

CHAPTER 7



AVIATION STRUCTURAL MECHANIC (SAFETY EQUIPMENT) (AME)

NAVPERS 18068F-7I
Change 86

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NAVY ENLISTED OCCUPATIONAL STANDARD

FOR

AVIATION STRUCTURAL MECHANIC (SAFETY EQUIPMENT) (AME)



SCOPE OF RATING

Aviation Structural Mechanics (Safety Equipment) (AME) maintain ejection seats, canopy jettison components, environmental control, fire extinguishing, and associated life support systems; maintain gaseous and liquid oxygen, cockpit pressurization, heating and cooling, ventilation systems, avionics cooling, and anti-gravity and control components; maintain utility systems and associated lines, fittings, rigging, valves, control mechanisms, oxygen gauges, converters, and regulators; inspect, remove, and install ejection seats, and shoulder harnesses; inspect, remove, and install explosive devices; adjust canopy and ejection seat firing mechanisms; operate and maintain liquid oxygen, gaseous oxygen and nitrogen support equipment; and perform daily, pre-flight, post-flight, and other periodic aircraft inspections.

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) in Chapter 7.

Job Title

Aviation Environmental and Egress Technician

Job Code

001955

Job Family

Transportation and Material Moving

NOC

TBD

Short Title (30 Characters)

AVIA ENVIRONMENTAL EGRESS TEC

Short Title (14 Characters)

SFTY EQUI TECH

Pay Plan

Enlisted

Career Field

AME

Other Relationships and Rules

NEC EXXX series or other NECs as assigned

Job Description

Aviation Environmental and Egress Technicians maintain and repair aircraft systems such as: ejection seats, crash worthy seats, and canopy systems; maintain gaseous and liquid oxygen and nitrogen systems and environmental control systems (aircraft air-conditioning and pressurization systems); maintain ordnance and manage explosive devices (Cartridge Actuated Devices (CAD) and Propellant Actuated Devices (PAD)); configure aircraft for flight schedules; and manage scheduled and unscheduled maintenance. Technicians also perform daily, pre-flight, post-flight, and other periodic aircraft inspections.

DoD Relationship

Group Title

Aircraft Structures

DoD Code

160300

O*NET Relationship

Occupation Title

Aviation Inspectors

SOC Code

53-6051.01

Job Family

Transportation and Material Moving

Skills

Equipment Maintenance
Reading Comprehension
Operation and Control
Complex Problem-Solving
Troubleshooting
Operation Monitoring
Quality Control Analysis
Judgment and Decision-Making
Monitoring
Critical Thinking

Abilities

Deductive Reasoning
Dynamic Flexibility
Extent Flexibility
Speed of Closure
Perceptual Speed
Time Sharing
Selective Attention
Category Flexibility
Problem Sensitivity
Inductive Reasoning

CORROSION CONTROL

Paygrade

Task Type

Task Statements

E4	CORE	Clean aircraft, support equipment, and aircraft related equipment
E4	CORE	Depreserve aircraft, support equipment, and aircraft related equipment
E4	CORE	Inspect aircraft and aircraft components for corrosion
E4	CORE	Perform corrosion prevention procedures
E4	CORE	Perform emergency reclamations
E4	CORE	Preserve aircraft, support equipment, and aircraft related equipment
E4	CORE	Treat aircraft and components for corrosion

EGRESS/EMERGENCY SYSTEMS

Paygrade

Task Type

Task Statements

E5	CORE	Inspect explosive system components
E4	CORE	Install Cartridge Actuated Devices/Propellant Actuated Devices (CAD/PADs)
E4	CORE	Install explosive system components
E4	CORE	Maintain aircraft portable fire bottles
E4	CORE	Maintain seat pan assemblies
E6	CORE	Manage egress system checkout programs
E6	CORE	Manage explosive devices
E6	CORE	Manage Explosive Handling Personnel Qualification and Certification Program

EGRESS/EMERGENCY SYSTEMS (CONT.)

