

CHAPTER 11



AVIATION ELECTRONICS TECHNICIAN (AT)

NAVPERS 18068F-11I
Change 105

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TABLE OF CONTENTS
AVIATION ELECTRONICS TECHNICIAN (AT)

SCOPE OF RATING	AT-3
GENERAL INFORMATION	AT-4
AVIATION ELECTRONICS INTERMEDIATE LEVEL TECHNICIAN	AT-5
AVIONICS MAINTENANCE	AT-5
CORROSION CONTROL	AT-7
MAINTENANCE ADMINISTRATION	AT-7
QUALITY ASSURANCE	AT-7
TEST EQUIPMENT	AT-7
AVIATION ELECTRONICS ORGANIZATIONAL LEVEL TECHNICIAN	AT-8
AVIONICS MAINTENANCE	AT-8
CORROSION CONTROL	AT-10
MAINTENANCE ADMINISTRATION	AT-10
QUALITY ASSURANCE	AT-10
TEST EQUIPMENT	AT-11

NAVY ENLISTED OCCUPATIONAL STANDARD

FOR

AVIATION ELECTRONICS TECHNICIAN (AT)



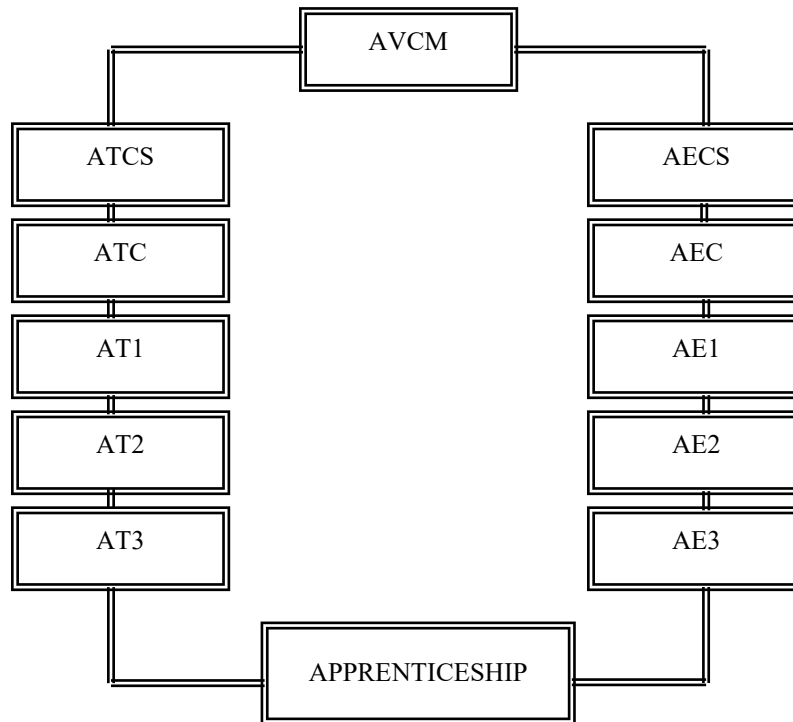
SCOPE OF RATING

Aviation Electronics Technicians (AT) perform Intermediate Level maintenance on aviation electronic components with conventional and automatic test equipment; repair Weapons Replaceable Assemblies (WRA) and Shop Replaceable Assemblies (SRA); perform test equipment calibration/repair and associated test bench maintenance; and perform Organizational Level maintenance on aircraft electronics systems to include: computers, communications, Radio Detection and Ranging (RADAR), navigation, Anti-Submarine Warfare (ASW) sensors, fiber optics, Forward Looking Infrared (FLIR), wiring, weapons systems, Light Amplification by Stimulated Emission of Radiation (LASER), electronic warfare, data link, fire control, and tactical displays with associated equipment.

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 11.

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**Aviation Electronics Intermediate Level Technician****Job Code****002410****Job Family**

Installation, Maintenance, and Repair

NOC

TBD

Short Title (30 Characters)

AVIATION ELECTRONICS I-LVL TEC

Short Title (14 Characters)

AV ELTRON I-LV

Pay Plan

Enlisted

Career Field

AT

Other Relationships and Rules

NEC EXXX, IXXX, 7XXX series and other NECs as assigned

Job Description

Aviation Electronics Intermediate Level Technicians communicate with Production Control (PC) and Quality Assurance (QA) to ensure timely and accurate maintenance according to the Naval Aviation Maintenance Program (NAMP); inspect, troubleshoot, repair, and maintain a vast array of mission, navigation, Radio Detection and Ranging (RADAR), communications, and other avionics equipment; demonstrate knowledge of operational theory of assigned equipment and all levels of troubleshooting procedures; and interpret schematics for electronics and advanced electronic test equipment.

