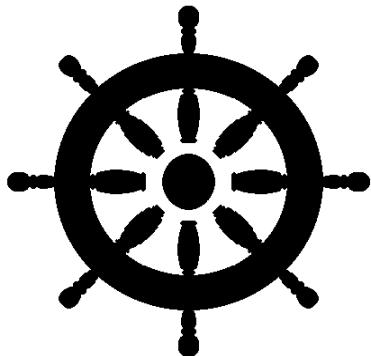


CHAPTER 66



QUARTERMASTER (QM)

NAVPERS 18068F-66H
Change 105

Updated: January 2026

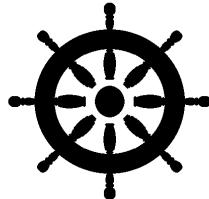
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NAVY ENLISTED OCCUPATIONAL STANDARD

FOR

QUARTERMASTER (QM)



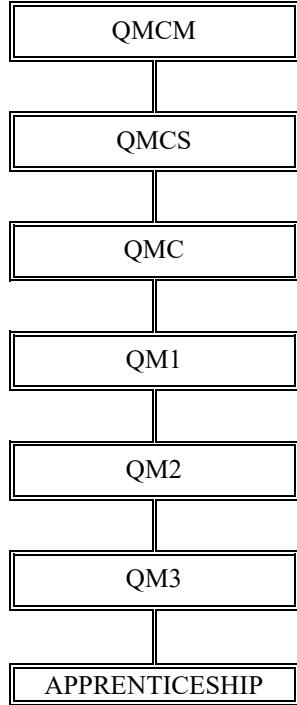
SCOPE OF RATING

Quartermasters (QM) assist the Officer of the Deck (OOD) and Navigator in all methods of navigation aboard ship, including celestial means, they are responsible for: safe navigation of the ship; adhering to international and inland rules and regulations, maintaining reliable communication with other vessels and shore stations; monitoring and recording the weather; maintaining Electronic Chart Display Information System (ECDIS), publications, charts, navigational instruments, and records for the ship's logs; and rendering honors and ceremonies.

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 66.

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 **Navigation Specialist** **Job Code** **003744**

Job Family Transportation and Material Moving	NOC TBD	Short Title (30 Characters) NAVIGATION SPECIALIST	Short Title (14 Characters) NAVIGATN SPEC
Pay Plan Enlisted	Career Field QM	Other Relationships and Rules NEC WXXX Series and other NECs as assigned	

Job Description

Navigation Specialists stand watch as assistants to the Officer of the Deck (OOD) and are a direct representative of the Navigator; perform ship control, navigation, and bridge watch duties; select charts for voyage planning; determine danger angles and danger bearings; use, update and inventory navigation publications and charts; use international and inland rules and regulations; use basic course-plotting instruments, lead lines, depth sounders, and compasses; maintain the compass book; determine ship's position by celestial observations; identify aids to navigation; serve as weather observers; recognize the significance of dew point, relative humidity, temperature, atmospheric pressure, wind force and direction, cloud formation, and sea state in general weather forecasting; maintain the weather observation sheet; handle plain language radio communications and visual communications; and as experienced Navigation Specialists, supervise bridge personnel.

DoD Relationship		O*NET Relationship		
<i>Group Title</i>	<i>DoD Code</i>	<i>Occupation Title</i>	<i>SOC Code</i>	<i>Job Family</i>
Navigators	106100	Captains, Mates, and Pilots of Water Vessels	53-5021.00	Transportation and Material Moving

Skills

Mathematics
Science
Complex Problem Solving
Critical Thinking
Operation and Control
Judgment and Decision Making
Monitoring
Coordination
Management of Material Resources
Active Listening

Abilities

Deductive Reasoning
Mathematical Reasoning
Information Ordering
Spatial Orientation
Inductive Reasoning
Problem Sensitivity
Written Comprehension
Finger Dexterity
Written Expression
Perceptual Speed

