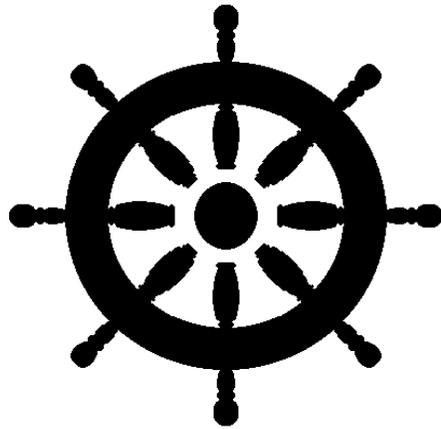


CHAPTER 66



QUARtermaster (QM)

NAVPERS 18068-66D
CH-52

Updated: October 2012

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NAVY ENLISTED OCCUPATIONAL STANDARDS

FOR

QUARTERMASTER (QM)



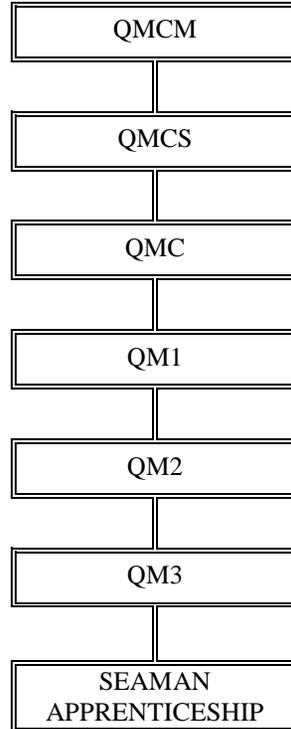
SCOPE OF RATING

Quartermasters (QM) stand watch as assistants to the Officer of the Deck (OOD) and the Navigator; serve as Steersmen; perform ship control, navigation, and bridge watch duties; procure, correct, use, and stow navigational and oceanographic publications and charts; maintain navigational instruments and keep correct navigational time; and render honors and ceremonies in accordance with national observances and foreign customs.

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.

NEBC Job Title

Navigation Administrator

NEBC Job Code

003743

Job Family

Computer and Mathematical

NOC

TBD

Short Title (30 Characters)

NAVIGATION ADMINISTRATOR

Short Title (10 Characters)

NAV ADM

Pay Plan

Enlisted

Career Field

QM

Other Relationships and Rules

As assigned to Job

Job Description

Navigation Administrators provide navigation expertise to shipboard personnel; provide recommendations to the Officer of the Deck (OOD) and the Navigator concerning usual and unusual navigation conditions; use charted visual aids to navigation, and tides and currents data; select, use, and correct navigational charts; maintain chart allowance inventories; prepare synoptic observation messages; coordinate shipboard honors and ceremonies; execute sunrise, morning, and evening colors; and supervise apprentice and journeymen bridge personnel during special evolutions and navigation detail.

DoD Relationship

Group Title

Navigators

DoD Code

106100

O*NET Relationship

Occupation Title

Operations Research Analysts

SOC Code

15-2031.00

Job Family

Computer and Mathematical

Skills

Writing

Reading Comprehension

Coordination

Mathematics

Management of Material Resources

Management of Personnel Resources

Operation and Control

Speaking

Abilities

Written Expression

Written Comprehension

Wrist-Finger Speed

Category Flexibility

Hearing Sensitivity

Information Ordering

Mathematical Reasoning

Memorization

Reaction Time

Response Orientation

EQUIPMENT ADMINISTRATION

Paygrade

E5

Task Type

NON-CORE

Task Statements

Inventory controlled equipment

NAVIGATION

Paygrade

E4

Task Type

CORE

Task Statements

Compute tides and currents

E4

CORE

Graph tides and currents

TECHNICAL ADMINISTRATION

Paygrade

E5

Task Type

CORE

Task Statements

Coordinate shipboard honors and ceremonies

E4

CORE

Correct navigational charts

E4

CORE

Execute sunrise, morning and evening colors

E4

NON-CORE

Maintain administrative records

E4

CORE

Maintain chart allowance inventories

E4

NON-CORE

Maintain equipment logs

E4	CORE	Maintain navigation watch logs
E4	NON-CORE	Maintain publication libraries
E4	CORE	Review Naval and navigation publications, technical briefs, notices, and bulletins
E4	CORE	Review navigation watch logs for format and content

NEBC Job Title

Navigation Specialist

NEBC Job Code

003744

Job Family

Military Specific

NOC

TBD

Short Title (30 Characters)

NAVIGATION SPECIALIST

Short Title (10 Characters)

NAV SPEC

Pay Plan

Enlisted

Career Field

QM

Other Relationships and Rules

As assigned to Job

Job Description

Navigation Specialists stand watch as assistants to the Officer of the Deck (OOD) and the Navigator; serve as ships Helmsman; perform ship's control, navigation, and bridge watch duties; select charts for voyage planning and determine danger angles, ranges, and bearings; update sailing directions, light lists, coastal pilots, related publications, and navigation charts; provide recommendations concerning international or inland Rules of the Road (ROR); determine ship's position; identify aids to navigation; maintain the compass book; observe, forecast, record, and report environmental and weather conditions; and perform external radio and visual communications.

