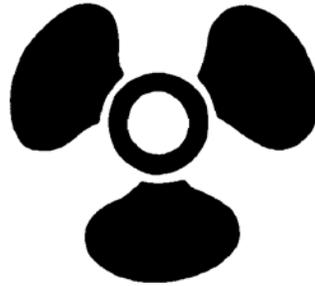


CHAPTER 51



MACHINIST'S MATE (MM)

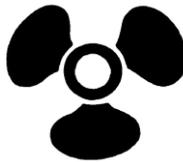
NAVPERS 18068-51G
CH-64

Updated: October 2015

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NAVY ENLISTED OCCUPATIONAL STANDARD
FOR
MACHINIST'S MATE, NON-NUCLEAR, SUBMARINE AUXILIARY (MMA)



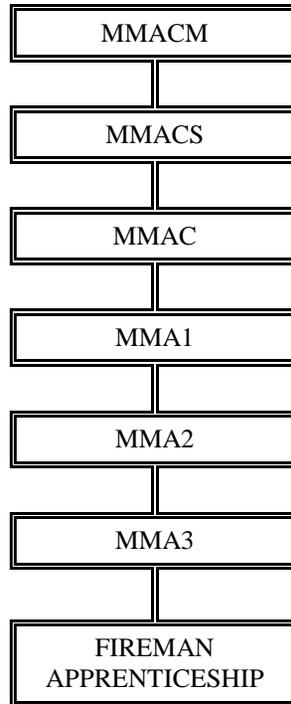
SCOPE OF RATING

Machinist's Mate, Non-Nuclear, Submarine Auxiliary (MMA) operate, maintain, and repair (at the organizational and intermediate level) damage control equipment and systems, internal combustion diesel engines and diesel engine support systems, hydraulic systems, atmosphere control and oxygen-generating equipment, refrigeration systems, compressed air and gas systems, potable water system, seawater systems, and sanitary and plumbing systems.

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 51.

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**Auxiliary Equipment Technician****Job Code****001519****Job Family**

Installation, Maintenance, and Repair

NOC

TBD

Short Title (30 Characters)

AUXILIARY EQUIPMENT TECHNICIAN

Short Title (14 Characters)

AUX EQUIP TECH

Pay Plan

Enlisted

Career Field

MMA

Other Relationships and Rules

NEC's may include 42XX series

Job Description

Auxiliary Equipment Technicians perform organizational and intermediate maintenance as well as advanced systems operations of hydraulic power plants and hydraulic system components, emergency diesel engines, compressed gas systems (air, oxygen, hydrogen, and nitrogen), sanitation systems, seawater systems, freshwater systems, oxygen-generating equipment, atmosphere control equipment, and submarine salvage equipment (watertight hatches and doors) and supervise operations and maintenance performed by Auxiliary Equipment Operators.

DoD Relationship*Group Title*

Shipboard Propulsion

DoD Code

165000

O*NET Relationship*Occupation Title*Maintenance and Repair Workers,
General*SOC Code*

49-9071.00

*Job Family*Installation, Maintenance and
Repair**Skills***Equipment Maintenance**Operation and Control**Operation Monitoring**Reading Comprehension**Troubleshooting**Quality Control Analysis**Systems Evaluation**Management of Material Resources**Monitoring***Abilities***Manual Dexterity**Written Comprehension**Multi-limb Coordination**Problem Sensitivity**Deductive Reasoning**Control Precision**Inductive Reasoning***MECHANICAL MAINTENANCE****Pavgrade****Task Type****Task Statements**

E4	CORE	Lubricate components
E4	CORE	Maintain air system components
E4	CORE	Maintain atmosphere control equipment
E4	CORE	Maintain auxiliary drain systems
E4	CORE	Maintain damage control equipment
E4	CORE	Maintain demineralized water systems
E4	CORE	Maintain depth sensing systems
E5	CORE	Maintain diesel engine support systems
E5	CORE	Maintain diesel engines
E4	CORE	Maintain drain systems
E5	NON-CORE	Maintain dry deck shelter systems
E4	CORE	Maintain escape trunks
E4	CORE	Maintain fresh water cooling systems
E4	CORE	Maintain habitability systems
E4	CORE	Maintain hydraulic system components
E4	CORE	Maintain oxygen and nitrogen systems
E5	CORE	Maintain oxygen-generating equipment

