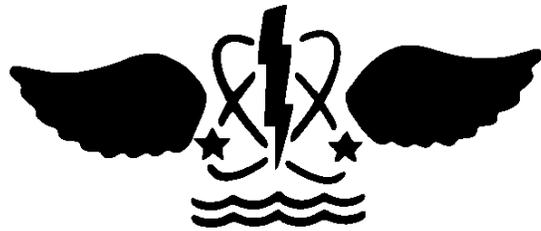


# CHAPTER 12



## NAVAL AIRCREWMAN (MECHANICAL) (AWF)

NAVPERS 18068F-12H  
Change 81

Updated: January 2020

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NAVY ENLISTED OCCUPATIONAL STANDARD

FOR

NAVAL AIRCREWMEN (MECHANICAL) (AWF)



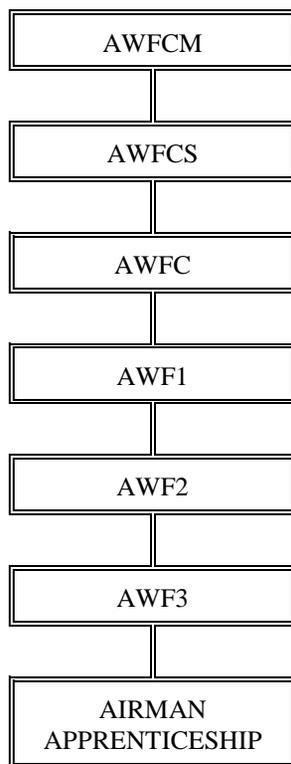
SCOPE OF RATING

Naval Aircrewmen (Mechanical) (AWF) are members of a fixed wing / tilt rotor integrated tactical crew aboard CMV-22, C-2, C-12, C-20, C-26, C-37, C-40, C-130, E-6, P-3 aircraft, and various Unmanned Aerial Vehicles (UAV); performs in-flight and ground duties as aircraft Flight Engineer/Crew Chief, Loadmaster/Second Loadmaster, Reel Operator, Aircrew Readiness Manager, Unmanned Aircraft Systems (UAS) Operator; calculate Weight and Balance (W&B) and aircraft performance, perform aircraft system maintenance and operation, system rigging, Aircrew administration, Flight/Ground training, Naval Air Logistics scheduling, cargo movement, Medical Evacuations (MEDEVAC), passenger transport and safety, equipment handling procedures, emergency procedures, utilize small arms, employ Dual Trailing Wire Antenna (DTWA) winch system, and support Joint Special Warfare operations; attain squadron aircrew qualifications and certifications to effectively sustain global warfare readiness.

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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 12.

**GENERAL INFORMATION**  
CAREER PATTERN



Normal path of advancement to Chief Warrant Officer and Limited Duty Officer categories can be found in OPNAVINST 1420.1(series).

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****Air Warfare Systems Engineer****Job Code****001595****Job Family**

Military Specific

**NOC**

TBD

**Short Title (30 Characters)**

AIR WARFARE SYSTEMS ENGINEER

**Short Title (14 Characters)**

NAC AW SYS ENG

**Pay Plan**

Enlisted

**Career Field**

AWF

**Other Relationships and Rules**

NEC GXXX Series and other NECs as assigned

**Job Description**

Air Warfare Systems Engineers are members of fixed wing / tilt rotor integrated tactical crews aboard C-2, C-26, C-130, C-40, P-3, E-6 Gulfstream aircraft, or Tactical Operations Center/Mobile Tactical Operations Center (TOC/MTOC); perform primary in-flight and ground duties; perform maintenance, weight and balance (W&B), and rigging; perform aircrew administration, flight/ground training, internal/external cargo movement, Medical Evacuations (MEDEVAC), and passenger transport; conduct small arms and Naval Special Warfare (NSW) operations by using Unmanned Aerial Vehicles (UAV); perform aircrew duties that contribute directly to aircrew operations, training, and administration for the purposes of attaining and maintaining squadron aircrew qualifications and certifications; perform aircraft systems, passenger safety and equipment handling procedures in accordance with federal and military regulations for passenger transport, emergency procedures, and aircraft equipment.

