## CHAPTER 20



# CRYPTOLOGIC TECHNICIAN (MAINTENANCE) (CTM)

NAVPERS 18068-20M Change 93

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#### NAVY ENLISTED OCCUPATIONAL STANDARD

FOR

#### CRYPTOLOGIC TECHNICIAN (MAINTENANCE) (CTM)



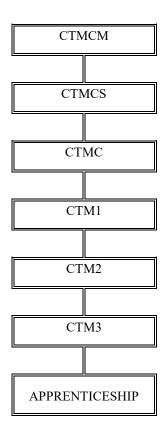
#### SCOPE OF RATING

Cryptologic Technicians (Maintenance) (CTM) maintain, configure, and install intelligence, tactical cryptologic and ancillary systems used to conduct Information and Cyberspace Operations; design, install, test, certify, troubleshoot, and repair or replace: tactical cryptologic systems, physical security systems, electrical and electronic equipment, antennas, computer systems, networks, and ancillary equipment; implement Information Assurance (IA) policy; manage organizational level maintenance; coordinate repair of command, control, communications, computer, intelligence, surveillance and reconnaissance systems in support of surface, subsurface, air, special warfare, and national consumers.

This Occupational Standard is being incorporated in Volume I, Part B, of the Manual of Navy Enlisted Manpower and Personnel Classifications and Occupational Standards (NAVPERS 18068F) as Chapter 20.

### **GENERAL INFORMATION**

### **CAREER PATTERN**



Normal path of advancement to Chief Warrant Officer and Limited Duty Officer categories can be found in OPNAVINST 1420.1.

For rating entry requirements, refer to MILPERSMAN 1306-618.

### **SAFETY**

The observance of Operational Risk Management (ORM) and proper safety precautions in all areas is an integral part of each billet and the responsibility of every Sailor; therefore, it is a universal requirement for all ratings.

## Job Title Cryptologic Systems Maintenance Technician

Job Code 001035

Job FamilyNOCShort Title (30 Characters)Short Title (14 Characters)Installation, Maintenance, and RepairTBDCRYPTO SYSTEM MAINT TECHNICIANC SYS MNT TECH

<u>Pay Plan</u> <u>Career Field</u> <u>Other Relationships and Rules</u>

Enlisted CTM NEC CXXX Series and other NECs as assigned

#### **Job Description**

Cryptologic Systems Maintenance Technicians maintain and configure Tactical Cryptologic Systems (TCS) in support of Information and Cyberspace Operations worldwide to Navy, National Security Agency (NSA), and Department of Defense (DoD) for National and theater level missions; perform organizational level maintenance on cryptographic and cryptologic systems, antennas, ancillary equipment, and communication devices; configure, test, and maintain servers and network components; perform operational testing and certification requirements for cryptographic, cryptologic, and Sensitive Compartmented Information Facility (SCIF) physical security equipment supporting Fleet and National operations.

#### DoD Relationship O\*NET Relationship

Group TitleDoD CodeOccupation TitleSOC CodeJob FamilyNavigation,110200Electrical and Electronics49-2094.00Installation, Maintenance,Communication, andRepairers, Commercial andand RepairCountermeasure, N.E.C.Industrial Equipment

**Skills Abilities** Operation and Control Problem Sensitivity Equipment Maintenance Information Ordering Systems Analysis Written Comprehension Equipment Selection Deductive Reasoning Critical Thinking Inductive Reasoning Installation Manual Dexterity Systems Evaluation Finger Dexterity Repairing Selective Attention Reading Comprehension Extent Flexibility Oral Expression Operation Monitoring

#### **COMMUNICATIONS**

<b>Paygrade</b>	Task Type	Task Statements
E4	CORE	Configure communication circuits
E4	NON-CORE	Configure telephone switches
E4	CORE	Inspect communication systems
E4	CORE	Maintain communication signal cables
E4	CORE	Maintain communications infrastructure for data exfiltration
E4	CORE	Repair communication circuits
E4	CORE	Repair communication signal cables
E4	NON-CORE	Repair cryptographic equipment
E4	CORE	Test communication circuits
E4	CORE	Troubleshoot communication circuits
E4	NON-CORE	Troubleshoot cryptographic equipment

