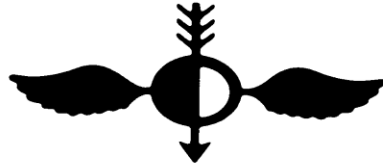


CHAPTER 5



AEROGRAPHER'S MATE (AG)

NAVPERS 18068F-5E
Change 95

Updated: July 2023

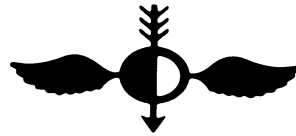
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NAVY ENLISTED OCCUPATIONAL STANDARD

FOR

AEROGRAPHER'S MATE (AG)



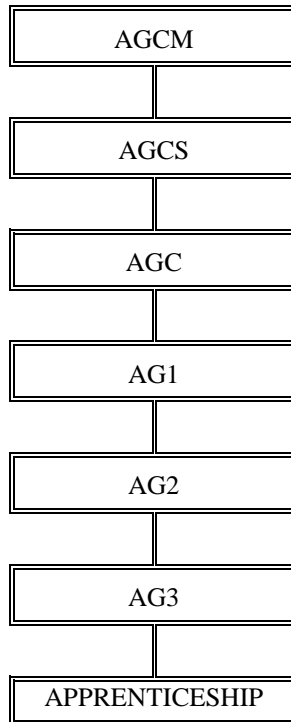
SCOPE OF RATING

Aerographer's Mates (AG) collect, measure, and analyze the elements of the physical environment (Land/Sea/Air/Space) and land/sea interface; synthesize a vast array of oceanographic, hydrographic, celestial, and meteorological data and in situ observations and measurements to produce forecasts and warnings in support of safety of flight, navigation, and Naval/Joint operations and missions; demonstrate expertise in Meteorological and Oceanographic (METOC) equipment and systems, Geospatial Information and Services (GIS), and Tactical Decision Aids (TDA); combine knowledge of the operating environment with a thorough understanding of warfighting capabilities to assess and predict environmental impacts to friendly and enemy platforms, sensors, and weapon systems; develop actionable recommendations regarding tactics, techniques, and procedures that fully exploit environmental parameters, mitigate risks, and enable decision superiority across all warfighting areas and strategic and enabling capabilities; operate Unmanned Systems (UxS), small boats and expeditionary survey vehicles to collect meteorological, hydrographic and oceanographic data; and distribute data internally and externally to platforms and operational activities via communication devices, web-centric architecture, or on-scene in direct support of afloat units, Fleet/Joint staffs, or Combatant/Operational Commanders.

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 5.

GENERAL INFORMATION

CAREER PATTERN



Normal path of advancement to Chief Warrant Officer 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**Meteorological And Oceanographic (METOC) Analyst****Job Code****001695****Job Family**

Life, Physical, and Social Science

NOC

TBD

Short Title (30 Characters)

METOC ANALYST

Short Title (14 Characters)

METOC ANALYST

Pay Plan

ENLISTED

Career Field

AG

Other Relationships and Rules

NEC JXXX and 7XXX series and other NECs as assigned

Job Description

Meteorological and Oceanographic (METOC) Analysts observe, measure, and collect atmospheric and oceanographic data, phenomena, and parameters that affect platforms, sensors, and weapon systems performance; interpret numerical prediction models and provide limited analysis of operationally significant weather data (e.g., cloud cover, freezing level, fronts and pressure centers, significant weather, and hazards to flight, etc.); conduct routine analysis of hydrographic features and elements on nautical/navigation charts and prepare routine forecasts of METOC conditions on synoptic, meso, and micro scales in low risk operating areas; utilize Tactical Decision Aids (TDA) to generate graphical depictions of atmospheric refractive conditions and acoustic properties of the ocean; operate Unmanned Systems (UxS), small boats and expeditionary survey vehicles to collect meteorological, hydrographic and oceanographic data; process side-scan, multi-beam, and single-beam sonar imageries; brief current METOC conditions in support of warfare operations (e.g., Anti-Submarine Warfare (ASW), Mine Warfare (MIW), Strike Warfare (STW), Amphibious Warfare (AMW), Electromagnetic Maneuver Warfare (EMW)); operate classified/unclassified software and systems; and communicate METOC information internally and externally to platforms and operational activities.

DoD Relationship**Group Title**

Weather, General

DoD Code

142000

O*NET Relationship**Occupation Title**

Atmospheric and Space Scientists

SOC Code

19-2021.00

Job Family

Life, Physical, and Social Science

Skills*Science**Critical Thinking**Speaking**Operation and Control**Operations Analysis**Coordination**Quality Control Analysis**Judgment and Decision Making**Writing**Management of Material Resources***Abilities***Information Ordering**Deductive Reasoning**Oral Expression**Flexibility of Closure**Speech Clarity**Written Expression**Spatial Orientation**Written Comprehension**Category Flexibility**Problem Sensitivity***ASSIMILATION, APPLICATION, AND PREDICTION****Paygrade**

E5

Task Type

CORE

Task Statements

Assess climatological data for long-range mission planning

E4

CORE

Brief satellite derived meteorological features and elements

CHARACTERIZATION AND ANALYSIS**Paygrade**

E4

Task Type

CORE

Task Statements

Analyze atmospheric refractive conditions

E4

CORE

Analyze bathythermograph data

E4

CORE

Analyze hydrographic data

E4

NON-CORE

Analyze impacts of clutter density data to mission timelines

E4

CORE

Analyze ocean surface buoy data

E4

CORE

Analyze open ocean wave conditions (i.e., average and significant wave heights, lengths, and periods)