E4	CORE	Maintain potable water system components
E4	CORE	Maintain refrigeration system components
E4	CORE	Maintain salvage components
E4	CORE	Maintain ship service hydraulic plants
E5	CORE	Maintain steering and diving control systems
E4	CORE	Maintain steering and diving hydraulic plants
E4	CORE	Maintain submarine lubrication system
E4	CORE	Maintain trim system components
E4	CORE	Maintain variable ballast system components
E4	CORE	Maintain ventilation system components
E4	CORE	Maintain watertight doors and hatches
E4	CORE	Perform corrective maintenance on air system components
E5	CORE	Perform corrective maintenance on atmosphere control equipment
E4	CORE	Perform corrective maintenance on auxiliary drain system components
E4	CORE	Perform corrective maintenance on damage control equipment
E4	CORE	Perform corrective maintenance on demineralized water system
E5	CORE	Perform corrective maintenance on depth sensing system
E5	CORE	Perform corrective maintenance on diesel engine and support systems
E4	CORE	Perform corrective maintenance on drain system components
E5	CORE	Perform corrective maintenance on dry deck shelter systems
E4	CORE	Perform corrective maintenance on escape trunks
E4	CORE	Perform corrective maintenance on fresh water cooling systems
E4	CORE	Perform corrective maintenance on habitability systems
E4	CORE	Perform corrective maintenance on hydraulic system components
E5	CORE	Perform corrective maintenance on main ballast tank vent components
E5	CORE	Perform corrective maintenance on oxygen and nitrogen systems
E5	CORE	Perform corrective maintenance on oxygen-generating equipment
E4	CORE	Perform corrective maintenance on potable water system
E4	CORE	Perform corrective maintenance on refrigeration systems
E4	CORE	Perform corrective maintenance on salvage components
E4	CORE	Perform corrective maintenance on shipboard pumps
E4	CORE	Perform corrective maintenance on shipboard valves
E5	CORE	Perform corrective maintenance on steering and diving control systems
E4	CORE	Perform corrective maintenance on submarine lubrication systems
E4	CORE	Perform corrective maintenance on trim systems
E4	CORE	Perform corrective maintenance on ventilation systems
E4	CORE	Perform corrective maintenance on water tight doors and hatches
E5	CORE	Perform preventive maintenance on air system components
E5	CORE	Perform preventive maintenance on atmosphere control equipment
E4	CORE	Perform preventive maintenance on auxiliary drain system components
E4	CORE	Perform preventive maintenance on damage control equipment

E4	CORE	Perform preventive maintenance on demineralized water system
E4	CORE	Perform preventive maintenance on depth sensing system
E4	CORE	Perform preventive maintenance on diesel engine and support systems
E4	CORE	Perform preventive maintenance on drain system components
E5	NON-CORE	Perform preventive maintenance on dry deck shelter systems
E5	CORE	Perform preventive maintenance on escape trunks
E4	CORE	Perform preventive maintenance on fresh water cooling systems
E4	CORE	Perform preventive maintenance on habitability systems
E4	CORE	Perform preventive maintenance on hydraulic system components
E5	CORE	Perform preventive maintenance on oxygen and nitrogen systems
E5	CORE	Perform preventive maintenance on oxygen-generating equipment
E4	CORE	Perform preventive maintenance on potable water system
E5	CORE	Perform preventive maintenance on refrigeration systems
E5	CORE	Perform preventive maintenance on salvage components
E4	CORE	Perform preventive maintenance on shipboard pumps
E4	CORE	Perform preventive maintenance on shipboard valves
E6	CORE	Perform preventive maintenance on steering and diving control systems
E4	CORE	Perform preventive maintenance on submarine lubrication systems
E4	CORE	Perform preventive maintenance on trim systems
E5	CORE	Perform preventive maintenance on variable ballast systems
E4	CORE	Perform preventive maintenance on ventilation systems
E5	CORE	Perform preventive maintenance on water tight doors and hatches
E7	CORE	Supervise diesel inspections

