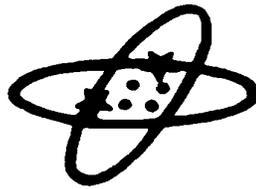


CHAPTER 32



ELECTRONICS TECHNICIAN (ET)

NAVPERS 18068-32J
CH-64

Updated: October 2015

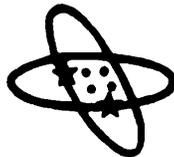
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NAVY ENLISTED OCCUPATIONAL STANDARD

FOR

ELECTRONICS TECHNICIAN (ET)



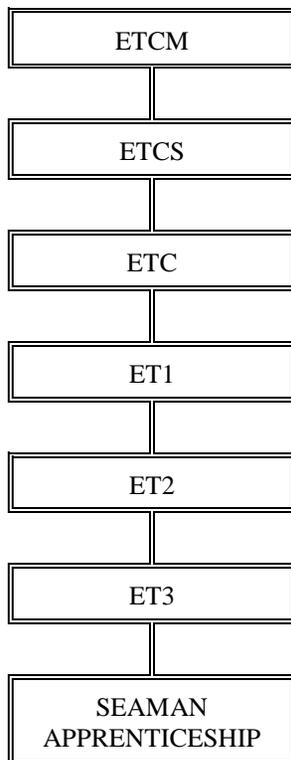
SCOPE OF RATING

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

0304, 0345, 1403, 1404, 1405, 1406, 1407, 1410, 1413, 1419, 1420, 1424, 1425, 1428, 1429, 1430, 1459, 1460, 1465, 1486, 1493, 1494, 1570, 1589, 1591, 1690, 2354, 2790, 2791, 3349, 4135, 4740, 5328, 6673,] 9534, 9535, 9550, 9604, 9607, 9613, 98GD, 98LM

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 to include managing test equipment calibration requirements and updating casualty reporting messages, technical manuals, and equipment maintenance records; conduct 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*Quality Control Analysis**Operation Monitoring**Complex Problem Solving**Equipment Selection**Repairing**Troubleshooting**Equipment Maintenance**Operation and Control**Systems Analysis**Reading Comprehension***Abilities***Deductive Reasoning**Inductive Reasoning**Selective Attention**Written Comprehension**Problem Sensitivity**Time Sharing**Information Ordering**Manual Dexterity**Written Expression**Control Precision***AUXILIARY EQUIPMENT AND SUPPORT SYSTEMS****Paygrade****Task Type****Task Statements**

E4

CORE

Align auxiliary air and cooling water systems

E4

NON-CORE

Configure electrical, electronic, and mechanical calibration equipment

E4

CORE

Inspect personal electronic equipment

E4

CORE

Perform preventive maintenance on aloft equipment

E4

CORE

Perform preventive maintenance on analog and digital General Purpose Electronic Test Equipment (GPETE)

E4

CORE

Perform preventive maintenance on auxiliary air and cooling water systems

E4

CORE

Perform preventive maintenance on electrical, electronic, and mechanical calibration equipment

E4

NON-CORE

Perform preventive maintenance on electronic security systems

E4

NON-CORE

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

E4

CORE

Repair auxiliary air and cooling water systems

E4

NON-CORE

Repair electrical, electronic, and mechanical calibration equipment

E4

NON-CORE

Repair electronic security systems

E4

CORE

Replace aloft equipment

E4	NON-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	NON-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	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 Special Operations (SPECOPS) electronic equipment
E4	CORE	Establish data links (i.e., dual-net multi-frequency data links and multi-frequency links)
E4	CORE	Establish multiplex audio circuits
E4	CORE	Load cryptographic keying material
E4	CORE	Maintain Command, Control, Computer, Communication, and Intelligence (C4I) password accounts
E4	CORE	Perform preventive maintenance on audio switching systems
E4	CORE	Perform preventive maintenance on Command, Control, Computer, Communication, and Intelligence (C4I) antenna systems
E4	NON-CORE	Perform preventive maintenance on Commercial-Off-The-Shelf (COTS) and Non-Program of Record (Non-POR) systems
E4	CORE	Perform preventive maintenance on computer and peripheral systems
E4	CORE	Perform preventive maintenance on cryptographic equipment
E4	CORE	Perform preventive maintenance on data link systems
E4	CORE	Perform preventive maintenance on data multiplexing equipment
E4	CORE	Perform preventive maintenance on 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	Perform preventive maintenance on low frequency radio communication systems (i.e., Low Frequency (LF), Very Low Frequency (VLF), and Extremely Low Frequency (ELF))
E4	CORE	Perform preventive maintenance on message routing systems
E4	NON-CORE	Perform preventive maintenance on Special Operations (SPECOPS) electronic equipment