E4

CORE

Analyze ray trace diagrams

E4

CORE

Analyze sea ice conditions

E4

CORE

Analyze sea surface conditions (i.e., current direction and speed, ocean fronts and eddies, and sea surface temperature)

E4

NON-CORE

Analyze sonar imagery (i.e., side-scan, multi-beam and single beam)

CHARACTERIZATION AND ANALYSIS (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Analyze Sound Speed Profile (SSP) (e.g., sonic layer depth, sound channels, best depth, cut-off frequencies, etc.)
E5	NON-CORE	Analyze Unmanned Underwater Vehicle (UUV) data
E4	NON-CORE	Apply geospatial orientation on Meteorological and Oceanographic (METOC) products
E4	CORE	Brief basic Meteorological and Oceanographic (METOC) elements and features on climatological products and information
E4	NON-CORE	Brief hydrographic features and elements on nautical/navigation charts
E4	CORE	Brief meteorological features and elements on surface weather charts
E4	CORE	Brief oceanographic and biological properties of the oceans (e.g., bottom types, bioluminescence, etc.)
E4	CORE	Brief satellite derived oceanographic features and elements
E4	NON-CORE	Characterize hydrographic features and elements on nautical/navigation charts
E4	CORE	Characterize meteorological features and elements on constant pressure charts
E4	CORE	Characterize meteorological features and elements on satellite imagery
E4	CORE	Characterize meteorological features and elements on surface weather charts
E4	CORE	Characterize meteorological features and elements on upper air data
E4	CORE	Characterize oceanographic features and elements on satellite imagery
E4	CORE	Characterize physical and biological properties of the oceans
E4	CORE	Characterize severe weather (e.g., tornadoes, thunderstorms, hail, etc.)
E4	CORE	Compile oceanographic and biological data (e.g., bottom types, bioluminescence, etc.)
E5	CORE	Develop tropical streamline analyses
E4	CORE	Evaluate ocean surface buoy data
E4	CORE	Evaluate ray trace diagrams
E4	NON-CORE	Generate graphical depictions of hydrographic properties of the ocean
E4	CORE	Integrate bathythermograph data into oceanographic prediction products
E4	NON-CORE	Perform change detection and contact fusion analyses
E4	NON-CORE	Process multi-beam sonar imagery
E4	NON-CORE	Process single beam sonar imagery

METEOROLOGICAL, OCEANOGRAPHIC, AND HYDROGRAPHIC DATA COLLECTION

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Collect climatological data for long-range mission planning
E4	NON-CORE	Collect hydrographic data
E4	NON-CORE	Collect ocean bottom data using Unmanned Underwater Vehicles (UUV)
E4	CORE	Collect satellite imagery using shipboard or shore-based satellite data terminal (i.e., SMQ-11 and FMQ-17)
E4	CORE	Compile astronomical data (e.g., solar, lunar, tidal, etc.)
E4	CORE	Document observed surf conditions (e.g., breaker height, breaker type, breaker angle, etc.)
E4	NON-CORE	Launch oceanographic buoys

METEOROLOGICAL, OCEANOGRAPHIC, AND HYDROGRAPHIC DATA COLLECTION (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Measure current atmospheric conditions (e.g., land-based, shipboard, upper air, etc.)
E4	CORE	Observe surf conditions (e.g., breaker height, breaker type, breaker angle, etc.)
E4	NON-CORE	Perform launch and recovery of Unmanned Underwater Vehicles (UUV)
E4	NON-CORE	Perform small craft operations (e.g., Expeditionary Survey Vehicle (ESV), Combat Rubber Raiding Craft (CRRC), etc.)
E4	NON-CORE	Process side-scan sonar imagery
E4	NON-CORE	Record current tidal observations
E4	CORE	Record current weather observations (e.g., land-based, shipboard, upper air, etc.)
E4	NON-CORE	Recover oceanographic buoys

METOC ADMINISTRATION, TRAINING, AND QUALITY CONTROL

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Archive Meteorological and Oceanographic (METOC) data
E4	NON-CORE	Conduct Meteorological and Oceanographic (METOC) training
E4	CORE	Disseminate Meteorological and Oceanographic (METOC) forecasts and products
E4	NON-CORE	Inspect Meteorological and Oceanographic (METOC) equipment
E4	CORE	Maintain Meteorological and Oceanographic (METOC) administrative files
E4	CORE	Maintain Meteorological and Oceanographic (METOC) publications and databases
E4	CORE	Maintain Tactical Decision Aid (TDA) sensor databases
E4	CORE	Perform environmental observation quality control checks (e.g., surface, synoptic, surf, etc.)
E5	NON-CORE	Provide Meteorological and Oceanographic (METOC) information for Daily Intentions Message System (DIMS)
E4	CORE	Verify deployable Meteorological and Oceanographic (METOC) equipment readiness

SAFETY OF FLIGHT, NAVIGATION, AND INFRASTRUCTURE

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Analyze radar data in support of flight operations (i.e., convective and non-convective meteorological features significant to aircraft operations and safety)
E4	CORE	Brief flight weather conditions and recommendations
E4	CORE	Brief sea ice conditions and forecasts
E4	CORE	Brief Terminal Aerodrome Forecast (TAF)
E4	CORE	Collect observed environmental conditions in the event of a mishap (e.g., aircraft, ship, infrastructure, personnel, etc.)
E4	NON-CORE	Construct digital flight weather packages (i.e., ditch headings, satellite image, and flight level wind)
E4	NON-CORE	Create Optimum Path Aircraft Routing System (OPARS) customized flight plan predictions
E4	CORE	Develop Horizontal Weather Depictions (HWD) (e.g., cloud cover, freezing level, fronts and pressure centers, significant weather, hazards to flight, etc.)
E4	CORE	Plot ship Projected Intended Movement (PIM) and Movement Reports (MOVREP)