CELESTIAL NAVIGATION

Paygrade	Task Type	Task Statements
E4	CORE	Calculate a fix by advancing celestial lines of position
E4	CORE	Calculate celestial event times (e.g., sunrise, sunset, civil/nautical twilights, etc.)
E4	CORE	Calculate gyro error by Polaris
E4	CORE	Calculate latitude at Local Apparent Noon (LAN)
E4	CORE	Calculate latitude by Polaris
E4	CORE	Calculate time of moonrise/moonset
E4	CORE	Determine a celestial fix using morning or evening stars
E4	CORE	Determine gyro error by amplitude at sunset/sunrise
E4	CORE	Determine gyro error by azimuth
E4	CORE	Plan for morning and evening stars
E6	CORE	Supervise day's work of celestial navigation and Dead Reckoning (DR) in a Global Positioning System (GPS) denied environment

COMMUNICATIONS

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Perform ship-to-ship and ship-to-shore external voice communications
E4	CORE	Perform ship-to-ship and ship-to-shore visual communications (e.g., flashing lights, flags, morse code, etc.)
E4	CORE	Signal watercraft or boats (i.e., visually and audibly)
E4	CORE	Test internal and external visual and audible communications equipment (e.g., portable ship's whistle, sound powered phones, yard arm blinkers, etc.)
E4	CORE	Verify the completion of internal communications tests (e.g., 1 Main Circuit (1MC), sound power phones, headsets, etc.)

ELECTRONIC SYSTEMS OPERATIONS

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Adjust radar scope presentation to align with Commanding Officer's (CO) standing orders
E4	CORE	Compare fathometer readings to charted depth
E4	CORE	Configure navigation and task lights
E6	CORE	Demonstrate functionality of helm and lee helm equipment operations
E4	CORE	Detect indications of spoofing/jamming
E4	CORE	Manage non-technical equipment inventory (e.g., flags, day shapes, binoculars, etc.)
E4	CORE	Prepare electronic navigation systems (e.g., navigation plans, charts loaded, applying correct system configuration, etc.)
E4	CORE	Verify ship's position data between sources (e.g., radar, paper, Voyage Management System (VMS), etc.)
E4	CORE	Verify water depth is safe for navigation

EQUIPMENT ADMINISTRATION

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Inventory controlled equipment
E5	CORE	Manage controlled equipment inventories
E4	CORE	Perform preventive maintenance on navigation equipment (e.g., telescopic alidades, signal lights, ship mounted binoculars, etc.)

LOOKOUT AND SIGNALING OPERATIONS

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Conduct man overboard procedures (e.g., signal light, raise Oscar flag, weather reports, etc.)
E4	CORE	Conduct sunrise, morning and evening colors
E4	CORE	Correlate lighted aids to navigation on electronic charts
E4	CORE	Maintain halyards, halyard blocks, and tie downs
E4	CORE	Prepare weather observation reports
E4	CORE	Report audible and visual information (e.g., sound signals, lights, navigational alarms, etc.)
E4	CORE	Report contacts (i.e., air and surface)
E4	CORE	Report flags to higher authority (e.g., country flags, signal flags, etc.)

NAVIGATION

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Calculate basic maneuvering board solutions (e.g., winds, Closest Point of Approach (CPA), etc.)
E4	CORE	Calculate compensating and correcting courses and speeds
E4	CORE	Calculate danger bearings and ranges
E4	CORE	Calculate relative bearings
E4	CORE	Calculate required Speed Of Advance (SOA)
E4	CORE	Calculate set and drift
E4	CORE	Compare ship's position ahead/behind relative to Plan of Intended Movement (PIM)
E4	CORE	Compute advance and transfer
E4	CORE	Compute anchor chain scopes
E4	CORE	Compute course and speed made good
E4	CORE	Compute Estimated Time of Arrival (ETA)
E4	CORE	Compute expected times of radar landfall
E4	CORE	Compute gyro error
E4	CORE	Compute magnetic compass errors using gyrocompass
E4	CORE	Compute visibility of lights and expected times of sighting
E4	CORE	Compute Zone Time (ZT) using Zone Description (ZD)
E4	CORE	Convert arc to time and time to arc
E4	CORE	Correlate lookout information with radar presentations
E4	CORE	Determine latitude and longitude from plotted positions on navigational charts
E4	CORE	Determine ship's position (e.g., electronic, visual, radar, etc.)
E4	CORE	Determine tides and currents
E4	CORE	Determine variation on charts
E4	CORE	Graph tides and currents
E4	CORE	Identify type of ocean bottom
E4	CORE	Incorporate lookout information with navigation plot
E4	CORE	Measure distances on navigational charts
E4	CORE	Navigate ship during reduced visibility (e.g., fog, sandstorms, rain, etc.)
E4	CORE	Observe helmsman and lee helmsman for compliance with orders given from Commanding Officer
E4	CORE	Obtain visual bearings using alidades
E5	CORE	Plan anchorage areas
E4	CORE	Prepare bridge for special evolutions
E4	CORE	Prepare Movement Reports (MOVREP)
E4	CORE	Prepare navigational charts
E4	CORE	Prepare restricted water transits
E7	NON-CORE	Recommend restricted water transits
E5	CORE	Recommend transit plans to higher authority