E4	CORE	Repair audio switching systems
E4	CORE	Repair Command, Control, Computer, Communication, and Intelligence (C4I) antenna systems
E4	NON-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	CORE	Repair Extremely High Frequency (EHF) systems
E4	NON-CORE	Repair Extremely Low Frequency (ELF) systems
E4	CORE	Repair High Frequency (HF) systems
E4	NON-CORE	Repair Low Frequency (LF) systems
E4	CORE	Repair message routing systems
E4	NON-CORE	Repair Special Operations (SPECOPS) electronic equipment
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	CORE	Test audio switching systems
E4	CORE	Test Command, Control, Computer, Communication, and Intelligence (C4I) antenna systems
E5	NON-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	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	NON-CORE	Test Special Operations (SPECOPS) electronic equipment
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	NON-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	CORE	Troubleshoot Extremely High Frequency (EHF) systems
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	NON-CORE	Troubleshoot Special Operations (SPECOPS) electronic equipment
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

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	NON-CORE	Inventory Maintenance Assistance Modules (MAM)
E5	CORE	Maintain preventive maintenance documents
E6	CORE	Manage equipment certifications and recertifications
E5	CORE	Manage test equipment calibration programs
E4	CORE	Provide electronic equipment installation assistance
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 configuration and maintenance operations
E5	CORE	Update Combat Systems Operational Sequencing System (CSOSS)

TECHNICAL CORE FUNDAMENTALS

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Align combat systems equipment
E6	CORE	Analyze blueprints and ships drawings
E4	CORE	Analyze electronic schematics
E4	CORE	Analyze mechanical drawings
E4	CORE	Analyze plumbing and valve drawings
E4	CORE	Analyze technical manuals
E4	CORE	Configure analog and digital General Purpose Electronic Test Equipment (GPETE)
E4	CORE	Configure electromechanical (synchro/servo) systems
E4	CORE	Configure Special Purpose Electronic Test Equipment (SPETE)
E5	CORE	Control Electromagnetic Interference (EMI) and Radio Frequency Interference (RFI) effects on electronic systems

E4	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	Perform internal communications (e.g., verbal communications, sound-powered phone, and Internal Voice Communications Systems (IVCS))
E4	CORE	Perform preventive maintenance on electromechanical (synchro/servo) systems
E4	CORE	Perform preventive maintenance on fiber optic cables and connectors
E4	CORE	Perform preventive maintenance on interconnecting cables and connectors
E4	CORE	Perform preventive maintenance on power supplies
E4	CORE	Perform preventive maintenance on Special Purpose Electronic Test Equipment (SPETE)
E4	CORE	Repair Alternating Current (AC) circuits
E4	CORE	Repair digital circuits
E4	CORE	Repair Direct Current (DC) circuits
E4	CORE	Repair fiber optic cables and connectors
E4	CORE	Repair interconnecting cables and connectors
E4	CORE	Repair power supplies
E4	NON-CORE	Repair Special Purpose Electronic Test Equipment (SPETE)
E4	CORE	Replace electromechanical (synchro/servo) systems
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

0304, 0345, 0751, 1212, 1213, 1419, 1452, 1459, 1493, 1517, 1529, 1589, 1591, 1592, 1654, 1657, 1678, 1690, 2730, 2779, 2780, 2781, 2790, 2791, 3349, 4135, 4236, 4740, 5328, 6673, 9534, 9535, 9550, 9604, 9605, 9612, 9616, 98GD, 98LM

Job Description

Electronics Data Systems Technicians maintain calibration and Miniature/Microminiature Module Test and Repair (2MTR) equipment and data link, inertial navigation, tactical network, message routing, fiber optic, 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 and recognizing mission criticality and redundancies within systems; perform administrative functions to include managing test equipment calibration requirements and updating casualty reporting messages, technical manuals, and equipment maintenance records; conduct 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**O*NET Relationship****Group Title**

