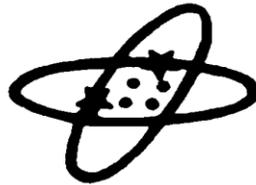


CHAPTER 32



ELECTRONICS TECHNICIAN (ET)

NAVPERS 18068-32K
CH-77

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NAVY ENLISTED OCCUPATIONAL STANDARD

FOR

ELECTRONICS TECHNICIAN (ET)



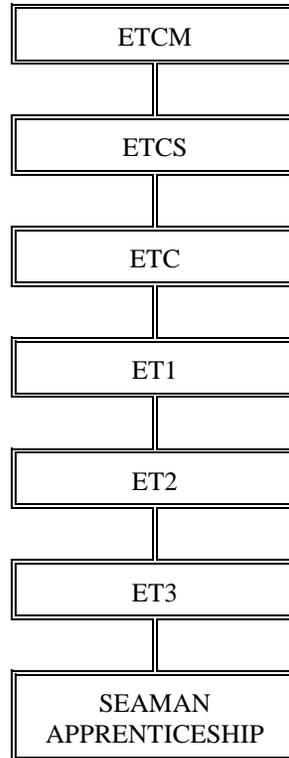
SCOPE OF RATING

Electronics Technicians (ET) perform, supervise, and manage the preventive and corrective maintenance, calibration, configuration, and alignment of cryptographic, radar, navigation, and Command, Control, Computer, Communication, and Intelligence (C4I) systems, utilizing test equipment and technical drawings.

This Occupational Standard is to be incorporated in Volume I, Part B, of the Manual of Navy Enlisted Manpower and Personnel Classifications and Occupational Standards (NAVPERS 18068F) as Chapter 32.

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**Electronics Communications Technician****Job Code****003723****Job Family**

Installation, Maintenance, and Repair

NOC

TBD

Short Title (30 Characters)

ELECTRONICS COMMUNICATION TEC

Short Title (14 Characters)

E COM SYS TECH

Pay Plan

Enlisted

Career Field

ET

Other Relationships and Rules

NEC VXXX series and other NECs as assigned.

Job Description

Electronic Communications Technicians maintain shore-based, ship-based, and portable communications equipment, including all associated cabling, computer, multiplexing, switching, cryptographic, recording, cooling water, and dry air systems; analyze equipment operation and align, troubleshoot, and repair equipment to the lowest replaceable unit; execute casualty control procedures, restoring operability for all assigned electronic equipment, and recognizing mission criticality and redundancies within systems; perform administrative functions that include updating casualty reporting messages, technical manuals, equipment maintenance records, and managing test equipment calibration requirements; complete fiber optic and basic soldering repair, electrical safety checks, and test equipment calibration; and supervise personnel who conduct tool and test equipment inventories, logistics support, and maintenance and testing of systems and equipment.

DoD Relationship**Group Title**

Radio/Radar, General

DoD Code

110000

O*NET Relationship**Occupation Title**Telecommunications Equipment
Installers and Repairers, Except
Line Installers**SOC Code**

49-2022.00

Job Family

Installation, Maintenance, and Repair

Skills*Operation Monitoring**Quality Control Analysis**Complex Problem Solving**Operation and Control**Troubleshooting**Equipment Selection**Repairing**Coordination**Management of Material Resources**Systems Analysis***Abilities***Deductive Reasoning**Selective Attention**Inductive Reasoning**Problem Sensitivity**Time Sharing**Written Comprehension**Manual Dexterity**Written Expression**Information Ordering**Control Precision***AUXILIARY EQUIPMENT AND SUPPORT SYSTEMS****Paygrade****Task Type****Task Statements**

E4

CORE

Configure auxiliary air and cooling water systems

E4

NON-CORE

Configure electrical, electronic, and mechanical calibration equipment

E4

CORE

Repair auxiliary air and cooling water systems

E4

NON-CORE

Repair electronic security systems

E4

CORE

Replace aloft equipment

E4

CORE

Test analog and digital General Purpose Electronic Test Equipment (GPETE)

E4

CORE

Test auxiliary air and cooling water systems

E4

NON-CORE

Test electrical, electronic, and mechanical calibration equipment

E4

NON-CORE

Test electronic security systems

E4

CORE

Troubleshoot analog and digital General Purpose Electronic Test Equipment (GPETE)