NAVIGATION (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Report aids to navigation
E4	CORE	Report Navigation Rules and Regulations signals (e.g., task lights, day shapes, sound signals, etc.)
E4	CORE	Shift navigation control to secondary location
E4	NON-CORE	Steer ship using aft steering
E4	CORE	Submit weather observation reports to Joint Observations Submissions (J-OBS) or message traffic
E6	CORE	Verify Dead Reckoning (DR) tracks on a universal plotting sheet in a Global Positioning System (GPS) denied environment
E5	NON-CORE	Verify Movement Reports (MOVREP)
E6	CORE	Verify restricted water transits
E4	CORE	Verify ship's position data in the Combat Information Center (CIC)

PLOTTING

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Plot advance and transfer
E4	CORE	Plot anchorage area
E4	CORE	Plot danger bearings and ranges
E4	CORE	Plot Dead Reckoning (DR) tracks on a universal plotting sheet in a Global Positioning System (GPS) denied environment
E4	CORE	Plot distress signals, bearings, and ranges
E4	CORE	Plot great circle sailing routes
E4	CORE	Plot man overboard positions
E4	CORE	Plot mine danger information
E4	CORE	Plot navigation hazards
E4	CORE	Plot navigation points
E4	CORE	Plot pickup and drop-off points
E4	CORE	Plot Plan of Intended Movement (PIM) tracks
E4	CORE	Plot relative bearings
E4	CORE	Plot ship's position during navigation detail
E4	CORE	Plot ship's position using visual bearings
E4	CORE	Plot surface contact information
E4	CORE	Plot swept channels
E4	CORE	Plot weather message information

TECHNICAL ADMINISTRATION

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Collect information from Naval and navigation publications, technical briefs, notices, and bulletins
E4	CORE	Correct navigational charts (i.e., paper and electronic)
E4	CORE	Maintain administrative records (e.g., deck logs, position logs, bearing books, etc.)

TECHNICAL ADMINISTRATION (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Maintain chart and publication inventories
E4	CORE	Prepare navigation briefs

<u>Job Title</u>	<u>Job Code</u>
Navigation Administrator	003743

<u>Job Family</u>	<u>NOC</u>	<u>Short Title (30 Characters)</u>	<u>Short Title (14 Characters)</u>
Transportation and Material Moving	TBD	NAVIGATION ADMINISTRATOR	NAVIGATN ADMIN
<u>Pay Plan</u>	<u>Career Field</u>	<u>Other Relationships and Rules</u>	
Enlisted	QM	NEC WXXX Series and other NECs as assigned	

Job Description
 Navigation Administrators provide navigation expertise to shipboard personnel; serve as advisors by providing actionable navigation recommendations under all navigational conditions and during special evolutions In Accordance With (IAW) Fleet directives; use charted visual aids to navigation, tides, and current data; select, use and correct nautical charts; maintain chart allowance inventories; prepare weather observation messages; maintain and review equipment and navigation logs; extract and record maintenance data from appropriate navigation publications; prepare weekly and quarterly schedules of preventive maintenance; ensure maintenance schedules are implemented; coordinate shipboard honors and ceremonies; and execute sunrise, morning, and evening colors.

