

# CHAPTER 77



## UTILITIESMAN (UT)

NAVPERS 18068-77F  
CH-77

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NAVY ENLISTED OCCUPATIONAL STANDARD

FOR  
UTILITIESMAN (UT)



SCOPE OF RATING

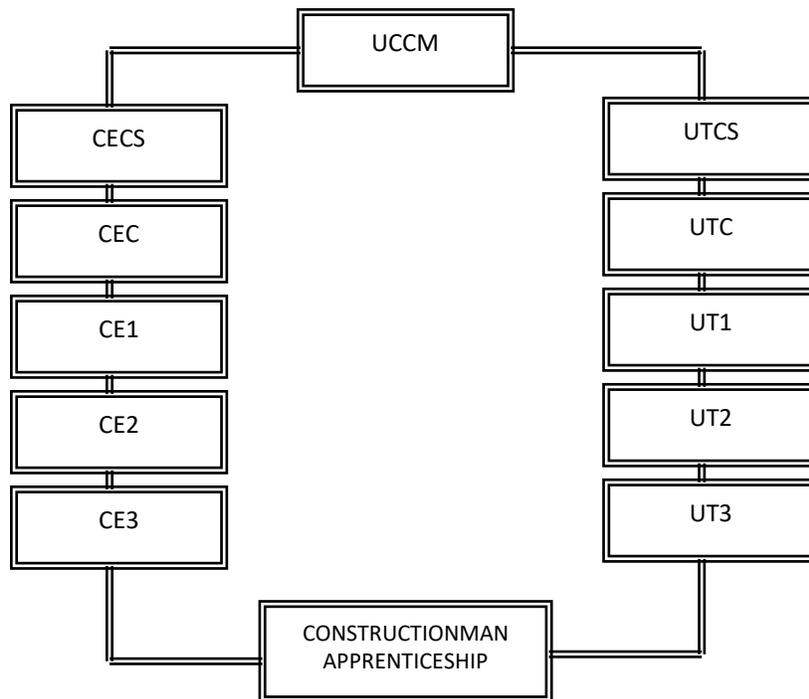
Utilitiesmen (UT) plan, supervise, manage, and perform tasks involved in installation, maintenance, and repair of plumbing, heating, steam, compressed air, fuel storage and distribution systems, water treatment and distribution systems, air conditioning and refrigeration equipment, and septic systems,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

**Job Title**  
**Utilitiesmen**

**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 and other NECs as assigned

**Job Description**

Utilitiesmen 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 septic systems, as prescribed by 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 Personnel Resources*

*Management of Material Resources*

*Equipment Maintenance*

*Critical Thinking*

*Operation Monitoring*

*Equipment Selection*

*Reading Comprehension*

*Complex Problem Solving*

*Repairing*

*Troubleshooting*

**Abilities**

*Deductive Reasoning*

*Information Ordering*

*Oral Expression*

*Problem Sensitivity*

*Visualization*

*Written Comprehension*

*Manual Dexterity*

*Spatial Orientation*

*Inductive Reasoning*

*Gross Body Coordination*

**BOILERS**

<b><u>Paygrade</u></b>	<b><u>Task Type</u></b>	<b><u>Task Statements</u></b>
E4	CORE	Conduct boiler system operational checks
E5	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
E5	NON-CORE	Install boiler systems
E4	CORE	Interpret boiler drawings and specifications
E7	CORE	Manage boiler installation and maintenance
E6	CORE	Supervise boiler installation and maintenance

**CONSTRUCTION MANAGEMENT**

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

### **CONSTRUCTION MANAGEMENT (CONT'D)**

<b><u>Paygrade</u></b>	<b><u>Task Type</u></b>	<b><u>Task Statements</u></b>
E5	CORE	Develop master activities
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 drawings 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 project(s)
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 plan(s)
E7	CORE	Manage three-phase quality control process
E6	NON-CORE	Monitor construction project contracts
E6	CORE	Supervise construction project crew(s)
E5	CORE	Supervise construction project safety operations
E6	CORE	Supervise environmental protection plans
E6	CORE	Supervise planning and estimating operations
E6	CORE	Supervise project three-phase quality control process
E5	CORE	Turnover construction project
E6	CORE	Validate construction project packages
E5	NON-CORE	Validate project surveys and elevation data

### **FACILITIES MANAGEMENT**

<b><u>Paygrade</u></b>	<b><u>Task Type</u></b>	<b><u>Task Statements</u></b>
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)**

<b><u>Paygrade</u></b>	<b><u>Task Type</u></b>	<b><u>Task Statements</u></b>
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

