

CHAPTER 11



AVIATION ELECTRONICS TECHNICIAN (AT)

NAVPERS 18068F-11H
Change 94

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NAVY ENLISTED OCCUPATIONAL STANDARD

FOR

AVIATION ELECTRONICS TECHNICIAN (AT)

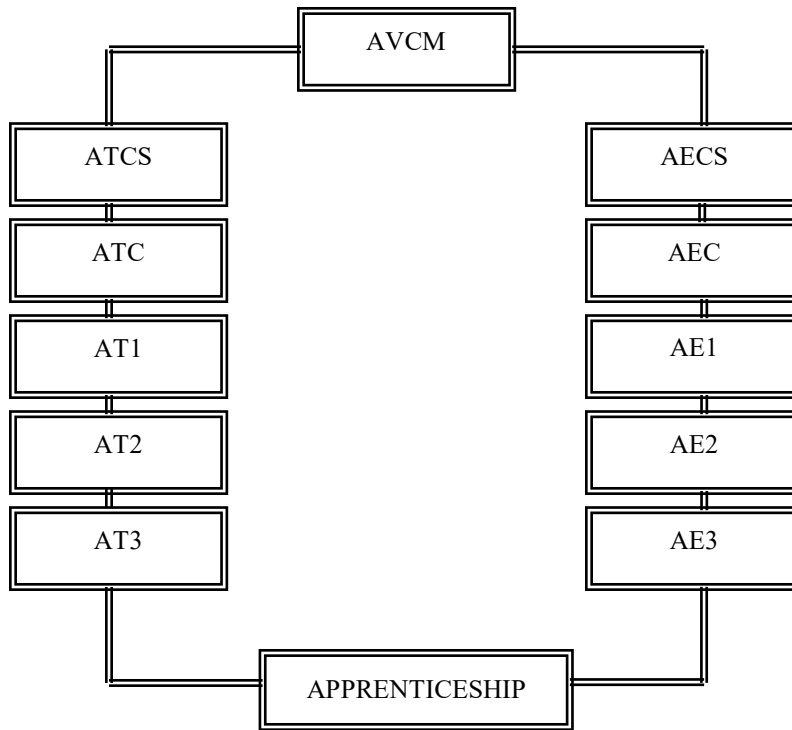


SCOPE OF RATING

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 RelationshipGroup Title

Navigation, Communication, I10200 and Countermeasure, N.E.C.

DoD Code**O*NET Relationship**Occupation Title

Avionics Technicians

SOC Code

49-2091.00

Job Family

Installation, Maintenance, and Repair

Skills*Systems Evaluation**Equipment Maintenance**Troubleshooting**Quality Control Analysis**Repairing**Systems Analysis**Management of Material Resources**Installation**Coordination**Monitoring***Abilities***Deductive Reasoning**Problem Sensitivity**Written Comprehension**Selective Attention**Manual Dexterity**Finger Dexterity**Near Vision**Inductive Reasoning**Information Ordering**Written Expression***AVIONICS MAINTENANCE****Paygrade****Task Type****Task Statements**

E4

CORE

Adjust electronic equipment

E4

CORE

Analyze wiring schematics

E5

CORE

Conduct scheduled inspections

E5

CORE

Conduct Technical Directive (TD) changes

E4

CORE

Configure Unit Under Test (UUT) with testing equipment

E4

CORE

Deconfigure Unit Under Test (UUT) from testing equipment

E4

CORE

Install Shop Replaceable Assemblies (SRA)