TACTICAL/OPERATIONAL ASSESSMENTS AND RECOMMENDATIONS

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	NON-CORE	Analyze acoustic and non-acoustic contacts
E4	CORE	Assess astronomical data (e.g., solar, lunar, tidal, etc.)
E4	CORE	Brief Chain of Command (COC) of environmental conditions impacting operations
E4	NON-CORE	Brief change detection and contact fusion analyses
E4	CORE	Brief communications forecasts, impacts, and recommendations
E4	CORE	Brief current local weather conditions, advisories, and warnings
E4	CORE	Brief current/forecasted Meteorological and Oceanographic (METOC) conditions in support of warfare operations (e.g., Undersea Warfare (USW), Mine Warfare (MIW), Strike Warfare (STW), Intelligence, Surveillance, and Reconnaissance (ISR), etc.)
E4	CORE	Brief forecasted atmospheric refractive conditions
E5	NON-CORE	Brief Humanitarian Assistance and Disaster Relief (HADR) forecasts and recommendations
E4	NON-CORE	Brief impacts of clutter density data to mission timelines
E4	CORE	Brief oceanographic acoustic prediction assessments and recommendations
E5	CORE	Brief Search and Rescue (SAR) forecasts and recommendations
E5	CORE	Brief surf forecasts and recommendations
E4	CORE	Create oceanographic acoustic prediction products (i.e., three-dimensional graphics, animations, audio, and tactical visualizations)
E4	CORE	Develop electromagnetic wave propagation predictions
E4	CORE	Develop electro-optic sensor predictions
E4	NON-CORE	Develop hydrographic mission planning briefs
E4	NON-CORE	Develop mosaic mapped imagery

Job Title**Meteorological And Oceanographic (METOC) Forecaster****Job Code****001585****Job Family**

Life, Physical, and Social Science

NOC

TBD

Short Title (30 Characters)

METOC FORECASTER

Short Title (14 Characters)

METOC FORCASTR

Pay Plan

ENLISTED

Career Field

AG

Other Relationships and Rules

NEC JXXX and 7XXX series and other NECs as assigned

Job Description

Meteorological and Oceanographic (METOC) Forecasters carry out a broad range of METOC forecasting activities to be performed in a wide variety of contexts, some of which are complex and non-routine; demonstrate personal autonomy and responsibility in the generation of METOC products and operational recommendations; demonstrate critical thinking and the capacity to apply scientific knowledge and skills in an integrated way; predict and assess the impact of the elements of the physical environment (Land/Sea/Air/Space) and land/sea interface on both friendly and enemy platforms, sensors and weapon system performance, safety of flight and navigation, and Naval/Joint operations and missions; evaluate numerical model performance to quantify the accuracy and reliability of future performance in low and moderate risk operating areas; analyze hydrographic features and elements on nautical/navigation charts and forecast METOC conditions on synoptic, meso, and micro scales in moderate risk operating areas; analyze side-scan, multi-beam, and single-beam sonar imagery; collect and analyze ocean bottom data using unmanned underwater vehicles; create climatological studies supporting Naval warfare planning; produce forecasts and warnings; synthesize a vast array of METOC data to characterize the operating environment and recommend Courses of Actions (COA) to enhance the warfighter's ability to exploit the physical environment for successful mission accomplishment; brief forecasted METOC conditions in support of warfare operations (e.g., Anti-Submarine Warfare (ASW), Mine Warfare (MIW), Strike Warfare (STW), Amphibious Warfare (AMW), Electromagnetic Maneuver Warfare (EMW), Navy Special Warfare (NSW)); and distribute data internally and externally to aircraft, ships, and shore activities via communication devices/web-centric architecture.

DoD Relationship*Group Title*

Weather, General

DoD Code

142000

O*NET Relationship*Occupation Title*

Atmospheric and Space Scientists

SOC Code

19-2021.00

Job Family

Life, Physical, and Social Science

Skills*Science**Critical Thinking**Complex Problem Solving**Speaking**Judgment and Decision Making**Coordination**Systems Analysis**Writing**Operations Analysis**Operation and Control***Abilities***Information Ordering**Deductive Reasoning**Written Expression**Oral Expression**Speech Clarity**Flexibility of Closure**Inductive Reasoning**Speed of Closure**Visualization**Written Comprehension***ASSIMILATION, APPLICATION, AND PREDICTION****Paygrade****Task Type****Task Statements**

E5

CORE

Analyze numerical model performance

E5

CORE

Assess climatological data for long-range mission planning

E4

CORE

Brief satellite derived meteorological features and elements

E5

CORE

Develop prognostic blend weather charts

E5

NON-CORE

Develop submarine operations forecasts

E5

CORE

Develop synoptic-scale surface weather forecasts (i.e., tropical, mid-latitude, and arctic)

E5

CORE

Evaluate numerical model performance

E5

CORE

Forecast aircraft en route weather (e.g., ditch headings, aircraft icing, flight weather winds, altimeter settings, freezing levels, etc.)