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

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E6	NON-CORE	Develop sketches and diagrams for heating, ventilating, air conditioning, and refrigeration (HVAC/R)
E5	CORE	Install Heating, Ventilation, Air Conditioning, and Refrigeration (HVAC/R) systems
E5	CORE	Interpret heating, ventilating, air conditioning, and refrigeration (HVAC/R) drawings 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

**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 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 drawings and specifications
E7	CORE	Manage plumbing systems installation and maintenance
E6	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
E5	CORE	Conduct corrective maintenance on pumps
E4	CORE	Conduct preventive maintenance on compressed air systems
E4	CORE	Conduct preventive maintenance on pumps
E5	CORE	Develop sketches and diagrams for compressed air systems
E5	NON-CORE	Install compressed air systems
E5	CORE	Install pumps
E4	CORE	Interpret compressed air system drawings and specifications
E7	CORE	Manage compressed air systems installation and maintenance
E7	CORE	Manage pump installation and maintenance
E6	CORE	Supervise compressed air systems installation and maintenance
E6	CORE	Supervise pump installation and maintenance

## SEABEE COMMON CORE

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Apply combat life saving techniques
E5	NON-CORE	Assess airfield damage
E6	NON-CORE	Assist Maritime Prepositioning Force (MPF) operations
E4	NON-CORE	Conduct convoy security operations
E4	NON-CORE	Conduct crew-served weapons operational checks
E4	CORE	Conduct field communications equipment operational checks
E7	NON-CORE	Conduct Humanitarian Assistance and Disaster Relief (HADR)
E4	CORE	Conduct personal protection and decontamination (DECON) procedures
E4	CORE	Conduct small arms operational checks
E4	CORE	Employ Advance Base Functional Component (ABFC) systems
E4	NON-CORE	Employ crew-served weapons
E4	CORE	Employ field communications equipment
E4	CORE	Employ grenades, mines, and pyrotechnics
E4	CORE	Employ land survival techniques
E4	CORE	Employ small arms
E4	CORE	Maintain Personal Gear Issue (PGI)
E4	NON-CORE	Palletize cargo and equipment
E4	CORE	Patrol assigned areas
E5	NON-CORE	Perform arrival and departure airfield control group (AACG&DACG) procedures
E4	NON-CORE	Perform Chemical, Biological, Radiological, and Nuclear Defense (CBRND) reconnaissance (i.e., surveying, monitoring, and marking)
E7	CORE	Perform command and control of a company
E4	CORE	Perform command and control of a fire team
E6	CORE	Perform command and control of a platoon
E5	CORE	Perform command and control of a squad
E4	NON-CORE	Perform detailed troop and equipment decontamination (DECON)
E5	NON-CORE	Plan Advance Base Functional Component (ABFC) systems setup
E5	NON-CORE	Plan Airfield Damage Repair (ADR)
E5	NON-CORE	Plan convoy operations
E7	NON-CORE	Plan convoy security operations
E5	NON-CORE	Plan load for embarkation
E6	NON-CORE	Plan unit embarkation
E4	CORE	Prepare cargo and equipment for transport (e.g., weight, balance, and marking)
E4	NON-CORE	Prepare hazardous materials (HAZMAT) for transport
E4	NON-CORE	Repair damaged airfields
E4	CORE	Set tactical defenses
E6	NON-CORE	Supervise Advance Base Functional Component (ABFC) setup
E7	NON-CORE	Supervise Airfield Damage Repair (ADR) operations
E7	NON-CORE	Supervise Chemical, Biological, Radiological, and Nuclear Defense (CBRND) operations

### SEABEE COMMON CORE(CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E6	NON-CORE	Supervise convoy operations
E6	NON-CORE	Supervise convoy security operations
E7	NON-CORE	Supervise embarkation and debarkation operations
E4	CORE	Transport troops and equipment (e.g., convoy)