## CRYPTOLOGIC ELECTRONIC MAINTENANCE

<u>Paygrade</u> E4	<u>Task Type</u> CORE	Task Statements Analyze test equipment results
E4	CORE	Configure Tactical Cryptologic Systems (TCS) hardware
E4	CORE	Detect Electromagnetic Interference (EMI)
E5	CORE	Groom collection systems
E5	CORE	Groom Radio Frequency (RF) path
E4	CORE	Initialize cryptologic equipment
E4	CORE	Inspect antenna weatherization and bonding
E4	CORE	Inspect tactical cryptologic equipment
E4	CORE	Install field changes
E4	CORE	Maintain ancillary Tactical Cryptologic Systems (TCS)
E4	CORE	Maintain antenna systems
E4	CORE	Maintain cryptologic carry-on systems
E4	CORE	Maintain cryptologic computer equipment
E4	CORE	Maintain Information Operation (IO) antenna systems
E4	CORE	Maintain Information Operation (IO) capabilities on Tactical Cryptologic Systems (TCS)
E4	CORE	Maintain tactical cryptologic Radio Frequency (RF) distribution system
E5	CORE	Mitigate Electromagnetic Interference (EMI)
E5	CORE	Repair antenna systems
E4	CORE	Repair cryptologic carry-on systems and peripheral equipment
E4	CORE	Repair Tactical Cryptologic Systems (TCS) and peripheral equipment
E4	CORE	Restore Tactical Cryptologic Systems (TCS)
E4	CORE	Shutdown cryptologic equipment
E4	CORE	Survey Radio Frequency (RF) Spectrum
E4	CORE	Test cryptologic equipment operations
E4	CORE	Test Radio Frequency (RF) distribution system
E4	CORE	Troubleshoot cryptologic carry-on systems and peripheral equipment
E4	CORE	Troubleshoot Tactical Cryptologic Systems (TCS) and peripheral equipment
E4	CORE	Validate test equipment functionality
E4	CORE	Validate test equipment requirements

## CRYPTOLOGIC MAINTENANCE ADMINISTRATION

<b>Paygrade</b>	Task Type	Task Statements
E6	CORE	Audit onboard repair parts requirements
E4	CORE	Inventory cryptologic carry-on maintenance assets
E5	CORE	Update station drawings
F6	CORE	Validate maintenance documents

## CRYPTOLOGIC MAINTENANCE MANAGEMENT

<b>Paygrade</b>	Task Type	Task Statements
E6	CORE	Coordinate Combat Systems Training Team (CSTT) scenarios
E6	CORE	Develop Combat Systems Training Team (CSTT) scenarios
E6	CORE	Manage logistic support
E6	CORE	Supervise electronic systems maintenance
		CRYPTOLOGIC SYSTEMS SUPPORT

<b>Paygrade</b>	Task Type	Task Statements
E5	CORE	Optimize precision geolocation operations
E4	CORE	Perform characterization of the electronic environment
E5	NON-CORE	Perform signals collections

## GENERAL INSTALLATION

<b>Paygrade</b>	Task Type	Task Statements
E4	CORE	Analyze schematic diagrams
E4	CORE	Fabricate cabling terminations (e.g., Radio Frequency (RF), network, power, etc.)
E4	CORE	Fabricate electronic systems cables (e.g., fiber, Radio Frequency (RF), etc.)
E6	CORE	Inspect equipment installations
E4	NON-CORE	Install minor scope projects
E4	CORE	Install tactical cryptologic antenna systems
E4	NON-CORE	Remove minor scope projects
E4	CORE	Validate cable standards

## INFORMATION ASSURANCE

<b>Paygrade</b>	Task Type	Task Statements
E4	CORE	Implement Information Assurance (IA) security controls
E5	CORE	Implement Information Assurance Vulnerability Alert (IAVA) procedures
E4	CORE	Maintain audit logs
E5	CORE	Perform Data Transfer Agent (DTA)/Authorized Transfer Agent (ATA) functions
E4	CORE	Perform Information Assurance Training (IAT) level 1 system Admin functions
E5	CORE	Perform Information Assurance Training (IAT) level 2 system Admin functions
E6	CORE	Perform System Operation Verification Test (SOVT)

## SECURITY AND ADMINISTRATION

<b>Paygrade</b>	Task Type	Task Statements
E4	CORE	Control restricted area access
E4	CORE	Destroy Sensitive Compartmented Information (SCI) materials
E6	CORE	Implement Emergency Action Plans (EAP)
E4	NON-CORE	Install locking mechanisms
E4	CORE	Install physical security equipment
E4	CORE	Perform Emergency Action Plans (EAP)

