# DEPARTMENT OF THE NAVY Office of the Chief of Naval Operations Washington, D.C. 20350

OPNAVINST 2221.3C Op-094 14 May 1984

### **OPNAV INSTRUCTION 2221.3C**

From: Chief of Naval Operations
To: All Ships and Stations

Subj: Communications Security (COMSEC) Equipment

Maintenance and Training

Ref: (a) OPNAVINST 1500.8K (NOTAL)

(b) NTP-7 (NOTAL)

(c) OPNAVINST 2221.5A (NOTAL)

Encl: (1) DoD Instruction 3135.1 of 17 Jan 1983

### 1. Purpose

- a. Implements enclosure (1) within Department of the Navy.
- **b.** Provides direction to ensure that COMSEC equipment is installed, maintained, and repaired by fully qualified personnel in accordance with criteria contained in enclosure (1).
- c. Supplements reference (a) in the Navy training planning process in support of new developments and the preparation of training documentation.
- 2. Cancellation. OPNAVINST 2221.3B.

### 3. Applicability and Scope

- R) a. This instruction applies to all COMSEC equipment (cryptographic and cryptoancillary) under the configuration control of NSA. Cryptographic equipment is nomenclatured TSEC/K \_\_\_\_ or K \_\_\_\_/TSEC; cryptoancillary equipment is nomenclatured TSEC/H \_\_\_\_ or H \_\_\_\_/TSEC. The objective is to preserve, unimpaired, all COMSEC features designed into and provided by such equipment.
  - b. This instruction applies to all Department of the Navy (DON) commands and activities involved in the installation and maintenance of the COMSEC equipment defined above. All DON military and civilian personnel involved in the installation and maintenance of COMSEC equipment must be trained in accordance with this instruction. Contract personnel used in accordance with reference (c) 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 here and in conformance with all applicable cryptosecurity rules, regulations, procedures and instructions currently in effect.
- b. Formal schools operated by the military departments, agencies, or other agencies of DoD shall continue to be the primary source of training in installation, maintenance, and repair of cryptographic equipment. Other schools or courses of instruction may be established under the management control of the Chief of Naval Material, Fleet Training Commands, or others as appropriate, provided that such schools or courses of instruction conform to the criteria stated herein.
- c. Only personnel who are graduates of an approved course of instruction for either unlimited or limited maintenance of a specific cryptographic equipment, or associated cryptoancillary equipments, shall be permitted to install, maintain or repair such equipment. If no maintenance action or external wiring change is involved, cryptographic equipment may be installed/deinstalled by other than a certified limited or full maintenance technician. This exception does not apply to initial cryptographic equipment installations which must be accomplished by a certified maintenance technician.
- d. Proficiency of trained personnel will be determined and certification maintained in accordance with enclosure (1) and the more detailed guidelines contained in reference (b). Certification to perform maintenance on certain ancillaries can be granted to persons by on the job training, provided these persons are presently certified to maintain the equipments associated with ancillaries. Individuals maintaining ancillaries must have received general TEMPEST training and any unique TEMPEST training applicable to the ancillary being maintained.
- e. Naval Training Plans (NTPs) for the primary communications system(s) will address the cryptographic aspects of the system(s). A complete and separate NTP will be prepared in accordance with reference (a) for major stand alone COMSEC systems/equipment (i.e. TSEC/KY-65/75, TSEC/KY-57/58, TSEC/KW-46, TSEC/KG-84). For COMSEC equipment that is a part of a larger system(s) an abbreviated NTP will be prepared only to identify the various system applications and provide identification of the system NTPs. COMSEC NTPs will reference this instruction

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and address the certification requirements for cryptographic and cryptoancillary equipment as appropriate.

### 5. Action

- R) a. All commands allowed cryptographic equipment for operational employment or having installation, maintenance or repair functions with respect to such equipment shall ensure compliance with the criteria of this instruction. Immediate superior in command (ISIC) or immediate unit commander (IUC) shall ensure examination of maintenance training records during inspections.
  - b. CHNAVMAT, COMNAVTELCOM and CNET shall coordinate, as required, to ensure that the provisions of

this instruction are incorporated into the appropriate installation, maintenance and training documentation.

- c. COMNAVSECGRU shall incorporate into the SIG-SEC Advice and Assistance Visit guidance a requirement to check form DD 1435 (SN 0102-LF-014-2701) for accuracy.
- 6. Form. COMSEC Maintenance Training and Experience Record (DD 1435), SN 0102-LF-014-2701, may be obtained through normal supply channels in accordance with NAVSUP P-2002.