<u>Pavgrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Perform maintenance on ejection seat parachute systems
E4	CORE	Perform maintenance on ejection seat systems
E4	CORE	Perform maintenance procedures on Dry Bay Fire Suppression Systems (DBFSS)
E4	CORE	Perform maintenance procedures on fire extinguishing systems
E4	CORE	Perform operational check procedures on Dry Bay Fire Suppression Systems (DBFSS)
E4	CORE	Perform operational check procedures on fire extinguishing systems
E4	CORE	Remove Cartridge Actuated Devices/Propellant Actuated Devices (CAD/PADs)
E4	CORE	Remove explosive system components
E5	CORE	Supervise arming evolutions
E5	CORE	Supervise de-arming evolutions
E5	CORE	Supervise egress/emergency systems maintenance
E6	CORE	Supervise emergency reclamations
E5	CORE	Supervise ordnance maintenance
E5	CORE	Troubleshoot Dry Bay Fire Suppression Systems (DBFSS)
E5	CORE	Troubleshoot fire extinguishing systems
E6	CORE	Verify high time components

MAINTENANCE ADMINISTRATION

<u>Pavgrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E7	CORE	Assign aircraft to flight schedules
E7	CORE	Conduct maintenance meetings
E7	CORE	Configure aircraft for flight schedules
E7	CORE	Control aircraft acceptance inspections
E7	CORE	Coordinate Flight Deck (FD)/Flight Line (FL) operations
E4	CORE	Document maintenance actions
E7	CORE	Manage Maintenance Control (MC) operations
E6	CORE	Manage scheduled maintenance
E6	CORE	Manage unscheduled maintenance
E7	CORE	Prepare Planned Maintenance Intervals (PMI) for aircraft
E7	CORE	Prepare Standard Depot Level Maintenance (SDLM) for aircraft
E7	CORE	Release aircraft safe for flight
E4	CORE	Review Aircraft Discrepancy Books (ADB)
E6	CORE	Review Monthly Maintenance Plans (MMP)
E5	CORE	Revise monthly maintenance plans
E7	CORE	Screen work orders or Visual Information Display System/Maintenance Action Forms (VIDS/MAF)
E6	CORE	Verify Functional Check Flight (FCF) requirements
E4	CORE	Verify ordnance utilizing Cartridge Actuated Devices/Propellant Actuated Devices (CAD/PAD) program

MECHANICAL MAINTENANCE

<u>Pavgrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Perform maintenance procedures on air conditioning systems
E4	CORE	Perform maintenance procedures on anti-gravity systems
E4	CORE	Perform maintenance procedures on anti-ice/ rain removal systems
E4	CORE	Perform maintenance procedures on avionics and ground equipment cooling systems
E4	CORE	Perform maintenance procedures on avionics Liquid Cooling Systems (LCS)
E4	CORE	Perform maintenance procedures on bleed air leak detection systems
E4	CORE	Perform maintenance procedures on cabin pressurization systems
E4	CORE	Perform maintenance procedures on cabin seal systems
E4	CORE	Perform maintenance procedures on canopy defog systems
E4	CORE	Perform maintenance procedures on canopy seal systems
E4	CORE	Perform maintenance procedures on cockpit furnishings
E4	CORE	Perform maintenance procedures on crash worthy seats
E4	CORE	Perform maintenance procedures on crew relief systems
E4	CORE	Perform maintenance procedures on de-icing systems
E4	CORE	Perform maintenance procedures on emergency canopy systems
E4	CORE	Perform maintenance procedures on engine bleed air systems
E4	CORE	Perform maintenance procedures on Environmental Control Systems (ECS)
E4	CORE	Perform maintenance procedures on galley systems
E4	CORE	Perform maintenance procedures on normal canopy systems
E4	CORE	Perform maintenance procedures on potable water systems
E4	CORE	Perform maintenance procedures on radar pressurization systems
E4	CORE	Perform maintenance procedures on ram air systems
E4	CORE	Perform maintenance procedures on wave guide systems
E4	CORE	Perform maintenance procedures windshield wash systems
E4	CORE	Perform operational check procedures on air conditioning systems
E4	CORE	Perform operational check procedures on aircraft defog systems
E4	CORE	Perform operational check procedures on anti-ice/rain removal systems
E4	CORE	Perform operational check procedures on avionics and ground equipment cooling systems
E4	CORE	Perform operational check procedures on avionics Liquid Cooling Systems (LCS)
E4	CORE	Perform operational check procedures on bleed air leak detection systems
E4	CORE	Perform operational check procedures on cabin pressurization systems
E4	CORE	Perform operational check procedures on cabin seal systems
E4	CORE	Perform operational check procedures on canopy seal systems
E4	CORE	Perform operational check procedures on cockpit furnishings
E4	CORE	Perform operational check procedures on crash worthy seats
E4	CORE	Perform operational check procedures on crew relief systems