MECHANICAL SYSTEMS OPERATIONS

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Adjust air system components
E4	CORE	Adjust hydraulic system components
E5	CORE	Adjust refrigeration system components
E5	CORE	Adjust steering and diving control systems
E4	CORE	Maintain shipboard pumps
E4	CORE	Operate air system components
E5	CORE	Operate atmosphere control equipment
E4	CORE	Operate auxiliary drain systems
E4	CORE	Operate depth sensing systems
E4	CORE	Operate diesel engines and support systems
E4	CORE	Operate drain systems
E5	NON-CORE	Operate dry deck shelter systems
E4	CORE	Operate external hydraulic plants
E4	CORE	Operate fresh water cooling systems
E4	CORE	Operate hydraulic system components
E4	CORE	Operate main ballast tank vent components

E4	CORE	Operate oxygen and nitrogen systems
E5	CORE	Operate oxygen-generating equipment
E4	CORE	Operate potable water systems
E4	CORE	Operate refrigeration systems
E4	CORE	Operate ships service hydraulic plants
E4	CORE	Operate steering and diving control systems
E4	CORE	Operate stern diving plants
E4	CORE	Operate submarine emergency life support systems
E4	CORE	Operate submarine habitability systems
E4	CORE	Operate submarine salvage systems
E4	CORE	Operate trim systems
E4	CORE	Operate ventilation systems

QUALITY ASSURANCE

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E5	CORE	Perform Quality Assurance (QA) inspections

Job Title

Auxiliary Equipment Operator

Job Code

001524

Job Family

Installation, Maintenance, and Repair

NOC

TBD

Short Title (30 Characters)

AUXILIARY EQUIPMENT OPERATOR

Short Title (14 Characters)

AUX EQUIP OPER

Pay Plan

Enlisted

Career Field

MMA

Other Relationships and Rules

NEC's may include 42XX series

Job Description

Auxiliary Equipment Operators perform operations and basic preventive maintenance of hydraulic power plants and hydraulic system components, emergency diesel engines, compressed gas systems (air, oxygen, hydrogen, and nitrogen), sanitation systems, seawater systems, freshwater systems, submarine firefighting, and emergency dewatering and damage control equipment.

DoD Relationship

Group Title

Shipboard Propulsion

DoD Code

165000

O*NET Relationship

Occupation Title

Maintenance and Repair Workers,
General

SOC Code

49-9071.00

Job Family

Installation, Maintenance and
Repair

Skills

Operation and Control

Operation Monitoring

Equipment Maintenance

Troubleshooting

Monitoring

Quality Control Analysis

Abilities

Manual Dexterity

Deductive Reasoning

Problem Sensitivity

Written Comprehension

Control Precision

Multi-limb Coordination

Information Ordering

MECHANICAL MAINTENANCE

Paygrade

Task Type

Task Statements

E4	CORE	Lubricate components
E4	CORE	Maintain ship service hydraulic plants
E4	CORE	Perform corrective maintenance on air system components
E5	CORE	Perform corrective maintenance on atmosphere control equipment
E4	CORE	Perform corrective maintenance on auxiliary drain system components
E4	CORE	Perform corrective maintenance on damage control equipment
E4	CORE	Perform corrective maintenance on demineralized water system
E5	CORE	Perform corrective maintenance on depth sensing system
E5	CORE	Perform corrective maintenance on diesel engine and support systems
E4	CORE	Perform corrective maintenance on drain system components
E5	CORE	Perform corrective maintenance on dry deck shelter systems
E4	CORE	Perform corrective maintenance on escape trunks
E4	CORE	Perform corrective maintenance on fresh water cooling systems
E4	CORE	Perform corrective maintenance on habitability systems
E4	CORE	Perform corrective maintenance on hydraulic system components
E5	CORE	Perform corrective maintenance on main ballast tank vent components
E5	CORE	Perform corrective maintenance on oxygen and nitrogen systems
E5	CORE	Perform corrective maintenance on oxygen-generating equipment
E4	CORE	Perform corrective maintenance on potable water system
E4	CORE	Perform corrective maintenance on refrigeration systems
E4	CORE	Perform corrective maintenance on salvage components