## SECURITY AND ADMINISTRATION (CONT'D)

<u>Paygrade</u> E4	Task Type CORE	<u>Task Statements</u> Protect Crypto Management System (CMS)/Key Management Infrastructure (KMI) materials
E4	CORE	Protect Sensitive Compartmented Information (SCI) material
E4	NON-CORE	Remove locking mechanisms
E4	CORE	Remove physical security equipment
E4	NON-CORE	Repair electronic security systems
E4	NON-CORE	Repair locking mechanisms
E4	CORE	Report Sensitive Compartmented Information Facility (SCIF) accreditation discrepancies
E4	CORE	Store Sensitive Compartmented Information (SCI) material
E4	CORE	Transport Sensitive Compartmented Information (SCI) material
E4	NON-CORE	Troubleshoot electronic security systems
E4	NON-CORE	Troubleshoot locking mechanisms
E6	CORE	Verify Sensitive Compartmented Information Facility (SCIF) accreditation

## SENSITIVE COMPARTMENTED INFORMATION (SCI) SYSTEMS/NETWORK ADMINISTRATION

<u>Paygrade</u>	Task Type	Task Statements
E4	CORE	Backup cryptologic systems information
E4	CORE	Configure computer applications
E4	CORE	Configure computer Operating Systems (OS) software
E4	CORE	Configure network hardware
E4	CORE	Configure network software
E5	CORE	Cross-check network performance
E4	CORE	Install certificates (e.g., security, system, etc.)
E4	CORE	Install computer applications
E4	CORE	Install computer Operating Systems (OS) software
E4	CORE	Install network software
E4	CORE	Maintain computer file systems
E4	CORE	Maintain network systems
E4	CORE	Maintain remote computer files
E4	CORE	Maintain system domain accounts
E5	CORE	Modify computer shell scripts
E4	CORE	Perform network systems integration
E4	CORE	Remove computer applications
E4	CORE	Remove computer Operating Systems (OS) software
E4	CORE	Remove network software
E4	CORE	Repair network components
E4	CORE	Restore computer data from backups
E4	CORE	Start computer shell scripts
E4	CORE	Test systems networks

## SENSITIVE COMPARTMENTED INFORMATION (SCI) SYSTEMS/NETWORK ADMINISTRATION (CONT'D)

<u>Paygrade</u>	Task Type	Task Statements
E4	CORE	Troubleshoot computer applications
E4	CORE	Troubleshoot computer Operating Systems (OS) software
E4	CORE	Troubleshoot network components

## Job Title Cryptologic Systems Maintenance Director

Job Code 001040

Job FamilyNOCShort Title (30 Characters)Short Title (14 Characters)Installation, Maintenance, and RepairTBDCRYPTO SYSTEM MAINT DIRECTORC SYS MNT DIR

Pay Plan Career Field Other Relationships and Rules

Enlisted CTM NEC CXXX Series and other NECs as assigned

#### **Job Description**

Cryptologic Systems Maintenance Directors manage and coordinate the installation and maintenance of Tactical Cryptologic Systems (TCS), cryptologic carry-on systems, and cryptologic network systems in support of Information and Cyberspace Operations worldwide for Navy, National Security Agency (NSA), and Department of Defense (DoD) requirements; and support deployment schedules, installation planning, logistics, resource allocation, and fiscal analysis associated with Fleet and National operations.

#### DoD Relationship O\*NET Relationship

Group Title DoD Code Occupation Title SOC Code Job Family

Navigation, 110200 First-Line Supervisors of 49-1011.00 Installation, Maintenance, Communication, and Mechanics, Installers, and Repair

Countermeasure, N.E.C. and Repairers

<u>Skills</u> <u>Abilities</u>

Management of Material ResourcesInformation OrderingQuality Control AnalysisWritten Comprehension

Critical ThinkingOral ExpressionReading ComprehensionProblem SensitivitySystems EvaluationInductive Reasoning

CoordinationDeductive ReasoningMonitoringSelective AttentionEquipment SelectionWritten Expression

Writing Fluency of Ideas
Installation Time Sharing

#### **COMMUNICATIONS**

Paygrade Task Type Task Statements

E4 CORE Inspect communication systems

#### CRYPTOLOGIC ELECTRONIC MAINTENANCE

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Analyze test equipment results
E5	NON-CORE	Fabricate tactical antenna systems
E4	CORE	Inspect antenna weatherization and bonding
E4	CORE	Inspect tactical cryptologic equipment

#### CRYPTOLOGIC MAINTENANCE ADMINISTRATION

<b>Paygrade</b>	Task Type	Task Statements
E6	CORE	Audit onboard repair parts requirements
E6	CORE	Audit station drawings
E7	CORE	Manage Electrostatic Discharge (ESD) programs
E5	CORE	Perform cryptologic carry-on systems training
E7	CORE	Validate Integrated Logistic Support (ILS) documentation
E6	CORE	Validate maintenance documents