E5

CORE

Forecast electromagnetic wave propagation

E5

CORE

Forecast flight weather, visibility, and cloud ceiling conditions (i.e., Visual Flight Rules (VFR), Instrument Flight Rules (IFR), Visual Meteorological Conditions (VMC), and Instrument Meteorological Conditions (IMC))

ASSIMILATION, APPLICATION, AND PREDICTION (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E5	CORE	Forecast jet stream positions and intensities
E5	CORE	Forecast long wave patterns
E5	CORE	Forecast movement and intensity changes in major short wave troughs and ridges
E5	CORE	Forecast movement and intensity changes in surface pressure systems and features
E5	CORE	Forecast oceanographic near shore conditions (e.g., littoral currents, speeds, and direction, temperatures, surf, etc.)
E5	CORE	Forecast precipitation types, intensities, and durations
E5	CORE	Forecast sea surface conditions (e.g., sea states, current direction and speed, ocean fronts and eddies, sea surface temperature, etc.)
E5	CORE	Forecast severe weather (e.g., tornados, thunderstorms, hail, etc.)
E5	CORE	Forecast sky conditions (e.g., cloud types, amounts, layer heights, etc.)
E5	CORE	Forecast sound propagation (e.g., sonic layer depth, sound channels, best depth, etc.)
E5	CORE	Forecast surface air temperatures (e.g., ambient air, dew point, heat stress, wind chill, etc.)
E5	CORE	Forecast synoptic-scale meteorological features and elements (e.g., pressure systems, frontal boundaries, cloud cover, precipitation, etc.)
E5	CORE	Forecast tropical cyclone development, movement, and intensity changes
E5	CORE	Forecast visibility obstructions (e.g., fog, rain, haze, smoke, etc.)
E5	CORE	Forecast wind conditions (e.g., direction, speed, character, shifts, etc.)
E5	CORE	Forecast wind shear and turbulence (e.g., types, intensities, levels, and locations, etc.)
E6	CORE	Synthesize performance trends of multiple numerical models
E5	CORE	Validate severe weather advisories, watches and warnings (e.g., tornadoes, thunderstorms, hail, etc.)

CHARACTERIZATION AND ANALYSIS

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E6	CORE	Analyze advanced physics-based effects (e.g., dynamics, kinematics, thermodynamics, etc.)
E4	CORE	Analyze atmospheric refractive conditions
E4	CORE	Analyze bathythermograph data
E4	CORE	Analyze hydrographic data
E4	NON-CORE	Analyze hydrographic features and elements on nautical/navigation charts
E5	NON-CORE	Analyze imageries for environmental Essential Elements of Information (EEL)
E4	NON-CORE	Analyze impacts of clutter density data to mission timelines
E5	NON-CORE	Analyze Magnetic Anomaly Detection (MAD) Magnetic Operational Effectiveness (MOE) charts
E5	NON-CORE	Analyze Meteorological and Oceanographic (METOC) features and elements on full motion videos
E5	CORE	Analyze meteorological features and elements on constant pressure charts
E5	CORE	Analyze meteorological features and elements on satellite imagery
E5	CORE	Analyze meteorological features and elements on surface weather charts

CHARACTERIZATION AND ANALYSIS (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E5	CORE	Analyze meteorological features and elements on upper air data
E5	CORE	Analyze ocean bottom characteristics (e.g., topography, sediment, etc.)
E4	CORE	Analyze ocean surface buoy data
E5	NON-CORE	Analyze oceanographic features and elements on satellite imagery
E4	CORE	Analyze open ocean wave conditions (i.e., average and significant wave heights, lengths, and periods)
E5	CORE	Analyze physical and biological properties of the oceans
E5	CORE	Analyze prognostic weather charts
E4	CORE	Analyze ray trace diagrams
E5	NON-CORE	Analyze riverine imagery
E4	CORE	Analyze sea surface conditions (i.e., current direction and speed, ocean fronts and eddies, and sea surface temperature)
E4	NON-CORE	Analyze sonar imagery (i.e., side-scan, multi-beam and single beam)
E4	CORE	Analyze Sound Speed Profile (SSP) (e.g., sonic layer depth, sound channels, best depth, cut-off frequencies, etc.)
E5	CORE	Analyze thickness and height change charts
E5	NON-CORE	Analyze Unmanned Underwater Vehicle (UUV) data
E5	CORE	Analyze vorticity charts
E4	NON-CORE	Apply geospatial orientation on Meteorological and Oceanographic (METOC) products
E4	CORE	Brief basic Meteorological and Oceanographic (METOC) elements and features on climatological products and information
E5	NON-CORE	Brief graphical depictions of hydrographic properties of the ocean
E4	NON-CORE	Brief hydrographic features and elements on nautical/navigation charts
E4	CORE	Brief meteorological features and elements on surface weather charts
E4	CORE	Brief oceanographic and biological properties of the oceans (e.g., bottom types, bioluminescence, etc.)
E4	CORE	Brief satellite derived oceanographic features and elements
E4	CORE	Characterize meteorological features and elements on constant pressure charts
E4	CORE	Characterize meteorological features and elements on satellite imagery
E4	CORE	Characterize meteorological features and elements on surface weather charts
E4	CORE	Characterize meteorological features and elements on upper air data
E4	CORE	Characterize oceanographic features and elements on satellite imagery
E4	CORE	Characterize physical and biological properties of the oceans
E4	CORE	Characterize severe weather (e.g., tornadoes, thunderstorms, hail, etc.)
E4	CORE	Compile oceanographic and biological data (e.g., bottom types, bioluminescence, etc.)
E5	CORE	Develop tropical streamline analyses
E5	CORE	Enhance meteorological features and elements in multi-channel satellite derived imagery
E4	CORE	Evaluate ocean surface buoy data