Radio/Radar, General

DoD Code

110000

Occupation Title

Network and Computer Systems Administrators

SOC Code

15-1142.00

Job Family

Computer and Mathematical

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

E4

CORE

Align auxiliary air and cooling water systems

E4

NON-CORE

Configure electrical, electronic, and mechanical calibration equipment

E4

CORE

Inspect personal electronic equipment

E4

CORE

Perform preventive maintenance on aloft equipment

E4

CORE

Perform preventive maintenance on analog and digital General Purpose Electronic Test Equipment (GPETE)

E4

CORE

Perform preventive maintenance on auxiliary air and cooling water systems

E4

CORE

Perform preventive maintenance on electrical, electronic, and mechanical calibration equipment

E4

NON-CORE

Perform preventive maintenance on electronic security systems

E4

NON-CORE

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

E4

CORE

Repair auxiliary air and cooling water systems

E4

NON-CORE

Repair electrical, electronic, and mechanical calibration equipment

E4

NON-CORE

Repair electronic security systems

E4

CORE

Replace aloft equipment

E4

NON-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	NON-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	CORE	Configure network systems
E4	NON-CORE	Configure Special Operations (SPECOPS) electronic equipment
E4	CORE	Establish data links (i.e., dual-net multi-frequency data links and multi-frequency links)
E4	CORE	Inventory network software and firmware
E4	CORE	Load cryptographic keying material
E4	CORE	Maintain Command, Control, Computer, Communication, and Intelligence (C4I) password accounts
E5	NON-CORE	Monitor networks for vulnerabilities
E4	NON-CORE	Perform preventive maintenance on Commercial-Off-The-Shelf (COTS) and Non-Program of Record (Non-POR) systems
E4	CORE	Perform preventive maintenance on computer and peripheral systems
E4	CORE	Perform preventive maintenance on cryptographic equipment
E4	CORE	Perform preventive maintenance on data link systems
E4	CORE	Perform preventive maintenance on data multiplexing equipment
E4	CORE	Perform preventive maintenance on message routing systems
E4	CORE	Perform preventive maintenance on network systems
E4	NON-CORE	Perform preventive maintenance on Special Operations (SPECOPS) electronic equipment
E4	NON-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	CORE	Repair message routing systems
E4	CORE	Repair network systems
E4	NON-CORE	Repair Special Operations (SPECOPS) electronic equipment
E4	CORE	Replace cryptographic equipment
E5	NON-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	CORE	Test message routing systems
E4	CORE	Test network systems
E4	NON-CORE	Test Special Operations (SPECOPS) electronic equipment
E4	NON-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	CORE	Troubleshoot message routing systems
E4	CORE	Troubleshoot network systems
E4	NON-CORE	Troubleshoot Special Operations (SPECOPS) electronic equipment
E5	CORE	Update network software

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	NON-CORE	Inventory Maintenance Assistance Modules (MAM)
E5	CORE	Maintain preventive maintenance documents
E6	CORE	Manage equipment certifications and recertifications
E5	CORE	Manage test equipment calibration programs
E4	CORE	Provide electronic equipment installation assistance
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 configuration and maintenance operations
E5	CORE	Update Combat Systems Operational Sequencing System (CSOSS)

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	CORE	Perform preventive maintenance on navigation systems
E4	CORE	Repair navigation 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>
E4	CORE	Align combat systems equipment
E6	CORE	Analyze blueprints and ships drawings
E4	CORE	Analyze electronic schematics
E4	CORE	Analyze mechanical drawings
E4	CORE	Analyze plumbing and valve drawings
E4	CORE	Analyze technical manuals
E4	CORE	Configure analog and digital General Purpose Electronic Test Equipment (GPETE)
E4	CORE	Configure electromechanical (synchro/servo) systems
E4	CORE	Configure Special Purpose Electronic Test Equipment (SPETE)
E5	CORE	Control Electromagnetic Interference (EMI) and Radio Frequency Interference (RFI) effects on electronic systems
E4	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	Perform internal communications (e.g., verbal communications, sound-powered phone, and Internal Voice Communications Systems (IVCS))
E4	CORE	Perform preventive maintenance on electromechanical (synchro/servo) systems
E4	CORE	Perform preventive maintenance on fiber optic cables and connectors
E4	CORE	Perform preventive maintenance on interconnecting cables and connectors
E4	CORE	Perform preventive maintenance on power supplies
E4	CORE	Perform preventive maintenance on Special Purpose Electronic Test Equipment (SPETE)
E4	CORE	Repair Alternating Current (AC) circuits
E4	CORE	Repair digital circuits
E4	CORE	Repair Direct Current (DC) circuits
E4	CORE	Repair fiber optic cables and connectors
E4	CORE	Repair interconnecting cables and connectors
E4	CORE	Repair power supplies
E4	NON-CORE	Repair Special Purpose Electronic Test Equipment (SPETE)
E4	CORE	Replace electromechanical (synchro/servo) systems
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