## CRYPTOLOGIC MAINTENANCE MANAGEMENT

<b>Paygrade</b>	Task Type	Task Statements
E7	CORE	Analyze maintenance trends
E7	CORE	Determine direct support personnel augmentation
E7	CORE	Manage cryptologic carry-on and Tactical Cryptologic Systems (TCS)
E7	CORE	Manage cryptologic carry-on and Tactical Cryptologic Systems (TCS) training
E7	CORE	Manage equipment maintenance
E6	CORE	Manage logistic support
E6	CORE	Supervise electronic systems maintenance
E7	CORE	Validate acceptance testing programs
E7	CORE	Validate equipment maintenance
E6	CORE	Validate minimum equipment requirements

## **GENERAL INSTALLATION**

<b>Paygrade</b>	Task Type	Task Statements
E4	CORE	Analyze schematic diagrams
E7	CORE	Approve installation plans
E5	CORE	Conduct installation site surveys
E6	CORE	Coordinate installation plans
E6	CORE	Coordinate installation site surveys
E6	CORE	Inspect equipment installations
E7	CORE	Perform tactical cryptologic electronic equipment installation Quality Assurance (QA)

### INFORMATION ASSURANCE

<u>Paygrade</u>	<u>Task Type</u>	Task Statements
E5	CORE	Maintain Information Assurance (IA) accreditation requirements
E7	NON-CORE	Manage Information Assurance (IA) acceptance requirements
E6	CORE	Perform System Operation Verification Test (SOVT)
E7	CORE	Validate information systems accreditation packages

## SECURITY AND ADMINISTRATION

<b>Paygrade</b>	Task Type	Task Statements
E4	CORE	Control restricted area access
E4	CORE	Destroy Sensitive Compartmented Information (SCI) materials
E6	CORE	Implement Emergency Action Plans (EAP)
E4	CORE	Perform Emergency Action Plans (EAP)
E4	CORE	Protect Sensitive Compartmented Information (SCI) material
E4	CORE	Report Sensitive Compartmented Information Facility (SCIF) accreditation discrepancies
E4	CORE	Store Sensitive Compartmented Information (SCI) material
E4	CORE	Transport Sensitive Compartmented Information (SCI) material
E6	CORE	Verify Sensitive Compartmented Information Facility (SCIF) accreditation

## SENSITIVE COMPARTMENTED INFORMATION (SCI) SYSTEMS/NETWORK ADMINISTRATION

<b>Paygrade</b>	Task Type	Task Statements
E5	CORE	Cross-check network performance
E4	CORE	Install certificates (e.g., security, system, etc.)
E6	CORE	Manage network systems integration

## **Job Title Cryptologic Systems Installation Technician**

Job Code 002729

Job FamilyNOCShort Title (30 Characters)Short Title (14 Characters)Installation, Maintenance, and RepairTBDCRYPTO SYSTEM INSTAL TECHC SYS INST TEC

Pay Plan Career Field Other Relationships and Rules

Enlisted CTM NEC CXXX Series and other NECs as assigned

#### **Job Description**

Cryptologic Systems Installation Technicians install, certify, and maintain cryptologic carry-on systems and cryptologic network systems in support of Information and Cyberspace Operations worldwide for Navy, National Security Agency (NSA), and Department of Defense (DoD) requirements; identify, develop, and implement architecture and infrastructure design; ensure network system integrity, and information assurance compliance; perform network configuration, network engineering, Radio Frequency (RF) grooming, antenna maintenance, circuit design and activation; read, develop, and verify schematic drawings; install cable transport, telecommunications, electrical wiring, cables, and termination; conduct site surveys and equipment training, equipment removal/modifications, and logistical support; track equipment movement; perform operational testing and certification requirements for cryptographic, cryptologic, and Sensitive Compartmented Information Facility (SCIF) physical security equipment supporting Fleet and National operations.

#### DoD Relationship O\*NET Relationship

 Group Title
 DoD Code
 Occupation Title
 SOC Code
 Job Family

 Navigation,
 110200
 Electrical and Electronics
 49-2094.00
 Installation, Maintenance, and Repair

 Communication, and Countermeasure, N.E.C.
 Repairers, Commercial and Industrial Equipment
 and Repair

<u>Skills</u> <u>Abilities</u>

Operation and Control Information Ordering Equipment Maintenance Written Comprehension Installation Problem Sensitivity Critical Thinking Deductive Reasoning Systems Analysis Manual Dexterity Equipment Selection Inductive Reasoning Systems Evaluation Extent Flexibility Coordination Selective Attention Reading Comprehension Finger Dexterity Operation Monitoring Dynamic Flexibility

