

CHAPTER 7



AVIATION STRUCTURAL MECHANIC (AM)

NAVPERS 18068-7F

CH-42

AVIATION STRUCTURAL MECHANIC (SAFETY EQUIPMENT) (AME) TABLE OF CONTENTS

SCOPE OF RATING	AM-3 (E)
GENERAL INFORMATION	AM-4 (E)
AVIATION ENVIRONMENTAL AND EGRESS TECHNICIAN	AM-5 (E)
MAINTENANCE ADMINISTRATION	AM-5 (E)
MECHANICAL MAINTENANCE	AM-6 (E)
EGRESS ORDNANCE MAINTENANCE	AM-7 (E)
OXYGEN, NITROGEN, AND LIQUID OXYGEN SYSTEMS	AM-7 (E)
QUALITY ASSURANCE (QA)	AM-8 (E)

NAVY ENLISTED OCCUPATIONAL STANDARD
FOR
AVIATION STRUCTURAL MECHANIC (SAFETY EQUIPMENT) (AME)



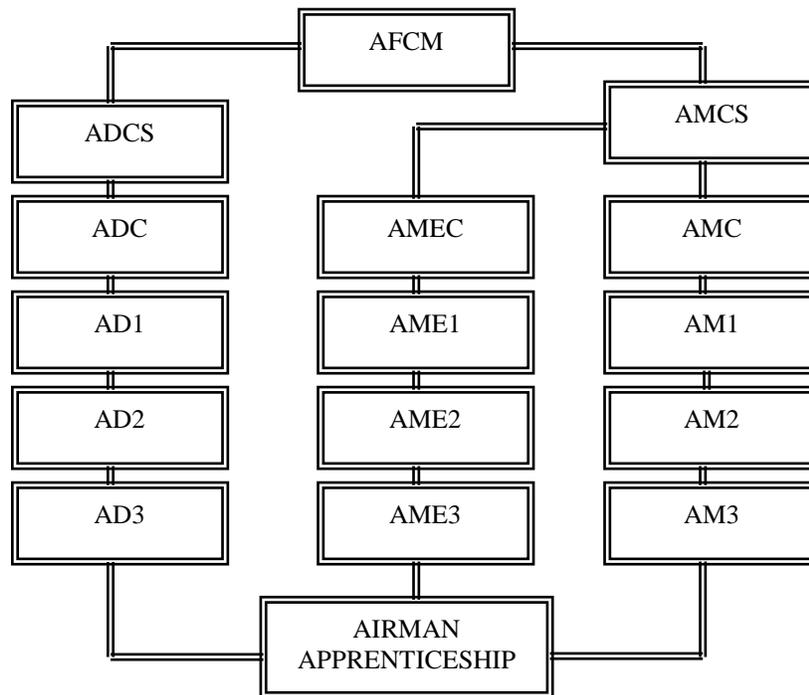
SCOPE OF RATING

Aviation Structural Mechanics (Safety Equipment) (AME) maintain safety belts, shoulder harnesses and integrated flight harnesses, inertia reels, seat and canopy ejection systems, gaseous and liquid oxygen systems, life raft ejection systems, fire extinguishing systems (excluding fire detection systems), portable fire extinguishers, emergency egress systems, air-conditioning, heating cabin and cockpit pressurization, ventilating and anti-G systems, visual improvement systems, other utility systems and associated lines, fittings, rigging, valves, and control mechanisms; replenish liquid and gaseous oxygen systems; remove and install oxygen system valves, gages, converters, and regulators; inspect, remove, install, and rig ejection seats, shoulder harnesses, lap belts and face curtain mechanisms; inspect, remove, install, and adjust firing mechanisms and cartridges for ejection seats, lap belts, and canopies; operate and maintain liquid nitrogen and liquid and gaseous oxygen shop transfer and recharge 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.

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 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 Environmental and Egress Technician****Job Code****001955****Job Family**

Transportation and Material Moving

NOC

5300-6051.01

Short Title (30 Characters)

AVIA ENVIRONMENTAL/EGRESS TEC

Short Title (10 Characters)

EGRES TEC

Pay Plan

Enlisted

Career Field

AME

Proficiency Level

A/J/M

Other Relationships and Rules:

