

# CHAPTER 77



## UTILITIESMAN (UT)

NAVPERS 18068F-77H  
Change 100

Updated: October 2024

**TABLE OF CONTENTS  
UTILITIESMAN (UT)**

<b>SCOPE OF RATING</b>	<b>UT-3</b>
<b>GENERAL INFORMATION</b>	<b>UT-4</b>
<b>UTILITIESMAN</b>	<b>UT-5</b>
BOILERS	UT-5
CONSTRUCTION MANAGEMENT	UT-5
EXPEDITIONARY CONSTRUCTION	UT-6
FACILITIES MANAGEMENT	UT-7
HEATING, VENTILATING, AIR CONDITIONING, AND REFRIGERATION (HVAC/R)	UT-7
PLUMBING	UT-7
PUMPS AND COMPRESSED AIR SYSTEMS	UT-8
UTILITIES EQUIPMENT	UT-8
WASTE WATER SYSTEMS	UT-9
WATER TREATMENT	UT-9

NAVY ENLISTED OCCUPATIONAL STANDARD

FOR  
UTILITIESMAN (UT)



SCOPE OF RATING

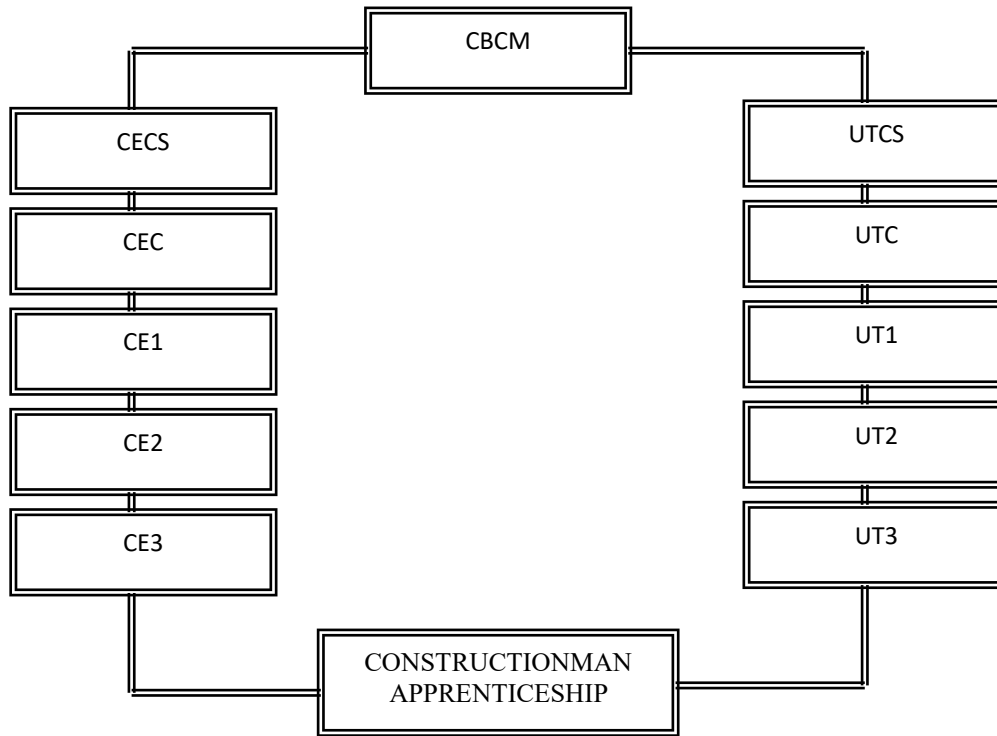
Utilitiesmen (UT) plan, supervise, manage, and perform tasks involved in installation, maintenance, and repair of plumbing, heating, steam, compressed air, fuel storage and distribution systems, water treatment and distribution systems, air conditioning and refrigeration equipment, and waste water management systems, as prescribed by blueprints, drawings and specifications; schedule and evaluate installation and operational tasks; prepare records and reports; maintain individual combat readiness; and perform tasks required in combat and disaster preparedness or recovery operations.