G. R. NAGLER
By direction

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## Department of Defense Instruction USDRE

SUBJECT: Communications Security Equipment Maintenance and Training

References:

- (a) DoD Instruction 3135.1, "Cryptographic Equipment Maintenance and Training," September 13, 1968 (hereby canceled)
- (b) DoD Directive C-5200.5, "Communications Security (COMSEC) (U)," October 6, 1981

### A. REISSUANCE AND PURPOSE

This Instruction reissues reference (a), establishes policy, assigns responsibilities, and prescribes procedures to ensure that only fully qualified technicians install and maintain communications security (COMSEC) equipment.

### B. APPLICABILITY AND SCOPE

- 1. This Instruction applies to the Office of the Secretary of Defense, the Military Departments, the Organization of the Joint Chiefs of Staff, and the Defense Agencies (hereafter called "DoD Components").
- 2. Its provisions cover all DoD Components using COMSEC equipment that provides security to telecommunications by converting information to a form unintelligible to an unauthorized interceptor and by reconverting this information to its original form for authorized recipients, and using equipment that aids in, or is an essential element of, the conversion process.

### C. DEFINITION

COMSEC equipment is cryptoequipment, cryptoancillary equipment, cryptoproduction equipment, and authentication equipment.

### D. POLICY

- 1. The complexity of modern COMSEC equipment places the maintenance technician in a critical position of responsibility that affects directly the secure operation of this equipment. Since the technician's proficiency is largely dependent on the quality and amount of maintenance training received and on the extent of experience acquired in applying this training, all DoD Components shall ensure that:
- a. Only technicians who have been trained by methods or course materials approved by the National Security Agency/Central Security Service (NSA/CSS) are permitted to install and maintain COMSEC equipment.
- b. Supervisory personnel follow the procedures in section E., below, and in supporting regulations to determine the proficiency of technicians before they are assigned the responsibility for COMSEC equipment installation and maintenance.

- c. COMSEC equipment installation and maintenance are accomplished in accordance with applicable cryptosecurity rules, regulations, procedures, and instructions prescribed or approved by NSA/CSS and promulgated in maintenance publications. This requirement does not relieve the individual DoD Components of the responsibility for prescribing supplementary security procedures required for unique application within their respective Components.
- d. Personnel operating general purpose COMSEC automatic test equipment (ATE) are not required to be trained on the individual COMSEC equipment or components being tested.
- e. Personnel performing piece-part replacement of components on COMSEC elements, previously identified as defective by either ATE or a certified full COMSEC maintenance technician at the full maintenance site, are not required to be trained on the COMSEC equipment.
  - 2. Maximum economies shall be achieved through:
- a. The introduction and use of maintenance methods that exploit COMSEC equipment design and construction advances.
  - b. Consolidation of COMSEC equipment maintenance training courses.
- c. Training of personnel to the minimum level (limited or full maintenance) required for accomplishment of their assigned duties.

### E. PROCEDURES

All DoD Components concerned shall adhere to the following procedures:

- 1. The scope of and the graduation requirements for COMSEC maintenance technician courses shall be maintained at a level sufficient to ensure that technicians who install and maintain COMSEC equipment are qualified in all aspects of their assigned responsibilities.
- 2. DD Form 1435, "COMSEC Maintenance Training and Experience Record" (enclosure 1), shall be completed for each technician who completes a COMSEC maintenance course. DD Form 1435 may be used as a graduation certificate. This form shall constitute a chronological record of all COMSEC training and maintenance experience received by the technician, and shall become a part of the technician's permanent personnel record. Each form shall be reviewed and updated every 12 months and before a permanent change of station (PCS). (Technicians trained to perform only limited maintenance are excluded from this review requirement.)
- 3. Supervisory personnel shall review each technician's DD Form 1435 to ensure that the training and experience requirements on a particular equipment are met before the technician is assigned responsibility for its installation and maintenance.
- 4. Previously trained and qualified technicians who no longer meet the requirements for installing and maintaining a particular equipment because they have not had training in, nor experience with, the equipment in the

preceding 36 months, or NSA/CSS has determined that retraining is required because major changes have been made to the equipment, shall be retrained or requalified by approved examination. Technicians trained to perform only limited maintenance are excluded from this requirement. Technicians previously trained to perform full maintenance, but who are no longer qualified, will retain the certification to perform limited maintenance.