**DoD Relationship****O\*NET Relationship****Group Title**

Air Crew, General

**DoD Code**

105000

**Occupation Title**

Air Crew Members

**SOC Code**

55-3011.00

**Job Family**

Military Specific

**Skills***Operation and Control**Critical Thinking**Systems Analysis**Judgment and Decision Making**Coordination**Quality Control Analysis**Equipment Maintenance**Operation Monitoring**Management of Material Resources**Complex Problem Solving***Abilities***Written Comprehension**Deductive Reasoning**Near Vision**Problem Sensitivity**Written Expression**Information Ordering**Originality**Manual Dexterity**Multi-limb Coordination**Oral Expression***AIRCRAFT SYSTEM OPERATIONS****Paygrade****Task Type****Task Statements**

E4	NON-CORE	Adjust aircraft engine power settings
E4	NON-CORE	Adjust antenna reel length
E4	NON-CORE	Align Inertial Navigation Systems (INS)
E4	CORE	Conduct aircraft system testing
E5	CORE	Conduct Functional Check Flight (FCF)
E4	NON-CORE	Initialize Global Positioning Satellite (GPS) equipment
E4	CORE	Maintain aircraft fuel load balance
E4	CORE	Maintain aircraft pressurization
E4	CORE	Maintain environmental control systems
E4	CORE	Monitor aircraft electrical systems
E4	NON-CORE	Operate aircraft engines
E4	CORE	Operate aircraft hydraulic systems
E4	CORE	Operate aircraft pneumatic systems
E4	NON-CORE	Operate anti-icing and de-icing systems
E4	NON-CORE	Operate dual trailing wire antenna
E4	NON-CORE	Operate liquid cooling systems
E4	NON-CORE	Operate propeller systems

### AIRCREW ADMINISTRATION

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E5	CORE	Administer Naval Air Training and Operating Procedures Standardization (NATOPS) programs
E6	CORE	Develop aircrew course curriculum
E6	CORE	Develop training readiness matrix
E5	CORE	Record individual flight time summaries

### AIRCREW DUTIES

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	NON-CORE	Assign aircraft ditching stations
E4	CORE	Brief passengers on safety procedures
E4	CORE	Calculate fuel requirements
E4	NON-CORE	Communicate with cargo-loading hand-signals
E4	CORE	Compute aircraft load limitations
E4	CORE	Compute aircraft Weight and Balances (W&B)
E4	CORE	Compute take off, landing, and in-flight performance
E4	NON-CORE	Conduct Night Vision Device (NVD) operations
E4	CORE	Configure aircraft for cargo operations
E4	CORE	Inspect aircraft and personal survival equipment
E4	NON-CORE	Inspect Search and Rescue (SAR) equipment
E4	CORE	Inspect small arms
E4	NON-CORE	Jettison cargo
E4	CORE	Operate Auxiliary Power Units (APU)
E4	CORE	Operate emergency equipment
E4	CORE	Operate radios and Internal Communication Systems (ICS)
E4	CORE	Operate small arms
E4	CORE	Perform aircraft emergency procedures
E4	NON-CORE	Perform Emergency Destruction Plan (EDP) procedures
E4	NON-CORE	Perform Emergency Medical Evacuations (MEDEVAC)
E4	NON-CORE	Perform expeditious cargo offload
E4	CORE	Perform in-flight status system checks
E4	CORE	Perform pre- and post-flight aircraft inspections
E4	NON-CORE	Report visual contacts
E4	CORE	Restrain cargo and equipment

### AIRCREW TRAINING

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E5	CORE	Administer aircrew training programs
E5	CORE	Conduct Naval Air Training and Operating Procedures Standardization (NATOPS) flight and ground training
E5	CORE	Develop Naval Air Training and Operating Procedures Standardization (NATOPS) training materials

### **AIRCREW TRAINING (CONT'D)**

<b><u>Paygrade</u></b>	<b><u>Task Type</u></b>	<b><u>Task Statements</u></b>
E5	NON-CORE	Develop trainer and simulator scenarios
E5	CORE	Evaluate aircrew qualification and readiness programs
E5	CORE	Facilitate Crew Resource Management (CRM) programs
E5	NON-CORE	Operate Weapons Systems Trainer (WST) or Operational Flight Trainer (OFT)
E5	NON-CORE	Perform warfare training exercises
E5	CORE	Update aircrew course curriculum

### **MAINTENANCE ADMINISTRATION**

<b><u>Paygrade</u></b>	<b><u>Task Type</u></b>	<b><u>Task Statements</u></b>
E6	CORE	Brief maintenance operations (maintenance control and work center)
E6	CORE	Conduct Functional Flight Check (FCF) briefs and debriefs
E6	CORE	Conduct maintenance meetings and briefs
E4	CORE	Document aircraft discrepancies
E4	CORE	Document aircraft maintenance
E7	CORE	Manage cannibalization actions
E5	CORE	Manage Naval Aviation Maintenance Programs (NAMP)
E6	CORE	Manage scheduled and unscheduled maintenance
E5	CORE	Manage workload reports
E7	CORE	Manage X-RAY reports
E7	CORE	Monitor aircraft records for compliance
E6	CORE	Monitor Naval Aviation Maintenance Programs (NAMP)
E4	CORE	Process maintenance actions with Optimized Organizational Maintenance Activity Naval Aviation Logistics Command Managed Information System (OOMA NALCOMIS)
E6	CORE	Release aircraft safe for flight
E6	CORE	Review Maintenance Data Reports (MDR)
E4	CORE	Review monthly maintenance plans
E6	CORE	Schedule aircraft for maintenance
E7	CORE	Schedule aircraft for phase/Planned Maintenance Intervals (PMI)
E6	CORE	Schedule aircraft inspections
E6	CORE	Screen Visual Information Display System/Maintenance Action Forms (VIDS/MAF)
E5	CORE	Supervise scheduled and unscheduled maintenance
E5	CORE	Update Monthly Maintenance Plans (MMP)
E6	CORE	Verify aircraft logbooks
E6	CORE	Verify Technical Directive (TD) compliance