---

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 77.

## 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.**

\*Career path updated to reflect rating name change to Seabee Master Chief (CBCM) – NAVADMIN 054/21 refers

**Job Title****Utilitiesman****Job Code****001797****Job Family**

Construction and Extraction

**NOC**

TBD

**Short Title (30 Characters)**

UTILITIESMAN

**Short Title (14 Characters)**

UTILITIESMAN

**Pay Plan**

Enlisted

**Career Field**

UT

**Other Relationships and Rules**

NEC BXXX series and other NECs as assigned

**Job Description**

Utilitiesmen (UT) plan, supervise, manage, and perform tasks involved in installation, maintenance, and repair of plumbing, heating, steam, compressed air, fuel storage and distribution systems, water treatment and distribution systems, air conditioning and refrigeration equipment, and waste water systems, as prescribed by blueprints, drawings and specifications; schedule and evaluate installation and operational tasks; prepare time records, progress reports, construction schedules, and material, labor, tool and equipment estimates for construction projects; act as project managers, staffing, directing, and controlling multiple construction projects to include problem solving, planning, estimating, scheduling, cost control, and personnel management ensuring compliance with specifications, code requirements, plans, and contracts; and function as a project supervisor and subject matter expert.

**DoD Relationship**Group Title

Utilities, General

DoD Code

172000

**O\*NET Relationship**Occupation Title

Plumbers, Pipefitters, and Steamfitters

SOC Code

47-2152.00

Job Family

Construction and Extraction

**Skills***Management of Material Resources**Management of Personnel Resources**Operation Monitoring**Repairing**Troubleshooting**Equipment Maintenance**Equipment Selection**Installation**Reading Comprehension**Systems Analysis***Abilities***Oral Expression**Multi-limb Coordination**Deductive Reasoning**Inductive Reasoning**Problem Sensitivity**Visualization**Information Ordering**Written Comprehension**Written Expression**Manual Dexterity***BOILERS****Paygrade****Task Type****Task Statements**

E4

CORE

Conduct boiler system operational checks

E4

CORE

Conduct corrective maintenance on boiler systems

E4

CORE

Conduct preventive maintenance on boiler systems

E6

NON-CORE

Develop sketches and diagrams for boiler supply and return systems

E4

CORE

Install boiler systems

E4

CORE

Interpret boiler blueprints and specifications

E7

NON-CORE

Manage boiler installation and maintenance operations

E6

NON-CORE

Supervise boiler installation and maintenance operations

E4

CORE

Troubleshoot boiler electrical system components

**CONSTRUCTION MANAGEMENT****Paygrade****Task Type****Task Statements**

E5

CORE

Conduct construction project turnovers

E6

NON-CORE

Conduct Three-Phase Quality Control inspections

E4

CORE

Develop construction activities

E4

CORE

Develop construction estimates

E5

CORE

Develop construction project packages

E4

CORE

Develop construction project sketches, diagrams, and shop drawings

E4

CORE

Develop construction safety plans

## CONSTRUCTION MANAGEMENT (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Develop environmental protection plans
E5	CORE	Develop master activities listing
E4	CORE	Develop project Three-Phase Quality Control plans
E5	CORE	Establish construction site layouts
E5	CORE	Input project data into construction management software and tools
E5	CORE	Inspect construction materials
E4	CORE	Interpret construction project blueprints and specifications
E4	CORE	Inventory project tools and materials
E5	CORE	Lead construction project crews
E7	CORE	Manage construction project resources
E7	CORE	Manage construction projects
E7	CORE	Manage construction safety plans
E7	CORE	Manage job site construction operations (e.g., Quality Control (QC) and safety plan implementation, job site information board, level III chart, etc.)
E7	CORE	Manage project Quality Control (QC) plans
E7	CORE	Manage Three-Phase Quality Control process
E6	CORE	Supervise construction project crews
E5	NON-CORE	Supervise construction project safety operations
E6	CORE	Supervise construction project turnovers
E5	CORE	Supervise environmental protection plans
E6	CORE	Supervise planning and estimating operations
E6	CORE	Supervise project Three-Phase Quality Control process
E6	CORE	Validate construction project packages
E6	NON-CORE	Validate construction project safety plans
E5	NON-CORE	Validate project surveys and elevation data
E5	NON-CORE	Verify construction project contract requirements

