

DATA ITEM DESCRIPTIONForm Approved
OMB No. 0704-0188

TITLE

RADAR SPECTRUM MANAGEMENT (RSM) TEST PLAN

1. IDENTIFICATION NUMBER

DI-MISC 81113

3. DESCRIPTION/PURPOSE

3.1 The Radar Spectrum Management (RSM) Test Plan describes the measurement program that will be employed to determine that all new radar equipments operating between 100 MHz and 100 GHz promote electromagnetic compatibility (EMC) and conserve the frequency spectrum available to military radar systems in accordance with MIL-STD-469A.

4. APPROVAL DATE
(YYMMDD)

901208

5. OFFICE OF PRIMARY RESPONSIBILITY (OPR)

SH

6a. DTIC REQUIRED

6b. GIDEP REQUIRED

7. APPLICATION/INTERRELATIONSHIP

7.1 This Data Item Description contains the format and content preparation instructions for data resulting from the work task described by 4.1.5 of MIL-STD-469A.

7.2 This DID supersedes DI-R-2055 and UDI-R-20008.

8. APPROVAL LIMITATION

9a. APPLICABLE FORMS

9b. AMSC NUMBER

N5090

PREPARATION INSTRUCTIONS

10.1 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.

10.2 Format. The Test Plan shall be in the contractor's format.

10.3 Content. The RSM Test Plan shall contain an introduction to include the following:

- a. The purpose of the plan and its relationship to the overall Radar Engineering Design Requirement, Electromagnetic Compatibility program for the radar equipment or subsystem
- b. A table listing all the tests to be performed, the paragraph number of the plan, and the corresponding test method of the basic standard MIL-STD-469A
- c. Description of military radar equipment or system including operating frequency, power output and so forth.

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11. DISTRIBUTION STATEMENT

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

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Block 10. Preparation instructions (Continued)

10.4 Applicable documents. The plan shall list as follows:

- a. Military (standards, specifications, and so forth)
- b. Company (any in-house document for calibration or quality assurance)
- c. Other (Government or industry standards, specifications, or documents).

10.5 Test sites. The plan shall include a description of the test sites and shall address the following:

- a. Description of closed system test site including test points for both transmitter and receiver measurements
- b. Description of open field test site including separation between radar and test antennas
- c. Elevations of test and radar sites
- d. Calculation of minimum required separation between the radar antenna and the test antenna.

10.6 Test instrumentation. Test instrumentation to be used shall be described as follows:

- a. Test equipment nomenclature with amplitude and frequency accuracy
- b. Instrumentation bandwidths
- c. Accuracy of external attenuators
- d. Signal generator leakage
- e. Insertion loss of receiver input coupler.

10.7 Radar operation. The description of the radar's operation shall cover:

- a. Modes of operation for each test and operating frequency
- b. Power output, pulse width and pulse repetition frequency (PRF) for each mode of operation
- c. Frequency range and bandwidth for each mode of operation
- d. Antenna gain, beamwidth, antenna movement (rotation), scan coverage and polarization for each mode of operation.

10.8 Measurements. The measurements to be employed to demonstrate compliance with contractual requirements shall be described. The following shall be indicated for each test:

- a. Block diagram depicting test setup
- b. Test equipment used in performance test
- c. Detailed procedure for conducting test
- d. Radar modes of operation for each test
- e. Sample data sheet for each test.