E4

CORE

Troubleshoot auxiliary air and cooling water systems

E4

NON-CORE

Troubleshoot electrical, electronic, and mechanical calibration equipment

E4

NON-CORE

Troubleshoot electronic security systems

COMMAND, CONTROL, COMPUTER, COMMUNICATION, AND INTELLIGENCE (C4I)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Configure Commercial-Off-The-Shelf (COTS) and Non-Program of Record (Non-POR) systems
E4	CORE	Configure computer and peripheral systems
E4	CORE	Configure cryptographic equipment
E4	NON-CORE	Configure Expeditionary Warfare (EXW) electronic equipment
E4	CORE	Configure high frequency radio communication systems (i.e., Extremely High Frequency (EHF), Super High Frequency (SHF), Ultra High Frequency (UHF), Very High Frequency (VHF), High Frequency (HF))
E4	NON-CORE	Configure low frequency radio communication systems (i.e., Low Frequency (LF), Very Low Frequency (VLF), and Extremely Low Frequency (ELF))
E4	NON-CORE	Configure portable communications systems
E4	CORE	Configure switching equipment (e.g., Automated Single Audio System (ASAS), Tactical Variant Switch (TVS), Automated Network Control Center (ANCC), etc.)
E4	CORE	Establish audio circuits
E4	CORE	Establish data links (dual-net multi-frequency data links and multi-frequency links)
E5	NON-CORE	Implement Communications Plans (COMPLANS)
E4	NON-CORE	Integrate Intelligence, Surveillance, and Reconnaissance (ISR) services (e.g., Global Broadcasting Systems (GBS), Communications Data Link System (CDLS), etc.)
E4	NON-CORE	Integrate portable communications systems (e.g., iridium, Portable Radio Communications (PRC), etc.)
E4	CORE	Load cryptographic keying material
E4	NON-CORE	Load image software
E4	CORE	Maintain Command, Control, Computer, Communication, and Intelligence (C4I) password accounts
E4	NON-CORE	Monitor portable communications systems (e.g., iridium, Portable Radio Communications (PRC), etc.)
E4	NON-CORE	Monitor Radio Frequency (RF) systems (e.g., Super High Frequency (SHF), Ultra High Frequency (UHF), Very High Frequency (VHF), Extremely High Frequency (EHF), High frequency (HF))
E4	NON-CORE	Monitor routing and switching devices
E4	NON-CORE	Perform End of Mission Sanitizations (EOMS)
E4	CORE	Repair audio switching systems
E4	CORE	Repair Command, Control, Computer, Communication, and Intelligence (C4I) antenna systems
E4	CORE	Repair Commercial-Off-The-Shelf (COTS) and Non-Program of Record (Non-POR) systems
E4	CORE	Repair computer and peripheral systems
E4	CORE	Repair data link systems
E4	CORE	Repair data multiplexing equipment
E4	NON-CORE	Repair Expeditionary Warfare (EXW) electronic equipment
E4	CORE	Repair Extremely High Frequency (EHF) systems
E4	NON-CORE	Repair Extremely Low Frequency (ELF) systems

COMMAND, CONTROL, COMPUTER, COMMUNICATION, AND INTELLIGENCE (C4I) (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Repair High Frequency (HF) systems
E4	NON-CORE	Repair Low Frequency (LF) systems
E4	CORE	Repair message routing systems
E4	CORE	Repair Super High Frequency (SHF) systems
E4	CORE	Repair Ultra High Frequency (UHF) systems
E4	CORE	Repair Very High Frequency (VHF) systems
E4	NON-CORE	Repair Very Low Frequency (VLF) systems
E4	CORE	Replace cryptographic equipment
E4	NON-CORE	Set up cryptographic equipment
E4	NON-CORE	Set up cryptographic networks
E4	CORE	Test audio switching systems
E4	CORE	Test Command, Control, Computer, Communication, and Intelligence (C4I) antenna systems
E4	CORE	Test Commercial-Off-The-Shelf (COTS) and Non-Program of Record (Non-POR) systems
E4	CORE	Test computer and peripheral systems
E4	CORE	Test cryptographic equipment
E4	CORE	Test data link systems
E4	CORE	Test data multiplexing equipment
E4	NON-CORE	Test Expeditionary Warfare (EXW) electronic equipment
E4	CORE	Test Extremely High Frequency (EHF) systems
E4	NON-CORE	Test Extremely Low Frequency (ELF) systems
E4	CORE	Test High Frequency (HF) systems
E4	NON-CORE	Test Low Frequency (LF) systems
E4	CORE	Test message routing systems
E4	CORE	Test Super High Frequency (SHF) systems
E4	CORE	Test Ultra High Frequency (UHF) systems
E4	CORE	Test Very High Frequency (VHF) systems
E4	NON-CORE	Test Very Low Frequency (VLF) systems
E4	CORE	Troubleshoot audio switching systems
E4	CORE	Troubleshoot Command, Control, Computer, Communication, and Intelligence (C4I) antenna systems
E4	CORE	Troubleshoot Commercial-Off-The-Shelf (COTS) and Non-Program of Record (Non-POR) systems
E4	CORE	Troubleshoot computer and peripheral systems
E4	CORE	Troubleshoot data link systems
E4	CORE	Troubleshoot data multiplexing equipment
E4	NON-CORE	Troubleshoot Expeditionary Warfare (EXW) electronic equipment
E4	CORE	Troubleshoot Extremely High Frequency (EHF) systems

COMMAND, CONTROL, COMPUTER, COMMUNICATION, AND INTELLIGENCE (C4I) (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	NON-CORE	Troubleshoot Extremely Low Frequency (ELF) systems
E4	CORE	Troubleshoot High Frequency (HF) systems
E4	NON-CORE	Troubleshoot Low Frequency (LF) systems
E4	CORE	Troubleshoot message routing systems
E4	CORE	Troubleshoot Super High Frequency (SHF) systems
E4	CORE	Troubleshoot Ultra High Frequency (UHF) systems
E4	CORE	Troubleshoot Very High Frequency (VHF) systems
E4	NON-CORE	Troubleshoot Very Low Frequency (VLF) systems
E5	NON-CORE	Update network software and firmware