0304, 1413, 1419, 1471, 1491, 1503, 1504, 1507, 1510, 1511, 1517, 1520, 1529, 1530, 1571, 1572, 1574, 1575, 1578, 1579, 1580, 1589, 1590, 1591, 1592, 3349, 4135, 5328, 6673, 9534, 9535, 9550, 9606, 9608, 9610, 9614, 9615, 9616, 98GD, 98LM

Job Description

Electronics Radar Systems Technicians maintain surface search, air search, and weather radar systems, radar video switchboards, electromechanical (synchro/servo) systems, Identification Friend or Foe (IFF) systems, meteorological systems, 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 and recognizing mission criticality and redundancies within systems; perform administrative functions to include managing test equipment calibration requirements and updating casualty reporting messages, technical manuals, and equipment maintenance records; conduct 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*Quality Control Analysis**Operation Monitoring**Equipment Selection**Complex Problem Solving**Equipment Maintenance**Repairing**Troubleshooting**Operation and Control**Systems Analysis**Reading Comprehension***Abilities***Deductive Reasoning**Written Comprehension**Inductive Reasoning**Information Ordering**Selective Attention**Problem Sensitivity**Time Sharing**Manual Dexterity**Written Expression**Speed of Closure***AUXILIARY EQUIPMENT AND SUPPORT SYSTEMS****Paygrade****Task Type****Task Statements**

E4

CORE

Align auxiliary air and cooling water systems

E4

NON-CORE

Configure electrical, electronic, and mechanical calibration equipment

E4

CORE

Inspect personal electronic equipment

E4

CORE

Perform preventive maintenance on aloft equipment

E4

CORE

Perform preventive maintenance on analog and digital General Purpose Electronic Test Equipment (GPETE)

E4

CORE

Perform preventive maintenance on auxiliary air and cooling water systems

E4

CORE

Perform preventive maintenance on electrical, electronic, and mechanical calibration equipment

E4

NON-CORE

Perform preventive maintenance on electronic security systems

E4

NON-CORE

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

E4

CORE

Repair auxiliary air and cooling water systems

E4

NON-CORE

Repair electrical, electronic, and mechanical calibration equipment

E4

NON-CORE

Repair electronic security systems

E4

CORE

Replace aloft equipment

E4	NON-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	NON-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 meteorological systems
E4	NON-CORE	Configure Special Operations (SPECOPS) electronic equipment
E4	CORE	Load cryptographic keying material
E4	CORE	Maintain Command, Control, Computer, Communication, and Intelligence (C4I) password accounts
E4	NON-CORE	Perform preventive maintenance on Commercial-Off-The-Shelf (COTS) and Non-Program of Record (Non-POR) systems
E4	CORE	Perform preventive maintenance on computer and peripheral systems
E4	CORE	Perform preventive maintenance on cryptographic equipment
E4	NON-CORE	Perform preventive maintenance on meteorological systems
E4	NON-CORE	Perform preventive maintenance on Special Operations (SPECOPS) electronic equipment
E4	NON-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 meteorological systems
E4	NON-CORE	Repair Special Operations (SPECOPS) electronic equipment
E4	CORE	Replace cryptographic equipment
E5	NON-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 meteorological systems
E4	NON-CORE	Test Special Operations (SPECOPS) electronic equipment
E4	NON-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 meteorological systems
E4	NON-CORE	Troubleshoot Special Operations (SPECOPS) electronic equipment

E5 CORE Update network software

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	NON-CORE	Inventory Maintenance Assistance Modules (MAM)
E5	CORE	Maintain preventive maintenance documents
E6	CORE	Manage equipment certifications and recertifications
E5	CORE	Manage test equipment calibration programs
E4	CORE	Provide electronic equipment installation assistance
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 configuration and maintenance operations
E5	CORE	Update Combat Systems Operational Sequencing System (CSOSS)

