

# CHAPTER 1



## AVIATION BOATSWAIN'S MATE (FUELS) (ABF)

NAVPERS 18068F-1E  
Change 96

Updated: October 2023

# TABLE OF CONTENTS

## AVIATION BOATSWAIN'S MATE (FUELS) (ABF)

<b>SCOPE OF RATING</b>	<b>ABF-3</b>
<b>GENERAL INFORMATION</b>	<b>ABF-4</b>
<b>AVIATION FUELS BELOW DECKS OPERATIONS TECHNICIAN</b>	<b>ABF-5</b>
BELOW DECKS SYSTEM MAINTENANCE	ABF-5
BELOW DECKS SYSTEM OPERATIONS	ABF-5
FLIGHT/HANGAR DECK OPERATIONS	ABF-6
QUALITY SURVEILLANCE	ABF-6
TECHNICAL ADMINISTRATION	ABF-7
<b>AVIATION FUELS FLIGHT DECK OPERATIONS TECHNICIAN</b>	<b>ABF-8</b>
BELOW DECKS SYSTEM OPERATIONS	ABF-8
FLIGHT/HANGAR DECK EQUIPMENT MAINTENANCE	ABF-8
FLIGHT/HANGAR DECK OPERATIONS	ABF-9
QUALITY SURVEILLANCE	ABF-9
TECHNICAL ADMINISTRATION	ABF-9
<b>AVIATION FUELS SHORE BASED OPERATIONS TECHNICIAN</b>	<b>ABF-11</b>
BELOW DECKS SYSTEM OPERATIONS	ABF-11
FLIGHT/HANGAR DECK OPERATIONS	ABF-11
QUALITY SURVEILLANCE	ABF-12
SHORE BASED REFUELING	ABF-12
TECHNICAL ADMINISTRATION	ABF-12

# NAVY ENLISTED OCCUPATIONAL STANDARD

FOR

AVIATION BOATSWAIN'S MATE (FUELS) (ABF)



## SCOPE OF RATING

Aviation Boatswain's Mates (AB) operate, maintain, and perform organizational maintenance on catapults, arresting gear, barricades, and associated flight deck launching and recovery equipment; operate and service aircraft ground-handling equipment and machinery; operate and service aircraft crash, firefighting, and rescue equipment; handle aircraft afloat and ashore; operate, maintain, and repair aviation fueling, defueling, lubricating oil, and inert gas systems; perform crash rescue, firefighting, crash removal, and damage control duties; and perform administrative duties, implement training initiatives, and oversee/maintain divisional spaces.

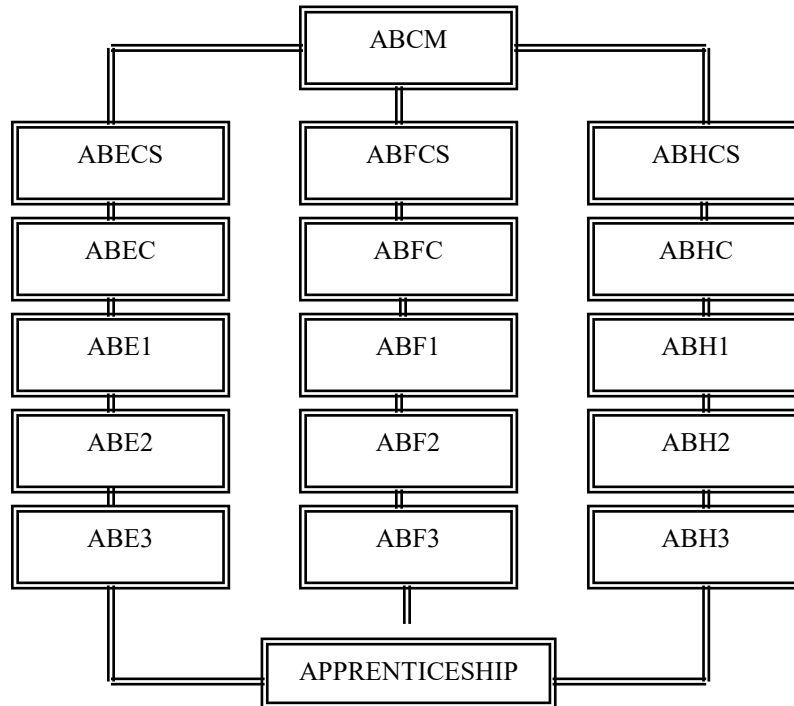
Aviation Boatswain's Mates (Fuels) (ABF) operate, maintain, and perform organizational maintenance on aviation fueling and lubricating oil systems within Carrier, Volplane, Nuclear (CVN), Landing Helicopter Assault (LHA), Landing Helicopter Dock (LHD), Landing Platform Dock (LPD), and air capable platforms including aviation fuel and lubricating oil service stations and pump rooms, piping, valves, pumps, tanks, and portable equipment related to the fuel system; operate, maintain, and repair valves and piping of purging and protective systems within the air department's spaces aboard ship; supervise the operation and servicing of fuel farms and equipment associated with the fueling and defueling of aircraft ashore and afloat; operate and service motorized fueling equipment; maintain fuel quality surveillance and control in aviation fuel systems ashore and afloat; train, direct, and supervise firefighting crews, fire rescue teams, and damage control parties in assigned fuel and lubricating oil spaces; and observe and enforce fuel handling safety precautions.