EQUIPMENT ADMINISTRATION

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Collect equipment and systems status data
E4	CORE	Document equipment status
E4	CORE	Inspect work areas, tools, and electronic systems equipment
E4	CORE	Inventory controlled equipment
E4	CORE	Inventory Maintenance Assistance Modules (MAM)
E5	CORE	Maintain preventive maintenance documents
E5	CORE	Manage test equipment calibration programs
E4	CORE	Provide electronic equipment installation assistance
E5	NON-CORE	Receive Communications Security (COMSEC) materials
E5	NON-CORE	Report Electronic Key Management System (EKMS) discrepancies
E5	CORE	Review technical briefs, notices, and bulletins
E5	CORE	Supervise controlled equipment inventories
E5	CORE	Supervise Maintenance Assistance Modules (MAM) usage
E5	CORE	Supervise work center equipment and system configurations
E5	CORE	Update Combat Systems Operational Sequencing System (CSOSS)
E5	NON-CORE	Validate Communications Security (COMSEC) materials

TECHNICAL CORE FUNDAMENTALS

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E6	CORE	Analyze schematics (e.g., ship's drawings, mechanical drawings, electronic schematics, piping and valve drawings, etc.)
E4	CORE	Analyze technical manuals
E4	CORE	Conduct Emergency Action Plans (EAP) and Emergency Destruction Plans (EDP)
E4	CORE	Configure analog and digital General Purpose Electronic Test Equipment (GPETE)
E4	CORE	Configure combat systems equipment
E4	CORE	Configure electromechanical (synchro/servo) systems
E4	NON-CORE	Configure Special Purpose Electronic Test Equipment (SPETE)
E5	CORE	Control Electromagnetic Interference (EMI) and Radio Frequency Interference (RFI) effects on electronic systems

TECHNICAL CORE FUNDAMENTALS (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	NON-CORE	Handle Communications Security (COMSEC) materials
E4	CORE	Inspect personal electronic equipment
E4	NON-CORE	Inventory Communications Security (COMSEC) materials
E4	NON-CORE	Perform basic soldering on electrical and electronic equipment
E4	CORE	Perform Combat Systems Operational Sequencing System (CSOSS) procedures (e.g., casualty responses/operations, normal operations, initialize/de-energize equipment, etc.)
E4	CORE	Perform corrosion prevention and control procedures on electronic equipment and systems
E4	CORE	Repair Alternating Current (AC) circuits
E4	CORE	Repair digital circuits
E4	CORE	Repair Direct Current (DC) circuits
E4	NON-CORE	Repair fiber optic cables and connectors
E4	CORE	Repair interconnecting cables and connectors
E4	NON-CORE	Repair power supplies
E4	NON-CORE	Repair Special Purpose Electronic Test Equipment (SPETE)
E4	CORE	Replace electromechanical (synchro/servo) systems
E6	CORE	Report electromagnetic interference
E4	CORE	Set Emission Control (EMCON) conditions
E4	CORE	Set Hazards of Electromagnetic Radiation to Ordnance (HERO)/Hazards of Electromagnetic Radiation to Personnel (HERP) conditions
E4	CORE	Test Alternating Current (AC) circuits
E4	CORE	Test digital circuits
E4	CORE	Test Direct Current (DC) circuits
E4	CORE	Test electromechanical (synchro/servo) systems
E4	CORE	Test fiber optic cables and connectors
E4	CORE	Test interconnecting cables and connectors
E4	CORE	Test power supplies
E4	NON-CORE	Test Special Purpose Electronic Test Equipment (SPETE)
E4	CORE	Troubleshoot Alternating Current (AC) circuits
E4	CORE	Troubleshoot Alternating Current and Direct Current (AC/DC) motors
E4	CORE	Troubleshoot digital circuits
E4	CORE	Troubleshoot Direct Current (DC) circuits
E4	CORE	Troubleshoot electromechanical (synchro/servo) systems
E4	CORE	Troubleshoot fiber optic cables and connectors
E4	CORE	Troubleshoot interconnecting cables and connectors
E4	CORE	Troubleshoot power supplies
E4	CORE	Troubleshoot Radio Frequency (RF) circuits
E4	NON-CORE	Troubleshoot Special Purpose Electronic Test Equipment (SPETE)

Job Title**Electronics Data Systems Technician****Job Code****003724****Job Family**

Computer and Mathematical

NOC

TBD

Short Title (30 Characters)

ELECTRONICS DATA SYSTEMS TEC

Short Title (14 Characters)

E DATA SYS TEC

Pay Plan

Enlisted

Career Field

ET

Other Relationships and Rules

NEC VXXX series and other NECs as assigned.

Job Description

Electronics Data Systems Technicians maintain data link, inertial navigation, tactical network, message routing, digital production/projection, calibration, fiber optics, micro-miniature module test and repair, computer-based, and peripheral computer systems; analyze equipment operation, establish computer and network configurations, and troubleshoot and repair computer-based equipment to the lowest replaceable unit; execute casualty control procedures, restoring operability for all assigned electronic equipment, recognizing mission criticality and redundancies within systems; perform administrative functions that include updating casualty reporting messages, technical manuals, equipment maintenance records, and managing test equipment calibration requirements; complete fiber optic and basic soldering repair, electrical safety checks, and test equipment calibration; and supervise personnel who conduct tool and test equipment inventories, logistics support, and maintenance and testing of systems and equipment.

