

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

1/18/95

SUBJ: TEMPEST COUNTERMEASURES FOR FACILITIES

1. <u>PURPOSE</u>. This order prescribes the Federal Aviation Administration (FAA) policy and procedures for preventing the loss of classified information through compromising emanations. It Implements National Security Telecommunications and Information Systems Security Instruction (NSTISSI) Number 7000, "TEMPEST Countermeasures for Facilities," dated November 29, 1993, and Department of Transportation Order DOT 1600.28, Control of Compromising Emanations, dated January 12, 1990.

2. <u>DISTRIBUTION</u>. This order is distributed to the division level in Washington, regions, centers, and overseas area offices, with a limited distribution to all field offices and facilities.

3. <u>BACKGROUND</u>. Electronic and electromechanical information-processing equipment can produce unintentional intelligence-bearing emanations, commonly known as TEMPEST. If intercepted and analyzed, these emanations may disclose information transmitted, received, handled, or otherwise processed by the equipment. NSTISSI Number 7000, which is classified CONFIDENTIAL, establishes guidelines and procedures that shall be used to determine the applicable TEMPEST countermeasures for national security systems.

4. <u>DEFINITIONS</u>. For the purpose of this order, the following definitions apply:

a. <u>TEMPEST</u>. Transient electromagnetic pulse emanation standard.

b. <u>Certified TEMPEST Technical Authority (CTTA</u>). An experienced, technically qualified U.S. Government employee who has met established certification requirements in accordance with National Security Telecommunications and Information Systems Security Committee (NSTISSC) approved criteria and has been appointed by a U.S. Government department or agency to fulfill CTTA responsibilities. The CTTA for the FAA is located in the Office of the Secretary of Transportation (OST), Office of Security, M-70.

c. <u>FAA Cognizant Security Office (CSO)</u>. The office designated by the Associate Administrator for Civil Aviation Security, ACS-1, as the office responsible for the monitoring and oversight of the FAA TEMPEST Countermeasures Program. The designated FAA CSO is located in the Office of Civil Aviation Security (CAS) Operations, ACO. Within ACO, the focal point for TEMPEST matters is the Manager, Internal Security Division, ACO-400.

d. <u>Inspectable Space</u>. The three-dimensional space surrounding equipment that processes classified and/or sensitive unclassified national security information within which TEMPEST exploitation is not considered practical, or where legal authority to identify and/or remove a potential TEMPEST exploitation exists. The CTTA shall determine the inspectable space for FAA facilities.

5. <u>REQUESTS FOR INFORMATION</u>. Requests for information concerning the TEMPEST Countermeasures Program should be directed through the appropriate servicing security element (SSE) to ACO-400, Washington, D.C. 20591. If the request includes classified information, it shall be transmitted by a secure means in accordance with provisions of the latest edition of Order 1600.2, National Security Information.

6. <u>AUTHORITY TO CHANGE THIS ORDER</u>. The Associate Administrator for Civil Aviation Security, ACS-1, is authorized to make changes to this order in areas other than those concerned with policy and assignment of responsibilities.

7. <u>POLICY</u>. It is the policy of the FAA that:

a. TEMPEST countermeasures shall be applied to FAA equipment and facilities processing classified and sensitive unclassified national security information only when the need for such countermeasures is established by a TEMPEST countermeasures review conducted by, or validated by, the Office of Security, M-70, as the FAA CTTA in accordance with provisions of NSTISSI Number 7000.

b. When TEMPEST countermeasures are required, they will be accomplished in accordance with recommendations made by the CTTA to the FAA CSO. Measures selected shall be the most cost-effective countermeasures which will contain compromising emanations within the inspectable space.

c. When the need for TEMPEST equipment has been approved by the CTTA, every effort shall be made to use equipment meeting national standards contained in National Security Telecommunications and Information Systems Security Advisory Memorandum (NSTISSAM) TEMPEST/1-92 and equipment listed in the Information Systems Security Products and Services Catalog, or the North Atlantic Treaty Organization (NATO) Recommended Products List (NRPL).

8. <u>PROCEDURES</u>. Because the threat parameters and other applicable criteria and requirements specified in NSTISSI Number 7000 are classified, they are not included in this order. The FAA CSO and each SSE have this information and are the focal points within the administration to answer specific questions regarding TEMPEST. The FAA CSO will coordinate with the Office of Security, M-70, all matters concerning TEMPEST that affect FAA operations. No TEMPEST equipment shall be acquired or TEMPEST measures implemented without prior coordination with and approval of the CTTA.