<u>DoD Relationship</u>	<u>O*NET Relationship</u>			
<u>Group Title</u>	<u>DoD Code</u>	<u>Occupation Title</u>	<u>SOC Code</u>	<u>Job Family</u>
Naviators	106100	Captains, Mates, and Pilots of Water Vessels	53-5021.00	Transportation and Material Moving

Skills

Mathematics
 Complex Problem Solving
 Science
 Critical Thinking
 Judgment and Decision Making
 Monitoring
 Operation and Control
 Coordination
 Management of Material Resources
 Reading Comprehension

Abilities

Deductive Reasoning
 Mathematical Reasoning
 Information Ordering
 Spatial Orientation
 Inductive Reasoning
 Written Comprehension
 Written Expression
 Problem Sensitivity
 Finger Dexterity
 Perceptual Speed

CELESTIAL NAVIGATION

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Calculate a fix by advancing celestial lines of position
E4	CORE	Calculate celestial event times (e.g., sunrise, sunset, civil/nautical twilights, etc.)
E4	CORE	Calculate gyro error by Polaris
E4	CORE	Calculate latitude at Local Apparent Noon (LAN)
E4	CORE	Calculate latitude by Polaris
E4	CORE	Calculate time of moonrise/moonset
E4	CORE	Determine a celestial fix using morning or evening stars
E4	CORE	Determine gyro error by amplitude at sunset/sunrise
E4	CORE	Determine gyro error by azimuth
E4	CORE	Plan for morning and evening stars

COMMUNICATIONS

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Perform ship-to-ship and ship-to-shore external voice communications
E4	CORE	Perform ship-to-ship and ship-to-shore visual communications (e.g., flashing lights, flags, morse code, etc.)
E4	CORE	Signal watercraft or boats (i.e., visually and audibly)

COMMUNICATIONS (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Verify the completion of internal communications tests (e.g., 1 Main Circuit (1MC), sound power phones, headsets, etc.)

ELECTRONIC SYSTEMS OPERATIONS

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Adjust radar scope presentation to align with Commanding Officer's (CO) standing orders
E5	CORE	Archive electronic navigation data
E4	CORE	Compare fathometer readings to charted depth
E4	CORE	Configure navigation and task lights
E4	CORE	Detect indications of spoofing/jamming
E4	CORE	Manage non-technical equipment inventory (e.g., flags, day shapes, binoculars, etc.)
E4	CORE	Prepare electronic navigation systems (e.g., navigation plans, charts loaded, applying correct system configuration, etc.)
E4	CORE	Verify ship's position data between sources (e.g., radar, paper, Voyage Management System (VMS), etc.)
E4	CORE	Verify water depth is safe for navigation

EQUIPMENT ADMINISTRATION

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E5	CORE	Coordinate with other entities for corrective maintenance on navigation equipment (e.g., telescopic alidades, signal lights, ship mounted binoculars, etc.)
E5	CORE	Coordinate with other entities to troubleshoot internal and external visual and audible communications equipment (e.g., portable ship's whistle, sound powered phones, yard arm blinkers, etc.)
E4	CORE	Inventory controlled equipment
E5	CORE	Manage controlled equipment inventories
E4	CORE	Perform preventive maintenance on navigation equipment (e.g., telescopic alidades, signal lights, ship mounted binoculars, etc.)

LOOKOUT AND SIGNALING OPERATIONS

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Conduct man overboard procedures (e.g., signal light, raise Oscar flag, weather reports, etc.)
E4	CORE	Conduct sunrise, morning and evening colors
E6	CORE	Coordinate shipboard honors and ceremonies (e.g., up and overs, passing honors, dress ship, etc.)
E4	CORE	Correlate lighted aids to navigation on electronic charts
E4	CORE	Maintain halyards, halyard blocks, and tie downs
E4	CORE	Prepare weather observation reports
E4	CORE	Report audible and visual information (e.g., sound signals, lights, navigational alarms, etc.)
E4	CORE	Report contacts (i.e., air and surface)

LOOKOUT AND SIGNALING OPERATIONS (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Report flags to higher authority (e.g., country flags, signal flags, etc.)
E7	CORE	Supervise procedural compliance of shipboard honors and ceremonies (e.g., up and overs, passing honors, dress ship, etc.)
E6	CORE	Support lookout training program (e.g., Rules of the Road (ROR) training and examinations, regular and low visibility lookout training, etc.)