DoD Relationship**Group Title**

Radio/Radar, General

DoD Code

110000

O*NET Relationship**Occupation Title**

Network and Computer Systems Administrators

SOC Code

15-1142.00

Job Family

Computer and Mathematical

Skills*Operation Monitoring**Quality Control Analysis**Operation and Control**Complex Problem Solving**Equipment Selection**Repairing**Troubleshooting**Coordination**Management of Material Resources**Systems Analysis***Abilities***Deductive Reasoning**Selective Attention**Inductive Reasoning**Problem Sensitivity**Written Comprehension**Time Sharing**Manual Dexterity**Written Expression**Information Ordering**Control Precision***AUXILIARY EQUIPMENT AND SUPPORT SYSTEMS****Paygrade****Task Type****Task Statements**

E4

CORE

Configure auxiliary air and cooling water systems

E4

NON-CORE

Configure electrical, electronic, and mechanical calibration equipment

E4

CORE

Repair auxiliary air and cooling water systems

E4

NON-CORE

Repair electronic security systems

E4

CORE

Replace aloft equipment

E4

CORE

Test analog and digital General Purpose Electronic Test Equipment (GPETE)

E4

CORE

Test auxiliary air and cooling water systems

E4

NON-CORE

Test electrical, electronic, and mechanical calibration equipment

E4

NON-CORE

Test electronic security systems

E4

CORE

Troubleshoot analog and digital General Purpose Electronic Test Equipment (GPETE)

E4

CORE

Troubleshoot auxiliary air and cooling water systems

E4

NON-CORE

Troubleshoot electrical, electronic, and mechanical calibration equipment

E4

NON-CORE

Troubleshoot electronic security systems

E4

CORE

Configure Commercial-Off-The-Shelf (COTS) and Non-Program of Record (Non-POR) systems

COMMAND, CONTROL, COMPUTER, COMMUNICATION, AND INTELLIGENCE (C4I)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Configure computer and peripheral systems
E4	CORE	Configure cryptographic equipment
E4	NON-CORE	Configure Expeditionary Warfare (EXW) electronic equipment
E4	CORE	Configure network systems
E4	NON-CORE	Configure portable communications systems
E4	CORE	Configure switching equipment (e.g., Automated Single Audio System (ASAS), Tactical Variant Switch (TVS), Automated Network Control Center (ANCC), etc.)
E4	CORE	Establish data links (dual-net multi-frequency data links and multi-frequency links)
E5	NON-CORE	Implement Communications Plans (COMPLANS)
E4	NON-CORE	Integrate Intelligence, Surveillance, and Reconnaissance (ISR) services (e.g., Global Broadcasting Systems (GBS), Communications Data Link System (CDLS), etc.)
E4	NON-CORE	Integrate portable communications systems (e.g., iridium, Portable Radio Communications (PRC), etc.)
E4	CORE	Inventory network software and firmware
E4	CORE	Load cryptographic keying material
E4	NON-CORE	Load image software
E4	CORE	Maintain Command, Control, Computer, Communication, and Intelligence (C4I) password accounts
E4	NON-CORE	Monitor networks for vulnerabilities
E4	NON-CORE	Monitor portable communications systems (e.g., iridium, Portable Radio communications (PRC), etc.)
E4	NON-CORE	Monitor Radio Frequency (RF) systems (e.g., Super High Frequency (SHF), Ultra High Frequency (UHF), Very High Frequency (VHF), Extremely High Frequency (EHF), High frequency (HF))
E4	NON-CORE	Monitor routing and switching devices
E4	NON-CORE	Perform End of Mission Sanitizations (EOMS)
E4	NON-CORE	Perform Information Systems (IS) backups
E4	CORE	Repair Commercial-Off-The-Shelf (COTS) and Non-Program of Record (Non-POR) systems
E4	CORE	Repair computer and peripheral systems
E4	CORE	Repair data link systems
E4	CORE	Repair data multiplexing equipment
E4	NON-CORE	Repair Expeditionary Warfare (EXW) electronic equipment
E4	CORE	Repair High Frequency (HF) systems
E4	CORE	Repair message routing systems
E4	CORE	Repair network systems
E4	CORE	Repair Ultra High Frequency (UHF) systems
E4	CORE	Repair Very High Frequency (VHF) systems
E4	CORE	Replace cryptographic equipment
E4	NON-CORE	Set up cryptographic equipment

COMMAND, CONTROL, COMPUTER, COMMUNICATION, AND INTELLIGENCE (C4I) (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	NON-CORE	Set up cryptographic networks
E4	CORE	Test audio switching systems
E4	CORE	Test Command, Control, Computer, Communication, and Intelligence (C4I) antenna systems
E4	CORE	Test Commercial-Off-The-Shelf (COTS) and Non-Program of Record (Non-POR) systems
E4	CORE	Test computer and peripheral systems
E4	CORE	Test cryptographic equipment
E4	CORE	Test data link systems
E4	CORE	Test data multiplexing equipment
E4	NON-CORE	Test Expeditionary Warfare (EXW) electronic equipment
E4	CORE	Test Extremely High Frequency (EHF) systems
E4	CORE	Test High Frequency (HF) systems
E4	CORE	Test message routing systems
E4	CORE	Test network systems
E4	CORE	Test Ultra High Frequency (UHF) systems
E4	CORE	Test Very High Frequency (VHF) systems
E4	CORE	Troubleshoot Command, Control, Computer, Communication, and Intelligence (C4I) antenna systems
E4	CORE	Troubleshoot Commercial-Off-The-Shelf (COTS) and Non-Program of Record (Non-POR) systems
E4	CORE	Troubleshoot computer and peripheral systems
E4	CORE	Troubleshoot data link systems
E4	CORE	Troubleshoot data multiplexing equipment
E4	NON-CORE	Troubleshoot Expeditionary Warfare (EXW) electronic equipment
E4	CORE	Troubleshoot Extremely High Frequency (EHF) systems
E4	CORE	Troubleshoot High Frequency (HF) systems
E4	CORE	Troubleshoot message routing systems
E4	CORE	Troubleshoot network systems
E4	CORE	Troubleshoot Ultra High Frequency (UHF) systems
E4	CORE	Troubleshoot Very High Frequency (VHF) systems
E5	NON-CORE	Update network software and firmware

