

DATA ITEM DESCRIPTION

Form Approved
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Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

1. TITLE

AIRCRAFT MECHANICAL COMPATIBILITY DATA (MCD)

2. IDENTIFICATION NUMBER

DI-NUOR-81407

3. DESCRIPTION/PURPOSE

3.1 The MCD defines the mechanical clearance between the nuclear weapon(s), the suspension and release system, and the aircraft. The MCD shall dimensionally define the physical interfaces between nuclear weapons and the aircraft. The MCD includes the mechanical layout drawings.

4. APPROVAL DATE
(YYMMDD)

940729

5. OFFICE OF PRIMARY RESPONSIBILITY (OPR)

F/SA-ALC-NWI

6a. DTIC APPLICABLE

6b. GIDEP APPLICABLE

7. APPLICATION/INTERRELATIONSHIP

7.1 This Data Item Description (DID) contains the format and content preparation instructions for data resulting from the work task described by 90.6 of MIL-STD-1822.

7.2 This DID is related to DI- NUOR-81409 , Nuclear Certification Plan.

8. APPROVAL LIMITATION

9a. APPLICABLE FORMS

9b. AMSC NUMBER

F7044

10. PREPARATION INSTRUCTIONS

10.1 Format. Contractor format is acceptable.

10.2 Content. The MCD shall provide engineering data and descriptions that define:

- a. The general aircraft monitor and control system information or dimensions and weapon(s) location(s).
- b. The installation of the ejector rack for each weapon.
- c. The access to the ejector rack inspection points.
- d. The swaybrace mechanism.
- e. The swaybrace locations, pad dimensions, and the angles for each weapon.
- f. The ejector mechanism. (Note - if there are several different types of ejectors used on the aircraft, the MCD shall show each.)

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11. DISTRIBUTION STATEMENT

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

Block 10, Preparation Instructions (Continued)

- g. The ejector or ejector's location(s) on the bomb(s) and the stroke difference.
- h. The method of securing weapons and the hook-lug interface details.
- i. The details of ejector rack(s), orifice, cartridge access, and installation.
- j. The clearance distances and angles of all parts of the nuclear weapons from all other ordnance, aircraft structures, electrical cables, and other installed equipment. .
- k. The access to weapon pullout connectors, release electrical connectors, and inspection and monitor points.
- l. The loading and drop clearance angles from the nearest aircraft equipment or structures and other ordnance.
- m. The drop clearance angles, if applicable, of other adjacent ordnance items with respect to weapons in the event that the other ordnance is dropped prior to releasing the weapons.
- n. The weapon connector pullout bail retaining provisions, including slack provisions.
- o. The angles of pullout withdrawal with respect to pullout device centerline.
- p. Three views (top, side, and front) of the aircraft showing locations of bomb bays and/or pylons.
- q. The launcher actuation mechanism for the nuclear ejector safety lock.
- r. The pullout cable routing.
- s. The lanyard retention devices.
- t. The cartridge and orifice combinations, if applicable, that will be used for each type of nuclear weapon.

10.3 The MCD shall provide:

- a. Provisions for recording the coordination and approval by cognizant government agencies and their contractors.
- b. References to applicable DOE (Sandia National Laboratory) mechanical compatibility control drawings.