CHARACTERIZATION AND ANALYSIS (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Evaluate ray trace diagrams
E5	CORE	Evaluate stability indices on upper air profiles
E5	CORE	Evaluate surf conditions (e.g., breaker height, breaker type, breaker angle, etc.)
E4	NON-CORE	Generate graphical depictions of hydrographic properties of the ocean
E4	CORE	Integrate bathythermograph data into oceanographic prediction products
E4	NON-CORE	Perform change detection and contact fusion analyses
E4	NON-CORE	Process multi-beam sonar imagery
E4	NON-CORE	Process single beam sonar imagery
E7	NON-CORE	Validate hydrographic features and elements on nautical/navigation charts

METEOROLOGICAL, OCEANOGRAPHIC, AND HYDROGRAPHIC DATA COLLECTION

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	NON-CORE	Collect hydrographic data
E4	NON-CORE	Collect ocean bottom data using Unmanned Underwater Vehicles (UUV)
E4	CORE	Compile astronomical data (e.g., solar, lunar, tidal, etc.)
E4	NON-CORE	Launch oceanographic buoys
E4	NON-CORE	Perform launch and recovery of Unmanned Underwater Vehicles (UUV)
E4	NON-CORE	Perform small craft operations (e.g., Expeditionary Survey Vehicle (ESV), Combat Rubber Raiding Craft (CRRC), etc.)
E4	NON-CORE	Process side-scan sonar imagery
E4	NON-CORE	Recover oceanographic buoys

METOC ADMINISTRATION, TRAINING, AND QUALITY CONTROL

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Archive Meteorological and Oceanographic (METOC) data
E7	CORE	Compose Meteorological and Oceanographic (METOC) messages (e.g., Operational Task Report (OPTASK) Meteorological and Oceanographic (METOC), ANNEX H, Meteorological and Oceanographic (METOC) Letter of Instruction (LOI), etc.)
E7	CORE	Compose post-deployment Meteorological and Oceanographic (METOC) reports (e.g., lessons learned, operational impacts, equipment performance, etc.)
E5	NON-CORE	Compose tsunami reports
E5	CORE	Conduct Meteorological and Oceanographic (METOC) forecast and quality control checks
E4	NON-CORE	Conduct Meteorological and Oceanographic (METOC) training
E4	CORE	Disseminate Meteorological and Oceanographic (METOC) forecasts and products
E6	CORE	Establish Meteorological and Oceanographic (METOC) support requirements for warfare operations (e.g., Mine Warfare (MIW), Anti-Submarine Warfare (ASW)/Undersea Warfare (USW), Strike Warfare (STW), etc.)
E4	NON-CORE	Inspect Meteorological and Oceanographic (METOC) equipment
E5	NON-CORE	Issue environmental emergency notification warnings
E4	CORE	Maintain Meteorological and Oceanographic (METOC) administrative files

METOC ADMINISTRATION, TRAINING, AND QUALITY CONTROL (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Maintain Meteorological and Oceanographic (METOC) publications and databases
E4	CORE	Maintain Tactical Decision Aid (TDA) sensor databases
E4	CORE	Perform environmental observation quality control checks (e.g., surface, synoptic, surf, etc.)
E5	NON-CORE	Provide Meteorological and Oceanographic (METOC) information for Daily Intentions Message System (DIMS)
E4	CORE	Verify deployable Meteorological and Oceanographic (METOC) equipment readiness

SAFETY OF FLIGHT, NAVIGATION, AND INFRASTRUCTURE

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Analyze radar data in support of flight operations (i.e., convective and non-convective meteorological features significant to aircraft operations and safety)
E5	CORE	Analyze radar data in support of resource protection (e.g., severe weather potential, precipitation type and intensity, storm tracking surveillance, etc.)
E5	CORE	Assess aviation operations Meteorological and Oceanographic (METOC) support requirements
E5	CORE	Assess maritime operations Meteorological and Oceanographic (METOC) support requirements
E5	CORE	Assess operational risks due to hazardous environmental conditions
E5	CORE	Brief aviation operations forecast and recommendations (e.g., Tactical Recovery of Aircraft and Personnel (TRAP), parachute operations, in-flight refueling, etc.)
E4	CORE	Brief flight weather conditions and recommendations
E4	CORE	Brief sea ice conditions and forecasts
E4	CORE	Brief Terminal Aerodrome Forecast (TAF)
E5	CORE	Compose Meteorological and Oceanographic (METOC) advisories, watches, and warnings
E6	CORE	Compose tropical cyclone Conditions of Readiness (COR) recommendations and messages
E4	NON-CORE	Construct digital flight weather packages (i.e., ditch headings, satellite image, and flight level wind)
E4	NON-CORE	Create Optimum Path Aircraft Routing System (OPARS) customized flight plan predictions
E5	CORE	Develop afloat cyclic operations forecasts and products
E5	CORE	Develop aviation operations forecasts and recommendations (e.g., Tactical Recovery of Aircraft and Personnel (TRAP), parachute operations, in-flight refueling, etc.)
E5	CORE	Develop en route Routine Weather (WEAX) forecasts and recommendations (e.g., task force, task group, submarine, ice, graphical, etc.)
E4	CORE	Develop Horizontal Weather Depictions (HWD) (e.g., cloud cover, freezing level, fronts and pressure centers, significant weather, hazards to flight, etc.)
E5	NON-CORE	Develop International Submarine Escape and Rescue Liaison Office (ISMERLO) forecasts and recommendations