DoD Relationship**Group Title**Navigation, Communication, 110200
and Countermeasure, N.E.C.**DoD Code****O*NET Relationship****Occupation Title**

Avionics Technicians

SOC Code

49-2091.00

Job FamilyInstallation, Maintenance, and
Repair**Skills***Systems Evaluation**Systems Analysis**Repairing**Troubleshooting**Equipment Maintenance**Quality Control Analysis**Operation Monitoring**Management of Material Resources**Monitoring**Operation and Control***Abilities***Problem Sensitivity**Deductive Reasoning**Written Comprehension**Manual Dexterity**Selective Attention**Information Ordering**Finger Dexterity**Near Vision**Time Sharing**Written Expression***AVIONICS MAINTENANCE****Paygrade****Task Type****Task Statements**

E4

CORE

Analyze wiring schematics

E4

CORE

Conduct scheduled inspections

E4

CORE

Conduct Technical Directive (TD) changes

E4

CORE

Load avionics-related software

E4

CORE

Load Key Management Infrastructure (KMI) systems

E4

NON-CORE

Repair Anti-Submarine Warfare (ASW) system components

E4

CORE

Repair communication system components

E4

CORE

Repair countermeasures system components

E4

CORE

Repair data handling system components

E4

CORE

Repair display, indicator, and control system components

E4

CORE

Repair Electronic Support Measures (ESM) system components

E4

NON-CORE

Repair flight recording system components

E4

NON-CORE

Repair infrared system components

E4

CORE

Repair Key Management Infrastructure (KMI) system components

E4

NON-CORE

Repair Light Amplification by Stimulated Emission of Radiation (LASER) system components

E4

CORE

Repair navigation system components

E4

CORE

Repair Radio Detection and Ranging (RADAR) system components

E4

CORE

Repair Shop Replaceable Assemblies (SRA)

AVIONICS MAINTENANCE (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Repair Stores Management System (SMS) components
E4	NON-CORE	Repair video and audio recording system components
E4	CORE	Repair wiring and connectors
E4	NON-CORE	Replace fiber optic cables
E4	NON-CORE	Test aircrew survival equipment radios
E4	NON-CORE	Test Anti-Submarine Warfare (ASW) system components
E4	CORE	Test communication system components
E4	CORE	Test countermeasures system components
E4	CORE	Test data handling system components
E4	CORE	Test display, indicator, and control system components
E4	CORE	Test Electronic Support Measures (ESM) system components
E4	NON-CORE	Test flight recording system components
E4	NON-CORE	Test infrared system components
E4	NON-CORE	Test Key Management Infrastructure (KMI) system components
E4	NON-CORE	Test Light Amplification by Stimulated Emission of Radiation (LASER) system components
E4	CORE	Test navigation system components
E4	CORE	Test Radio Detection and Ranging (RADAR) system components
E4	CORE	Test Shop Replaceable Assemblies (SRA)
E4	NON-CORE	Test Stores Management System (SMS)
E4	CORE	Test video and audio recording system components
E4	NON-CORE	Troubleshoot Anti-Submarine Warfare (ASW) system components
E4	CORE	Troubleshoot communication system components
E4	CORE	Troubleshoot countermeasures system components
E4	CORE	Troubleshoot data handling system components
E4	CORE	Troubleshoot display, indicator, and control system components
E4	CORE	Troubleshoot Electronic Support Measures (ESM) system components
E4	NON-CORE	Troubleshoot fiber optic cables
E4	NON-CORE	Troubleshoot flight recording system components
E4	NON-CORE	Troubleshoot infrared system components
E4	NON-CORE	Troubleshoot Key Management Infrastructure (KMI) system components
E4	NON-CORE	Troubleshoot Light Amplification by Stimulated Emission of Radiation (LASER) system components
E4	CORE	Troubleshoot navigation system components
E4	NON-CORE	Troubleshoot Radio Detection and Ranging (RADAR) system components
E4	CORE	Troubleshoot Shop Replaceable Assemblies (SRA)
E4	NON-CORE	Troubleshoot Stores Management System (SMS) components
E4	NON-CORE	Troubleshoot video and audio recording system components
E4	CORE	Troubleshoot wiring and connectors

CORROSION CONTROL

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Depreserve Support Equipment (SE)
E4	CORE	Perform corrosion inspections on avionics systems and components
E4	CORE	Perform corrosion prevention procedures on avionics systems and components
E4	CORE	Perform corrosion treatment procedures on avionics systems and components
E4	CORE	Preserve Support Equipment (SE)

MAINTENANCE ADMINISTRATION

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Control classified material
E5	CORE	Manage Key Management Infrastructure (KMI) program
E6	CORE	Monitor Key Management Infrastructure (KMI) program for compliance
E5	CORE	Prepare Broad Arrow (BA) reports