E4

CORE

Load avionics related software

E4

NON-CORE

Maintain carrier landing system components

E4

CORE

Maintain communication system components

E4

NON-CORE

Maintain Communications Security (COMSEC) system components

E4

CORE

Maintain computer system components

E4

CORE

Maintain display, indicator, and control system components

E4

NON-CORE

Maintain Electronic Countermeasures (ECM) system components

E4

NON-CORE

Maintain Electronic Support Measures (ESM) system components

E4

NON-CORE

Maintain flight recording system components

E4

NON-CORE

Maintain Global Positioning System (GPS) components

E4

CORE

Maintain Identification Friend or Foe (IFF) communication system components

AVIONICS MAINTENANCE (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	NON-CORE	Maintain infrared system components
E4	NON-CORE	Maintain Instrument Landing System (ILS) components
E4	CORE	Maintain navigation system components
E4	NON-CORE	Maintain video and audio recording system components
E4	CORE	Perform acceptance inspections
E4	CORE	Perform conditional inspections
E4	NON-CORE	Perform Micro-Miniature (2M) repairs
E4	CORE	Perform phase inspections
E4	CORE	Perform scheduled inspections
E4	CORE	Perform Support Equipment (SE) inspections (e.g., daily, preoperations, etc.)
E4	CORE	Perform Technical Directive (TD) changes
E4	CORE	Perform transfer inspections
E4	CORE	Remove Shop Replaceable Assemblies (SRA)
E4	NON-CORE	Repair Anti-Submarine Warfare (ASW) system components
E4	CORE	Repair countermeasures system components
E4	CORE	Repair display, indicator, and control system components
E4	CORE	Repair electronic equipment
E4	CORE	Repair Radio Detection and Ranging (RADAR) system components
E4	CORE	Repair radio frequency equipment
E4	CORE	Repair Stores Management System (SMS) components
E4	CORE	Repair Unit Under Test (UUT) sub-assemblies
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 countermeasures system components
E4	NON-CORE	Troubleshoot Anti-Submarine Warfare (ASW) system components
E4	CORE	Troubleshoot communication system components
E4	NON-CORE	Troubleshoot Communications Security (COMSEC) system components
E4	CORE	Troubleshoot computer system components
E4	CORE	Troubleshoot countermeasures system components
E4	CORE	Troubleshoot display, indicator, and control system components
E4	NON-CORE	Troubleshoot Electronic Countermeasures (ECM) system components
E4	NON-CORE	Troubleshoot Electronic Support Measures (ESM) system components
E4	NON-CORE	Troubleshoot flight recording system components
E4	NON-CORE	Troubleshoot Global Positioning System (GPS) components
E4	CORE	Troubleshoot Identification Friend or Foe (IFF) communication system components
E4	NON-CORE	Troubleshoot infrared system components
E4	NON-CORE	Troubleshoot Instrument Landing System (ILS) components

AVIONICS MAINTENANCE (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Troubleshoot navigation system components
E4	NON-CORE	Troubleshoot Radio Detection and Ranging (RADAR) system components
E4	CORE	Troubleshoot radio frequency equipment
E4	CORE	Troubleshoot Shop Replaceable Assemblies (SRA)
E4	NON-CORE	Troubleshoot Stores Management System (SMS) components
E4	CORE	Troubleshoot Unit Under Test (UUT) sub-assemblies
E4	NON-CORE	Troubleshoot Unit Under Test (UUT) using Consolidated Automated Support System (CASS) Family of Testers (FOT)
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	Clean Support Equipment (SE) and avionics related equipment
E4	CORE	Depreserve Support Equipment (SE) and avionics related equipment
E4	CORE	Perform corrosion identification
E4	CORE	Perform corrosion inspections
E4	CORE	Perform corrosion prevention procedures
E4	CORE	Perform corrosion treatment procedures
E4	CORE	Perform emergency reclamations
E4	CORE	Preserve Support Equipment (SE) and avionics related equipment

MAINTENANCE ADMINISTRATION

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E5	CORE	Brief Production Control (PC)
E7	CORE	Conduct production meetings
E4	CORE	Control classified material
E4	CORE	Document maintenance actions
E5	CORE	Maintain Key Management Infrastructure (KMI) programs
E5	CORE	Manage avionics maintenance
E7	CORE	Manage Key Management Infrastructure (KMI) programs
E7	CORE	Manage Production Control (PC)
E7	CORE	Manage scheduled maintenance
E7	CORE	Manage unscheduled maintenance
E5	CORE	Prepare Broad Arrow (BA) reports
E5	CORE	Review maintenance reports
E5	CORE	Supervise scheduled maintenance
E5	CORE	Supervise unscheduled maintenance
E5	CORE	Update Monthly Maintenance Plans (MMP) / Monthly Personnel Plan (MPP)
E6	CORE	Validate Monthly Maintenance Plans (MMP) / Monthly Personnel Plan (MPP)

