

# CHAPTER 11



## AVIATION ELECTRONICS TECHNICIAN (AT)

NAVPERS 18068F-11G  
Change 82

Enclosure (1)

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NAVY ENLISTED OCCUPATIONAL STANDARD

FOR

AVIATION ELECTRONICS TECHNICIAN (AT)



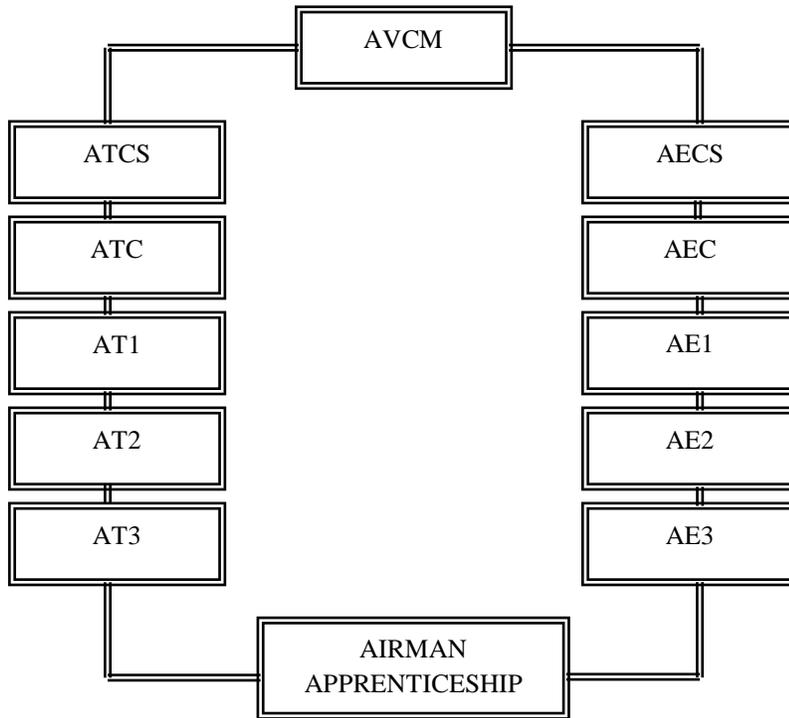
SCOPE OF RATING

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); and perform test equipment calibration/repair and associated test bench maintenance. They also 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.

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These Occupational Standards are 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 IXXX series and other NECs as required

**Job Description**

Aviation Electronics Intermediate Level Technicians communicate with Production Control and Quality Assurance 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), and communications avionics equipment; understand the operational theory of assigned equipment; possess knowledge of all levels of troubleshooting procedures; and are required to read and interpret schematics for electronics and advanced electronic test equipment.

**DoD Relationship****Group Title**

Navigation, Communication, and Countermeasure

**DoD Code**

110200

**O\*NET Relationship****Occupation Title**

Avionics Technicians

**SOC Code**

49-2091.00

**Job Family**

Installation, Maintenance, and Repair

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

E4

CORE

Analyze wiring schematics

E4

CORE

Conduct Support Equipment (SE) inspections (e.g., daily, pre-operations, etc.)

E4

CORE

Install Unit Under Test (UUT) sub-assemblies

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 system components

E4

CORE

Maintain Identification Friend or Foe (IFF) communication system components

E4

NON-CORE

Maintain infrared system components

E4

NON-CORE

Maintain Instrument Landing System (ILS) components

E4

CORE

Maintain navigation system components

E4

CORE

Operate Consolidated Automated Support System (CASS) Family of Testers (FOT)