NAVIGATION

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E5	NON-CORE	Calculate advanced maneuvering board solutions (e.g., station changes, avoidance courses, etc.)
E4	CORE	Calculate basic maneuvering board solutions (e.g., winds, Closest Point of Approach (CPA), etc.)
E4	CORE	Calculate compensating and correcting courses and speeds
E4	CORE	Calculate danger bearings and ranges
E4	CORE	Calculate relative bearings
E4	CORE	Calculate required Speed Of Advance (SOA)
E4	CORE	Calculate set and drift
E4	CORE	Compare ship's position ahead/behind relative to Plan of Intended Movement (PIM)
E4	CORE	Compute advance and transfer
E4	CORE	Compute anchor chain scopes
E4	CORE	Compute course and speed made good
E4	CORE	Compute Estimated Time of Arrival (ETA)
E4	CORE	Compute expected times of radar landfall
E4	CORE	Compute gyro error
E4	CORE	Compute magnetic compass errors using gyrocompass
E4	CORE	Compute visibility of lights and expected times of sighting
E4	CORE	Compute Zone Time (ZT) using Zone Description (ZD)
E4	CORE	Convert arc to time and time to arc
E4	CORE	Correlate lookout information with radar presentations
E4	CORE	Determine latitude and longitude from plotted positions on navigational charts
E4	CORE	Determine ship's position (e.g., electronic, visual, radar, etc.)
E4	CORE	Determine tides and currents
E4	CORE	Determine variation on charts
E4	CORE	Graph tides and currents
E4	CORE	Identify type of ocean bottom
E4	CORE	Incorporate lookout information with navigation plot
E4	CORE	Measure distances on navigational charts
E4	CORE	Navigate ship during reduced visibility (e.g., fog, sandstorms, rain, etc.)
E4	CORE	Observe helmsman and lee helmsman for compliance with orders given from Commanding Officer

NAVIGATION (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E5	CORE	Plan anchorage areas
E4	CORE	Prepare bridge for special evolutions
E4	CORE	Prepare Movement Reports (MOVREP)
E4	CORE	Prepare navigational charts
E4	CORE	Prepare position reports
E4	CORE	Prepare restricted water transits
E7	NON-CORE	Recommend Movement Reports
E7	NON-CORE	Recommend restricted water transits
E5	CORE	Recommend transit plans to higher authority
E4	CORE	Report aids to navigation
E4	CORE	Report Navigation Rules and Regulations signals (e.g., task lights, day shapes, sound signals, etc.)
E6	CORE	Review navigation briefs for accuracy and currency (e.g., tides and currents, pilots pick up points, arrival times, etc.)
E4	CORE	Shift navigation control to secondary location
E4	NON-CORE	Steer ship using aft steering
E4	CORE	Submit weather observation reports to Joint Observations Submissions (J-OBS) or message traffic
E6	CORE	Supervise shift of navigation control from bridge to secondary location
E7	CORE	Validate day's work of celestial navigation and Dead Reckoning (DR) for accuracy
E7	CORE	Validate day's work of celestial navigation and Dead Reckoning (DR) in a Global Positioning System (GPS) denied environment for accuracy
E7	CORE	Validate Dead Reckoning (DR) tracks on a universal plotting sheet in a Global Positioning System (GPS) denied environment for accuracy
E6	CORE	Validate navigational charts
E6	CORE	Verify Dead Reckoning (DR) tracks on a universal plotting sheet in a Global Positioning System (GPS) denied environment
E5	NON-CORE	Verify Movement Reports (MOVREP)
E7	CORE	Verify navigation briefs for accuracy and currency (e.g., tides and currents, pilots pick up points, arrival times, etc.)
E6	CORE	Verify position reports for submission
E6	CORE	Verify restricted water transits
E4	CORE	Verify ship's position data in the Combat Information Center (CIC)

PLOTTING

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Plot advance and transfer
E4	CORE	Plot anchorage area
E4	CORE	Plot danger bearings and ranges
E4	CORE	Plot Dead Reckoning (DR) tracks on a universal plotting sheet in a Global Positioning System (GPS) denied environment