QUALITY ASSURANCE

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E5	CORE	Conduct acceptance inspections
E5	CORE	Conduct Collateral Duty Inspector (CDI) functions
E5	CORE	Conduct conditional inspections
E5	CORE	Conduct phase inspections
E5	CORE	Conduct Quality Assurance (QA) inspections
E5	CORE	Conduct transfer inspections
E6	CORE	Manage Naval Aviation Maintenance Programs (NAMP)
E6	CORE	Perform Naval Aviation Maintenance Program (NAMP) audits
E4	CORE	Perform Quality Assurance (QA) inspections
E5	CORE	Verify scheduled inspections
E5	CORE	Verify Technical Directive (TD) changes

TEST EQUIPMENT

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Adjust electronic test equipment
E4	CORE	Adjust radio frequency equipment
E5	NON-CORE	Inspect Consolidated Automated Support System (CASS) Family of Testers (FOT) stations
E5	CORE	Inspect test equipment
E4	NON-CORE	Install Consolidated Automated Support System (CASS) Family of Testers (FOT) test equipment
E4	CORE	Maintain Operational Test Program Sets (OTPS)
E4	CORE	Maintain Support Equipment (SE)
E4	NON-CORE	Remove Consolidated Automated Support System (CASS) Family of Testers (FOT) test equipment
E5	NON-CORE	Repair Consolidated Automated Support System (CASS) Family of Testers (FOT) stations
E4	CORE	Repair Operational Test Program Sets (OTPS)
E4	CORE	Repair Support Equipment (SE)
E4	CORE	Repair test equipment
E4	NON-CORE	Troubleshoot Consolidated Automated Support System (CASS) Family of Testers (FOT) stations
E4	CORE	Troubleshoot Operational Test Program Sets (OTPS)
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 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 RelationshipGroup Title

Navigation, Communication, I10200 and Countermeasure, N.E.C.

DoD Code**O*NET Relationship**Occupation Title

Avionics Technicians

SOC Code

49-2091.00

Job Family

Installation, Maintenance, and Repair

Skills*Systems Evaluation**Equipment Maintenance**Quality Control Analysis**Troubleshooting**Coordination**Management of Material Resources**Monitoring**Reading Comprehension**Operation and Control**Systems Analysis***Abilities***Deductive Reasoning**Selective Attention**Written Comprehension**Problem Sensitivity**Information Ordering**Near Vision**Inductive Reasoning**Finger Dexterity**Oral Expression**Written Expression***AVIONICS MAINTENANCE****Paygrade****Task Type****Task Statements**

E4

CORE

Adjust electronic equipment

E4

CORE

Analyze wiring schematics

E5

CORE

Conduct scheduled inspections

E5

CORE

Conduct Technical Directive (TD) changes

E4

CORE

Load avionics related software

E4

CORE

Load Communications Security (COMSEC) on aircrew survival equipment radios

E4

CORE

Load Communications Security (COMSEC) systems

E4

NON-CORE

Maintain Anti-Submarine Warfare (ASW) systems

E4

NON-CORE

Maintain carrier approach landing systems

E4

CORE

Maintain communication systems

E4

CORE

Maintain Communications Security (COMSEC) systems

E4

CORE

Maintain computer systems

E4

CORE

Maintain display, indicator, and control systems

E4

CORE

Maintain Electronic Countermeasures (ECM) systems

E4

NON-CORE

Maintain Electronic Support Measures (ESM) systems

E4

CORE

Maintain flight recording systems

E4

CORE

Maintain Global Positioning System (GPS)

