## CHAPTER 10



# AVIATION SUPPORT EQUIPMENT TECHNICIAN (AS)

NAVPERS 18068-10E CH-75

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## NAVY ENLISTED OCCUPATIONAL STANDARD

FOR

AVIATION SUPPORT EQUIPMENT TECHNICIAN (AS)



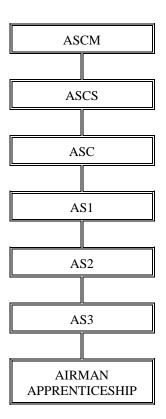
#### SCOPE OF RATING

Aviation Support Equipment Technicians (AS) perform preventive and corrective maintenance on aviation support equipment, aviation armament handling equipment, aviation mobile firefighting units, and associated components and systems; service, inspect, test, troubleshoot, and repair diesel engine systems, transmission systems, hydraulic, hydrostatic, and pneumatic systems, steering and suspension systems, cryogenic systems, electrical systems, gas turbine compressor units, electrical and hydraulic power generating equipment, and air-conditioning and refrigeration systems (excluding avionics support equipment); manage support equipment assets at different command levels; and provide training in operation of aviation support 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 10.

## **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 Support Equipment Technician**



| Job Family                            | <u>NOC</u> | <u>Short Title (30 Characters)</u>                        | <u>Short Title (14 Characters)</u> |
|---------------------------------------|------------|---|------------------------------------|
| Installation, Maintenance, and Repair | TBD        | AVIATION SUPPORT EQUIPMENT TEC                            | AV SUP EQ TECH                     |
| Pay PlanCareer FieldEnlistedAS        |            | tionships and Rules<br>(series and other NECs as assigned |                                    |

#### Job Description

Aviation Support Equipment Technicians perform scheduled and unscheduled maintenance on aircraft support equipment. They perform maintenance (adjust, troubleshoot, and repair) on mechanical systems (diesel engines, gas turbine compressor systems, brake systems, transmission systems, welding and structural repair equipment), air conditioning and refrigeration systems (compressors, condensers, evaporators, refrigerant reclaimer equipment and plumbing components, reclaiming of refrigerant), electrical systems (Mobile Electrical Power Plant (MEPP) systems, aircraft tow tractors electrical systems, forklift electrical systems, and numerous other support equipment electrical systems), mobile maintenance facility (electrical/structural corrosion control, mobile facility van complexing, environmental control units), cryogenic equipment (gaseous and liquid oxygen servicing systems, gaseous nitrogen servicing systems and oxygen system purge units), hydraulic/pneumatic systems (hydraulic test stands, aircraft and automotive lifting devices, maintenance platforms, various pumps, actuators and accumulators). They also perform support equipment management, training and licensing, by planning, organizing, scheduling, and implementing daily maintenance tasks and training requirements.

#### **DoD Relationship**

#### **O\*NET Relationship**

Group TitleDoD CodeOccupation TitleSAircraft Accessories160200Automotive Master Mechanics4

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<u>Job Family</u> Installation, Maintenance, and Repair

| Skills                            | Abilities                   |
|-----------------------------------|-----------------------------|
| Systems Evaluation                | Problem Sensitivity         |
| Equipment Maintenance             | Deductive Reasoning         |
| Quality Control Analysis          | Inductive Reasoning         |
| Repairing                         | Written Comprehension       |
| Complex Problem Solving           | Originality                 |
| Troubleshooting                   | Oral Expression             |
| Judgment and Decision Making      | Manual Dexterity            |
| Management of Material Resources  | Information Ordering        |
| Management of Personnel Resources | Oral Comprehension          |
| Active Learning                   | Visual Color Discrimination |

#### **CORROSION CONTROL**

| <b>Paygrade</b> | <u>Task Type</u> | Task Statements                         |
|-----------------|------------------|---|
| E5              | CORE             | Determine corrosion treatment           |
| E4              | CORE             | Identify corrosion types                |
| E4              | CORE             | Implement corrosion control maintenance |
| E4              | CORE             | Perform preservation procedures         |

#### ELECTRO/MECHANICAL MAINTENANCE

| <b>Paygrade</b> | <u>Task Type</u> | Task Statements   |
|-----------------|------------------|---|
| E4              | CORE             | Build power cables  |
| E4              | CORE             | Maintain air conditioning and refrigeration equipment           |
| E4              | CORE             | Maintain air conditioning and refrigeration reclaimer equipment |
| E4              | CORE             | Maintain aircraft tow tractors                                  |
| E4              | CORE             | Maintain deicing equipment                                      |
| E4              | CORE             | Maintain Environmental Control Unit (ECU)                       |
| E4              | CORE             | Maintain gas turbine engine                                     |
| E4              | CORE             | Maintain Mobile Electric Power Plant (MEPP)                     |
| E4              | CORE             | Maintain Mobile Maintenance Facility (MMF)                      |
| E4              | CORE             | Maintain Mobile Maintenance Facility (MMF) generator            |