RADAR NAVIGATION AND IDENTIFICATION SYSTEMS

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
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	NON-CORE	Perform preventive maintenance on Identification Friend or Foe (IFF) systems
E4	CORE	Perform preventive maintenance on navigation systems
E4	CORE	Perform preventive maintenance on radar repeaters
E4	CORE	Perform preventive maintenance on radar switchboards
E4	CORE	Perform preventive maintenance on radar systems
E4	CORE	Perform preventive maintenance on Tactical Air Navigation (TACAN) systems
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	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	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>
E4	CORE	Align combat systems equipment
E6	CORE	Analyze blueprints and ships drawings
E4	CORE	Analyze electronic schematics
E4	CORE	Analyze mechanical drawings
E4	CORE	Analyze plumbing and valve drawings
E4	CORE	Analyze technical manuals
E4	CORE	Configure analog and digital General Purpose Electronic Test Equipment (GPETE)
E4	CORE	Configure electromechanical (synchro/servo) systems
E4	CORE	Configure Special Purpose Electronic Test Equipment (SPETE)
E5	CORE	Control Electromagnetic Interference (EMI) and Radio Frequency Interference (RFI) effects on electronic systems
E4	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	Perform internal communications (e.g., verbal communications, sound-powered phone, and Internal Voice Communications Systems (IVCS))
E4	CORE	Perform preventive maintenance on electromechanical (synchro/servo) systems
E4	CORE	Perform preventive maintenance on fiber optic cables and connectors
E4	CORE	Perform preventive maintenance on interconnecting cables and connectors
E4	CORE	Perform preventive maintenance on power supplies
E4	CORE	Perform preventive maintenance on Special Purpose Electronic Test Equipment (SPETE)
E4	CORE	Repair Alternating Current (AC) circuits
E4	CORE	Repair digital circuits
E4	CORE	Repair Direct Current (DC) circuits
E4	CORE	Repair fiber optic cables and connectors
E4	CORE	Repair interconnecting cables and connectors
E4	CORE	Repair power supplies
E4	NON-CORE	Repair Special Purpose Electronic Test Equipment (SPETE)
E4	CORE	Replace electromechanical (synchro/servo) systems

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 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

0304, 1321, 1419, 1589, 1591, 2779, 2780, 2781, 4135, 5328, 6673

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 RelationshipGroup Title

Radio/Radar, General

DoD Code

110000

O*NET RelationshipOccupation TitleFirst-Line Supervisors of
Mechanics, Installers, and RepairersSOC Code

49-1011.00

Job FamilyInstallation, Maintenance, and
Repair**Skills***Management of Material Resources**Systems Analysis**Quality Control Analysis**Reading Comprehension**Writing**Systems Evaluation**Coordination**Learning Strategies**Management of Financial Resources**Operation and Control***Abilities***Written Comprehension**Written Expression**Information Ordering**Inductive Reasoning**Oral Expression**Problem Sensitivity**Selective Attention**Speed of Closure**Category Flexibility**Control Precision***COMMAND, CONTROL, COMPUTER, COMMUNICATION, AND INTELLIGENCE (C4I)****Paygrade****Task Type****Task Statements**

E7

CORE

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

E6

CORE

Manage network software and firmware operations

EQUIPMENT ADMINISTRATION**Paygrade****Task Type****Task Statements**

E7

CORE

Approve equipment installations, testing, and alterations

E4

CORE

Collect equipment and systems status data

E7

CORE

Coordinate equipment certifications and recertifications

E4

CORE

Document equipment status

E4

CORE

Inventory controlled equipment

E5

CORE

Maintain preventive maintenance documents

E6

CORE

Manage controlled equipment

E7

CORE

Manage divisional equipment and system configuration and maintenance operations

E7

CORE

Manage equipment Casualty Reporting (CASREP) process

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

E6

CORE

Supervise divisional equipment and system configuration and maintenance operations

E6	CORE	Supervise equipment installations, testing, and alterations
E5	CORE	Train technicians in casualty control procedures
E5	CORE	Update Combat Systems Operational Sequencing System (CSOSS)
E7	CORE	Verify electronic equipment Standard Operating Procedures (SOP)
E7	CORE	Verify equipment installations, testing, and alterations

TECHNICAL CORE FUNDAMENTALS

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E6	CORE	Analyze blueprints and ships drawings
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 internal communications (e.g., verbal communications, sound-powered phone, and Internal Voice Communications Systems (IVCS))