---

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 1.

## 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 Fuels Below Decks Operations Technician****Job Code****001030****Job Family**

Transportation and Material Moving

**NOC**

TBD

**Short Title (30 Characters)**

AVFUELS BLWDECK OPS TECH

**Short Title (14 Characters)**

FUEL BDCK TECH

**Pay Plan**

Enlisted

**Career Field**

ABF

**Other Relationships and Rules**

NEC DXXX and 7XXX series and other NECs as assigned

**Job Description**

Aviation Fuels Below Decks Operations Technicians ensure, supervise, and manage the safe receipt, transfer, purification and issue of JP-5 aviation fuel to various locations throughout the ship; take samples; sound tanks; operate auxiliary, service, transfer, and stripping systems to perform various functions; perform preventive and corrective maintenance on equipment; and maintain the material condition of assigned spaces.

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

Missile Fuel and Petroleum

**DoD Code**

182100

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

Pump Operators, Except Wellhead Pumps

**SOC Code**

53-7072.00

**Job Family**

Transportation and Material Moving

**Skills***Equipment Selection**Monitoring**Operation Monitoring**Critical Thinking**Judgment and Decision Making**Management of Material Resources**Quality Control Analysis**Writing**Mathematics**Management of Personnel Resources***Abilities***Problem Sensitivity**Written Comprehension**Response Orientation**Control Precision**Memorization**Hearing Sensitivity**Information Ordering**Near Vision**Number Facility**Finger Dexterity***BELOW DECKS SYSTEM EQUIPMENT MAINTENANCE****Paygrade****Task Type****Task Statements**

E5

CORE

Coordinate below decks systems equipment repairs

E4

CORE

Perform below decks systems equipment planned maintenance

E4

CORE

Perform below decks systems equipment repairs

E4

CORE

Perform below decks systems preventive/corrective maintenance using procedures

E6

CORE

Supervise below decks systems equipment repair

E5

CORE

Supervise below decks systems preventive/corrective maintenance using procedures

**BELOW DECKS SYSTEM OPERATIONS****Paygrade****Task Type****Task Statements**

E4

CORE

Align JP-5 transfer system for Underway Replenishment (UNREP)