## EXPEDITIONARY CONSTRUCTION

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E5	NON-CORE	Assess airfield damages (i.e., data collection)
E5	NON-CORE	Assess pier damages
E6	NON-CORE	Plan Airfield Damage Repairs (ADR) (e.g., operational length determination, repair quality criteria, operating surface selection, etc.)
E6	NON-CORE	Plan Pier Damage Repairs (PDR)
E4	NON-CORE	Repair damaged airfields (e.g., debris clearing, material staging, spall repair, crater repair, etc.)
E4	NON-CORE	Repair damaged piers
E7	NON-CORE	Supervise Airfield Damage Repair (ADR) operations
E7	NON-CORE	Supervise Pier Damage Repairs (PDR)

## FACILITIES MANAGEMENT

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Conduct facilities corrective maintenance
E4	CORE	Conduct facilities preventive maintenance
E5	CORE	Inspect facilities systems
E7	NON-CORE	Manage facilities maintenance contracts
E6	CORE	Manage facilities maintenance operations (e.g., Camp Maintenance, 3M, MAXIMO, etc.)
E5	NON-CORE	Perform sewage treatment plant operations
E5	NON-CORE	Perform water treatment plant operations
E5	CORE	Supervise facilities maintenance (e.g., Camp Maintenance, 3M, MAXIMO, etc.)

## HEATING, VENTILATING, AIR CONDITIONING, AND REFRIGERATION (HVAC/R)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Conduct corrective maintenance on Heating, Ventilation, Air Conditioning, and Refrigeration (HVAC/R) systems
E4	CORE	Conduct Heating, Ventilation, Air Conditioning, and Refrigeration (HVAC/R) system operational checks
E4	CORE	Conduct preventive maintenance on Heating, Ventilation, Air Conditioning, and Refrigeration (HVAC/R) systems
E5	NON-CORE	Develop sketches and diagrams for Heating, Ventilating, Air Conditioning, and Refrigeration (HVAC/R) systems
E4	CORE	Install Heating, Ventilation, Air Conditioning, and Refrigeration (HVAC/R) systems
E4	CORE	Interpret Heating, Ventilating, Air Conditioning, and Refrigeration (HVAC/R) blueprints and specifications
E7	CORE	Manage Heating, Ventilation, Air Conditioning, and Refrigeration (HVAC/R) installation and maintenance
E6	CORE	Supervise Heating, Ventilation, Air Conditioning, and Refrigeration (HVAC/R) installation and maintenance
E4	CORE	Troubleshoot Heating, Ventilation, Air Conditioning, and Refrigeration (HVAC/R) electrical system components

## PLUMBING

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Conduct corrective maintenance on Drain Waste Vent (DWV) systems
E4	CORE	Conduct corrective maintenance on sewer systems
E4	CORE	Conduct corrective maintenance on storm water drainage systems
E4	CORE	Conduct corrective maintenance on water distribution systems
E4	CORE	Conduct preventive maintenance on sewer systems
E4	CORE	Conduct preventive maintenance on storm water drainage systems
E4	CORE	Conduct preventive maintenance on water distribution systems
E4	CORE	Develop sketches and diagrams for Drain Waste Vent (DWV) systems
E4	CORE	Develop sketches and diagrams for plumbing systems
E4	CORE	Establish plumbing system elevations
E4	CORE	Install Drain Waste Vent (DWV) systems
E4	CORE	Install sewer systems
E4	CORE	Install storm water drainage systems