PLOTTING (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Plot distress signals, bearings, and ranges
E4	CORE	Plot great circle sailing routes
E4	CORE	Plot man overboard positions
E4	CORE	Plot mine danger information
E4	CORE	Plot navigation hazards
E4	CORE	Plot navigation points
E4	CORE	Plot pickup and drop-off points
E4	CORE	Plot Plan of Intended Movement (PIM) tracks
E4	CORE	Plot relative bearings
E4	CORE	Plot ship's position during navigation detail
E4	CORE	Plot ship's position using visual bearings
E4	CORE	Plot surface contact information
E4	CORE	Plot swept channels
E4	CORE	Plot weather message information

TECHNICAL ADMINISTRATION

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E5	CORE	Analyze environmental hazards utilizing Protective Measures Assessment Protocol (PMAP) program
E4	CORE	Collect information from Naval and navigation publications, technical briefs, notices, and bulletins
E4	CORE	Correct navigational charts (i.e., paper and electronic)
E4	CORE	Maintain administrative records (e.g., deck logs, position logs, bearing books, etc.)
E4	CORE	Maintain chart and publication inventories
E5	NON-CORE	Manage administrative programs (e.g., maintenance management systems, Relational Administrative Data Management (RADM), etc.)
E5	CORE	Manage administrative records (e.g., deck logs, position logs, bearing books, etc.)
E4	CORE	Prepare navigation briefs
E5	CORE	Verify navigational charts

Job Title **Navigation Manager** **Job Code** **003745**

Job Family Transportation and Material Moving **NOC** TBD **Short Title (30 Characters)** NAVIGATION MANAGER **Short Title (14 Characters)** NAVIGATN MGR

Pay Plan Enlisted **Career Field** QM **Other Relationships and Rules** NEC WXXX Series and other NECs as assigned

Job Description

Navigation Managers provide navigation and piloting expertise to bridge personnel; manage navigation certification processes; serve as advisors by providing actionable navigation recommendations under all navigational conditions In Accordance With (IAW) Fleet directives; conduct navigation briefs; select and use appropriate nautical charts; select anchorages; utilize appropriate electronic navigation systems; validate day's work of celestial navigation; oversee voyage planning; plan emergency drills; train and evaluate personnel in the Navigation department.

DoD Relationship

Group Title Navigators	DoD Code 106100	Occupation Title Captains, Mates, and Pilots of Water Vessels	SOC Code 53-5021.00	Job Family Transportation and Material Moving
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Skills

Complex Problem Solving
Mathematics
Monitoring
Judgment and Decision Making
Coordination
Critical Thinking
Management of Material Resources
Operation and Control
Quality Control Analysis
Speaking

Abilities

Deductive Reasoning
Information Ordering
Written Comprehension
Inductive Reasoning
Problem Sensitivity
Written Expression
Mathematical Reasoning
Spatial Orientation
Perceptual Speed
Time Sharing

CELESTIAL NAVIGATION

Paygrade E6	Task Type CORE	Task Statements Supervise day's work of celestial navigation and Dead Reckoning (DR) in a Global Positioning System (GPS) denied environment
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COMMUNICATIONS

Paygrade E4	Task Type CORE	Task Statements Perform ship-to-ship and ship-to-shore external voice communications
E4	CORE	Perform ship-to-ship and ship-to-shore visual communications (e.g., flashing lights, flags, morse code, etc.)
E4	CORE	Signal watercraft or boats (i.e., visually and audibly)

ELECTRONIC SYSTEMS OPERATIONS

Paygrade E4	Task Type CORE	Task Statements Adjust radar scope presentation to align with Commanding Officer's (CO) standing orders
E5	CORE	Archive electronic navigation data
E6	CORE	Demonstrate functionality of helm and lee helm equipment operations
E4	CORE	Detect indications of spoofing/jamming
E4	CORE	Manage non-technical equipment inventory (e.g., flags, day shapes, binoculars, etc.)
E4	CORE	Prepare electronic navigation systems (e.g., navigation plans, charts loaded, applying correct system configuration, etc.)