QUALITY ASSURANCE

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E6	CORE	Audit Naval Aviation Maintenance Program (NAMP) programs (Laser Hazard Control, Electrostatic Discharge (ESD) Protection/Electromagnetic Interference (EMI) Reporting, Electrical Wiring Interconnection System (EWIS), Aircraft Survivability Equipment)
E4	CORE	Conduct acceptance inspections
E4	CORE	Conduct Collateral Duty Inspector (CDI) inspections
E5	CORE	Conduct Collateral Duty Quality Assurance Representative (CDQAR) inspections
E4	CORE	Conduct conditional inspections
E4	CORE	Conduct phase inspections
E6	CORE	Conduct Quality Assurance Representative (QAR) inspections
E4	CORE	Conduct transfer inspections
E6	CORE	Manage Naval Aviation Maintenance Program (NAMP) programs (Laser Hazard Control, Electrostatic Discharge (ESD) Protection/Electromagnetic Interference (EMI) Reporting, Electrical Wiring Interconnection System (EWIS), Aircraft Survivability Equipment)

TEST EQUIPMENT

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E5	NON-CORE	Maintain Consolidated Automated Support System (CASS)/Electronic Consolidated Automated Support System (ECASS) Family of Testers (FOT) stations
E4	CORE	Maintain Support Equipment (SE)
E4	CORE	Perform preoperational inspections on Support Equipment (SE)
E5	NON-CORE	Repair Consolidated Automated Support System (CASS)/Electronic Consolidated Automated Support System (ECASS) Family of Testers (FOT) stations
E4	CORE	Repair Support Equipment (SE)
E4	CORE	Test Support Equipment (SE)
E4	NON-CORE	Troubleshoot Consolidated Automated Support System (CASS)/Electronic Consolidated Automated Support System (ECASS) Family of Testers (FOT) stations
E4	CORE	Troubleshoot Support Equipment (SE)

Job Title**Aviation Electronics Organizational Level Technician****Job Code****002455****Job Family**

Installation, Maintenance, and Repair

NOC

TBD

Short Title (30 Characters)

AVIATION ELECTRONICS O-LVL TEC

Short Title (14 Characters)

AV ELTRON O-LV

Pay Plan

Enlisted

Career Field

AT

Other Relationships and Rules

NEC EXXX, IXXX, 7XXX series and other NECs as assigned

Job Description

Aviation Electronics Organizational Level Technicians communicate with Maintenance Control (MC) and Quality Assurance (QA) to ensure timely and accurate maintenance according to the Naval Aviation Maintenance Program (NAMP); inspect, troubleshoot, repair, and maintain various aircraft avionics systems; demonstrate in-depth knowledge of operational theory of assigned equipment and all troubleshooting procedures; and interpret schematics for aircraft and avionics systems.

DoD Relationship**Group Title**Navigation, Communication, I10200
and Countermeasure, N.E.C.**DoD Code****O*NET Relationship****Occupation Title**

Avionics Technicians

SOC Code

49-2091.00

Job FamilyInstallation, Maintenance, and
Repair**Skills***Equipment Maintenance**Systems Evaluation**Quality Control Analysis**Repairing**Installation**Troubleshooting**Management of Material Resources**Coordination**Monitoring**Operation and Control***Abilities***Written Comprehension**Deductive Reasoning**Selective Attention**Dynamic Strength**Problem Sensitivity**Information Ordering**Finger Dexterity**Near Vision**Time Sharing**Written Expression***AVIONICS MAINTENANCE****Paygrade****Task Type****Task Statements**

E4

CORE

Analyze wiring schematics

E4

CORE

Conduct scheduled inspections

E4

CORE

Conduct Technical Directive (TD) changes

E4

NON-CORE

Install Anti-Submarine Warfare (ASW) system components

E4

CORE

Install communication system components

E4

CORE

Install countermeasures system components

E4

CORE

Install data handling system components

E4

CORE

Install display, indicator, and control system components

E4

CORE

Install Electronic Support Measures (ESM) system components

E4

CORE

Install flight recording system components

E4

CORE

Install infrared system components

E4

CORE

Install Key Management Infrastructure (KMI) system components

E4

CORE

Install Light Amplification by Stimulated Emission of Radiation (LASER) system components