NEC 72XX, 83XX, and 88XX series

Job Description

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

DoD Relationship

Title and Group:
Aircraft Structures
160

O*NET Relationship

Code and Area:
160300
16

Title and SOC Code:
Aviation Inspectors
53-6051.01

Name and Family Code:
Transportation and Material Moving
53

MAINTENANCE ADMINISTRATION

Paygrade	Task Type	Task Statements	Skills	Abilities
E7	CORE	Assign aircraft to flight schedules	<i>Management of Material Resources Operation and Control</i>	<i>Category Flexibility Inductive Reasoning</i>
E5	CORE	Attend maintenance meetings	<i>Active Listening Management of Material Resources</i>	<i>Category Flexibility Inductive Reasoning</i>
E7	CORE	Configure aircraft for flight schedules	<i>Management of Material Resources Operation and Control</i>	<i>Deductive Reasoning Inductive Reasoning</i>
E7	CORE	Control aircraft acceptance inspections	<i>Coordination Operation and Control</i>	<i>Category Flexibility Inductive Reasoning</i>
E7	CORE	Conduct maintenance and production control maintenance meetings	<i>Coordination Judgment and Decision Making</i>	<i>Category Flexibility Inductive Reasoning</i>
E5	CORE	Manage scheduled maintenance	<i>Management of Material Resources Monitoring</i>	<i>Deductive Reasoning Inductive Reasoning</i>
E5	CORE	Manage unscheduled maintenance	<i>Systems Analysis Systems Evaluation</i>	<i>Deductive Reasoning Inductive Reasoning</i>
E5	CORE	Manage workload reports	<i>Complex Problem Solving Critical Thinking</i>	<i>Deductive Reasoning Inductive Reasoning</i>
E4	CORE	Operate Naval Aviation Logistics Command Managed Information System (NALCOMIS)	<i>Critical Thinking Equipment Maintenance</i>	<i>Category Flexibility Inductive Reasoning</i>
E7	CORE	Prepare Planned Maintenance Intervals (PMI) for aircraft	<i>Coordination Operation and Control</i>	<i>Inductive Reasoning Problem Sensitivity</i>
E7	CORE	Prepare Standard Depot Level Maintenance (SDLM) for aircraft	<i>Coordination Operation and Control</i>	<i>Inductive Reasoning Problem Sensitivity</i>
E5	CORE	Review monthly maintenance plans	<i>Operation and Control Reading Comprehension</i>	<i>Category Flexibility Information Ordering</i>
E7	CORE	Screen Aircraft discrepancy book safe for flights	<i>Judgment and Decision Making Reading Comprehension</i>	<i>Inductive Reasoning Problem Sensitivity</i>
E7	CORE	Screen Visual Information Display System/Maintenance Action Forms (VIDS/MAF)	<i>Judgment and Decision Making Reading Comprehension</i>	<i>Inductive Reasoning Problem Sensitivity</i>

MECHANICAL MAINTENANCE

<u>Pavgrade</u>	<u>Task Type</u>	<u>Task Statements</u>	<u>Skills</u>	<u>Abilities</u>
E4	CORE	Maintain air conditioning systems	<i>Equipment Maintenance Troubleshooting</i>	<i>Dynamic Flexibility Extent Flexibility</i>
E4	CORE	Maintain aircraft portable fire bottles	<i>Equipment Maintenance Troubleshooting</i>	<i>Dynamic Flexibility Extent Flexibility</i>
E4	CORE	Maintain anti-gravity systems	<i>Equipment Maintenance Troubleshooting</i>	<i>Dynamic Flexibility Extent Flexibility</i>
E4	CORE	Maintain avionics and ground equipment cooling systems	<i>Equipment Maintenance Troubleshooting</i>	<i>Dynamic Flexibility Extent Flexibility</i>
E4	CORE	Maintain avionics liquid cooling systems	<i>Equipment Maintenance Troubleshooting</i>	<i>Dynamic Flexibility Extent Flexibility</i>
E4	CORE	Maintain boarding ladders	<i>Equipment Maintenance Troubleshooting</i>	<i>Dynamic Flexibility Extent Flexibility</i>
E4	JOBSPEC	Maintain bomb bay heat systems	<i>Equipment Maintenance Troubleshooting</i>	<i>Dynamic Flexibility Extent Flexibility</i>
E4	CORE	Maintain cabin pressurization systems	<i>Equipment Maintenance Troubleshooting</i>	<i>Dynamic Flexibility Extent Flexibility</i>
E4	CORE	Maintain canopy defog systems	<i>Equipment Maintenance Troubleshooting</i>	<i>Dynamic Flexibility Extent Flexibility</i>
E4	CORE	Maintain canopy seal systems	<i>Equipment Maintenance Troubleshooting</i>	<i>Dynamic Flexibility Extent Flexibility</i>
E4	CORE	Maintain de-icing systems	<i>Equipment Maintenance Troubleshooting</i>	<i>Dynamic Flexibility Extent Flexibility</i>
E4	CORE	Maintain dry bay fire suppression systems	<i>Equipment Maintenance Troubleshooting</i>	<i>Dynamic Flexibility Extent Flexibility</i>
E5	CORE	Maintain ejection gun assemblies	<i>Equipment Maintenance Troubleshooting</i>	<i>Dynamic Flexibility Extent Flexibility</i>
E5	CORE	Maintain ejection seat catapult assemblies	<i>Equipment Maintenance Troubleshooting</i>	<i>Dynamic Flexibility Extent Flexibility</i>
E4	CORE	Maintain ejection seat parachute systems	<i>Equipment Maintenance Troubleshooting</i>	<i>Dynamic Flexibility Extent Flexibility</i>
E5	CORE	Maintain ejection seat systems	<i>Equipment Maintenance Troubleshooting</i>	<i>Dynamic Flexibility Extent Flexibility</i>
E5	CORE	Maintain emergency canopy systems	<i>Equipment Maintenance Troubleshooting</i>	<i>Dynamic Flexibility Extent Flexibility</i>
E4	CORE	Maintain engine bleed air systems	<i>Equipment Maintenance Troubleshooting</i>	<i>Dynamic Flexibility Extent Flexibility</i>
E4	CORE	Maintain Engine Driven Compressors (EDC)	<i>Equipment Maintenance Troubleshooting</i>	<i>Dynamic Flexibility Extent Flexibility</i>
E4	CORE	Maintain environmental control systems	<i>Equipment Maintenance Troubleshooting</i>	<i>Dynamic Flexibility Extent Flexibility</i>
E5	CORE	Maintain fire extinguishing systems	<i>Equipment Maintenance Troubleshooting</i>	<i>Dynamic Flexibility Extent Flexibility</i>
E4	CORE	Maintain heat exchangers	<i>Equipment Maintenance Troubleshooting</i>	<i>Dynamic Flexibility Extent Flexibility</i>