#### COMMUNICATIONS

<u>Paygrade</u>	Task Type	Task Statements
E4	CORE	Configure communication circuits
E4	NON-CORE	Configure telephone switches
E5	CORE	Establish communications infrastructure for data exfiltration
E4	CORE	Inspect communication systems
E4	CORE	Maintain communication signal cables
E4	CORE	Maintain communications infrastructure for data exfiltration
E4	CORE	Repair communication circuits
E4	CORE	Repair communication signal cables
E4	CORE	Test communication circuits
E4	CORE	Troubleshoot communication circuits
E4	NON-CORE	Troubleshoot cryptographic equipment

## CRYPTOLOGIC ELECTRONIC MAINTENANCE

<u>Paygrade</u> E4	<u>Task Type</u> CORE	Task Statements Analyze test equipment results
E5	NON-CORE	Assemble collection equipment (Commercial Off The Shelf/Government Off The Shelf (COTS/GOTS))
E4	CORE	Detect Electromagnetic Interference (EMI)
E5	NON-CORE	Fabricate tactical antenna systems
E5	CORE	Groom collection systems
E5	CORE	Groom Radio Frequency (RF) path
E4	CORE	Initialize cryptologic equipment
E4	CORE	Inspect antenna weatherization and bonding
E4	CORE	Inspect tactical cryptologic equipment
E4	CORE	Install field changes
E4	CORE	Maintain cryptologic carry-on systems
E4	CORE	Maintain cryptologic computer equipment
E5	CORE	Mitigate Electromagnetic Interference (EMI)
E5	CORE	Repair antenna systems
E4	CORE	Repair cryptologic carry-on systems and peripheral equipment
E4	CORE	Shutdown cryptologic equipment
E4	CORE	Survey Radio Frequency (RF) Spectrum
E4	CORE	Test cryptologic equipment operations
E4	CORE	Test Radio Frequency (RF) distribution system
E4	CORE	Troubleshoot cryptologic carry-on systems and peripheral equipment
E4	CORE	Validate test equipment functionality
E4	CORE	Validate test equipment requirements

## CRYPTOLOGIC MAINTENANCE ADMINISTRATION

<u>Paygrade</u>	Task Type	Task Statements
E6	CORE	Audit onboard repair parts requirements
E4	CORE	Inventory cryptologic carry-on maintenance assets
E5	CORE	Perform cryptologic carry-on systems training
E5	CORE	Update station drawings
E6	CORE	Validate maintenance documents

### CRYPTOLOGIC MAINTENANCE MANAGEMENT

<b>Paygrade</b>	Task Type	Task Statements
E6	CORE	Manage logistic support
E6	CORE	Supervise electronic systems maintenance

## CRYPTOLOGIC SYSTEMS SUPPORT

<u>Paygrade</u> E5	<u>Task Type</u> CORE	Task Statements Optimize precision geolocation operations
LS	CORL	
E4	CORE	Perform characterization of the electronic environment
E5	NON-CORE	Perform electronic counter-surveillance
E5	NON-CORE	Perform precision geolocation operations
E5	NON-CORE	Perform Sensitive Site Exploitation (SSE) operations
E5	NON-CORE	Perform signals collections
E5	NON-CORE	Perform signals survey operations
E5	NON-CORE	Perform tactical Airborne Precision Geolocation (APGL) operations/Unmanned Aerial Systems (UAS) payload operations

## GENERAL INSTALLATION

CORE CORE	Analyze schematic diagrams  Conduct installation site surveys
	Conduct installation site surveys
	•
	Coordinate installation plans
CORE	Coordinate installation site surveys
CORE	Fabricate cabling terminations (e.g., Radio Frequency (RF), network, power, etc.)
CORE	Fabricate electronic systems cables (e.g., fiber, Radio Frequency (RF), etc.)
CORE	Inspect equipment installations
NON-CORE	Install cable ducts
CORE	Install communication equipment
CORE	Install communication signal cables
CORE	Install cryptologic carry-on equipment
NON-CORE	Install electrical conduits
CORE	Install electronic equipment
CORE	Install electronic equipment racks
NON-CORE	Install minor scope projects
CORE	Install network equipment
CORE	Install power panels
CORE	Install tactical cryptologic antenna systems
NON-CORE	Operate specialized installation tools
NON-CORE	Remove cable ducts
CORE	Remove communication equipment
CORE	Remove communication signal cables
CORE	Remove cryptologic carry-on equipment
NON-CORE	Remove electrical conduits
CORE	Remove electronic equipment
CORE	Remove electronic equipment racks
NON-CORE	Remove minor scope projects
	CORE CORE CORE CORE CORE CORE CORE CORE