E4

CORE

Perform scheduled inspections

E4

CORE

Perform Technical Directive (TD) changes

E4

CORE

Remove Unit Under Test (UUT) sub-assemblies

E4

NON-CORE

Repair Anti-Submarine Warfare (ASW) system components

E4

CORE

Repair controls and indicators

## **AVIONICS MAINTENANCE (CON'T)**

<b><u>Paygrade</u></b>	<b><u>Task Type</u></b>	<b><u>Task Statements</u></b>
E4	CORE	Repair countermeasures system components
E4	CORE	Repair flight control system components
E4	CORE	Repair navigation system components
E4	CORE	Repair radar system components
E4	CORE	Repair stores management system components
E4	CORE	Repair Unit Under Test (UUT) sub-assemblies
E4	CORE	Repair wiring and connectors
E4	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 system 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

## **CALIBRATION**

<b><u>Paygrade</u></b>	<b><u>Task Type</u></b>	<b><u>Task Statements</u></b>
E4	NON-CORE	Calibrate dimensional measuring equipment
E4	NON-CORE	Calibrate electronic test equipment
E4	NON-CORE	Calibrate Precision Measuring Equipment (PME)
E4	NON-CORE	Calibrate radio frequency equipment
E4	NON-CORE	Document calibration laboratories climate standards
E4	NON-CORE	Maintain radio frequency calibration standards
E4	NON-CORE	Repair dimensional measuring equipment
E4	NON-CORE	Repair Precision Measuring Equipment (PME)

## **CORROSION CONTROL**

<b><u>Paygrade</u></b>	<b><u>Task Type</u></b>	<b><u>Task Statements</u></b>
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

## ELECTRICAL AND ELECTRONIC MAINTENANCE

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Adjust electronic equipment
E4	CORE	Install Shop Replaceable Assemblies (SRA)
E4	CORE	Load avionics related software
E4	NON-CORE	Perform Micro-Miniature (2M) repairs
E4	CORE	Remove Shop Replaceable Assemblies (SRA)
E4	CORE	Repair electronic equipment
E4	CORE	Repair radio frequency 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
E6	CORE	Manage avionics maintenance
E6	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)

## QUALITY ASSURANCE

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E5	CORE	Conduct acceptance inspections
E5	CORE	Conduct Quality Assurance (QA) inspections
E5	CORE	Conduct transfer inspections
E6	CORE	Manage Naval Aviation Maintenance Programs (NAMPP)
E5	CORE	Perform Collateral Duty Inspector (CDI) functions
E6	CORE	Perform Naval Aviation Maintenance Program (NAMPP) audits

## TEST EQUIPMENT

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E5	NON-CORE	Inspect Consolidated Automated Support System (CASS) Family of Testers (FOT) stations
E5	CORE	Inspect test equipment
E4	CORE	Install Consolidated Automated Support System (CASS) Family of Testers (FOT) test equipment
E4	CORE	Maintain Support Equipment (SE)

**TEST EQUIPMENT (CON'T)**

<b><u>Paygrade</u></b>	<b><u>Task Type</u></b>	<b><u>Task Statements</u></b>
E4	CORE	Remove Consolidated Automated Support System (CASS) Family of Testers (FOT) test equipment
E5	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 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 series and other NECs as assigned

**Job Description**

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

**DoD Relationship**Group Title

Navigation, Communication, and Countermeasure

DoD Code

110200

**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**Coordination**Equipment Selection**Management of Material Resources**Critical Thinking**Monitoring**Systems Analysis***Abilities***Deductive Reasoning**Selective Attention**Problem Sensitivity**Information Ordering**Written Comprehension**Near Vision**Perceptual Speed**Inductive Reasoning**Finger Dexterity**Oral Expression***AVIONICS MAINTENANCE****Paygrade****Task Type****Task Statements**

E4

CORE

Analyze wiring schematics

E4

CORE

Conduct Support Equipment (SE) inspections (e.g., daily, pre-operations, etc.)