MECHANICAL MAINTENANCE (CONT.)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Perform operational check procedures on de-icing systems
E4	CORE	Perform operational check procedures on engine bleed air systems
E4	CORE	Perform operational check procedures on Environmental Control Systems (ECS)
E4	CORE	Perform operational check procedures on galley systems
E4	CORE	Perform operational check procedures on normal canopy systems
E4	CORE	Perform operational check procedures on potable water systems
E4	CORE	Perform operational check procedures on radar pressurization systems
E4	CORE	Perform operational check procedures on ram air systems
E4	CORE	Perform operational check procedures on wave guide systems
E4	CORE	Perform operational check procedures on windshield wash systems
E5	CORE	Troubleshoot air conditioning systems
E5	CORE	Troubleshoot aircraft defog systems
E5	CORE	Troubleshoot anti-gravity systems
E5	CORE	Troubleshoot anti-ice/rain removal systems
E5	CORE	Troubleshoot avionics and ground equipment cooling systems
E5	CORE	Troubleshoot avionics Liquid Cooling Systems (LCS)
E5	CORE	Troubleshoot bleed air leak detection systems
E5	CORE	Troubleshoot cabin pressurization systems
E5	CORE	Troubleshoot cabin seal systems
E5	CORE	Troubleshoot canopy seal systems
E5	CORE	Troubleshoot cockpit furnishings
E5	CORE	Troubleshoot crash worthy seats
E5	CORE	Troubleshoot crew relief systems
E5	CORE	Troubleshoot de-icing systems
E5	CORE	Troubleshoot engine bleed air systems
E5	CORE	Troubleshoot Environmental Control Systems (ECS)
E5	CORE	Troubleshoot galley systems
E5	CORE	Troubleshoot normal canopy systems
E5	CORE	Troubleshoot potable water systems
E5	CORE	Troubleshoot radar pressurization systems
E5	CORE	Troubleshoot ram air systems
E5	CORE	Troubleshoot wave guide systems
E5	CORE	Troubleshoot windshield wash systems
E5	CORE	Troubleshooting emergency canopy systems

OXYGEN, NITROGEN, AND LIQUID OXYGEN SYSTEMS

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E6	CORE	Manage Aviators Breathing Oxygen (ABO) program
E4	CORE	Perform maintenance procedures on gaseous oxygen systems
E4	CORE	Perform maintenance procedures on Liquid Oxygen (LOX) systems

OXYGEN, NITROGEN, AND LIQUID OXYGEN SYSTEMS (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Perform maintenance procedures on On-Board Inert Gas Generating Systems (OBIGGS)
E4	CORE	Perform maintenance procedures on On-Board Oxygen Generating Systems (OBOGS)
E4	CORE	Perform operational check procedures on gaseous oxygen systems
E4	CORE	Perform operational check procedures on Liquid Oxygen (LOX) systems
E4	CORE	Perform operational check procedures on On-Board Inert Gas Generating Systems (OBIGGS)
E4	CORE	Perform operational check procedures on On-Board Oxygen Generating Systems (OBOGS)
E5	CORE	Troubleshoot gaseous oxygen systems
E5	CORE	Troubleshoot Liquid Oxygen (LOX) systems
E5	CORE	Troubleshoot On-Board Inert Gas Generating Systems (OBIGGS)
E5	CORE	Troubleshoot On-Board Oxygen Generating Systems (OBOGS)

QUALITY ASSURANCE (QA)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E6	CORE	Audit Naval Aviation Maintenance Programs (NAMP)
E5	CORE	Comply with technical directives
E4	CORE	Comply with technical publication requirements
E5	CORE	Conduct aircraft acceptance inspections
E4	CORE	Conduct aircraft daily inspections
E5	CORE	Conduct aircraft special inspections
E5	CORE	Conduct aircraft transfer inspections
E4	CORE	Conduct aircraft turnaround inspections
E5	CORE	Conduct Collateral Duty Inspector (CDI) inspections
E5	CORE	Conduct Collateral Duty Quality Assurance Representative (CDQAR) inspections
E5	CORE	Conduct conditional inspections
E5	CORE	Conduct phase inspections
E6	CORE	Conduct Quality Assurance (QA) inspections
E4	CORE	Conduct Support Equipment (SE) inspections (e.g., daily, preoperational, etc.)
E5	CORE	Conduct visual inspections of aircraft internal components
E6	CORE	Coordinate phase maintenance
E5	CORE	Inspect arming evolutions
E5	CORE	Inspect de-arming evolutions
E5	CORE	Inspect egress/emergency systems maintenance
E5	CORE	Inspect ordnance maintenance
E6	CORE	Manage Naval Aviation Maintenance Programs (NAMP)