E4

CORE

Install navigation system components

E4

CORE

Install Radio Detection and Ranging (RADAR) system components

E4

CORE

Install Stores Management System (SMS) components

E4

CORE

Install video and audio recording system components

E4

CORE

Load avionics-related software

AVIONICS MAINTENANCE (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Load Key Management Infrastructure (KMI) systems
E4	NON-CORE	Maintain Anti-Submarine Warfare (ASW) systems
E4	CORE	Maintain communication systems
E4	CORE	Maintain countermeasures systems
E4	CORE	Maintain data handling systems
E4	CORE	Maintain display, indicator, and control systems
E4	CORE	Maintain Electronic Support Measures (ESM) systems
E4	CORE	Maintain flight recording systems
E4	CORE	Maintain infrared systems
E4	CORE	Maintain Key Management Infrastructure (KMI) systems
E4	CORE	Maintain Light Amplification by Stimulated Emission of Radiation (LASER) systems
E4	CORE	Maintain navigation systems
E4	CORE	Maintain Radio Detection and Ranging (RADAR) systems
E4	CORE	Maintain Stores Management System (SMS)
E4	CORE	Maintain video and audio recording systems
E4	CORE	Perform solder repairs
E4	CORE	Perform weapons release and control systems checks
E4	NON-CORE	Remove Anti-Submarine Warfare (ASW) system components
E4	CORE	Remove communication system components
E4	CORE	Remove countermeasures system components
E4	CORE	Remove data handling system components
E4	CORE	Remove display, indicator, and control system components
E4	CORE	Remove Electronic Support Measures (ESM) system components
E4	CORE	Remove flight recording system components
E4	CORE	Remove infrared system components
E4	CORE	Remove Key Management Infrastructure (KMI) system components
E4	CORE	Remove Light Amplification by Stimulated Emission of Radiation (LASER) system components
E4	CORE	Remove navigation system components
E4	CORE	Remove Radio Detection and Ranging (RADAR) system components
E4	CORE	Remove Stores Management System (SMS) components
E4	CORE	Remove video and audio recording system components
E4	CORE	Repair wiring and connectors
E4	NON-CORE	Replace fiber optic cables
E4	NON-CORE	Troubleshoot Anti-Submarine Warfare (ASW) systems
E4	CORE	Troubleshoot communication systems
E4	CORE	Troubleshoot countermeasures systems
E4	CORE	Troubleshoot data handling systems
E4	CORE	Troubleshoot display, indicator, and control systems
E4	CORE	Troubleshoot Electronic Support Measures (ESM) systems

AVIONICS MAINTENANCE (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	NON-CORE	Troubleshoot fiber optic cables
E4	CORE	Troubleshoot flight recording systems
E4	CORE	Troubleshoot infrared systems
E4	CORE	Troubleshoot Key Management Infrastructure (KMI) systems
E4	CORE	Troubleshoot Light Amplification by Stimulated Emission of Radiation (LASER) systems
E4	CORE	Troubleshoot navigation systems
E4	CORE	Troubleshoot Radio Detection and Ranging (RADAR) systems
E4	CORE	Troubleshoot Stores Management System (SMS)
E4	CORE	Troubleshoot video and audio recording systems
E4	CORE	Troubleshoot wiring and connectors

CORROSION CONTROL

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Depreserve Support Equipment (SE)
E4	CORE	Perform corrosion inspections on avionics systems and components
E4	CORE	Perform corrosion prevention procedures on avionics systems and components
E4	CORE	Perform corrosion treatment procedures on avionics systems and components
E4	CORE	Preserve Support Equipment (SE)

MAINTENANCE ADMINISTRATION

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Control classified material
E7	CORE	Coordinate flight deck and flight line operations
E7	CORE	Coordinate the preparation of the aircraft for Planned Maintenance Intervals (PMI)
E7	CORE	Coordinate the preparation of the aircraft for Standard Depot Level Maintenance (SDLM)
E5	CORE	Manage Key Management Infrastructure (KMI) program
E6	CORE	Monitor Key Management Infrastructure (KMI) program for compliance
E6	CORE	Release aircraft Safe for Flight (SFF)

QUALITY ASSURANCE

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E6	CORE	Audit Naval Aviation Maintenance Program (NAMP) programs (Laser Hazard Control, Electrostatic Discharge (ESD) Protection/Electromagnetic Interference (EMI) Reporting, Electrical Wiring Interconnection System (EWIS), Aircraft Survivability Equipment)
E4	CORE	Conduct acceptance inspections
E4	CORE	Conduct aircraft acceptance inspections
E4	CORE	Conduct Collateral Duty Inspector (CDI) inspections
E5	CORE	Conduct Collateral Duty Quality Assurance Representative (CDQAR) inspections
E4	CORE	Conduct conditional inspections
E4	CORE	Conduct phase inspections
E6	CORE	Conduct Quality Assurance Representative (QAR) inspections

QUALITY ASSURANCE (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Conduct transfer inspections
E6	CORE	Manage Naval Aviation Maintenance Program (NAMP) programs (Laser Hazard Control, Electrostatic Discharge (ESD) Protection/Electromagnetic Interference (EMI) Reporting, Electrical Wiring Interconnection System (EWIS), Aircraft Survivability Equipment)
E4	CORE	Perform aircraft daily inspections
E4	CORE	Perform aircraft turnaround inspections

TEST EQUIPMENT

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Maintain Support Equipment (SE)
E4	CORE	Perform preoperational inspections on Support Equipment (SE)