E4	CORE	Maintain radar pressurization systems <i>Equipment Maintenance</i> <i>Troubleshooting</i>	<i>Dynamic Flexibility</i> <i>Extent Flexibility</i>
E4	CORE	Maintain rain removal systems <i>Equipment Maintenance</i> <i>Troubleshooting</i>	<i>Dynamic Flexibility</i> <i>Extent Flexibility</i>
E4	CORE	Maintain ram air systems <i>Equipment Maintenance</i> <i>Troubleshooting</i>	<i>Dynamic Flexibility</i> <i>Extent Flexibility</i>
E5	CORE	Maintain seat bucket assemblies <i>Equipment Maintenance</i> <i>Troubleshooting</i>	<i>Dynamic Flexibility</i> <i>Extent Flexibility</i>
E4	CORE	Maintain seat pan assemblies <i>Equipment Maintenance</i> <i>Troubleshooting</i>	<i>Dynamic Flexibility</i> <i>Extent Flexibility</i>
E4	CORE	Maintain utility valves <i>Equipment Maintenance</i> <i>Troubleshooting</i>	<i>Dynamic Flexibility</i> <i>Extent Flexibility</i>
E4	CORE	Maintain vapor cycle systems <i>Equipment Maintenance</i> <i>Troubleshooting</i>	<i>Dynamic Flexibility</i> <i>Extent Flexibility</i>
E4	CORE	Maintain wave guide systems <i>Equipment Maintenance</i> <i>Troubleshooting</i>	<i>Dynamic Flexibility</i> <i>Extent Flexibility</i>
E4	CORE	Maintain windshield wash systems <i>Equipment Maintenance</i> <i>Troubleshooting</i>	<i>Dynamic Flexibility</i> <i>Extent Flexibility</i>

EGRESS ORDNANCE MAINTENANCE

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>	<u>Skills</u>	<u>Abilities</u>
E5	CORE	Maintain Cartridge Actuated Devices (CAD) <i>Equipment Maintenance</i> <i>Troubleshooting</i>	<i>Dynamic Flexibility</i> <i>Extent Flexibility</i>	
E4	CORE	Maintain command ejection seat systems <i>Equipment Maintenance</i> <i>Troubleshooting</i>	<i>Dynamic Flexibility</i> <i>Extent Flexibility</i>	
E5	CORE	Maintain Propellant Actuated Devices (PAD) <i>Equipment Maintenance</i> <i>Troubleshooting</i>	<i>Dynamic Flexibility</i> <i>Extent Flexibility</i>	
E5	CORE	Maintain Shielded Mild Detonating Cords (SMDC) <i>Equipment Maintenance</i> <i>Troubleshooting</i>	<i>Dynamic Flexibility</i> <i>Extent Flexibility</i>	
E5	CORE	Maintain Thin Layer Explosives (TLX) <i>Equipment Maintenance</i> <i>Troubleshooting</i>	<i>Dynamic Flexibility</i> <i>Extent Flexibility</i>	
E6	CORE	Manage explosive devices <i>Coordination</i> <i>Management of Material Resources</i>	<i>Category Flexibility</i> <i>Mathematical Reasoning</i>	
E6	CORE	Monitor high time components <i>Mathematics</i> <i>Monitoring</i>	<i>Inductive Reasoning</i> <i>Mathematical Reasoning</i>	
E6	CORE	Perform emergency reclamations for unused ejection equipment ordnance <i>Critical Thinking</i> <i>Equipment Selection</i>	<i>Dynamic Flexibility</i> <i>Inductive Reasoning</i>	

