described in the plan:
      - a. A listing shall be provided of piece parts, materials, components, circuits, structures, sub-assemblies, assemblies, and systems to be tested with detailed information concerning tests and parameters to be measured; monitor points and rationale for choices; ambient conditions; modes of test sample operation during the test with rationale; sample size; numbers and kinds of Government furnished equipment (GFE) and/or facilities requested; interface requirements or interaction of a subassembly with the rest of the system, which includes GFE and contractor furnished equipment (CFE); the data to be recorded and a listing of each hardness critical item (HCI), and hardness critical process (HCP) within the detailed design. A complete HCI list is a critical ingredient in the capability to manage and preserve survivable configurations and shall be provided in the plan.
      - b. The plan shall describe the test instrumentation or facilities to be employed to include special instrumentation, measurement techniques, and calibration procedures.
      - c. The plan shall provide a statement of the specific parameter values and qualities to be measured, a discussion of the specific corrective actions where these values and qualities are not achieved, and an explanation of how values for design margins shall be incorporated into the failure analysis for the equipment.
      - d. The methodology for interpreting test results shall be provided so that an assessment of how the system response to the specified threat environments can be made.
      - e. The plan shall present the sequence of the tests, the data analysis, and the specifics of the schedule to be followed, including, but not limited to, the frequency of tests, the time between testing and analysis, reporting schedules, and when the various steps are initiated.
      - f. The quantity and the types of personnel required for testing and analysis shall also be presented.
      - g. When first article tests and quality conformance inspections are not included in this plan, a specific justification shall be provided.
      - h. The plan shall identify the procedural, documentation and interface activities required of the contractor to control disciplines in support of survivability assurance. Explain how the following control disciplines are integrated:
        - (1) Configuration control
        - (2) Parts/material control
        - (3) Production/manufacturing control
        - (4) Quality assurance/ quality control

## DI-NUOR-80926A

i. The plan shall identify the approach that will be used to manage the hardness assurance program and the responsibilities and interfaces of all contractor, subcontractor, and supplier organizations/groups involved with survivability assurance planning and implementation, and the means by which the progress and results of survivability assurance test/inspections will be reviewed and evaluated in a timely manner. The means by which corrective actions will be identified, implemented and tracked in the event of valid test/inspection problems and/or anomalies shall be described. The management approach and procedures for control and review of the data necessary to support and implement the survivability assurance activity shall be identified.

5. End of DI-NUOR-80926A.