## **GENERAL INSTALLATION (CONT'D)**

<b>Paygrade</b>	Task Type	Task Statements
E4	CORE	Remove network equipment
E5	CORE	Remove power panels
E4	CORE	Validate cable standards

## INFORMATION ASSURANCE

<b>Paygrade</b>	Task Type	Task Statements
E4	CORE	Implement Information Assurance (IA) security controls
E5	CORE	Implement Information Assurance Vulnerability Alert (IAVA) procedures
E4	CORE	Maintain audit logs
E5	CORE	Maintain Information Assurance (IA) accreditation requirements
E5	CORE	Perform Data Transfer Agent (DTA)/Authorized Transfer Agent (ATA) functions
E4	CORE	Perform Information Assurance Training (IAT) level 1 system Admin functions
E5	CORE	Perform Information Assurance Training (IAT) level 2 system Admin functions
E6	CORE	Perform System Operation Verification Test (SOVT)

### SECURITY AND ADMINISTRATION

<b>Paygrade</b>	Task Type	Task Statements
E4	CORE	Control restricted area access
E4	CORE	Destroy Sensitive Compartmented Information (SCI) materials
E6	CORE	Implement Emergency Action Plans (EAP)
E4	NON-CORE	Install intrusion detection systems
E4	NON-CORE	Install locking mechanisms
E4	CORE	Install physical security equipment
E4	CORE	Perform Emergency Action Plans (EAP)
E4	CORE	Protect Crypto Management System (CMS)/Key Management Infrastructure (KMI) materials
E4	CORE	Protect Sensitive Compartmented Information (SCI) material
E4	NON-CORE	Remove locking mechanisms
E4	CORE	Remove physical security equipment
E4	NON-CORE	Repair electronic security systems
E4	NON-CORE	Repair locking mechanisms
E4	CORE	Report Sensitive Compartmented Information Facility (SCIF) accreditation discrepancies
E4	CORE	Store Sensitive Compartmented Information (SCI) material
E4	CORE	Transport Sensitive Compartmented Information (SCI) material
E4	NON-CORE	Troubleshoot electronic security systems
E4	NON-CORE	Troubleshoot locking mechanisms
E6	CORE	Verify Sensitive Compartmented Information Facility (SCIF) accreditation

## SENSITIVE COMPARTMENTED INFORMATION (SCI) SYSTEMS/NETWORK ADMINISTRATION

<u>Paygrade</u> E4	<u>Task Type</u> CORE	Task Statements Backup cryptologic systems information
E4	CORE	Configure computer applications
E4	CORE	Configure computer Operating Systems (OS) software
E4	CORE	Configure network hardware
E4	CORE	Configure network software
E5	NON-CORE	Create computer shell scripts
E5	CORE	Cross-check network performance
E4	CORE	Install certificates (e.g., security, system, etc.)
E4	CORE	Install computer applications
E4	CORE	Install computer Operating Systems (OS) software
E4	CORE	Install network software
E4	CORE	Maintain computer file systems
E4	CORE	Maintain network systems
E4	CORE	Maintain remote computer files
E4	CORE	Maintain system domain accounts
E5	CORE	Modify computer shell scripts
E4	CORE	Perform network systems integration
E6	CORE	Plan network systems integration
E4	CORE	Remove computer applications
E4	CORE	Remove computer Operating Systems (OS) software
E4	CORE	Remove network software
E4	CORE	Repair network components
E4	CORE	Restore computer data from backups
E4	CORE	Start computer shell scripts
E4	CORE	Test systems networks
E4	CORE	Troubleshoot computer applications
E4	CORE	Troubleshoot computer Operating Systems (OS) software
E4	CORE	Troubleshoot network components

## Job Title Cryptologic Systems Infrastructure Technician

Job Code 002811

Job FamilyNOCShort Title (30 Characters)Short Title (14 Characters)Computer and MathematicalTBDCRYPTO SYSTEM INFRA TECHC SYS INFR TEC

Enlisted CTM NEC CXXX Series and other NECs as assigned

#### **Job Description**

Countermeasure, N.E.C.