SAFETY OF FLIGHT, NAVIGATION, AND INFRASTRUCTURE (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E5	CORE	Develop local area forecasts and products
E5	CORE	Develop Terminal Aerodrome Forecasts (TAF)
E5	CORE	Evaluate forecasted environmental conditions in the event of a mishap (e.g., aircraft, ship, infrastructure, personnel, etc.)
E5	CORE	Forecast flight weather take-off, en route, and terminal conditions
E5	CORE	Forecast ice accretion conditions at-sea
E6	CORE	Provide mitigation strategies to avoid hazardous environmental conditions
E5	CORE	Update flight weather forecasts and products

TACTICAL/OPERATIONAL ASSESSMENTS AND RECOMMENDATIONS

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	NON-CORE	Analyze acoustic and non-acoustic contacts
E5	NON-CORE	Analyze Meteorological and Oceanographic (METOC) impacts on Unmanned Systems (UxS)
E5	CORE	Analyze upper air profiles for meteorological impacts (e.g., freezing level, icing, inversions, turbulence, etc.)
E4	CORE	Assess astronomical data (e.g., solar, lunar, tidal, etc.)
E5	CORE	Assess environmental impacts to the Electromagnetic Spectrum (EMS)
E5	CORE	Brief at-sea operations forecasts, impacts, and recommendations (e.g., Underway Replenishment (UNREP), Vertical Replenishment (VERTREP), and Visit, Board, Search, and Seizure (VBSS), etc.)
E5	NON-CORE	Brief ballistic wind forecasts and recommendations
E6	NON-CORE	Brief chaff dispersion forecasts and recommendations
E4	CORE	Brief Chain of Command (COC) of environmental conditions impacting operations
E4	NON-CORE	Brief change detection and contact fusion analyses
E5	CORE	Brief Chemical, Biological, Radiological, and Nuclear Explosive (CBRNE) forecasts and recommendations
E4	CORE	Brief communications forecasts, impacts, and recommendations
E4	CORE	Brief current local weather conditions, advisories, and warnings
E4	CORE	Brief current/forecasted Meteorological and Oceanographic (METOC) conditions in support of warfare operations (e.g., Undersea Warfare (USW), Mine Warfare (MIW), Strike Warfare (STW), Intelligence, Surveillance, and Reconnaissance (ISR), etc.)
E5	CORE	Brief current/forecasted tactical Meteorological and Oceanographic (METOC) recommendations in support of warfare operations (e.g., Undersea Warfare (USW), Mine Warfare (MIW), Strike Warfare (STW), Intelligence, Surveillance, and Reconnaissance (ISR), etc.)
E4	CORE	Brief forecasted atmospheric refractive conditions
E5	NON-CORE	Brief Humanitarian Assistance and Disaster Relief (HADR) forecasts and recommendations
E4	NON-CORE	Brief impacts of clutter density data to mission timelines
E6	CORE	Brief Meteorological and Oceanographic (METOC) support capabilities

TACTICAL/OPERATIONAL ASSESSMENTS AND RECOMMENDATIONS (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E5	NON-CORE	Brief Non-combative Evacuation Operation (NEO) forecasts and recommendations
E4	CORE	Brief oceanographic acoustic prediction assessments and recommendations
E5	CORE	Brief Operating Area (OPAREA) forecasts, impacts, and recommendations (e.g., port operations, gas and oil platform, inner harbor, etc.)
E5	NON-CORE	Brief riverine imagery
E5	CORE	Brief Search and Rescue (SAR) forecasts and recommendations
E5	CORE	Brief surf forecasts and recommendations
E5	CORE	Brief target area forecasts and recommendations
E5	CORE	Calculate evasion and detection depths
E4	CORE	Create oceanographic acoustic prediction products (i.e., three-dimensional graphics, animations, audio, and tactical visualizations)
E5	CORE	Develop amphibious warfare operations forecasts and recommendations
E5	CORE	Develop at-sea operations forecasts, impacts, and recommendations (e.g., Underway Replenishment (UNREP), Vertical Replenishment (VERTREP), and Visit, Board, Search, and Seizure (VBSS), etc.)
E5	CORE	Develop aviation strike operations forecasts and recommendations
E5	NON-CORE	Develop ballistic wind forecasts and recommendations
E5	NON-CORE	Develop chaff dispersion forecasts and recommendations
E5	CORE	Develop Chemical, Biological, Radiological, and Nuclear Explosive (CBRNE) forecasts and recommendations
E5	CORE	Develop communications forecasts, impacts, and recommendations
E4	CORE	Develop electromagnetic wave propagation predictions
E4	CORE	Develop electro-optic sensor predictions
E5	CORE	Develop expeditionary forecasts and recommendations
E5	NON-CORE	Develop Extended Echo Ranging (EER) forecasts and recommendations
E5	NON-CORE	Develop ground operating area forecasts and recommendations (e.g., civil affairs, direct action mission, ground operations, etc.)
E5	NON-CORE	Develop Humanitarian Assistance and Disaster Relief (HADR) forecasts and recommendations
E4	NON-CORE	Develop hydrographic mission planning briefs
E6	NON-CORE	Develop hydrographic mission planning recommendations
E5	NON-CORE	Develop Intelligence, Surveillance, and Reconnaissance (ISR) forecasts and recommendations
E5	CORE	Develop Meteorological and Oceanographic (METOC) pre-deployment briefs
E5	NON-CORE	Develop Mine Warfare (MIW) forecasts, summaries, and recommendations (e.g., dive plans, bottom characteristics, etc.)
E4	NON-CORE	Develop mosaic mapped imagery
E5	NON-CORE	Develop Non-combative Evacuation Operation (NEO) forecasts and recommendations
E5	CORE	Develop Operating Area (OPAREA) forecasts, impacts and recommendations (e.g., port operations, gas and oil platform, inner harbor, etc.)

