

# CHAPTER 77



## UTILITIESMAN

(UT)

NAVPERS 18068F-77G  
Change 88

Updated: October 2021

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NAVY ENLISTED OCCUPATIONAL STANDARD

FOR  
UTILITIESMAN (UT)



SCOPE OF RATING

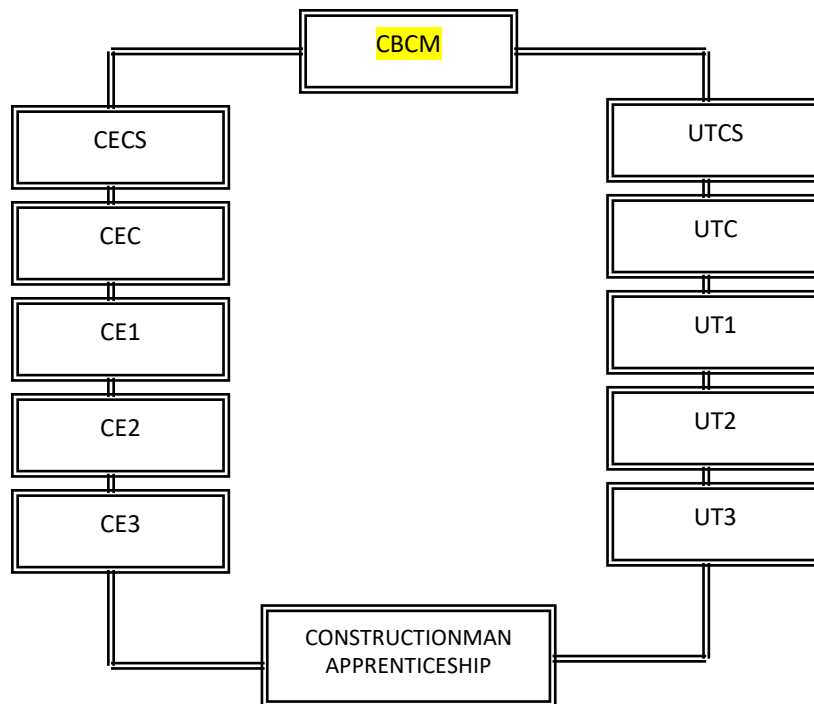
Utilitiesmen (UT) plan, supervise, manage, and perform tasks involved in installation, maintenance, and repair of plumbing, heating, steam, compressed air, fuel storage and distribution systems, water treatment and distribution systems, air conditioning and refrigeration equipment, and waste water management 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.

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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) 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, 717B, 718B, 804G, 833A or 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; and prepare time records, progress reports, construction schedules, and material, labor, tool and equipment estimates for construction projects. As project managers, they plan, staff, direct, and control 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*  
*Equipment Selection*  
*Installation*  
*Repairing*  
*Troubleshooting*  
*Equipment Maintenance*  
*Judgment and Decision Making*  
*Reading Comprehension*

**Abilities**

*Deductive Reasoning*  
*Information Ordering*  
*Oral Expression*  
*Visualization*  
*Problem Sensitivity*  
*Written Comprehension*  
*Manual Dexterity*  
*Gross Body Coordination*  
*Inductive Reasoning*  
*Multi-limb Coordination*

**BOILERS**

<b>Paygrade</b>	<b>Task Type</b>	<b>Task Statements</b>
E4	NON-CORE	Conduct boiler system operational checks
E5	NON-CORE	Conduct corrective maintenance on boiler systems
E4	NON-CORE	Conduct preventive maintenance on boiler systems
E6	NON-CORE	Develop sketches and diagrams for boiler supply and return systems
E5	NON-CORE	Install boiler systems
E4	NON-CORE	Interpret boiler blueprints and specifications
E7	NON-CORE	Manage boiler installation and maintenance
E6	NON-CORE	Supervise boiler installation and maintenance

**CONSTRUCTION MANAGEMENT**

<b>Paygrade</b>	<b>Task Type</b>	<b>Task Statements</b>
E6	CORE	Conduct three-phase quality control inspections
E4	CORE	Develop construction activities
E4	CORE	Develop construction environmental protection plans
E4	CORE	Develop construction estimates
E5	CORE	Develop construction project packages
E4	CORE	Develop construction project sketches, diagrams, and shop drawings
E5	CORE	Develop construction safety plans
E5	CORE	Develop master activities