OXYGEN, NITROGEN, AND LIQUID OXYGEN SYSTEMS

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>	<u>Skills</u>	<u>Abilities</u>
E5	CORE	Maintain Aviator Breathing Oxygen (ABO) programs <i>Equipment Maintenance</i> <i>Troubleshooting</i>	<i>Dynamic Flexibility</i> <i>Extent Flexibility</i>	
E4	CORE	Maintain gaseous oxygen systems <i>Equipment Maintenance</i> <i>Troubleshooting</i>	<i>Dynamic Flexibility</i> <i>Extent Flexibility</i>	
E4	CORE	Maintain Liquid Oxygen (LOX) systems <i>Equipment Maintenance</i> <i>Troubleshooting</i>	<i>Dynamic Flexibility</i> <i>Extent Flexibility</i>	

E5	CORE	Maintain main beam assemblies <i>Equipment Maintenance</i> <i>Troubleshooting</i>	<i>Dynamic Flexibility</i> <i>Extent Flexibility</i>
E4	CORE	Maintain nitrogen systems <i>Equipment Maintenance</i> <i>Troubleshooting</i>	<i>Dynamic Flexibility</i> <i>Extent Flexibility</i>
E4	CORE	Maintain Onboard Oxygen Generating Systems (OBOGS) <i>Equipment Maintenance</i> <i>Troubleshooting</i>	<i>Dynamic Flexibility</i> <i>Extent Flexibility</i>

QUALITY ASSURANCE (QA)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>	<u>Skills</u>	<u>Abilities</u>
E5	CORE	Attend phase meetings	<i>Critical Thinking</i> <i>Judgment and Decision Making</i>	<i>Category Flexibility</i> <i>Information Ordering</i>
E7	CORE	Brief aircrew	<i>Instructing</i> <i>Service Orientation</i>	<i>Deductive Reasoning</i> <i>Speech Clarity</i>
E5	CORE	Comply with technical directives	<i>Monitoring</i> <i>Reading Comprehension</i>	<i>Control Precision</i> <i>Flexibility of Closure</i>
E4	CORE	Comply with technical publication requirements	<i>Monitoring</i> <i>Reading Comprehension</i>	<i>Control Precision</i> <i>Flexibility of Closure</i>
E6	CORE	Conduct Naval Aviation Maintenance Program (NAMP) audits	<i>Complex Problem Solving</i> <i>Quality Control Analysis</i>	<i>Category Flexibility</i> <i>Problem Sensitivity</i>
E6	CORE	Conduct Quality Assurance (QA) inspections	<i>Complex Problem Solving</i> <i>Quality Control Analysis</i>	<i>Problem Sensitivity</i> <i>Visualization</i>
E5	CORE	Conduct visual inspections of internal components of aircraft	<i>Systems Analysis</i> <i>Systems Evaluation</i>	<i>Problem Sensitivity</i> <i>Visualization</i>
E4	CORE	Maintain cockpit furnishings <i>Equipment Maintenance</i> <i>Troubleshooting</i>	<i>Dynamic Flexibility</i> <i>Extent Flexibility</i>	
E4	JOBSPEC	Maintain crash worthy seats <i>Equipment Maintenance</i> <i>Troubleshooting</i>	<i>Dynamic Flexibility</i> <i>Extent Flexibility</i>	
E5	CORE	Maintain egress system checkout programs <i>Equipment Maintenance</i> <i>Troubleshooting</i>	<i>Dynamic Flexibility</i> <i>Extent Flexibility</i>	
E4	CORE	Maintain normal canopy systems <i>Equipment Maintenance</i> <i>Troubleshooting</i>	<i>Dynamic Flexibility</i> <i>Extent Flexibility</i>	
E6	CORE	Manage Naval Aviation Maintenance Programs (NAMP) <i>Management of Material Resources</i> <i>Quality Control Analysis</i>	<i>Dynamic Flexibility</i> <i>Problem Sensitivity</i>	
E6	CORE	Monitor Naval Aviation Maintenance Programs (NAMP) <i>Monitoring</i> <i>Quality Control Analysis</i>	<i>Category Flexibility</i> <i>Flexibility of Closure</i>	
E6	CORE	Perform Quality Assurance (QA) inspections <i>Quality Control Analysis</i> <i>Social Perceptiveness</i>	<i>Category Flexibility</i> <i>Problem Sensitivity</i>	
E6	CORE	Review functional check flight requirements <i>Active Listening</i> <i>Complex Problem Solving</i>	<i>Inductive Reasoning</i> <i>Problem Sensitivity</i>	