Cryptologic Systems Infrastructure Technicians install, certify, and maintain cryptologic network systems in support of Information and Cyberspace Operations worldwide for Navy, National Security Agency (NSA), Defense Intelligence Agency (DIA), and Department of Defense (DoD) requirements; identify, develop, and implement architecture and infrastructure design; ensure network system integrity, and information assurance compliance; perform network configuration, network engineering, circuit design and activation; read, develop, and verify schematic drawings; install cable transport, telecommunications, electrical wiring, cables, and termination; conduct site surveys and equipment training, equipment removal/modifications, and logistical support; track equipment movement; perform operational testing and certification requirements for cryptographic, cryptologic, and Sensitive Compartmented Information Facility (SCIF) physical security equipment supporting Fleet and National operations.

#### DoD Relationship O\*NET Relationship

Group TitleDoD CodeOccupation TitleSOC CodeJob FamilyNavigation,110200Network and Computer15-1244.00Computer and MathematicalCommunication, andSystems Administrators

<u>Skills</u> <u>Abilities</u>

Operation and Control Written Comprehension Equipment Maintenance Information Ordering Installation Deductive Reasoning Systems Analysis Manual Dexterity Equipment Selection Problem Sensitivity Critical Thinking Inductive Reasoning Reading Comprehension Finger Dexterity Coordination Selective Attention Complex Problem Solving Extent Flexibility Management of Material Resources Oral Expression

#### COMMUNICATIONS

<u>Paygrade</u>	Task Type	Task Statements
E4	CORE	Configure communication circuits
E4	NON-CORE	Configure telephone switches
E5	CORE	Establish communications infrastructure for data exfiltration
E4	CORE	Inspect communication systems
E4	CORE	Maintain communication signal cables
E4	CORE	Maintain communications infrastructure for data exfiltration
E4	CORE	Repair communication circuits
E4	CORE	Repair communication signal cables
E4	NON-CORE	Repair cryptographic equipment
E4	CORE	Test communication circuits
E4	CORE	Troubleshoot communication circuits
E4	NON-CORE	Troubleshoot cryptographic equipment

## CRYPTOLOGIC ELECTRONIC MAINTENANCE

<b>Paygrade</b>	Task Type	Task Statements
E4	CORE	Analyze test equipment results
E4	CORE	Detect Electromagnetic Interference (EMI)
E4	CORE	Initialize cryptologic equipment
E4	CORE	Install field changes
E4	CORE	Maintain antenna systems
E4	CORE	Maintain cryptologic computer equipment
E5	CORE	Mitigate Electromagnetic Interference (EMI)
E4	CORE	Shutdown cryptologic equipment
E4	CORE	Validate test equipment functionality
E4	CORE	Validate test equipment requirements

### CRYPTOLOGIC MAINTENANCE ADMINISTRATION

<b>Paygrade</b>	Task Type	Task Statements
E5	CORE	Update station drawings
E6	CORE	Validate maintenance documents

### CRYPTOLOGIC MAINTENANCE MANAGEMENT

<b>Paygrade</b>	Task Type	Task Statements
E6	CORE	Manage logistic support
E6	CORE	Supervise electronic systems maintenance

### CRYPTOLOGIC SYSTEMS SUPPORT

<b>Paygrade</b>	Task Type	Task Statements
E4	NON-CORE	Process customer trouble calls

### GENERAL INSTALLATION

<b>Paygrade</b>	Task Type	Task Statements
E4	CORE	Analyze schematic diagrams
E5	CORE	Conduct installation site surveys
E6	CORE	Coordinate installation plans
E6	CORE	Coordinate installation site surveys
E4	CORE	Fabricate cabling terminations (e.g., Radio Frequency (RF), network, power, etc.)
E4	CORE	Fabricate electronic systems cables (e.g., fiber, Radio Frequency (RF), etc.)
E6	CORE	Inspect equipment installations
E4	NON-CORE	Install cable ducts
E4	CORE	Install communication equipment
E4	CORE	Install communication signal cables
E4	NON-CORE	Install electrical conduits
E4	CORE	Install electronic equipment
E4	CORE	Install electronic equipment racks
E4	CORE	Install network equipment
E4	NON-CORE	Operate specialized installation tools

## GENERAL INSTALLATION (CONT'D)

<b>Paygrade</b>	Task Type	Task Statements
E4	NON-CORE	Remove cable ducts
E4	CORE	Remove communication equipment
E4	CORE	Remove communication signal cables
E4	NON-CORE	Remove electrical conduits
E4	CORE	Remove electronic equipment
E4	CORE	Remove electronic equipment racks
E4	CORE	Remove network equipment
E4	CORE	Validate cable standards