## CONSTRUCTION MANAGEMENT (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E5	CORE	Develop project three-phase quality control plans
E6	CORE	Establish construction site layouts
E5	CORE	Input project data into construction management software and tools
E5	CORE	Inspect construction materials
E5	CORE	Interpret construction project blueprints and specifications
E4	CORE	Inventory project tools and materials
E5	CORE	Lead construction project crew
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 and safety plan implementation, job site information board, level III chart, etc.)
E7	CORE	Manage project quality control plans
E7	CORE	Manage three-phase quality control process
E6	NON-CORE	Monitor construction project contracts
E6	CORE	Supervise construction project crews
E5	CORE	Supervise construction project safety operations
E5	CORE	Supervise environmental protection plans
E6	CORE	Supervise planning and estimating operations
E6	CORE	Supervise project three-phase quality control process
E6	CORE	Turnover construction project
E6	CORE	Validate construction project packages
E5	NON-CORE	Validate project surveys and elevation data

## 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
E7	CORE	Manage facilities maintenance operations (e.g., Camp Maintenance, 3M, MAXIMO)
E6	CORE	Supervise facilities maintenance (e.g., Camp Maintenance, 3M, MAXIMO)

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

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E5	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)

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

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E5	CORE	Install Heating, Ventilation, Air Conditioning, and Refrigeration (HVAC/R) systems
E5	CORE	Interpret Heating, Ventilating, Air Conditioning, and Refrigeration (HVAC/R) blueprints and specifications
E6	CORE	Manage Heating, Ventilation, Air Conditioning, and Refrigeration (HVAC/R) installation and maintenance
E5	CORE	Supervise Heating, Ventilation, Air Conditioning, and Refrigeration (HVAC/R) installation and maintenance

## 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
E5	CORE	Establish plumbing system elevations
E4	CORE	Install Drain Waste Vent (DWV) systems
E5	CORE	Install sewer systems
E4	CORE	Install storm water drainage systems
E4	CORE	Install water distribution systems and components
E4	CORE	Interpret plumbing blueprints and specifications
E6	CORE	Manage plumbing systems installation and maintenance
E5	CORE	Supervise plumbing system installation and maintenance

## PUMPS AND COMPRESSED AIR SYSTEMS

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E5	CORE	Conduct corrective maintenance on compressed air systems (i.e., general systems under 398 psi)
E5	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)
E5	CORE	Develop sketches and diagrams for compressed air systems (i.e., general systems under 398 psi)
E5	CORE	Install compressed air systems (i.e., general systems under 398 psi)
E5	CORE	Install pumps and compressors (i.e., general systems under 398 psi)
E5	CORE	Interpret compressed air system blueprints and specifications (i.e., general systems under 398 psi)

### PUMPS AND COMPRESSED AIR SYSTEMS (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E7	CORE	Manage compressed air systems installation and maintenance (i.e., general systems under 398 psi)
E7	CORE	Manage pumps and compressors installation and maintenance (i.e., general systems under 398 psi)
E6	CORE	Supervise compressed air systems installation and maintenance (i.e., general systems under 398 psi)
E6	CORE	Supervise pumps and compressors installation and maintenance (i.e., general systems under 398 psi)

### UTILITIES EQUIPMENT

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E5	NON-CORE	Conduct bulk fuel storage system operational checks
E5	NON-CORE	Conduct corrective maintenance on galley equipment
E5	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
E5	NON-CORE	Install bulk fuel storage systems
E4	NON-CORE	Install galley equipment
E4	CORE	Install laundry equipment
E4	CORE	Install shower systems
E7	NON-CORE	Manage bulk fuel storage installation and maintenance
E6	CORE	Manage utilities equipment installation and maintenance
E5	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
E5	CORE	Supervise utilities equipment installation and maintenance

### WASTE WATER SYSTEMS

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E5	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
E5	NON-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
E6	CORE	Supervise waste water treatment system installation and maintenance

### WATER TREATMENT

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E5	CORE	Conduct corrective maintenance on water treatment systems
E4	CORE	Conduct preventive maintenance on water treatment systems



**WATER TREATMENT (CONT'D)**

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