E5	CORE	Perform corrective maintenance on steering and diving control systems
E4	CORE	Perform corrective maintenance on submarine lubrication systems
E4	CORE	Perform corrective maintenance on trim systems
E4	CORE	Perform corrective maintenance on water tight doors and hatches

MECHANICAL SYSTEMS OPERATIONS

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Adjust air system components
E4	CORE	Adjust hydraulic system components
E5	CORE	Adjust refrigeration system components
E5	CORE	Adjust steering and diving control systems
E4	CORE	Maintain shipboard pumps
E4	CORE	Operate air system components
E5	CORE	Operate atmosphere control equipment
E4	CORE	Operate auxiliary drain systems
E4	CORE	Operate depth sensing systems
E4	CORE	Operate diesel engines and support systems
E4	CORE	Operate drain systems
E5	NON-CORE	Operate dry deck shelter systems
E4	CORE	Operate external hydraulic plants
E4	CORE	Operate fresh water cooling systems
E4	CORE	Operate hydraulic system components
E4	CORE	Operate main ballast tank vent components
E4	CORE	Operate oxygen and nitrogen systems
E5	CORE	Operate oxygen-generating equipment
E4	CORE	Operate potable water systems
E4	CORE	Operate refrigeration systems
E4	CORE	Operate ships service hydraulic plants
E4	CORE	Operate steering and diving control systems
E4	CORE	Operate stern diving plants
E4	CORE	Operate submarine emergency life support systems
E4	CORE	Operate submarine habitability systems
E4	CORE	Operate submarine salvage systems
E4	CORE	Operate trim systems
E4	CORE	Operate ventilation systems

QUALITY ASSURANCE

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Perform Quality Assurance (QA) maintenance

Job Title**Auxiliary Equipment Manager****Job Code****001532****Job Family**

Production

NOC

TBD

Short Title (30 Characters)

AUXILIARY EQUIPMENT MANAGER

Short Title (14 Characters)

AUX EQUIP MGR

Pay Plan

Enlisted

Career Field

MMA

Other Relationships and Rules

NEC's may include 42XX series

Job Description

Auxiliary Equipment Managers manage auxiliary division operations, maintenance, and training of hydraulic power plants and hydraulic system components, emergency diesel engines, compressed gas systems (such as air, oxygen, hydrogen, and nitrogen), sanitation systems, seawater systems, freshwater systems, oxygen-generating equipment, atmosphere control equipment, and submarine salvage equipment such as watertight hatches and doors. They also train, mentor, and supervise the operations and maintenance performed by Auxiliary Equipment Technicians and Operators.

DoD RelationshipGroup Title

Shipboard Propulsion

DoD Code

165000

O*NET RelationshipOccupation Title

First-Line Supervisors of Managers,
Mechanics, Installers, and
Repairers

SOC Code

49-1011.00

Job Family

Installation, Maintenance and
Repair

Skills*Management of Material Resources**Management of Personnel Resources**Monitoring**Quality Control Analysis***Abilities***Inductive Reasoning**Oral Expression**Deductive Reasoning**Information Ordering***MECHANICAL MAINTENANCE****Paygrade****Task Type****Task Statements**

E7

CORE

Supervise diesel engine corrective maintenance

E7

CORE

Supervise diesel inspections

E6

CORE

Supervise hydraulic corrective maintenance

E7

CORE

Supervise oxygen-generating plant corrective maintenance

E6

CORE

Supervise oxygen-generating plant operation

E7

CORE

Supervise steering and diving control system maintenance

MECHANICAL SYSTEMS OPERATIONS**Paygrade****Task Type****Task Statements**

E7

CORE

Supervise diesel engine operations

E6

CORE

Supervise habitability and sanitation operations

E6

CORE

Supervise hydraulic system operations

E6

CORE

Supervise oxygen and nitrogen systems maintenance

E6

CORE

Supervise oxygen and nitrogen systems operations

QUALITY ASSURANCE**Paygrade****Task Type****Task Statements**

E5

CORE

Develop Quality Assurance (QA) packages

E4

CORE

Perform Quality Assurance (QA) maintenance

E7

CORE

Review Quality Assurance (QA) packages