ELECTRONIC SYSTEMS OPERATIONS (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Verify ship's position data between sources (e.g., radar, paper, Voyage Management System (VMS), etc.)
E4	CORE	Verify water depth is safe for navigation

EQUIPMENT ADMINISTRATION

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E5	CORE	Coordinate with other entities for corrective maintenance on navigation equipment (e.g., telescopic alidades, signal lights, ship mounted binoculars, etc.)
E5	CORE	Coordinate with other entities to troubleshoot internal and external visual and audible communications equipment (e.g., portable ship's whistle, sound powered phones, yard arm blinkers, etc.)
E5	CORE	Manage controlled equipment inventories
E6	CORE	Manage equipment certifications and recertifications (e.g., benchmarks, Voyage Management System (VMS), Navigation Certifications (NAVCERT), etc.)
E6	NON-CORE	Verify equipment installation, testing, and alterations

LOOKOUT AND SIGNALING OPERATIONS

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Conduct man overboard procedures (e.g., signal light, raise Oscar flag, weather reports, etc.)
E6	CORE	Coordinate shipboard honors and ceremonies (e.g., up and overs, passing honors, dress ship, etc.)
E7	CORE	Supervise procedural compliance of shipboard honors and ceremonies (e.g., up and overs, passing honors, dress ship, etc.)
E6	CORE	Support lookout training program (e.g., Rules of the Road (ROR) training and examinations, regular and low visibility lookout training, etc.)

NAVIGATION

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E5	NON-CORE	Calculate advanced maneuvering board solutions (e.g., station changes, avoidance courses, etc.)
E4	CORE	Calculate basic maneuvering board solutions (e.g., winds, Closest Point of Approach (CPA), etc.)
E4	CORE	Calculate compensating and correcting courses and speeds
E4	CORE	Calculate required Speed Of Advance (SOA)
E4	CORE	Compare ship's position ahead/behind relative to Plan of Intended Movement (PIM)
E4	CORE	Incorporate lookout information with navigation plot
E4	CORE	Navigate ship during reduced visibility (e.g., fog, sandstorms, rain, etc.)
E4	CORE	Observe helmsman and lee helmsman for compliance with orders given from Commanding Officer
E5	CORE	Plan anchorage areas
E4	CORE	Prepare Movement Reports (MOVREP)
E4	CORE	Prepare position reports
E7	NON-CORE	Recommend Movement Reports

NAVIGATION (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E7	NON-CORE	Recommend restricted water transits
E5	CORE	Recommend transit plans to higher authority
E6	CORE	Review navigation briefs for accuracy and currency (e.g., tides and currents, pilots pick up points, arrival times, etc.)
E4	CORE	Submit weather observation reports to Joint Observations Submissions (J-OBS) or message traffic
E6	CORE	Supervise bridge team during special evolutions (e.g., Underway Replenishments (UNREP), sea and anchor details, navigation details, etc.)
E6	CORE	Supervise shift of navigation control from bridge to secondary location
E7	CORE	Validate day's work of celestial navigation and Dead Reckoning (DR) for accuracy
E7	CORE	Validate day's work of celestial navigation and Dead Reckoning (DR) in a Global Positioning System (GPS) denied environment for accuracy
E7	CORE	Validate Dead Reckoning (DR) tracks on a universal plotting sheet in a Global Positioning System (GPS) denied environment for accuracy
E6	CORE	Validate navigational charts
E6	CORE	Verify Dead Reckoning (DR) tracks on a universal plotting sheet in a Global Positioning System (GPS) denied environment
E5	NON-CORE	Verify Movement Reports (MOVREP)
E7	CORE	Verify navigation briefs for accuracy and currency (e.g., tides and currents, pilots pick up points, arrival times, etc.)
E6	CORE	Verify position reports for submission
E6	CORE	Verify restricted water transits
E4	CORE	Verify ship's position data in the Combat Information Center (CIC)

PLOTTING

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Plot ship's position during navigation detail

TECHNICAL ADMINISTRATION

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E5	CORE	Analyze environmental hazards utilizing Protective Measures Assessment Protocol (PMAP) program
E4	CORE	Collect information from Naval and navigation publications, technical briefs, notices, and bulletins
E5	NON-CORE	Manage administrative programs (e.g., maintenance management systems, Relational Administrative Data Management (RADM), etc.)
E5	CORE	Manage administrative records (e.g., deck logs, position logs, bearing books, etc.)
E6	CORE	Manage chart and publication allowances
E4	CORE	Prepare navigation briefs
E5	CORE	Verify navigational charts