E7

CORE

Approve tank sequences

E5

CORE

Conduct below decks systems space inspections

E6

CORE

Coordinate Underway Replenishment (UNREP) stations

E4

CORE

Detect below decks systems material deficiencies

E4

CORE

Detect pump room equipment deficiencies

### **BELOW DECKS SYSTEM OPERATIONS (CONT'D)**

<b><u>Paygrade</u></b>	<b><u>Task Type</u></b>	<b><u>Task Statements</u></b>
E6	CORE	Manage below decks personnel routines
E7	CORE	Manage below decks systems operations
E7	CORE	Manage fuel system liquid loads
E5	CORE	Monitor ballasting and de-ballasting system operations
E4	CORE	Monitor catapult lube oil system operations
E5	CORE	Monitor fuel transfer system operations
E5	CORE	Monitor JP-5 auxiliary fuel systems operations
E5	CORE	Monitor JP-5 reclamation system operations
E5	CORE	Monitor JP-5 service system operations
E5	CORE	Monitor JP-5 stripping system operations
E5	CORE	Monitor JP-5 transfer system for Underway Replenishment (UNREP)
E4	CORE	Perform ballasting and de-ballasting system operations
E4	CORE	Perform below decks systems casualty/emergency drills
E4	CORE	Perform catapult lube oil system operations
E4	CORE	Perform filter room operations
E4	CORE	Perform JP-5 below decks auxiliary fuel systems operations
E4	CORE	Perform JP-5 reclamation system operations
E4	CORE	Perform JP-5 service system operations
E4	CORE	Perform JP-5 stripping system operations
E4	CORE	Perform JP-5 transfer system operations
E4	CORE	Perform tank sounding
E5	CORE	Prepare fuel sounding reports
E4	CORE	Prepare sponson for Underway Replenishment (UNREP)
E6	CORE	Supervise below decks systems casualty/emergency drills
E7	CORE	Supervise fuel offload
E6	CORE	Supervise fuel system liquid loads
E6	CORE	Supervise sponson status of Underway Replenishment (UNREP)
E7	CORE	Verify sounding report accuracy

### **FLIGHT/HANGAR DECK OPERATIONS**

<b><u>Paygrade</u></b>	<b><u>Task Type</u></b>	<b><u>Task Statements</u></b>
E4	CORE	Perform flight/hangar deck fuel system casualty/emergency drills

### **QUALITY SURVEILLANCE**

<b><u>Paygrade</u></b>	<b><u>Task Type</u></b>	<b><u>Task Statements</u></b>
E4	CORE	Determine fuel characteristics
E4	CORE	Obtain appropriate sample for below decks fueling systems
E4	CORE	Perform Quality Surveillance (QS) tests
E5	CORE	Supervise aviation fuel Quality Surveillance (QS) tests

## TECHNICAL ADMINISTRATION

<b><u>Paygrade</u></b>	<b><u>Task Type</u></b>	<b><u>Task Statements</u></b>
E5	CORE	Input Organizational Maintenance Management System (OMMS) job data
E6	CORE	Maintain aviation fuels accountability logs and records
E7	NON-CORE	Manage below decks manning requirements
E6	CORE	Manage below decks training programs
E7	CORE	Manage Ship Operation Management System (SOMS)
E7	CORE	Verify Current Ships Maintenance Plans (CSMP)
E6	CORE	Verify Organizational Maintenance Management System (OMMS) jobs

**Job Title****Aviation Fuels Flight Deck Operations Technician****Job Code****001085****Job Family**

Installation, Maintenance, and Repair

**NOC**

TBD

**Short Title (30 Characters)**

AVFUELS FLTDECK OPS TECH

**Short Title (14 Characters)**

FUEL FLT DECK

**Pay Plan**

Enlisted

**Career Field**

ABF

**Other Relationships and Rules**

NEC DXXX and 7XXX series and other NECs as assigned

**Job Description**

Aviation Fuels Flight Deck Operations Technicians ensure, supervise, and manage the safe receipt, transfer and issue of JP-5 aviation fuel to various locations throughout the ship; take samples; perform Quality Surveillance (QS) of fuels; sound tanks; align and operate flight deck fueling stations; fuel and defuel aircraft and Support Equipment (SE); perform preventive and corrective maintenance on equipment; and maintain the material condition of assigned spaces.