DoD Relationship

Group Title

Navigators

DoD Code

106100

O*NET Relationship

Occupation Title

Radar and Sonar Technicians

SOC Code

55-3017.00

Job Family

Military Specific

Skills

Mathematics

Critical Thinking

Coordination

Judgment and Decision Making

Reading Comprehension

Complex Problem Solving

Writing

Operation and Control

Science

Quality Control Analysis

Abilities

Mathematical Reasoning

Written Comprehension

Deductive Reasoning

Information Ordering

Far Vision

Finger Dexterity

Manual Dexterity

Auditory Attention

Hearing Sensitivity

Problem Sensitivity

COMMUNICATIONS

Paygrade

Task Type

Task Statements

E4

CORE

Encode and decode tactical signals

E4

NON-CORE

Perform external communications (ship-to-ship, ship-to-shore)

E4

NON-CORE

Perform internal communications (verbal communications, sound-powered phone, and Internal Voice Communications System (IVCS))

E4

CORE

Signal water craft or boats

E4

NON-CORE

Test communications systems

ELECTRONIC SYSTEMS OPERATIONS

Paygrade

Task Type

Task Statements

E4

NON-CORE

Adjust ship's lighting for night operations

E4

CORE

Check operation of navigation task and running lights

E4

CORE

Configure navigation task lights

E4

CORE

Energize navigation task and running lights

E4

CORE

Monitor helm and lee helm operations

E4

CORE

Operate electronic navigation systems

E4

CORE

Operate informational display systems

E4

NON-CORE

Verify ship's position data between display sources (radar, paper, Voyage Management System (VMS))

EQUIPMENT ADMINISTRATION

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	NON-CORE	Collect equipment and system status data
E4	CORE	Perform preventive maintenance on navigation equipment

LOOKOUT AND SIGNALING OPERATIONS

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Identify and report foreign flags
E4	CORE	Identify lights and beacons using stopwatch
E4	CORE	Identify signal flags and flag signals
E4	CORE	Maintain halyards, halyard blocks, and tie downs
E4	NON-CORE	Perform man overboard procedures
E4	CORE	Prepare weather observation reports
E4	CORE	Repair halyards, halyard blocks, and tie downs
E4	CORE	Replace halyards, halyard blocks, and tie downs
E4	NON-CORE	Report audible and visual information
E4	NON-CORE	Report contacts (air, surface)
E4	CORE	Send and receive messages using signal flags
E4	NON-CORE	Tie basic knots, bends, and hitches
E4	CORE	Transmit and receive messages by flashing light

NAVIGATION

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Adjust radar scope presentation to align with navigation charts
E4	CORE	Calculate compensating and correcting courses and speeds
E4	CORE	Calculate maneuvering board solutions for wind problems
E4	CORE	Calculate set and drift
E4	CORE	Calculate times for moonrise and moonset
E4	CORE	Calculate times for sunrise, sunset, and twilight
E4	CORE	Compute course and speed made good
E4	CORE	Compute expected times of radar landfall
E4	CORE	Compute gyro errors using visual aids to navigation
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 and report gyrocompass errors by celestial observation
E4	CORE	Determine latitude and longitude from plotted positions on navigational charts
E4	CORE	Determine magnetic compass errors using gyrocompass
E4	CORE	Determine required Speed Of Advance (SOA)
E4	CORE	Determine ship's position electronically (e.g., Global Positioning System (GPS), radar))
E4	CORE	Determine ship's position relative to Plan of Intended Movement (PIM)
E4	CORE	Determine ship's position using running fixes
E4	CORE	Determine ship's position using sextant angles
E4	CORE	Determine variation on charts
E4	CORE	Identify and report aids to navigation
E4	NON-CORE	Identify Rules of the Road (ROR) signals
E4	CORE	Incorporate lookout information with navigation plot
E4	CORE	Make operational, situational, and position reports
E4	CORE	Measure distances on navigational charts
E4	CORE	Measure fathometer readings against charts
E4	CORE	Obtain visual bearings using alidades
E4	NON-CORE	Operate aft steering units
E4	CORE	Perform low visibility operations detail and procedures
E4	CORE	Plot Dead Reckoning (DR) tracks
E4	CORE	Plot ship's position during navigation detail
E4	CORE	Plot ship's position visually
E4	CORE	Prepare bridge for special evolutions
E4	CORE	Recommend actions based on international or inland Rules of the Road (ROR)
E4	CORE	Shift ship's control from bridge to secondary location