EQUIPMENT ADMINISTRATION

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Collect equipment and systems status data
E4	CORE	Document equipment status
E4	CORE	Inspect work areas, tools, and electronic systems equipment
E4	CORE	Inventory controlled equipment
E4	CORE	Inventory Maintenance Assistance Modules (MAM)

EQUIPMENT ADMINISTRATION (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E5	CORE	Maintain preventive maintenance documents
E5	CORE	Manage test equipment calibration programs
E4	CORE	Provide electronic equipment installation assistance
E5	NON-CORE	Receive Communications Security (COMSEC) materials
E5	NON-CORE	Report Electronic Key Management System (EKMS) discrepancies
E5	CORE	Review technical briefs, notices, and bulletins
E5	CORE	Supervise controlled equipment inventories
E5	CORE	Supervise Maintenance Assistance Modules (MAM) usage
E5	CORE	Supervise work center equipment and system configurations
E5	CORE	Update Combat Systems Operational Sequencing System (CSOSS)
E5	NON-CORE	Validate Communications Security (COMSEC) materials

RADAR NAVIGATION AND IDENTIFICATION SYSTEMS

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Configure navigation systems
E4	CORE	Extract data from navigation systems for diagnostics
E4	NON-CORE	Repair Identification Friend or Foe (IFF) systems
E4	CORE	Repair navigation systems
E4	CORE	Repair radar repeaters
E4	CORE	Repair radar systems
E4	CORE	Repair Tactical Air Navigation (TACAN) systems
E4	CORE	Test navigation systems
E4	CORE	Troubleshoot navigation systems

TECHNICAL CORE FUNDAMENTALS

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E6	CORE	Analyze schematics (e.g., ship's drawings, mechanical drawings, electronic schematics, piping and valve drawings, etc.)
E4	CORE	Analyze technical manuals
E4	CORE	Conduct Emergency Action Plans (EAP) and Emergency Destruction Plans (EDP)
E4	CORE	Configure analog and digital General Purpose Electronic Test Equipment (GPETE)
E4	CORE	Configure combat systems equipment
E4	CORE	Configure electromechanical (synchro/servo) systems
E4	NON-CORE	Configure Special Purpose Electronic Test Equipment (SPETE)
E5	CORE	Control Electromagnetic Interference (EMI) and Radio Frequency Interference (RFI) effects on electronic systems
E4	NON-CORE	Handle Communications Security (COMSEC) materials
E4	CORE	Inspect personal electronic equipment
E4	NON-CORE	Inventory Communications Security (COMSEC) materials
E4	NON-CORE	Perform basic soldering on electrical and electronic equipment

TECHNICAL CORE FUNDAMENTALS (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Perform Combat Systems Operational Sequencing System (CSOSS) procedures (e.g., casualty responses/operations, normal operations, initialize/de-energize equipment, etc.)
E4	CORE	Perform corrosion prevention and control procedures on electronic equipment and systems
E4	CORE	Repair Alternating Current (AC) circuits
E4	CORE	Repair digital circuits
E4	CORE	Repair Direct Current (DC) circuits
E4	NON-CORE	Repair fiber optic cables and connectors
E4	CORE	Repair interconnecting cables and connectors
E4	NON-CORE	Repair power supplies
E4	NON-CORE	Repair Special Purpose Electronic Test Equipment (SPETE)
E4	CORE	Replace electromechanical (synchro/servo) systems
E6	CORE	Report electromagnetic interference
E4	CORE	Set Emission Control (EMCON) conditions
E4	CORE	Set Hazards of Electromagnetic Radiation to Ordnance (HERO)/Hazards of Electromagnetic Radiation to Personnel (HERP) conditions
E4	CORE	Test Alternating Current (AC) circuits
E4	CORE	Test digital circuits
E4	CORE	Test Direct Current (DC) circuits
E4	CORE	Test electromechanical (synchro/servo) systems
E4	CORE	Test fiber optic cables and connectors
E4	CORE	Test interconnecting cables and connectors
E4	CORE	Test power supplies
E4	NON-CORE	Test Special Purpose Electronic Test Equipment (SPETE)
E4	CORE	Troubleshoot Alternating Current (AC) circuits
E4	CORE	Troubleshoot Alternating Current and Direct Current (AC/DC) motors
E4	CORE	Troubleshoot digital circuits
E4	CORE	Troubleshoot Direct Current (DC) circuits
E4	CORE	Troubleshoot electromechanical (synchro/servo) systems
E4	CORE	Troubleshoot fiber optic cables and connectors
E4	CORE	Troubleshoot interconnecting cables and connectors
E4	CORE	Troubleshoot power supplies
E4	NON-CORE	Troubleshoot Special Purpose Electronic Test Equipment (SPETE)

Job Title**Electronics Radar Systems Technician****Job Code****003725****Job Family**

Installation, Maintenance, and Repair

NOC

TBD

Short Title (30 Characters)

ELECTRONICS RADAR SYSTEMS TEC

Short Title (14 Characters)

E RDR SYS TECH

Pay Plan

Enlisted

Career Field

ET

Other Relationships and Rules

NEC VXXX series and other NECs as assigned.