E4

CORE

Maintain Identification Friend or Foe (IFF) communication systems

E4

CORE

Maintain infrared systems

AVIONICS MAINTENANCE (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Maintain Instrument Landing Systems (ILS)
E4	NON-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 secure speech communication systems
E4	CORE	Maintain Stores Management System (SMS)
E4	CORE	Maintain video and audio recording systems
E4	CORE	Perform acceptance inspections
E4	CORE	Perform aircraft acceptance inspections
E4	CORE	Perform conditional inspections
E4	CORE	Perform phase inspections
E4	CORE	Perform scheduled inspections
E4	NON-CORE	Perform solder repairs
E4	CORE	Perform Support Equipment (SE) inspections (e.g., daily, preoperations, etc.)
E4	CORE	Perform Technical Directive (TD) changes
E4	CORE	Perform transfer inspections
E4	CORE	Perform weapons release and control systems checks
E4	CORE	Repair display, indicator, and control system components
E4	CORE	Repair electronic equipment
E4	CORE	Repair wiring and connectors
E4	NON-CORE	Replace fiber optic cables
E4	NON-CORE	Troubleshoot Anti-Submarine Warfare (ASW) systems
E4	NON-CORE	Troubleshoot carrier approach landing systems
E4	CORE	Troubleshoot Communications Security (COMSEC) systems
E4	CORE	Troubleshoot communications systems
E4	CORE	Troubleshoot computer systems
E4	CORE	Troubleshoot display, indicator, and control systems
E4	CORE	Troubleshoot Electronic Countermeasures (ECM) systems
E4	NON-CORE	Troubleshoot Electronic Support Measures (ESM) systems
E4	CORE	Troubleshoot fiber optic cables
E4	CORE	Troubleshoot flight recording systems
E4	CORE	Troubleshoot Global Positioning System (GPS)
E4	CORE	Troubleshoot Identification Friend or Foe (IFF) communication systems
E4	CORE	Troubleshoot infrared systems
E4	CORE	Troubleshoot Instrument Landing Systems (ILS)
E4	NON-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

AVIONICS MAINTENANCE (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Troubleshoot secure speech communication 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	Clean Support Equipment (SE) and avionics related equipment
E4	CORE	Depreserve Support Equipment (SE) and avionics related equipment
E4	CORE	Perform corrosion identification
E4	CORE	Perform corrosion inspections
E4	CORE	Perform corrosion prevention procedures
E4	CORE	Perform corrosion treatment procedures
E4	CORE	Perform emergency reclamations
E4	CORE	Preserve Support Equipment (SE) and avionics related equipment

MAINTENANCE ADMINISTRATION

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E7	CORE	Assign aircraft to flight schedules
E7	CORE	Brief flight crews
E5	CORE	Brief maintenance control
E7	CORE	Conduct maintenance meetings
E7	CORE	Configure aircraft for flight schedules
E4	CORE	Control classified material
E7	CORE	Coordinate flight deck and flight line operations
E6	CORE	Coordinate phase maintenance
E4	CORE	Document maintenance actions
E5	CORE	Maintain Key Management Infrastructure (KMI) programs
E5	CORE	Manage avionics maintenance
E7	CORE	Manage Key Management Infrastructure (KMI) programs
E7	CORE	Manage maintenance control
E7	CORE	Manage scheduled maintenance
E7	CORE	Manage unscheduled maintenance
E7	CORE	Prepare aircraft for Planned Maintenance Intervals (PMI)
E7	CORE	Prepare aircraft for Standard Depot Level Maintenance (SDLM)
E7	CORE	Release aircraft safe for flight
E4	CORE	Review Automated Aircraft Discrepancy Book (AADB)
E5	CORE	Review maintenance reports
E5	CORE	Supervise scheduled maintenance
E5	CORE	Supervise unscheduled maintenance

MAINTENANCE ADMINISTRATION (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E5	CORE	Update Monthly Maintenance Plans (MMP) / Monthly Personnel Plan (MPP)
E6	CORE	Validate Monthly Maintenance Plans (MMP) / Monthly Personnel Plan (MPP)

QUALITY ASSURANCE

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E5	CORE	Conduct acceptance inspections
E5	CORE	Conduct aircraft acceptance inspections
E5	CORE	Conduct Collateral Duty Inspector (CDI) functions
E5	CORE	Conduct conditional inspections
E5	CORE	Conduct phase inspections
E5	CORE	Conduct Quality Assurance (QA) inspections
E5	CORE	Conduct transfer inspections
E6	CORE	Manage Functional Check Flight (FCF) requirements
E6	CORE	Manage Naval Aviation Maintenance Programs (NAMP)
E4	CORE	Perform aircraft daily inspections
E4	CORE	Perform aircraft turnaround inspections
E6	CORE	Perform Naval Aviation Maintenance Program (NAMP) audits
E4	CORE	Perform Quality Assurance (QA) inspections
E5	CORE	Supervise weapons release and control system checks
E5	CORE	Verify scheduled inspections
E5	CORE	Verify Technical Directive (TD) changes

TEST EQUIPMENT

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E5	CORE	Inspect test equipment
E4	CORE	Maintain Support Equipment (SE)