PLOTTING

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E5	CORE	Calculate danger bearings and ranges
E5	CORE	Calculate relative bearings
E5	CORE	Compute advance and transfer for turns
E5	CORE	Compute anchor chain scopes
E5	CORE	Compute Estimated Time of Arrival (ETA)
E4	CORE	Determine type of ocean bottom
E4	CORE	Plan anchorage areas
E4	CORE	Plot advance and transfer for turns
E4	CORE	Plot Amphibious Objective Area (AOA) information

E4	CORE	Plot anchorage area
E4	CORE	Plot Chemical, Biological, Radiological, and Nuclear Explosive (CBRNE) areas
E4	CORE	Plot danger bearings and ranges
E5	CORE	Plot departure and approach points for great circle sailing
E4	CORE	Plot distress signals, bearings, and ranges
E5	CORE	Plot diversion points for transit routes
E4	CORE	Plot environmental conditions
E4	CORE	Plot man overboard positions
E4	CORE	Plot mine warfare 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 surface contact information
E4	CORE	Plot swept channels
E4	CORE	Plot swing and drag circles
E4	CORE	Plot turn bearings, turn ranges, and slide lines
E4	CORE	Plot weather message information
E4	CORE	Prepare anchoring grids
E4	CORE	Prepare restricted water tracks
E5	CORE	Recommend great circle sailing routes
E5	CORE	Review navigational charts
E4	CORE	Select head and drop bearings
E5	CORE	Verify construction of swept channel parameters
E4	CORE	Verify navigation rule lines of demarcation
E4	CORE	Verify water depth is safe for navigation

NEBC Job Title

Navigation Manager

NEBC Job Code

003745

Job Family

Military Specific

NOC

TBD

Short Title (30 Characters)

NAVIGATION MANAGER

Short Title (10 Characters)

NAV MGR

Pay Plan

Enlisted

Career Field

QM

Other Relationships and Rules

As assigned to Job

Job Description

Navigation Managers provide navigation expertise to shipboard personnel; provide recommendations to the Officer of the Deck (OOD) and the Navigator concerning usual and unusual navigation conditions; select and use navigational charts; select anchorages; employ appropriate electronic navigation systems; plan emergency drills; and supervise and evaluate personnel during special evolutions and navigation details.

DoD Relationship

Group Title

Navigators

DoD Code

106100

O*NET Relationship

Occupation Title

Radar and Sonar Technicians

SOC Code

55-3017.00

Job Family

Military Specific

Skills

Management of Material Resources

Mathematics

Science

Coordination

Quality Control Analysis

Judgment and Decision Making

Reading Comprehension

Writing

Critical Thinking

Installation

Abilities

Deductive Reasoning

Mathematical Reasoning

Information Ordering

Manual Dexterity

Speed of Closure

Time Sharing

Written Comprehension

Category Flexibility

Perceptual Speed

Problem Sensitivity

EQUIPMENT ADMINISTRATION

Paygrade

Task Type

Task Statements

E6

NON-CORE

Manage controlled equipment inventories

E7

CORE

Manage equipment certifications and recertifications

E7

NON-CORE

Verify installations, testing, and alterations of equipment

NAVIGATION

Paygrade

Task Type

Task Statements

E6

CORE

Calculate maneuvering board solutions for station changes

E6

CORE

Calculate maneuvering board solutions to determine avoidance courses

E6

CORE

Calculate maneuvering board solutions to determine Closest Point of Approach (CPA)

E6

CORE

Calculate maneuvering board solutions to determine surface contacts course and speed

E6

CORE

Compare and verify ship's position data in the Combat Information Center (CIC) with bridge plot

E6

CORE

Supervise bridge team during special evolutions and navigation detail

E6

CORE

Supervise shift of ship's control from bridge to secondary location

TECHNICAL ADMINISTRATION

<u>Pavgrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E6	CORE	Analyze environmental hazards utilizing Protective Measures Assessment Program (PMAP)
E6	CORE	Archive electronic navigation data
E6	CORE	Determine appropriate shipboard honors and ceremonies
E6	NON-CORE	Manage administrative programs
E6	CORE	Verify navigational charts