## ELECTRO/MECHANICAL MAINTENANCE (CONT'D)

| <b>Paygrade</b><br>E4 | <u>Task Type</u><br>CORE | <u>Task Statements</u><br>Maintain Weight Handling Equipment (WHE)  |
|-----------------------|--------------------------|---|
| E4                    | NON-CORE                 | Recharge air condition and refrigeration equipment refrigerants     |
| E4                    | NON-CORE                 | Recover air condition and refrigeration equipment refrigerants      |
| E4                    | CORE                     | Repair air conditioning and refrigeration equipment                 |
| E4                    | CORE                     | Repair air conditioning and refrigeration reclaimer equipment       |
| E4                    | CORE                     | Repair aircraft tow tractors  |
| E4                    | CORE                     | Repair deicing equipment  |
| E4                    | CORE                     | Repair Environmental Control Unit (ECU)                             |
| E4                    | CORE                     | Repair gas turbine engine   |
| E4                    | CORE                     | Repair Mobile Electric Power Plant (MEPP)                           |
| E4                    | CORE                     | Repair Mobile Maintenance Facility (MMF)                            |
| E5                    | CORE                     | Repair Mobile Maintenance Facility (MMF) generator                  |
| E4                    | CORE                     | Repair Weight Handling Equipment (WHE)                              |
| E4                    | CORE                     | Test air conditioning and refrigeration equipment                   |
| E4                    | CORE                     | Test air conditioning and refrigeration reclaimer equipment         |
| E4                    | CORE                     | Test aircraft tow tractors  |
| E4                    | CORE                     | Test deicing equipment  |
| E4                    | CORE                     | Test Environmental Control Unit (ECU)                               |
| E4                    | CORE                     | Test gas turbine engine   |
| E4                    | CORE                     | Test Mobile Electric Power Plant (MEPP)                             |
| E4                    | CORE                     | Test Mobile Maintenance Facility (MMF)                              |
| E4                    | CORE                     | Test Mobile Maintenance Facility (MMF) generator                    |
| E4                    | CORE                     | Test Weight Handling Equipment (WHE)                                |
| E4                    | CORE                     | Troubleshoot air conditioning and refrigeration equipment           |
| E4                    | CORE                     | Troubleshoot air conditioning and refrigeration reclaimer equipment |
| E4                    | CORE                     | Troubleshoot aircraft tow tractors                                  |
| E4                    | CORE                     | Troubleshoot deicing equipment                                      |
| E4                    | CORE                     | Troubleshoot Environmental Control Unit (ECU)                       |
| E4                    | CORE                     | Troubleshoot gas turbine engine                                     |
| E4                    | CORE                     | Troubleshoot Mobile Electric Power Plant (MEPP)                     |
| E4                    | CORE                     | Troubleshoot Mobile Maintenance Facility (MMF)                      |
| E4                    | CORE                     | Troubleshoot Mobile Maintenance Facility (MMF) generator            |
| E4                    | CORE                     | Troubleshoot Weight Handling Equipment (WHE)                        |
|                       | CFN                      | NED AL SUDDODT FOUDDMENT MAINTENANCE                                |

## GENERAL SUPPORT EQUIPMENT MAINTENANCE

| <u>Paygrade</u> | <u>Task Type</u> | <u>Task Statements</u>                               |
|-----------------|------------------|--|
| E5              | CORE             | Conduct flight deck troubleshooter operations        |
| E4              | CORE             | Maintain aviation Peculiar Support Equipment (PSE)   |
| E4              | CORE             | Maintain Common Support Equipment (CSE)              |
| E4              | CORE             | Maintain support equipment tire and wheel assemblies |
| E4              | CORE             | Repair aviation Peculiar Support Equipment (PSE)     |

## GENERAL SUPPORT EQUIPMENT MAINTENANCE (CONT'D)

| <u>Paygrade</u><br>E4 | <u>Task Type</u><br>CORE | <u>Task Statements</u><br>Repair Common Support Equipment (CSE) |
|-----------------------|--------------------------|---|
| E4                    | CORE                     | Repair support equipment tire and wheel assemblies              |
| E4                    | CORE                     | Test aviation Peculiar Support Equipment (PSE)                  |
| E4                    | CORE                     | Test Common Support Equipment (CSE)                             |
| E4                    | CORE                     | Test support equipment tire and wheel assemblies                |
| E4                    | CORE                     | Troubleshoot aviation Peculiar Support Equipment (PSE)          |
| E4                    | CORE                     | Troubleshoot Common Support Equipment (CSE)                     |
|                       |                          |   |