### **MAINTENANCE SUPPORT**

<b><u>Paygrade</u></b>	<b><u>Task Type</u></b>	<b><u>Task Statements</u></b>
E5	CORE	Evaluate aircraft ground performance
E4	CORE	Inspect aircraft and aircraft components for corrosion

## MAINTENANCE SUPPORT (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Inventory tools
E4	NON-CORE	Maintain air refueling systems
E4	CORE	Maintain aircraft flight databases
E4	CORE	Maintain aircraft hydraulic systems
E4	CORE	Maintain aircraft ice control systems
E4	CORE	Maintain automatic flight control systems
E4	CORE	Maintain environmental systems
E4	NON-CORE	Maintain extended range fuel tanks
E4	CORE	Maintain flight control systems
E4	CORE	Maintain landing gear assemblies
E4	CORE	Maintain navigation systems
E4	CORE	Maintain pneumatic systems
E4	CORE	Maintain pressurization systems
E4	CORE	Operate Support Equipment (SE)
E4	CORE	Perform aircraft conditional inspections
E4	CORE	Perform aircraft daily inspections
E4	CORE	Perform aircraft ground handling operations
E4	CORE	Perform aircraft servicing procedures
E4	CORE	Perform aircraft special inspections
E4	CORE	Perform aircraft turnaround inspections
E4	CORE	Perform corrosion prevention procedures
E4	CORE	Perform preservation and depreservation procedures
E5	CORE	Perform Quality Assurance (QA) inspections
E4	CORE	Perform Support Equipment (SE) inspections (e.g., daily, preoperational, etc.)
E4	CORE	Supervise aircraft towing and pushback operations
E4	CORE	Treat aircraft corrosion

## OPERATIONS AND LOGISTICS

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	NON-CORE	Conduct air logistics training
E6	CORE	Coordinate aircraft availability for long and short range planning
E4	NON-CORE	Coordinate cargo transfers
E4	CORE	Coordinate flight packet requirements
E5	NON-CORE	Coordinate Operating Areas (OPAREA) schedules with external agencies
E7	NON-CORE	Coordinate tactical exercises
E5	CORE	Determine aircrew readiness requirements for individuals and crews
E4	CORE	Document logistics flight records
E4	CORE	Perform aircrew mission briefs
E4	CORE	Perform flight and mission planning
E4	CORE	Perform pre- and post-deployment procedures

## OPERATIONS AND LOGISTICS (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E5	NON-CORE	Plan Night Vision Device (NVD) operations
E6	NON-CORE	Prepare country clearance messages
E5	CORE	Prepare flight hour reports
E5	CORE	Prepare flight schedules
E5	CORE	Report aircraft mission capability status
E5	NON-CORE	Submit airlift requests
E7	CORE	Submit logistics requests
E5	NON-CORE	Supervise alert aircraft procedures

## SPECIAL WARFARE AND UNMANNED AERIAL VEHICLE (UAV) OPERATIONS

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E5	NON-CORE	Conduct Naval Special Warfare (NSW) training
E5	NON-CORE	Configure aircraft for Special Warfare Operations (SPECOPS)
E7	NON-CORE	Coordinate Naval Special Warfare (NSW) operations
E5	NON-CORE	Maintain Unmanned Aerial Vehicles (UAV)
E5	NON-CORE	Operate Unmanned Aerial Vehicle (UAV) camera systems
E5	NON-CORE	Operate Unmanned Aerial Vehicle (UAV) electrical systems
E5	NON-CORE	Operate Unmanned Aerial Vehicle (UAV) fuel systems
E5	NON-CORE	Operate Unmanned Aerial Vehicle (UAV) navigation systems
E5	NON-CORE	Operate Unmanned Aerial Vehicle (UAV) radar systems
E5	NON-CORE	Operate Unmanned Aerial Vehicle (UAV) radio systems
E5	NON-CORE	Perform certification inspections on aviation combat systems
E5	NON-CORE	Perform Naval Special Warfare (NSW) operations
E5	NON-CORE	Perform Unmanned Aerial Vehicle (UAV) pre and post-flight inspections
E5	NON-CORE	Pilot Unmanned Aerial Vehicles (UAV)
E6	NON-CORE	Plan Naval Special Warfare (NSW) operations

