

## DATA ITEM DESCRIPTION

**Title:** TEMPEST Control Plan

**Number:** DI-EMCS-81687

**Approval Date:** 14 Aug 2006

**AMSC Number:** 7602

**Limitation:** N/A

**DTIC Applicable:** No

**GIDEP Applicable:** No

**Office of Primary Responsibility:** NS/I3213

**Applicable Forms:** N/A

**Use/relationship:** The TEMPEST Control Plan documents the TEMPEST control design techniques proposed for a development program of an equipment or system, in order to minimize potential TEMPEST vulnerabilities.

- a. This DID contains the format and content preparation instructions for the data product generated by the specific and discrete task requirement as delineated in the contract.
- b. This DID is applicable to contracts that reference:  
NACSEM 5112, "NONSTOP Evaluation Techniques" (entire document),  
Paragraphs 5.1.5.1, 6.1.1.6.1 and Appendix F of KAG-30A/TSEC, "Compromising Emanations Standards Cryptographic Equipment,"  
or equivalent and require preparation of a TEMPEST Control Plan.

### Requirements:

1. Reference Documents. The applicable issue of documents cited herein, including their approval dates and the dates of any applicable amendments, notices, and revisions, shall be as stated herein. NACSEM 5112, "NONSTOP Evaluation Techniques," current edition; and KAG-30A/TSEC, "Compromising Emanations Standards Cryptographic Equipment," current edition, are available at the Director, National Security Agency, Attention: I3213, 9800 Savage Rd, Suite 6706, Fort Meade, Md 20755-6706.
2. Format. The TEMPEST Control Plan may be in the contractor's format.
3. Content. The TEMPEST Control Plan shall be in accordance with paragraph 5.1 (Control Plan) of NACSEM 5112, or paragraphs 5.1.5.1, 6.1.1.6.1 (Control Plan) and Appendix F (Control Plan) of KAG-30A/TSEC, or as identified in the contract. A Control Plan shall include, as a minimum, the following information:
  - a. Title Page. The title page shall include:
    - Name of the equipment or system.
    - Name of the organization or firm preparing the TEMPEST Control Plan.
    - Name of the Contracting Agency.
    - Contract Number.
  - b. Management Control. This section shall include specific responsibilities, lines of

## DI-EMCS-81687

- authority, and control. An implementation plan for TEMPEST control, with milestones, shall be included.
- c. General Description of Equipment
  - d. Statement of TEMPEST Requirements
  - e. Mechanical Design. This section shall include the following:
    - (1). Construction Techniques
      - Housing material
      - Compartmentation (RED/BLACK)
      - Penetrations (windows, air vents, access plates)
      - Drawings, including an exploded view
      - RF Gasketing
    - (2). Interface Techniques
      - Signal filtering
      - Power filtering
      - Location and mounting of filters
      - Connectors/Junction Boxes
    - (3). Other Mechanical Design Features which may have an impact on the TEMPEST characteristic of the unit
  - f. RED/BLACK Design which shall include the following:
    - (1). RED/BLACK signals
      - RED/BLACK signal flow description and block flow diagram
      - RED/BLACK power distribution description and block flow diagram
      - RED/BLACK Logic (type, amplitude, and transition times)
      - RED/BLACK Interfaces (signal amplitude, transition times, design considerations)
    - (2). Other RED/BLACK Design Features
      - Physical RED/BLACK circuit layout (multi-layer boards, partitioning of circuits)
      - Type of cables
      - Grounds
      - Clocks
  - g. NONSTOP (if required)
    - (1). Transmitter Characteristics
      - Antenna bandwidth
      - RF output bandwidth
      - IF bandwidth
      - Baseband Bandwidth
      - Type of modulation
      - Signaling rate
      - RF frequency band
      - RF carrier power
      - Sideband power

DI-EMCS-81687

(2). List and description of circuits susceptible to RED signal coupling

4. END OF DI-EMCS-81687.