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

Missile Fuel and Petroleum

**DoD Code**

182100

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

Maintenance Workers, Machinery

**SOC Code**

49-9043.00

**Job Family**

Installation, Maintenance, and Repair

**Skills**

Monitoring

Operation and Control

Equipment Selection

Operation Monitoring

Critical Thinking

Management of Personnel Resources

Judgment and Decision Making

Management of Material Resources

Quality Control Analysis

Reading Comprehension

**Abilities**

Problem Sensitivity

Reaction Time

Written Comprehension

Memorization

Inductive Reasoning

Information Ordering

Hearing Sensitivity

Near Vision

Selective Attention

Finger Dexterity

**BELOW DECKS SYSTEM OPERATIONS****Paygrade****Task Type****Task Statements**

E6

CORE

Coordinate Underway Replenishment (UNREP) stations

E5

CORE

Monitor JP-5 auxiliary fuel systems operations

E5

CORE

Monitor JP-5 service system operations

E4

CORE

Perform tank sounding

E4

CORE

Prepare sponson for Underway Replenishment (UNREP)

E7

CORE

Supervise fuel offload

E6

CORE

Supervise fuel system liquid loads

E6

CORE

Supervise sponson status of Underway Replenishment (UNREP)

E7

CORE

Verify sounding report accuracy

**FLIGHT/HANGAR DECK EQUIPMENT MAINTENANCE****Paygrade****Task Type****Task Statements**

E5

CORE

Coordinate flight/hangar deck fuel system equipment repairs

E4

CORE

Perform aviation fuels flight/hangar deck equipment planned maintenance

E4

CORE

Perform flight/hangar deck equipment repairs

E4

CORE

Perform flight/hangar deck preventive/corrective maintenance using procedures

E6

CORE

Supervise flight/hangar deck equipment repair using procedures



## FLIGHT/HANGAR DECK EQUIPMENT MAINTENANCE (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E6	CORE	Supervise flight/hangar deck fuel system casualty/emergency drills
E5	CORE	Supervise flight/hangar deck preventive/corrective maintenance using procedures

## FLIGHT/HANGAR DECK OPERATIONS

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E5	CORE	Conduct flight/hangar deck station inspections
E4	CORE	Defuel aircraft
E4	CORE	Detect fueling stations equipment deficiencies
E4	CORE	Detect fueling stations material deficiencies
E7	CORE	Manage aircraft emergency defueling operations
E6	CORE	Manage flight deck personnel routines
E7	CORE	Manage flight/hangar deck fueling operations
E4	CORE	Monitor aircraft fueling stations alignments
E4	CORE	Perform flight deck hot refueling operations
E4	CORE	Perform flight/hangar deck cold refueling operations
E4	CORE	Perform flight/hangar deck fuel system casualty/emergency drills
E4	CORE	Perform flight/hangar deck fuel systems auxiliary operations
E4	CORE	Perform flight/hangar deck station operations
E4	CORE	Perform Motor Gasoline (MOGAS) issue
E5	CORE	Perform Motor Gasoline (MOGAS) onloading/offloading
E5	CORE	Supervise aircraft defueling operations
E5	CORE	Supervise aircraft-to-aircraft fuel transfers
E5	CORE	Supervise emergency aircraft defueling using procedures
E5	CORE	Supervise flight deck hot refueling operations
E5	CORE	Supervise flight/hangar deck cold refueling operations
E5	CORE	Supervise Motor Gasoline (MOGAS) issue
E7	CORE	Supervise Motor Gasoline (MOGAS) onloading/offloading
E5	CORE	Supervise refueling crews operations

## QUALITY SURVEILLANCE

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Determine fuel characteristics
E6	CORE	Manage fuels Quality Surveillance (QS) team routine
E4	CORE	Obtain appropriate sample for laboratory analysis from fueling stations/sponsons
E4	CORE	Perform Quality Surveillance (QS) tests
E5	CORE	Supervise aviation fuel Quality Surveillance (QS) tests

## TECHNICAL ADMINISTRATION

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E5	CORE	Input Organizational Maintenance Management System (OMMS) job data
E6	CORE	Maintain aviation fuels accountability logs and records

**TECHNICAL ADMINISTRATION (CONT'D)**

<b><u>Paygrade</u></b>	<b><u>Task Type</u></b>	<b><u>Task Statements</u></b>
E7	CORE	Manage flight deck manning requirements
E6	CORE	Manage flight/hangar deck training programs
E7	CORE	Manage Ship Operation Management System (SOMS)
E7	CORE	Validate accuracy of Quality Surveillance (QS) logs
E7	CORE	Verify Current Ships Maintenance Plans (CSMP)
E6	CORE	Verify Organizational Maintenance Management System (OMMS) jobs