**Job Title****Aircrew Readiness Manager (Mechanical)****Job Code****002539****Job Family**

Transportation and Material Moving

**NOC**

TBD

**Short Title (30 Characters)**

ACREW READINESS MGR MECH

**Short Title (14 Characters)**

ARM (MECH)

**Pay Plan**

Enlisted

**Career Field**

AWF

**Other Relationships and Rules**

NEC GXXX Series and other NECs as assigned

**Job Description**

Aircrew Readiness Managers (Mechanical) are crucial and integral members of staffs, operational commands, and squadrons; coordinate the operational, administrative, and aircrew scheduling functions; administer and manage training programs and resources for naval aircrew, manage standardization of aircrew training programs to enhance proficiency and readiness, and coordinate all aspects of aircrew training; administer and direct the Naval Air Training and Operating Procedures Standardization (NATOPS) and Search and Rescue (SAR) programs; administer and direct tactics, training and readiness, ordnance and weapons, and aircrew training. As program managers they analyze training resource requirements, review and approve contract options for new training devices and programs, develop and revise curriculum, incorporate and initiate new aircrew training programs, manage student quotas, qualifications and certifications, and coordinate aircrew physical fitness and health program initiatives.

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

Air Crew, General

**DoD Code**

105000

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

Airfield Operations Specialists

**SOC Code**

53-2022.00

**Job Family**

Transportation and Material Moving

**Skills***Critical Thinking**Instructing**Complex Problem Solving**Coordination**Judgment and Decision Making**Monitoring**Writing**Learning Strategies**Management of Material Resources**Management of Personnel Resources***Abilities***Deductive Reasoning**Written Comprehension**Originality**Problem Sensitivity**Written Expression**Fluency of Ideas**Oral Expression**Inductive Reasoning**Memorization**Category Flexibility***AIRCREW ADMINISTRATION****Paygrade**

E5

**Task Type**

CORE

**Task Statements**

Administer Naval Air Training and Operating Procedures Standardization (NATOPS) programs

E7

CORE

Conduct Flight Order Audit Boards (FOAB)

E7

CORE

Determine aircrew production requirements

E6

CORE

Develop aircrew course curriculum

E6

CORE

Develop training readiness matrix

E5

CORE

Record individual flight time summaries

E7

CORE

Verify training and readiness matrices

**AIRCREW TRAINING****Paygrade**

E5

**Task Type**

CORE

**Task Statements**

Administer aircrew training programs

E7

NON-CORE

Brief fleet aviation training requirements to upper echelon

E5

CORE

Conduct Naval Air Training and Operating Procedures Standardization (NATOPS) flight and ground training

E7

CORE

Define aircrew production requirements

### AIRCREW TRAINING (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E5	CORE	Develop Naval Air Training and Operating Procedures Standardization (NATOPS) training materials
E5	NON-CORE	Develop trainer and simulator scenarios
E5	CORE	Evaluate aircrew qualification and readiness programs
E5	CORE	Facilitate Crew Resource Management (CRM) programs
E5	NON-CORE	Perform warfare training exercises
E5	CORE	Update aircrew course curriculum

### OPERATIONS AND LOGISTICS

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E7	NON-CORE	Brief fleet acquisition programs
E4	NON-CORE	Conduct air logistics training
E6	CORE	Coordinate aircraft availability for long and short range planning
E5	NON-CORE	Coordinate Operating Areas (OPAREA) schedules with external agencies
E7	NON-CORE	Coordinate tactical exercises
E7	NON-CORE	Coordinate training systems acquisition contracts
E5	CORE	Determine aircrew readiness requirements for individuals and crews
E4	CORE	Document logistics flight records
E7	NON-CORE	Manage Operational Target (OPTAR) budgets
E4	CORE	Perform aircrew mission briefs
E4	CORE	Perform flight and mission planning
E5	NON-CORE	Plan Night Vision Device (NVD) operations
E6	NON-CORE	Prepare country clearance messages
E5	CORE	Prepare flight hour reports
E5	CORE	Prepare flight schedules
E7	NON-CORE	Process temporary flight order requests
E5	CORE	Report aircraft mission capability status
E5	NON-CORE	Submit airlift requests
E7	CORE	Submit logistics requests
E5	NON-CORE	Supervise alert aircraft procedures

### SPECIAL WARFARE AND UNMANNED AERIAL VEHICLE (UAV) OPERATIONS

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E6	NON-CORE	Plan Naval Special Warfare (NSW) operations