## INFORMATION ASSURANCE

<b>Payg</b>	<u>rade</u> <u>Task Type</u>	Task Statements
E4	NON-CORE	Identify Information Systems Security (ISS) violations and vulnerabilities
E4	CORE	Implement Information Assurance (IA) security controls
E5	CORE	Implement Information Assurance Vulnerability Alert (IAVA) procedures
E4	CORE	Maintain audit logs
E5	CORE	Maintain Information Assurance (IA) accreditation requirements
E5	CORE	Perform Data Transfer Agent (DTA)/Authorized Transfer Agent (ATA) functions
E4	CORE	Perform Information Assurance Training (IAT) level 1 system Admin functions
E5	CORE	Perform Information Assurance Training (IAT) level 2 system Admin functions
E6	CORE	Perform System Operation Verification Test (SOVT)
E4	NON-CORE	Provide technical support to resolve cyber incidents
E4	NON-CORE	Remove system viruses
E7	NON-CORE	Report Information Systems Security (ISS) incidents
E5	NON-CORE	Update computer Information Systems (IS) antivirus definitions

## SECURITY AND ADMINISTRATION

<b>Paygrade</b>	Task Type	Task Statements
E4	CORE	Control restricted area access
E4	CORE	Destroy Sensitive Compartmented Information (SCI) materials
E6	CORE	Implement Emergency Action Plans (EAP)
E4	NON-CORE	Install intrusion detection systems
E4	NON-CORE	Install locking mechanisms
E4	CORE	Install physical security equipment
E4	CORE	Perform Emergency Action Plans (EAP)
E4	CORE	Protect Crypto Management System (CMS)/Key Management Infrastructure (KMI) materials
E4	CORE	Protect Sensitive Compartmented Information (SCI) material
E4	NON-CORE	Remove locking mechanisms
E4	CORE	Remove physical security equipment
E4	NON-CORE	Repair electronic security systems
E4	NON-CORE	Repair locking mechanisms

## SECURITY AND ADMINISTRATION (CONT'D)

<b>Paygrade</b> E4	Task Type CORE	<u>Task Statements</u> Report Sensitive Compartmented Information Facility (SCIF) accreditation discrepancies
E4	CORE	Store Sensitive Compartmented Information (SCI) material
E4	CORE	Transport Sensitive Compartmented Information (SCI) material
E4	NON-CORE	Troubleshoot electronic security systems
E4	NON-CORE	Troubleshoot locking mechanisms
E6	CORE	Verify Sensitive Compartmented Information Facility (SCIF) accreditation

## SENSITIVE COMPARTMENTED INFORMATION (SCI) SYSTEMS/NETWORK ADMINISTRATION

SENSITIVI	SENSITIVE COMPARTMENTED INFORMATION (SCI) STSTEMS/NET WORK ADMINISTRATION			
<u>Paygrade</u> E4	<u>Task Type</u> CORE	Task Statements Backup cryptologic systems information		
E4	CORE	Configure computer applications		
E4	CORE	Configure computer Operating Systems (OS) software		
E4	CORE	Configure network hardware		
E4	CORE	Configure network software		
E5	NON-CORE	Create computer shell scripts		
E7	NON-CORE	Create Continuity of Operations (COOP) Procedures		
E5	NON-CORE	Create web pages		
E5	CORE	Cross-check network performance		
E6	NON-CORE	Establish Command, Control, Communications, Computers, Combat Systems and Intelligence (C5I) system interconnectivity		
E4	CORE	Install certificates (e.g., security, system, etc.)		
E4	CORE	Install computer applications		
E4	CORE	Install computer Operating Systems (OS) software		
E4	CORE	Install network software		
E4	CORE	Maintain computer file systems		
E4	CORE	Maintain network systems		
E4	CORE	Maintain remote computer files		
E4	CORE	Maintain system domain accounts		
E5	NON-CORE	Maintain websites		
E5	CORE	Modify computer shell scripts		
E7	NON-CORE	Perform Information Assurance Management (IAM) functions		
E4	CORE	Perform network systems integration		
E6	CORE	Plan network systems integration		
E4	CORE	Remove computer applications		
E4	CORE	Remove computer Operating Systems (OS) software		
E4	CORE	Remove network software		
E4	CORE	Repair network components		
E4	CORE	Restore computer data from backups		
E4	CORE	Start computer shell scripts		
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## SENSITIVE COMPARTMENTED INFORMATION (SCI) SYSTEMS/NETWORK ADMINISTRATION (CONT'D)

<b>Paygrade</b>	Task Type	Task Statements
E4	CORE	Test systems networks
E4	CORE	Troubleshoot computer applications
E4	CORE	Troubleshoot computer Operating Systems (OS) software
E4	CORE	Troubleshoot network components
E6	NON-CORE	Validate migration/installation computer software