### UNDERWATER CONSTRUCTION

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E5	NON-CORE	Conduct corrective maintenance on certified Diver's Life Support Systems (DLSS)
E5	NON-CORE	Conduct corrective maintenance on Self-Contained Underwater Breathing Apparatus (SCUBA) diving equipment
E5	NON-CORE	Conduct corrective maintenance on Surface Supplied Diving (SSD) equipment
E5	NON-CORE	Conduct corrective maintenance on underwater construction equipment and tools
E5	NON-CORE	Conduct maritime defensive operations
E5	NON-CORE	Conduct oceanographic surveys
E5	NON-CORE	Conduct preventive maintenance on cable systems
E5	NON-CORE	Conduct preventive maintenance on certified Diver's Life Support Systems (DLSS)
E5	NON-CORE	Conduct preventive maintenance on fleet moorings
E5	NON-CORE	Conduct preventive maintenance on pipelines
E5	NON-CORE	Conduct preventive maintenance on Self-Contained Underwater Breathing Apparatus (SCUBA) diving equipment
E5	NON-CORE	Conduct preventive maintenance on Surface Supplied Diving (SSD) equipment
E5	NON-CORE	Conduct preventive maintenance on underwater construction equipment and tools
E5	NON-CORE	Conduct preventive maintenance on waterfront facilities
E5	NON-CORE	Conduct terrestrial construction demolition using explosives
E5	NON-CORE	Conduct underwater construction demolition using explosives
E5	NON-CORE	Conduct underwater search and recovery operations
E5	NON-CORE	Construct cable systems
E5	NON-CORE	Construct fleet moorings
E5	NON-CORE	Construct pipelines
E5	NON-CORE	Construct waterfront facilities
E5	NON-CORE	Deploy underwater vehicles (e.g., Remotely Operated Vehicle (ROV) / Autonomous Underwater Vehicle (AUV) / Unmanned Underwater Vehicle (UUV))
E5	NON-CORE	Inspect cable systems
E5	NON-CORE	Inspect fleet moorings
E5	NON-CORE	Inspect pipelines
E5	NON-CORE	Inspect waterfront facilities
E7	NON-CORE	Manage diving emergency incidents
E7	NON-CORE	Manage diving equipment maintenance and certification (e.g., Self-Contained Underwater Breathing Apparatus (SCUBA), Surface Supplied Diving (SSD), Diver's Life Support System (DLSS))
E7	NON-CORE	Manage light salvage operations
E7	NON-CORE	Manage Ocean Facilities inspection

**UNDERWATER CONSTRUCTION (CONT'D)**

<b><u>Paygrade</u></b>	<b><u>Task Type</u></b>	<b><u>Task Statements</u></b>
E7	NON-CORE	Manage Ocean Facilities maintenance
E7	NON-CORE	Manage oceanographic survey teams
E7	NON-CORE	Manage Offshore Petroleum Distribution System (OPDS) operations
E7	NON-CORE	Manage terrestrial explosive construction demolition operations
E7	NON-CORE	Manage underwater construction equipment and tools maintenance
E7	NON-CORE	Manage underwater construction projects
E7	NON-CORE	Manage underwater explosive construction demolition operations
E7	NON-CORE	Manage underwater search and recovery operations
E7	NON-CORE	Manage watercraft program
E5	NON-CORE	Perform diving emergency procedures
E5	NON-CORE	Perform light salvage operations
E5	NON-CORE	Perform Offshore Petroleum Distribution System (OPDS) operations
E6	NON-CORE	Plan terrestrial explosive construction demolition
E6	NON-CORE	Plan underwater explosive construction demolition
E5	NON-CORE	Provide diving assistance during Maritime Prepositioning Force (MPF) operations
E5	NON-CORE	Repair cable systems
E5	NON-CORE	Repair fleet moorings
E5	NON-CORE	Repair pipelines
E5	NON-CORE	Repair waterfront facilities
E6	NON-CORE	Supervise construction of fleet moorings, waterfront facilities, pipelines, and cable systems
E6	NON-CORE	Supervise diving emergency incidents
E6	NON-CORE	Supervise diving equipment maintenance and certification (e.g., Self-Contained Underwater Breathing Apparatus (SCUBA), Surface Supplied Diving (SSD), Diver's Life Support System (DLSS))
E6	NON-CORE	Supervise hyperbaric treatments
E6	NON-CORE	Supervise inspection of fleet moorings, waterfront facilities, pipelines, and cable systems
E6	NON-CORE	Supervise light salvage operations
E6	NON-CORE	Supervise oceanographic survey team
E6	NON-CORE	Supervise Offshore Petroleum Distribution System (OPDS) operations
E6	NON-CORE	Supervise preventive maintenance of fleet moorings, waterfront facilities, pipelines, and cable systems
E6	NON-CORE	Supervise repairs of fleet moorings, waterfront facilities, pipelines, and cable systems
E6	NON-CORE	Supervise terrestrial explosive construction demolition operations
E6	NON-CORE	Supervise underwater construction equipment and tools maintenance
E6	NON-CORE	Supervise underwater explosive construction demolition operations
E6	NON-CORE	Supervise underwater search and recovery operations
E6	NON-CORE	Supervise watercraft crew during operations
E5	NON-CORE	Transport divers, personnel, and equipment using watercraft

### 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
E7	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
E6	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
E5	CORE	Conduct preventive maintenance on waste water treatment systems
E5	CORE	Conduct waste water treatment system operational checks
E4	CORE	Develop sketches and diagrams for Drain Waste Vent (DWV) systems
E5	CORE	Develop sketches and diagrams for waste water systems
E5	NON-CORE	Install waste water treatment systems
E4	CORE	Interpret waste water system drawings 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
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