Job Description

Electronics Radar Systems Technicians maintain surface search, air search, and weather radar systems, radar video switchboards, synchro Identification Friend or Foe (IFF) equipment, and tactical air navigation equipment, including all associated cabling, cooling water, and dry air systems; analyze equipment operation and align, troubleshoot, and repair equipment to the lowest replaceable unit; execute casualty control procedures, restoring operability for all assigned electronic equipment, recognizing mission criticality and redundancies within systems; perform administrative functions that include updating casualty reporting messages, technical manuals, equipment maintenance records, and managing test equipment calibration requirements; complete fiber optic and basic soldering repair, electrical safety checks, and test equipment calibration; and supervise personnel who conduct tool and test equipment inventories, logistics support, and maintenance and testing of systems and equipment.

DoD Relationship**Group Title**

Radio/Radar, General

DoD Code

110000

O*NET Relationship**Occupation Title**Electrical and Electronics
Installers and Repairers,
Transportation Equipment**SOC Code**

49-2093.00

Job Family

Installation, Maintenance, and Repair

Skills*Operation Monitoring**Quality Control Analysis**Operation and Control**Complex Problem Solving**Troubleshooting**Equipment Selection**Repairing**Management of Material Resources**Coordination**Systems Analysis***Abilities***Deductive Reasoning**Selective Attention**Inductive Reasoning**Problem Sensitivity**Time Sharing**Written Comprehension**Manual Dexterity**Written Expression**Information Ordering**Control Precision***AUXILIARY EQUIPMENT AND SUPPORT SYSTEMS****Paygrade****Task Type****Task Statements**

E4

CORE

Configure auxiliary air and cooling water systems

E4

NON-CORE

Configure electrical, electronic, and mechanical calibration equipment

E4

CORE

Repair auxiliary air and cooling water systems

E4

NON-CORE

Repair electronic security systems

E4

CORE

Replace aloft equipment

E4

CORE

Test analog and digital General Purpose Electronic Test Equipment (GPETE)

E4

CORE

Test auxiliary air and cooling water systems

E4

NON-CORE

Test electrical, electronic, and mechanical calibration equipment

E4

NON-CORE

Test electronic security systems

E4

CORE

Troubleshoot analog and digital General Purpose Electronic Test Equipment (GPETE)

E4

CORE

Troubleshoot auxiliary air and cooling water systems

E4

NON-CORE

Troubleshoot electrical, electronic, and mechanical calibration equipment

E4

NON-CORE

Troubleshoot electronic security systems

COMMAND, CONTROL, COMPUTER, COMMUNICATION, AND INTELLIGENCE (C4I)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Configure Commercial-Off-The-Shelf (COTS) and Non-Program of Record (Non-POR) systems
E4	CORE	Configure computer and peripheral systems
E4	CORE	Configure cryptographic equipment
E4	NON-CORE	Configure Expeditionary Warfare (EXW) electronic equipment
E4	NON-CORE	Configure meteorological systems
E5	NON-CORE	Implement Communications Plans (COMPLANS)
E4	CORE	Load cryptographic keying material
E4	NON-CORE	Load image software
E4	CORE	Maintain Command, Control, Computer, Communication, and Intelligence (C4I) password accounts
E4	NON-CORE	Monitor Radio Frequency (RF) systems (e.g., Super High Frequency (SHF), Ultra High Frequency (UHF), Very High Frequency (VHF), Extremely High Frequency (EHF), High frequency (HF))
E4	NON-CORE	Perform End of Mission Sanitizations (EOMS)
E4	CORE	Repair Commercial-Off-The-Shelf (COTS) and Non-Program of Record (Non-POR) systems
E4	CORE	Repair computer and peripheral systems
E4	NON-CORE	Repair Expeditionary Warfare (EXW) electronic equipment
E4	NON-CORE	Repair meteorological systems
E4	CORE	Replace cryptographic equipment
E4	NON-CORE	Set up cryptographic equipment
E4	CORE	Test Commercial-Off-The-Shelf (COTS) and Non-Program of Record (Non-POR) systems
E4	CORE	Test computer and peripheral systems
E4	CORE	Test cryptographic equipment
E4	NON-CORE	Test Expeditionary Warfare (EXW) electronic equipment
E4	NON-CORE	Test meteorological systems
E4	CORE	Troubleshoot Commercial-Off-The-Shelf (COTS) and Non-Program of Record (Non-POR) systems
E4	CORE	Troubleshoot computer and peripheral systems
E4	NON-CORE	Troubleshoot Expeditionary Warfare (EXW) electronic equipment
E4	NON-CORE	Troubleshoot meteorological systems
E5	NON-CORE	Update network software and firmware

EQUIPMENT ADMINISTRATION

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Collect equipment and systems status data
E4	CORE	Document equipment status
E4	CORE	Inspect work areas, tools, and electronic systems equipment

EQUIPMENT ADMINISTRATION (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Inventory controlled equipment
E4	CORE	Inventory Maintenance Assistance Modules (MAM)
E5	CORE	Maintain preventive maintenance documents
E5	CORE	Manage test equipment calibration programs
E4	CORE	Provide electronic equipment installation assistance
E5	NON-CORE	Receive Communications Security (COMSEC) materials
E5	NON-CORE	Report Electronic Key Management System (EKMS) discrepancies
E5	CORE	Review technical briefs, notices, and bulletins
E5	CORE	Supervise controlled equipment inventories
E5	CORE	Supervise Maintenance Assistance Modules (MAM) usage
E5	CORE	Supervise work center equipment and system configurations
E5	CORE	Update Combat Systems Operational Sequencing System (CSOSS)
E5	NON-CORE	Validate Communications Security (COMSEC) materials