E4

NON-CORE

Load aircrew survival equipment radios

E4

CORE

Load Communications Security (COMSEC ) systems

E4

CORE

Maintain aircraft communication systems

E4

CORE

Maintain aircraft external stores mission equipment

E4

NON-CORE

Maintain Antisubmarine Warfare (ASW) systems

E4

CORE

Maintain armament systems

E4

CORE

Maintain carrier approach landing systems

E4

CORE

Maintain communication systems

E4

CORE

Maintain Communications Security (COMSEC) systems

E4

CORE

Maintain display 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) systems

E4

CORE

Maintain infrared systems

E4

CORE

Maintain Instrument Landing Systems (ILS)

### AVIONICS MAINTENANCE (CON'T)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	NON-CORE	Maintain Light Amplification by Stimulated Emission of Radiation (LASER) systems
E4	CORE	Maintain mission computer system
E4	CORE	Maintain navigation systems
E4	CORE	Maintain radar systems
E4	CORE	Maintain secure speech communication systems
E4	CORE	Maintain video and audio recording systems
E4	CORE	Perform scheduled inspections
E4	CORE	Perform Technical Directive (TD) changes
E4	CORE	Perform weapons release and control systems checks
E4	CORE	Repair wiring and connectors
E4	CORE	Replace fiber optic cables
E4	CORE	Test aircraft electronic systems
E4	CORE	Troubleshoot aircraft communication systems
E4	CORE	Troubleshoot aircraft external stores mission equipment
E4	NON-CORE	Troubleshoot Antisubmarine Warfare (ASW) systems
E4	CORE	Troubleshoot armament systems
E4	CORE	Troubleshoot carrier approach landing systems
E4	CORE	Troubleshoot Communications Security (COMSEC) systems
E4	CORE	Troubleshoot communications systems
E4	CORE	Troubleshoot display systems
E4	CORE	Troubleshoot Electronic Countermeasures (ECM) systems
E4	NON-CORE	Troubleshoot Electronic Support Measures (ESM) systems
E4	CORE	Troubleshoot flight recording systems
E4	CORE	Troubleshoot Global Positioning System (GPS)
E4	CORE	Troubleshoot Identification Friend or Foe (IFF) 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 mission computer systems
E4	CORE	Troubleshoot navigation systems
E4	CORE	Troubleshoot radar systems
E4	CORE	Troubleshoot secure speech communication systems
E4	CORE	Troubleshoot video and audio recording systems

### 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	Perform corrosion identification
E4	CORE	Perform corrosion inspections
E4	CORE	Perform corrosion prevention procedures

### **CORROSION CONTROL (CON'T)**

<b><u>Paygrade</u></b>	<b><u>Task Type</u></b>	<b><u>Task Statements</u></b>
E4	CORE	Perform corrosion treatment procedures
E4	CORE	Perform emergency reclamations

### **ELECTRICAL AND ELECTRONIC MAINTENANCE**

<b><u>Paygrade</u></b>	<b><u>Task Type</u></b>	<b><u>Task Statements</u></b>
E4	CORE	Adjust electronic equipment
E4	CORE	Load avionics related software

### **MAINTENANCE ADMINISTRATION**

<b><u>Paygrade</u></b>	<b><u>Task Type</u></b>	<b><u>Task Statements</u></b>
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
E6	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
E5	CORE	Update Monthly Maintenance Plans (MMP)

### **QUALITY ASSURANCE**

<b><u>Paygrade</u></b>	<b><u>Task Type</u></b>	<b><u>Task Statements</u></b>
E5	CORE	Conduct acceptance inspections
E5	CORE	Conduct aircraft acceptance inspections
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)

**QUALITY ASSURANCE (CON'T)**

<b><u>Paygrade</u></b>	<b><u>Task Type</u></b>	<b><u>Task Statements</u></b>
E4	CORE	Perform aircraft daily inspections
E4	CORE	Perform aircraft turnaround inspections
E5	CORE	Perform Collateral Duty Inspector (CDI) functions
E6	CORE	Perform Naval Aviation Maintenance Program (NAMP) audits
E5	NON-CORE	Supervise weapons release and control system checks

**TEST EQUIPMENT**

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