## HYDRAULIC/PNEUMATIC MAINTENANCE

| <u>Paygrade</u><br>E5 | <u>Task Type</u><br>CORE | <u><b>Task Statements</b></u><br>Inspect support equipment Hydraulic Servicing Units (HSU) |
|-----------------------|--------------------------|--|
| E4                    | CORE                     | Maintain aircraft engine trailers  |
| E4                    | CORE                     | Maintain aircraft jacks  |
| E4                    | CORE                     | Maintain gaseous nitrogen support equipment  |
| E4                    | CORE                     | Maintain gaseous oxygen support equipment  |
| E5                    | CORE                     | Maintain hydraulic contamination control standards (i.e. samples, tools, logs, etc.)       |
| E4                    | CORE                     | Maintain hydraulic purification support equipment  |
| E4                    | CORE                     | Maintain Liquid Oxygen (LOX) support equipment   |
| E4                    | CORE                     | Maintain Material Handling Equipment (MHE)   |
| E4                    | CORE                     | Maintain support equipment hydraulic power supply  |
| E4                    | CORE                     | Maintain support equipment Hydraulic Servicing Units (HSU)                                 |
| E4                    | CORE                     | Perform hydraulic contamination control  |
| E5                    | CORE                     | Perform hydraulic purification procedures  |
| E4                    | NON-CORE                 | Recharge Environmental Control Unit (ECU) refrigerants                                     |
| E4                    | NON-CORE                 | Recover Environmental Control Unit (ECU) refrigerants                                      |
| E4                    | CORE                     | Repair aircraft engine trailers  |
| E4                    | CORE                     | Repair aircraft jacks  |
| E4                    | CORE                     | Repair gaseous nitrogen support equipment  |
| E4                    | CORE                     | Repair gaseous oxygen support equipment  |
| E4                    | CORE                     | Repair hydraulic purification support equipment  |
| E4                    | CORE                     | Repair hydraulic systems   |
| E4                    | CORE                     | Repair Liquid Oxygen (LOX) support equipment   |
| E4                    | CORE                     | Repair Material Handling Equipment (MHE)   |
| E4                    | CORE                     | Repair support equipment hydraulic power supply  |
| E4                    | CORE                     | Repair support equipment Hydraulic Servicing Units (HSU)                                   |
| E4                    | CORE                     | Test aircraft engine trailers  |
| E4                    | CORE                     | Test aircraft jacks  |
| E4                    | CORE                     | Test gaseous nitrogen support equipment  |
| E4                    | CORE                     | Test gaseous oxygen support equipment  |
| E4                    | CORE                     | Test hydraulic fluids for contamination  |
| E4                    | CORE                     | Test hydraulic purification support equipment  |

## HYDRAULIC/PNEUMATIC MAINTENANCE (CONT'D)

| <b>Paygrade</b> | <u>Task Type</u> | Task Statements  |
|-----------------|------------------|--|
| E4              | CORE             | Test hydraulic systems   |
| E4              | CORE             | Test Liquid Oxygen (LOX) support equipment                     |
| E4              | CORE             | Test Material Handling Equipment (MHE)                         |
| E4              | CORE             | Test support equipment hydraulic power supply                  |
| E4              | CORE             | Test support equipment Hydraulic Servicing Units (HSU)         |
| E4              | CORE             | Troubleshoot aircraft engine trailers                          |
| E4              | CORE             | Troubleshoot aircraft jacks                                    |
| E4              | CORE             | Troubleshoot gaseous nitrogen support equipment                |
| E4              | CORE             | Troubleshoot gaseous oxygen support equipment                  |
| E4              | CORE             | Troubleshoot hydraulic purification support equipment          |
| E4              | CORE             | Troubleshoot Liquid Oxygen (LOX) support equipment             |
| E4              | CORE             | Troubleshoot Material Handling Equipment (MHE)                 |
| E4              | CORE             | Troubleshoot support equipment hydraulic power supply          |
| E4              | CORE             | Troubleshoot support equipment Hydraulic Servicing Units (HSU) |