9. <u>RESPONSIBILITIES</u>.

a. <u>The Associate Administrator for Civil Aviation Security, ACS</u>, is responsible for planning, programming, implementing, and overseeing the management of FAA's TEMPEST Countermeasures Program and for implementing the applicable provisions of NSTISSI Number 7000.

b. <u>Office of Civil Aviation Security (CAS) Operations , ACO</u>, is the executive agent for ACS for the FAA TEMPEST Countermeasures Program. Within ACO, the Manager, Internal Security Division, ACO-400, is designated as the FAA CSO and is responsible for:

(1) Identifying those FAA facilities and FAA contractor facilities that process classified and/or sensitive unclassified national security information.

(2) Identifying to the CTTA, FAA, and FAA contractor facilities, both domestic and overseas, that require TEMPEST countermeasures reviews as specified in paragraph 10 of this order.

(3) Coordinating the scheduling and conducting of TEMPEST countermeasures reviews with the CTTA and reporting the results of such reviews in accordance with guidance provided by the CTTA.

(4) Ensuring that TEMPEST countermeasures approved by the CTTA for the FAA national headquarters are implemented.

c. <u>Managers, CAS Division and Staffs' Responsibilities</u>. Managers of CAS divisions and staffs are responsible for:

(1) Ensuring that all information required by the FAA CSO concerning FAA and FAA contractor facilities that process classified and sensitive unclassified national security information within their jurisdiction is provided to the FAA CSO on request.

(2) Ensuring that questions concerning TEMPEST vulnerabilities and countermeasures are referred to the FAA CSO for appropriate action.

(3) Assisting the FAA CSO in the conduct of TEMPEST countermeasures reviews and other TEMPEST requirements which may be imposed upon the FAA by the CTTA.

(4) Inspecting facilities within their jurisdiction to ensure that TEMPEST countermeasures approved by the CTTA are being implemented.

d. <u>Associate and Assistant Administrators and Directors of Offices and Services'</u> <u>Responsibilities</u>. Senior management officials at these levels are responsible for:

(1) Ensuring compliance with the provisions of this order concerning the limitations on the use of TEMPEST countermeasures.

(2) Ensuring that the approval of the CTTA is obtained by any office, service, or activity under his/her jurisdiction, prior to incorporation of TEMPEST countermeasures in the construction or modification of FAA facilities, or in equipment which are to be used in the processing of classified and/or sensitive unclassified national security information.

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e. <u>Regional Administrators, Director, Mike Monroney Aeronautical Center, and Director, FAA</u> <u>Technical Center's, Responsibilities</u>. Senior management officials in regions and centers have the same responsibilities described in paragraph 9d to ensure that the approval of the CTTA is obtained prior to making any decision regarding requirements for TEMPEST countermeasures.

10. <u>TEMPEST COUNTERMEASURES REVIEW (TCR)</u>. The FAA CSO shall identify to the CTTA those facilities that require a TCR in accordance with criteria contained in Section V, NSTISSI Number 7000, to include the following:

a. Conduct or validate all TCR's.

b. Maintain a record of all TCR's conducted to include the recommendations provided and the estimated cost of implementation.

c. Direct that the CSO provide additional information as required.

11. <u>CONTENT OF TCR</u>. The TCR report will be classified according to content. When conducting a TCR, NSTISSI Number 7000 requires that an evaluation be made of the following factors:

a. Location. Includes analysis of threat data.

b. <u>Volume of Information Processed</u>. The number of pages processed within a given time period, the number of messages transmitted, or other quantifying factor.

c. <u>Sensitivity of Information Processed</u>. The level of classified national security information processed and the level of sensitivity of the unclassified national security information processed.

d. <u>Perishability of Information Processed</u>. The length of time the information can logically be expected to retain its classification or sensitivity.

e. <u>Physical Control</u>. A description of the physical control that can be exercised over the inspectable areas and identification of any restrictions on physical control.

f. <u>TEMPEST Profile of Equipment</u>. Description of equipment in terms of the emanation characteristics and whether or not the equipment has been selected from an approved products list.

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