**Job Title****Aviation Fuels Shore Based Operations Technician****Job Code****001140****Job Family**

Transportation and Material Moving

**NOC**

TBD

**Short Title (30 Characters)**

AVFUELS ASHORE OPS TECH

**Short Title (14 Characters)**

FUEL SHORE TEC

**Pay Plan**

Enlisted

**Career Field**

ABF

**Other Relationships and Rules**

NEC DXXX and 7XXX series and other NECs as assigned

**Job Description**

Aviation Fuels Shore Based Operations Technicians ensure, supervise, and manage the safe receipt, transfer and issue of JP-5 aviation fuel to assigned and transient aircraft, as well as support equipment; take samples; sound tanks; coordinate refueling points; perform refuel and defuel operations; provide fuel for Jet Test facilities; conduct Quality Surveillance (QS) checks on fuel, aligning service, operating transfer, and stripping systems to perform various functions; perform preventive and corrective maintenance on equipment; and maintain the material condition of assigned spaces.

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

Missile Fuel and Petroleum

**DoD Code**

182100

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

Pump Operators, Except Wellhead Pumps

**SOC Code**

53-7072.00

**Job Family**

Transportation and Material Moving

**Skills***Operation and Control**Monitoring**Equipment Selection**Operation Monitoring**Equipment Maintenance**Quality Control Analysis**Reading Comprehension**Writing**Critical Thinking**Mathematics***Abilities***Problem Sensitivity**Reaction Time**Selective Attention**Memorization**Near Vision**Written Comprehension**Arm-Hand Steadiness**Finger Dexterity**Number Facility**Category Flexibility***BELOW DECKS SYSTEM OPERATIONS****Paygrade****Task Type****Task Statements**

E4

CORE

Perform tank sounding

E5

CORE

Prepare fuel sounding reports

E6

CORE

Supervise fuel system liquid loads

E7

CORE

Verify sounding report accuracy

**FLIGHT/HANGAR DECK OPERATIONS****Paygrade****Task Type****Task Statements**

E4

CORE

Detect fueling stations equipment deficiencies

E4

CORE

Detect fueling stations material deficiencies

E7

CORE

Manage aircraft emergency defueling operations

E4

CORE

Monitor aircraft fueling stations alignments

E5

CORE

Supervise aircraft-to-aircraft fuel transfers

E5

CORE

Supervise emergency aircraft defueling using procedures

E5

CORE

Supervise refueling crews operations

### **QUALITY SURVEILLANCE**

<b><u>Paygrade</u></b>	<b><u>Task Type</u></b>	<b><u>Task Statements</u></b>
E4	CORE	Determine fuel characteristics
E6	CORE	Manage fuels Quality Surveillance (QS) team routine
E4	CORE	Obtain appropriate sample for laboratory analysis from fueling stations/sponsons
E4	CORE	Perform Quality Surveillance (QS) tests
E5	CORE	Supervise aviation fuel Quality Surveillance (QS) tests

### **SHORE BASED REFUELING**

<b><u>Paygrade</u></b>	<b><u>Task Type</u></b>	<b><u>Task Statements</u></b>
E4	CORE	Perform shore based defueling operations
E4	CORE	Perform shore based direct refueling operations
E4	CORE	Perform shore based equipment maintenance
E4	CORE	Perform shore based equipment planned maintenance
E4	CORE	Perform shore based mobile refueling operations
E5	CORE	Supervise shore based defueling operations
E5	CORE	Supervise shore based direct refueling operations
E5	CORE	Supervise shore based mobile refueling operations
E5	CORE	Supervise shore based preventative/corrective maintenance using procedures
E5	CORE	Verify shore facility fuel station pressure gauges

### **TECHNICAL ADMINISTRATION**

<b><u>Paygrade</u></b>	<b><u>Task Type</u></b>	<b><u>Task Statements</u></b>
E6	CORE	Maintain aviation fuels accountability logs and records
E7	CORE	Validate accuracy of Quality Surveillance (QS) logs