- 5. When contractor training is used, COMSEC training courses shall:
  - a. Use only training material furnished or approved by NSA/CSS.
- b. Be approved by the appropriate training authority of the DoD Component using the contractor's services.
- c. Be conducted by instructors who meet the qualification requirements established by the DoD Components' training facilities.
  - 6. When field-type training is used, COMSEC training courses shall:
- a. Consist of an NSA/CSS-approved field training package that includes lesson plans, test material, and instructions for conducting the course. For limited training, the package shall also include a section of COMSEC doctrine, policy, and procedures.
- b. Be conducted by persons who have received resident classroom maintenance training on the equipment being taught.
- c. Be approved and controlled by the appropriate DoD Component training authority using the field training package. Certification authority shall rest solely with the above-described training organization.
- 7. Certain maintenance tasks associated with full maintenance training are not readily adaptable for inclusion in the field training packages. To ensure that proficiency is not degraded in performance of these tasks, full maintenance field training will be given only to persons who have previously received resident classroom full maintenance training on another COMSEC equipment.

### F. RESPONSIBILITIES

- 1. The <u>Director</u>, <u>National Security Agency/Chief</u>, <u>Central Security Service</u>, shall establish guidelines and provide technical guidance and support for COMSEC equipment technical training conducted by DoD Components, furnishing the Components with:
- a. Initial training necessary for the successful installation and maintenance of each newly developed NSA/CSS COMSEC equipment.
- b. Approved courses that meet the minimum standards for maintenance training on COMSEC equipment.
- c. Guidelines and standards for preparing and conducting courses on COMSEC equipment delegated to the Military Departments for development.

d. Technical guidance and support required to accomplish the objectives of this Instruction.

### 2. The Secretaries of the Military Departments shall:

- a. Provide maintenance training to support the operational use of COMSEC equipment, in consonance with the policy and procedures in sections D. and E., above.
- b. Prepare and teach the information required to support the use of the COMSEC equipment in their system applications.
- c. Before establishing a new course, determine if their COMSEC equipment training requirements cannot be met adequately by courses elsewhere.
- d. Prepare written courses on COMSEC equipment delegated for development and send to NSA/CSS for approval.
- $\,$  e. Provide the necessary initial maintenance training support for COMSEC equipment delegated to them.

### G. EFFECTIVE DATE AND IMPLEMENTATION

This Instruction is effective immediately. Foward four copies of implementing documents to the Under Secretary of Defense for Research and Engineering within 120 days.

James P. Wade, Jr.
Acting Under Secretary of Defense

for Research and Engineering

Enclosure - 1
DD Form 1435 and Instructions

COMSEC MAINTENANCE TRAINING AND EXPERIENCE RECORD	2. SERVICE NUMBER/SSN	=	organization of certifying officer	
			signature of cer c	
	1. NAME (Last - First - Middle Initial)	REMARKS (Include School or Organization) e		PREVIOUS EDITION IS OBSOLETE
		DATE	P	PREVIOUS 1
		МЕТНОВ	ပ	
		QUALIFIED (Yes/No)	۵	15
		EQUIPMENT SHORT TITLE	65	DD FORM 1435

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# INSTRUCTIONS DO NOT ENTER CLASSIFIED INFORMATION ON THIS FORM

- Item 1 NAME Enter name of technician who completes a COMSEC maintenance course.
- SERVICE NUMBER/SSN Enter Service Number/Social Security Number of technician named in Item 1. Iten
- EQUIPMENT SHORT TITLE List equipment maintained, trained on, or requalified on during the preceding 12 months by short title only. Do not use groups of equipments or course numbers. S<sub>1</sub> a.
- Ţ - Enter "yes" or "no" to indicate whether or not qualified for the equipment listed OUALIFIED Column a. &1 &1 &1
- Col c. METHOD Specify method of qualification:
- a. By formal training initially.
- By maintenance experience (qualified by actual maintenance performed on the equipment during the preceding 12 months and not valid without initial formal training). .
- By re-examination (not valid without prior formal training on the equipment). ວ່
- Still qualified, but no maintenance experience within 12 months. <del>ф</del>
- . Oualified by field training package.
- DATE Enter date (YYMMDD) of completion of training, examination, or records review. &1 d.
- REMARKS Enter any special remarks such as skill level, location of school or organization, and (Leave blank for maintenance experience). grade received. e e 3
- "Annual/PCS review conducted. When conducting an annual or PCS review of the DD Form 1435, you may determine that the member has had no formal training, maintenance experience, or requalifying examination during the period of review. In this event, make the following entry in the remarks column: No additional entries required and no change in certification status." NOTE:
- Col f. CERTIFICATION Signature and organization of authorized representative such as Communications Officer, Electronics Officer, Cryptorepresentative.