TACTICAL/OPERATIONAL ASSESSMENTS AND RECOMMENDATIONS (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E5	NON-CORE	Develop riverine forecasts and recommendations
E5	CORE	Develop Search and Rescue (SAR) forecasts and recommendations
E5	NON-CORE	Develop special operations forecasts and recommendations (e.g., psychological, swimmer, strategic and tactical reconnaissance, etc.)
E5	NON-CORE	Develop Special Warfare (SPECWAR) mission forecasts and recommendations (e.g., Sea, Air, and Land (SEAL) Delivery Vehicle (SDV), Special Boat Team (SBT), technical operations (tech ops), etc.)
E5	CORE	Develop surf forecasts and recommendations
E5	CORE	Develop Tactical Atmospheric Summaries (TAS)
E5	CORE	Develop Tactical Oceanographic Summaries (TOS)
E5	CORE	Develop tactical recommendations based on Tactical Decision Aid (TDA) output
E5	CORE	Develop target area forecasts and recommendations
E5	CORE	Develop Undersea Warfare (USW) forecasts and recommendations
E5	NON-CORE	Develop Unmanned Systems (UxS) forecasts and recommendations
E5	CORE	Evaluate impact of upwelling on operations
E5	CORE	Evaluate upper air profiles for meteorological impacts (e.g., freezing level, icing, inversions, turbulence, etc.)
E6	CORE	Exploit bathythermograph data
E6	CORE	Exploit climatological data for long-range mission planning
E6	CORE	Exploit meteorological features and elements on upper air data
E6	CORE	Exploit physical and biological properties of the oceans
E5	CORE	Forecast acoustic parameters and ranges (e.g., passive and active ranges, ambient noise, cutoff frequencies, etc.)
E5	CORE	Forecast atmospheric effects on electro-optic sensors and weapons
E6	CORE	Provide Meteorological and Oceanographic (METOC) impact recommendations for warfare mission plans
E5	NON-CORE	Validate acoustic and non-acoustic contacts

Job Title

Master Meteorological And Oceanographic (METOC) Forecaster

Job Code

001640

Job Family

Life, Physical, and Social Science

NOC

TBD

Short Title (30 Characters)

MASTER METOC FORECASTER

Short Title (14 Characters)

MSTRMETOCFORC

Pay Plan

ENLISTED

Career Field

AG

Other Relationships and Rules

NEC JXXX and 7XXX series and other NECs as assigned

Job Description

Master Meteorological and Oceanographic (METOC) Forecasters apply a significant range of fundamental scientific principles and complex techniques across a wide and often unpredictable variety of contexts; demonstrate substantial personal autonomy and responsibility in the generation of METOC products and operational recommendations; establish METOC support requirements to provide the most relevant products for operational and mission success; evaluate numerical model performance and stochastic model output to quantify the accuracy and reliability of future performance in high risk operating areas; analyze hydrographic features and elements on nautical/navigation charts and the physical and biological properties of the oceans; forecast METOC conditions on synoptic, meso, and micro scales in complex environments; validate side-scan, multi-beam, and single-beam sonar imagery; develop tactical recommendations based on forecasted atmospheric refractive conditions and acoustic properties of the ocean generated by Tactical Decision Aid (TDA) output; coordinate continuity of support with other METOC activities; integrate impacts of the physical environment into warfighter mission plans; manage METOC quality control and environmental impact metrics programs; ensure operational success through effective leadership of personnel, training, re-training and management of METOC assets; comply with international and governmental regulations, local procedures, and established priorities; and develop solutions to meet METOC equipment acquisition and training programs.

DoD Relationship

Group Title

Weather, General

DoD Code

142000

O*NET Relationship

Occupation Title

Atmospheric and Space Scientists

SOC Code

19-2021.00

Job Family

Life, Physical, and Social Science

Skills

Science

Complex Problem Solving

Speaking

Critical Thinking

Coordination

Management of Material Resources

Systems Evaluation

Writing

Quality Control Analysis

Judgment and Decision Making

Abilities

Oral Expression

Information Ordering

Written Expression

Speech Clarity

Deductive Reasoning

Inductive Reasoning

Problem Sensitivity

Written Comprehension

Mathematical Reasoning

Oral Comprehension

ASSIMILATION, APPLICATION, AND PREDICTION

Paygrade

Task Type

Task Statements

E5

CORE

Analyze numerical model performance

E4

CORE

Brief satellite derived meteorological features and elements

E5

CORE

Evaluate numerical model performance

E5

CORE

Forecast electromagnetic wave propagation

E5

CORE

Forecast severe weather (e.g., tornados, thunderstorms, hail, etc.)

E5

CORE

Forecast tropical cyclone development, movement, and intensity changes

E7

CORE

Quantify operational risks utilizing stochastic model output

E6

CORE

Synthesize performance trends of multiple numerical models

E5

CORE

Validate severe weather advisories, watches and warnings (e.g., tornadoes, thunderstorms, hail, etc.)

