



DEPARTMENT OF THE NAVY  
OFFICE OF THE CHIEF OF NAVAL OPERATIONS  
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OPNAVINST 2221.3D  
N6  
5 December 2008

OPNAV INSTRUCTION 2221.3D

From: Chief of Naval Operations

Subj: COMMUNICATIONS SECURITY EQUIPMENT MAINTENANCE AND  
TRAINING

Ref: (a) DoD Instruction 8523.01, April 22, 2008  
(b) OPNAVINST 1500.76A  
(c) EKMS 5 (Cryptographic Equipment Information/Guidance  
Manual, 23 March 2007)  
(d) OPNAVINST 2221.5C  
(e) EKMS 1A (CMS Policy and Procedures for Navy  
Electronic Key Management System Tiers 2 & 3,  
23 March 2007)

1. Purpose

a. To implement reference (a) within the Department of the Navy (DON).

b. To provide direction to ensure that Communications Security (COMSEC) equipment is installed, maintained, and repaired by fully qualified personnel under criteria contained in reference (b).

c. To comply with reference (c) in Navy training planning process in support of new developments and the preparation of training documentation.

2. Cancellation. OPNAVINST 2221.3C.

3. Applicability and Scope

a. This instruction applies to all COMSEC equipment (cryptographic and crypto ancillary). COMSEC equipment can mean either stand-alone equipment or equipment incorporating embedded COMSEC functions, and encompasses telecommunications security and nomenclature equipment including that equipment designated as "controlled cryptographic item." Reference (c) applies.

b. This instruction applies to all levels of DON commands and activities involved in the installation and maintenance of the COMSEC equipment defined above and must be maintained as a mission essential directive. All DON military and civilian personnel involved in the installation and maintenance of COMSEC equipment must be trained per this instruction. Contractor personnel approved under reference (d) are also governed by the training criteria contained herein.

#### 4. Policy

a. Installation, maintenance, and repair of COMSEC equipment will be in accordance with criteria stated herein and will conform to all applicable crypto security rules, regulations, procedures and instructions currently in effect.

b. Installation, maintenance and repair of equipment employing embedded COMSEC are handled on a case-by-case basis and will be governed by the policy established for the host equipment as determined by program of record, Naval COMSEC Material System (NCMS), and Navy Inventory Control Point procedures.

c. Formal schools operated by the military departments, Department of Defense (DoD) agencies or other federal agencies will continue to be the primary sources of training in installation, maintenance and repair of COMSEC equipment. Other schools or courses of instruction may be established under the management control of Fleet training commands, or others as appropriate, provided that schools or courses of instruction conform to the criteria stated herein.

d. An aircraft COMSEC certification maintenance instruction manual must be approved by a Naval Air Systems Command (NAVAIR) Certified Tempest Technical Authority (CTTA) and is used to certify a specific type/model/series aircraft. If no COMSEC certification maintenance instruction manual exists for a specific type/model/series aircraft, an alternate COMSEC certification plan shall be established by a CTTA.

e. Only qualified personnel who are graduates of an approved course of instruction for either unlimited or limited maintenance of a specific COMSEC equipment, or associated crypto

ancillary equipments, shall be permitted to maintain or repair such equipment, or in the case of embedded devices, those portions of equipment or systems containing COMSEC functions as defined in supporting technical documentation and/or as outlined in paragraph 4b. All personnel involved in the repair and system check-out/certification of COMSEC equipment require COMSEC awareness training as specified in reference (a).

f. Aircraft Organizational Level (O-Level) Maintenance

(1) Avionics technician training. In order to perform aircraft certification, the technician must be certified at the command level and be a graduate of a military department approved course of instruction for a specific type/model/series aircraft to include wire/connector repair. Other forms of instruction may be established by DoD agencies, such as NAVAIR and Naval Air Technical Data and Engineering Service Command, provided the instruction is for the specific type/model/series aircraft. A non-certified technician is authorized to perform wire/connector repair maintenance in accordance with applicable maintenance instruction manuals.

(2) Aircraft squadrons/units. Initial COMSEC equipment installations may be accomplished by aircraft manufacturers, contractors, rework facilities, or installation teams; however, the installations must be certified by a graduate of a military department approved course of instruction to include wire/connector repair or other forms of instruction established by DoD agencies for the specific type/model/series aircraft and COMSEC installations. An approved COMSEC certification maintenance instruction manual must be used to certify a specific type/model/series aircraft.

(3) If no COMSEC maintenance action or external wiring change is involved, COMSEC equipment may be removed and installed by other than a certified maintenance technician.

(4) If external COMSEC wiring repair is involved, this action may be completed by other than a certified maintenance technician, followed by a partial COMSEC certification using an approved COMSEC certification maintenance instruction manual for the specific type/model/series aircraft.



g. Non-aircraft Maintenance. Initial COMSEC equipment installations may be accomplished by installation teams, however, the installations must be certified by graduates of an approved course of instruction for either unlimited or limited maintenance of specific COMSEC equipment, or associated crypto ancillary equipments unless specifically exempted by logistic support documentation. If no COMSEC maintenance action or external wiring change is involved, COMSEC may be removed and installed by other than a certified maintenance technician.

h. Proficiency and certification of trained personnel will be determined in accordance with references (a) and (b). Certification to perform maintenance on certain crypto ancillaries can be granted to persons by on-the-job training, provided these persons are presently certified to maintain the equipment associated with the ancillaries.

i. Naval Training System Plan (NTSP) for the primary communications system(s) will address the COMSEC aspects of the system. A complete and separate NTSP will be prepared following reference (b) for major stand-alone COMSEC systems/equipment. For COMSEC equipment that is part of a larger system(s), only an abbreviated NTSP need be prepared to identify the various system applications and provide identification of the system's COMSEC. If an NTSP is not required, COMSEC installation requirements will be addressed in other Navy technical documentation in support of the equipment, i.e., Integrated Logistics Support Plan (ILSP), Operational Logistics Support Summary and Joint Logistics Support Plan. Within the DON, the maintenance of COMSEC equipment peculiar to the Marine Corps will be addressed by Marine Corps ILSPs, and the manpower and training plans will reference this instruction and address the installation and maintenance certification requirements for COMSEC and crypto ancillary equipment as appropriate. In all cases, maintenance personnel in support of systems employing COMSEC functions or equipment with embedded COMSEC devices, as defined in the aforementioned supporting technical documentation, must be trained to a level commensurate with their involvement with the equipment or systems.

5. Action

a. All commands authorized COMSEC equipment for operational employment shall ensure compliance with the criteria of this instruction for installation, maintenance or repair functions with respect to such equipment. Immediate superiors in command or immediate unit commanders shall ensure examination of maintenance training records during inspections.

b. Commander, Naval Network Warfare Command (COMNAVNETWARCOM), and Commander, Naval Education and Training Command shall coordinate, as required, to ensure that the provisions of this instruction are incorporated into the appropriate installation and training documentation.

c. COMNAVNETWARCOM through Commanding Officer, NCMS, shall ensure compliance as outlined in references (d) and (e).

6. Records Management. Records created as a result of this instruction, regardless of media and format, shall be managed in accordance with Secretary of the Navy Manual 5210.1.



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