### MANAGEMENT

| <b>Paygrade</b> | <u>Task Type</u> | Task Statements  |
|-----------------|------------------|--|
| E7              | CORE             | Approve depot level corrosion treatment                                      |
| E6              | CORE             | Coordinate depot level corrosion treatment                                   |
| E5              | CORE             | Implement work center responsibilities (e.g. programs, qualifications, etc.) |
| E7              | CORE             | Manage curriculum development for Apprentice and Journeyman schools          |
| E7              | CORE             | Manage depot level maintenance requirements                                  |
| E6              | CORE             | Manage flight deck troubleshooter operations                                 |
| E7              | CORE             | Manage Intermediate level maintenance requirements                           |
| E5              | CORE             | Manage material control assets   |
| E6              | CORE             | Manage production control  |
| E5              | CORE             | Manage support equipment asset inventories                                   |
| E5              | CORE             | Manage support equipment issues and receipts                                 |
| E5              | CORE             | Manage support equipment logs and records                                    |
| E5              | CORE             | Manage support equipment operator training and licensing program             |
| E7              | CORE             | Manage support equipment tool room operations                                |
| E6              | CORE             | Manage technical directives compliance programs                              |
| E5              | CORE             | Project scheduled maintenance reports  |
| E7              | CORE             | Supervise production control   |
| E6              | CORE             | Supervise support equipment operator training and licensing program          |
| E6              | CORE             | Supervise support equipment tool room operations                             |
| E7              | CORE             | Supervise technical directives compliance programs                           |
| E6              | CORE             | Validate material control assets   |
| E6              | CORE             | Validate support equipment logs and records                                  |
| E7              | CORE             | Verify material control assets   |
| E7              | CORE             | Verify support equipment logs and records                                    |
|                 |                  |  |

## MECHANICAL MAINTENANCE

| <b>Paygrade</b><br>E4 | <u>Task Type</u><br>CORE | Task Statements<br>Maintain aircraft crash and salvage equipment |
|-----------------------|--------------------------|--|
| E4                    | CORE                     | Maintain Armament Weapons Support Equipment (AWSE)               |
| E5                    | CORE                     | Repair aircraft crash and salvage equipment                      |
| E4                    | CORE                     | Repair Armament Weapons Support Equipment (AWSE)                 |
| E5                    | CORE                     | Test aircraft crash and salvage equipment                        |
| E4                    | CORE                     | Test Armament Weapons Support Equipment (AWSE)                   |
| E5                    | CORE                     | Troubleshoot aircraft crash and salvage equipment                |
| E4                    | CORE                     | Troubleshoot Armament Weapons Support Equipment (AWSE)           |

## QUALITY ASSURANCE

| <u>Paygrade</u><br>E5 | <u>Task Type</u><br>CORE | Task Statements<br>Inspect air conditioning and refrigeration equipment |
|-----------------------|--------------------------|---|
| E5                    | CORE                     | Inspect air conditioning and refrigeration reclaimer equipment          |
| E5                    | CORE                     | Inspect aircraft crash and salvage equipment                            |
| E5                    | CORE                     | Inspect aircraft engine trailers  |
| E5                    | CORE                     | Inspect aircraft jacks  |
| E5                    | CORE                     | Inspect aircraft tow tractors   |
| E5                    | CORE                     | Inspect Armament Weapons Support Equipment (AWSE)                       |
| E5                    | CORE                     | Inspect aviation Peculiar Support Equipment (PSE)                       |
| E5                    | CORE                     | Inspect Common Support Equipment (CSE)                                  |
| E5                    | CORE                     | Inspect deicing equipment   |
| E5                    | CORE                     | Inspect Environmental Control Unit (ECU)                                |
| E5                    | CORE                     | Inspect gas turbine engine  |
| E5                    | CORE                     | Inspect gaseous nitrogen support equipment                              |
| E5                    | CORE                     | Inspect gaseous oxygen support equipment                                |
| E5                    | CORE                     | Inspect hydraulic purification support equipment                        |
| E5                    | CORE                     | Inspect hydraulic systems   |
| E5                    | CORE                     | Inspect Liquid Oxygen (LOX) support equipment                           |
| E5                    | CORE                     | Inspect Material Handling Equipment (MHE)                               |
| E5                    | CORE                     | Inspect Mobile Electric Power Plant (MEPP)                              |
| E5                    | CORE                     | Inspect Mobile Maintenance Facility (MMF)                               |
| E5                    | CORE                     | Inspect Mobile Maintenance Facility (MMF) generator                     |
| E5                    | CORE                     | Inspect support equipment hydraulic power supply                        |
| E5                    | CORE                     | Inspect support equipment tire and wheel assemblies                     |
| E5                    | CORE                     | Inspect Weight Handling Equipment (WHE)                                 |
| E5                    | CORE                     | Locate level site for Mobile Maintenance Facility (MMF)                 |
| E6                    | CORE                     | Manage Quality Assurance (QA) program                                   |
| E6                    | CORE                     | Supervise hydraulic purification procedures                             |
| E7                    | CORE                     | Supervise Quality Assurance (QA) program                                |
| E5                    | CORE                     | Validate hydraulic fluid tests  |
|                       |                          |   |

## TECHNICAL ADMINISTRATION

| <b>Paygrade</b> | <u>Task Type</u> | Task Statements              |
|-----------------|------------------|------------------------------|
| E4              | CORE             | Document maintenance actions |
| E5              | CORE             | Validate discrepancy reports |
| E6              | CORE             | Verify discrepancy reports   |