## PLUMBING (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Install water distribution systems and components
E4	CORE	Interpret plumbing blueprints and specifications
E4	CORE	Interpret sewer system blueprints and specifications
E7	CORE	Manage Drain Waste Vent (DWV) installation and maintenance operations
E7	CORE	Manage plumbing systems installation and maintenance operations
E6	CORE	Supervise Drain Waste Vent (DWV) installation and maintenance operations
E6	CORE	Supervise plumbing system installation and maintenance operations

## PUMPS AND COMPRESSED AIR SYSTEMS

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Conduct corrective maintenance on compressed air systems (i.e., general systems under 398 psi)
E4	CORE	Conduct corrective maintenance on pumps and compressors (i.e., general systems under 398 psi)
E4	CORE	Conduct preventive maintenance on compressed air systems (i.e., general systems under 398 psi)
E4	CORE	Conduct preventive maintenance on pumps and compressors (i.e., general systems under 398 psi)
E4	CORE	Develop sketches and diagrams for compressed air systems (i.e., general systems under 398 psi)
E4	CORE	Install compressed air systems (i.e., general systems under 398 psi)
E4	CORE	Install pumps and compressors (i.e., general systems under 398 psi)
E4	CORE	Interpret compressed air system blueprints and specifications (i.e., general systems under 398 psi)
E7	CORE	Manage compressed air systems installation and maintenance operations (i.e., general systems under 398 psi)
E7	CORE	Manage pumps and compressors installation and maintenance operations (i.e., general systems under 398 psi)
E6	CORE	Supervise compressed air systems installation and maintenance operations (i.e., general systems under 398 psi)
E6	CORE	Supervise pumps and compressors installation and maintenance operations (i.e., general systems under 398 psi)

## UTILITIES EQUIPMENT

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	NON-CORE	Conduct bulk fuel storage system operational checks
E4	NON-CORE	Conduct corrective maintenance on galley equipment
E4	CORE	Conduct corrective maintenance on laundry equipment
E4	CORE	Conduct corrective maintenance on shower systems
E4	NON-CORE	Conduct preventive maintenance on galley equipment
E4	CORE	Conduct preventive maintenance on laundry equipment
E4	CORE	Conduct preventive maintenance on shower systems
E4	NON-CORE	Install bulk fuel storage systems
E4	NON-CORE	Install galley equipment
E4	CORE	Install laundry equipment



### UTILITIES EQUIPMENT (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Install shower systems
E7	NON-CORE	Manage bulk fuel storage installation and maintenance operations
E7	CORE	Manage utilities equipment installation and maintenance operations (e.g., laundry systems, shower systems, etc.)
E4	NON-CORE	Perform corrective maintenance on bulk fuel storage systems
E4	NON-CORE	Perform preventive maintenance on bulk fuel storage systems
E6	NON-CORE	Supervise bulk fuel storage installation and maintenance operations
E6	CORE	Supervise utilities equipment installation and maintenance operations (e.g., laundry systems, shower systems, etc.)

### WASTE WATER SYSTEMS

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Conduct corrective maintenance on waste water treatment systems
E4	CORE	Conduct preventive maintenance on waste water treatment systems
E4	CORE	Conduct waste water treatment system operational checks
E4	CORE	Develop sketches and diagrams for waste water systems
E4	CORE	Install waste water treatment systems
E4	CORE	Interpret waste water system blueprints and specifications
E7	CORE	Manage waste water treatment system installation and maintenance operations
E6	CORE	Supervise waste water treatment system installation and maintenance operations

### WATER TREATMENT

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Conduct corrective maintenance on water treatment systems
E4	CORE	Conduct preventive maintenance on water treatment systems
E4	CORE	Conduct water treatment systems operational checks
E4	CORE	Install water treatment systems
E7	CORE	Manage water treatment system installation and maintenance operations
E5	CORE	Select water source locations
E6	CORE	Supervise water treatment system installation and maintenance operations