RADAR NAVIGATION AND IDENTIFICATION SYSTEMS

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Configure Commercial-Off-The-Shelf (COTS) radar systems. (e.g., furuno)
E4	NON-CORE	Configure Identification Friend or Foe (IFF) systems
E4	CORE	Configure navigation systems
E4	CORE	Configure radar repeaters
E4	CORE	Configure radar switchboards
E4	CORE	Configure radar systems
E4	CORE	Configure Tactical Air Navigation (TACAN) systems
E4	CORE	Extract data from navigation systems for diagnostics
E4	CORE	Repair Commercial-Off-The-Shelf (COTS) radar systems. (e.g., furuno)
E4	NON-CORE	Repair Identification Friend or Foe (IFF) systems
E4	CORE	Repair navigation systems
E4	CORE	Repair radar repeaters
E4	CORE	Repair radar switchboards
E4	CORE	Repair radar systems
E4	CORE	Repair Tactical Air Navigation (TACAN) systems
E4	CORE	Test Commercial-Off-The-Shelf (COTS) radar systems. (e.g., furuno)
E4	NON-CORE	Test Identification Friend or Foe (IFF) systems
E4	CORE	Test navigation systems
E4	CORE	Test radar repeaters
E4	CORE	Test radar switchboards
E4	CORE	Test radar systems
E4	CORE	Test Tactical Air Navigation (TACAN) systems
E4	CORE	Troubleshoot Commercial-Off-The-Shelf (COTS) radar systems. (e.g., furuno)

RADAR NAVIGATION AND IDENTIFICATION SYSTEMS (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	NON-CORE	Troubleshoot Identification Friend or Foe (IFF) systems
E4	CORE	Troubleshoot navigation systems
E4	CORE	Troubleshoot radar repeaters
E4	CORE	Troubleshoot radar switchboards
E4	CORE	Troubleshoot radar systems
E4	CORE	Troubleshoot Tactical Air Navigation (TACAN) systems

TECHNICAL CORE FUNDAMENTALS

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E6	CORE	Analyze schematics (e.g., ship's drawings, mechanical drawings, electronic schematics, piping and valve drawings, etc.)
E4	CORE	Analyze technical manuals
E4	CORE	Conduct Emergency Action Plans (EAP) and Emergency Destruction Plans (EDP)
E4	CORE	Configure analog and digital General Purpose Electronic Test Equipment (GPETE)
E4	CORE	Configure combat systems equipment
E4	CORE	Configure electromechanical (synchro/servo) systems
E4	NON-CORE	Configure Special Purpose Electronic Test Equipment (SPETE)
E5	CORE	Control Electromagnetic Interference (EMI) and Radio Frequency Interference (RFI) effects on electronic systems
E4	NON-CORE	Handle Communications Security (COMSEC) materials
E4	CORE	Inspect personal electronic equipment
E4	NON-CORE	Inventory Communications Security (COMSEC) materials
E4	NON-CORE	Perform basic soldering on electrical and electronic equipment
E4	CORE	Perform Combat Systems Operational Sequencing System (CSOSS) procedures (e.g., casualty responses/operations, normal operations, initialize/de-energize equipment, etc.)
E4	CORE	Perform corrosion prevention and control procedures on electronic equipment and systems
E4	CORE	Repair Alternating Current (AC) circuits
E4	CORE	Repair digital circuits
E4	CORE	Repair Direct Current (DC) circuits
E4	NON-CORE	Repair fiber optic cables and connectors
E4	CORE	Repair interconnecting cables and connectors
E4	NON-CORE	Repair power supplies
E4	NON-CORE	Repair Special Purpose Electronic Test Equipment (SPETE)
E4	CORE	Replace electromechanical (synchro/servo) systems
E6	CORE	Report electromagnetic interference
E4	CORE	Set Emission Control (EMCON) conditions
E4	CORE	Set Hazards of Electromagnetic Radiation to Ordnance (HERO)/Hazards of Electromagnetic Radiation to Personnel (HERP) conditions
E4	CORE	Test Alternating Current (AC) circuits

TECHNICAL CORE FUNDAMENTALS (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Test digital circuits
E4	CORE	Test Direct Current (DC) circuits
E4	CORE	Test electromechanical (synchro/servo) systems
E4	CORE	Test fiber optic cables and connectors
E4	CORE	Test interconnecting cables and connectors
E4	CORE	Test power supplies
E4	NON-CORE	Test Special Purpose Electronic Test Equipment (SPETE)
E4	CORE	Troubleshoot Alternating Current (AC) circuits
E4	CORE	Troubleshoot Alternating Current and Direct Current (AC/DC) motors
E4	CORE	Troubleshoot digital circuits
E4	CORE	Troubleshoot Direct Current (DC) circuits
E4	CORE	Troubleshoot electromechanical (synchro/servo) systems
E4	CORE	Troubleshoot fiber optic cables and connectors
E4	CORE	Troubleshoot interconnecting cables and connectors
E4	CORE	Troubleshoot power supplies
E4	CORE	Troubleshoot Radio Frequency (RF) circuits
E4	NON-CORE	Troubleshoot Special Purpose Electronic Test Equipment (SPETE)

Job Title**Electronics Systems Manager****Job Code****003726****Job Family**

Installation, Maintenance, and Repair

NOC

TBD

Short Title (30 Characters)

ELECTRONICS SYSTEMS MANAGER

Short Title (14 Characters)

ELEC SYS MGR

Pay Plan

Enlisted

Career Field

ET

Other Relationships and Rules

NEC VXXX series and other NECs as assigned.

Job Description

Electronics Systems Managers supervise technicians and manage equipment and systems; train junior technicians in Personnel Qualification Standards (PQS) and casualty control procedures; coordinate watchstanding, maintenance, troubleshooting, and testing efforts between work centers, divisions, departments, and contractors; report equipment capabilities, limitations, and reliability to senior personnel when there is degradation in mission capability; establish and monitor safety programs and instructions for personnel and platforms; supervise training programs; coordinate support, certifications, and inspections with outside activities; and draft and update Combat System Operational Sequence System (CSOSS) procedures, Standard Operating Procedures (SOPs), Job Qualification Requirements (JQRs), casualty reports, and technical manuals.

DoD Relationship**Group Title**

Radio/Radar, General

DoD Code

110000

O*NET Relationship**Occupation Title**First-Line Supervisors of
Mechanics, Installers, and Repairers**SOC Code**

49-1011.00

Job Family

Installation, Maintenance, and Repair

Skills*Management of Material Resources**Quality Control Analysis**Reading Comprehension**Writing**Coordination**Systems Analysis**Operation and Control**Operation Monitoring**Systems Evaluation**Critical Thinking***Abilities***Written Comprehension**Written Expression**Information Ordering**Problem Sensitivity**Selective Attention**Inductive Reasoning**Oral Expression**Speed of Closure**Category Flexibility**Dynamic Strength***COMMAND, CONTROL, COMPUTER, COMMUNICATION, AND INTELLIGENCE (C4I)****Paygrade**

E6

Task Type

CORE

Task Statements

Manage Command, Control, Computer, Communication, and Intelligence (C4I) password accounts

E6

CORE

Manage network software and firmware operations

E4

NON-CORE

Perform End of Mission Sanitizations (EOMS)

EQUIPMENT ADMINISTRATION**Paygrade**

E7

Task Type

CORE

Task Statements

Approve equipment installations, testing, and alterations

E4

CORE

Collect equipment and systems status data

E6

NON-CORE

Collect spectrum requirements

E7

CORE

Coordinate equipment certifications and recertifications

E6

CORE

Develop Combat System Training Team (CSTT) scenarios

E6

NON-CORE

Develop Communications Plans (COMPLANS)

E6

NON-CORE

Develop Emergency Action Plans (EAP) and Emergency Destruction Plans (EDP)

E4

CORE

Document equipment status

E6

CORE

Draft Casualty Reports (CASREP)

E5

NON-CORE

Inspect security containers

EQUIPMENT ADMINISTRATION (CONT.)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Inspect work areas, tools, and electronic systems equipment
E4	CORE	Inventory controlled equipment
E6	NON-CORE	Maintain communications status boards
E5	CORE	Maintain preventive maintenance documents
E6	CORE	Manage controlled equipment
E7	CORE	Manage divisional equipment and system configurations
E7	CORE	Manage divisional maintenance operations
E7	CORE	Manage equipment Casualty Reporting (CASREP) process
E7	CORE	Manage equipment certifications and recertifications
E7	CORE	Manage safety programs and instructions (e.g., aloft, electrical equipment, etc.)
E5	CORE	Manage test equipment calibration programs
E6	CORE	Manage weapons and combat systems equipment alignment evolutions
E5	NON-CORE	Prepare local holder Electronic Key Management System (EKMS) reports
E6	NON-CORE	Prepare Satellite Access Requests (SAR), Gateway Access Request (GAR), After Action Reports (AAR), and End of Service Report (ESR)
E5	NON-CORE	Receive Communications Security (COMSEC) materials
E5	NON-CORE	Report Electronic Key Management System (EKMS) discrepancies
E5	CORE	Review technical briefs, notices, and bulletins
E5	CORE	Supervise controlled equipment inventories
E6	CORE	Supervise divisional equipment and system configurations
E6	CORE	Supervise divisional maintenance operations
E6	CORE	Supervise equipment installations, testing, and alterations
E5	CORE	Supervise work center maintenance operations
E5	CORE	Train technicians in casualty control procedures
E5	CORE	Update Combat Systems Operational Sequencing System (CSOSS)
E5	NON-CORE	Validate Communications Security (COMSEC) materials
E7	CORE	Verify equipment installations, testing, and alterations
E7	CORE	Verify procedural documents (e.g., Standard Operating Procedures (SOP), Temporary Standing Orders (TSO), Departure From Specifications (DFS), etc.)

TECHNICAL CORE FUNDAMENTALS

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E6	CORE	Analyze schematics (e.g., ship's drawings, mechanical drawings, electronic schematics, piping and valve drawings, etc.)
E4	CORE	Conduct Emergency Action Plans (EAP) and Emergency Destruction Plans (EDP)
E4	NON-CORE	Handle Communications Security (COMSEC) materials
E4	NON-CORE	Inventory Communications Security (COMSEC) materials
E4	CORE	Perform Combat Systems Operational Sequencing System (CSOSS) procedures (e.g., casualty responses/operations, normal operations, initialize/de-energize equipment, etc.)