CHARACTERIZATION AND ANALYSIS

Paygrade

Task Type

Task Statements

E6

CORE

Analyze advanced physics-based effects (e.g., dynamics, kinematics, thermodynamics, etc.)

E4

CORE

Analyze atmospheric refractive conditions

CHARACTERIZATION AND ANALYSIS (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E5	NON-CORE	Analyze oceanographic features and elements on satellite imagery
E4	CORE	Brief basic Meteorological and Oceanographic (METOC) elements and features on climatological products and information
E5	NON-CORE	Brief graphical depictions of hydrographic properties of the ocean
E4	NON-CORE	Brief hydrographic features and elements on nautical/navigation charts
E4	CORE	Brief meteorological features and elements on surface weather charts
E4	CORE	Brief oceanographic and biological properties of the oceans (e.g., bottom types, bioluminescence, etc.)
E4	CORE	Brief satellite derived oceanographic features and elements
E7	CORE	Conduct advanced remote sensing analyses
E5	CORE	Enhance meteorological features and elements in multi-channel satellite derived imagery
E7	CORE	Evaluate stochastic model outputs
E4	NON-CORE	Generate graphical depictions of hydrographic properties of the ocean
E7	NON-CORE	Validate change detection and contact fusion analysis results
E7	NON-CORE	Validate hydrographic features and elements on nautical/navigation charts
E7	NON-CORE	Validate multi-beam sonar imagery
E7	NON-CORE	Validate side-scan sonar imagery
E7	NON-CORE	Validate single beam sonar imagery

METEOROLOGICAL, OCEANOGRAPHIC, AND HYDROGRAPHIC DATA COLLECTION

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	NON-CORE	Collect ocean bottom data using Unmanned Underwater Vehicles (UUV)
E7	CORE	Coordinate with mission planners and oceanographers to develop Water Sampling Plan (WSP)

METOC ADMINISTRATION, TRAINING, AND QUALITY CONTROL

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E7	CORE	Analyze Meteorological and Oceanographic (METOC) environmental data requests
E7	NON-CORE	Arrange travel and logistics for deployable Meteorological and Oceanographic (METOC) teams
E7	CORE	Compose Meteorological and Oceanographic (METOC) messages (e.g., Operational Task Report (OPTASK) Meteorological and Oceanographic (METOC), ANNEX H, Meteorological and Oceanographic (METOC) Letter of Instruction (LOI), etc.)
E7	CORE	Compose Meteorological and Oceanographic (METOC) situation reports
E7	CORE	Compose post-deployment Meteorological and Oceanographic (METOC) reports (e.g., lessons learned, operational impacts, equipment performance, etc.)
E5	NON-CORE	Compose tsunami reports
E5	CORE	Conduct Meteorological and Oceanographic (METOC) forecast and quality control checks

METOC ADMINISTRATION, TRAINING, AND QUALITY CONTROL (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	NON-CORE	Conduct Meteorological and Oceanographic (METOC) training
E7	NON-CORE	Coordinate support with oceanography subject matter experts (e.g., acoustics, bathymetry and hydrography, etc.)
E4	CORE	Disseminate Meteorological and Oceanographic (METOC) forecasts and products
E7	CORE	Establish Meteorological and Oceanographic (METOC) support requirements for allied and coalition forces
E6	CORE	Establish Meteorological and Oceanographic (METOC) support requirements for warfare operations (e.g., Mine Warfare (MIW), Anti-Submarine Warfare (ASW)/Undersea Warfare (USW), Strike Warfare (STW), etc.)
E7	CORE	Evaluate ship's surface weather observation programs
E4	NON-CORE	Inspect Meteorological and Oceanographic (METOC) equipment
E5	NON-CORE	Issue environmental emergency notification warnings
E4	CORE	Maintain Tactical Decision Aid (TDA) sensor databases
E7	CORE	Manage Continuity of Operations Plans (COOP) and post-disaster contingency plans
E7	CORE	Manage deployable Meteorological and Oceanographic (METOC) team operational plans, schedules, and logistics
E7	CORE	Manage Meteorological and Oceanographic (METOC) certification and assessment programs
E7	CORE	Manage Meteorological and Oceanographic (METOC) equipment maintenance (e.g., Naval Integrated Tactical Environmental Suite (NITES), Unmanned Underwater Vehicle (UUV), Expeditionary Survey Vehicle (ESV), etc.)
E7	NON-CORE	Manage Meteorological and Oceanographic (METOC) quality control programs
E7	CORE	Manage Meteorological and Oceanographic (METOC) training and qualification programs
E7	CORE	Review Meteorological and Oceanographic (METOC) environmental data requests
E7	CORE	Validate Meteorological and Oceanographic (METOC) forecast and product accuracy
E4	CORE	Verify deployable Meteorological and Oceanographic (METOC) equipment readiness

SAFETY OF FLIGHT, NAVIGATION, AND INFRASTRUCTURE

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E5	CORE	Analyze radar data in support of resource protection (e.g., severe weather potential, precipitation type and intensity, storm tracking surveillance, etc.)
E5	CORE	Assess aviation operations Meteorological and Oceanographic (METOC) support requirements
E5	CORE	Assess maritime operations Meteorological and Oceanographic (METOC) support requirements
E5	CORE	Assess operational risks due to hazardous environmental conditions
E7	CORE	Assign level of risk associated with severe weather
E7	CORE	Brief tropical cyclone aircraft sortie recommendations
E7	CORE	Brief tropical cyclone ship evasion and sortie recommendations

SAFETY OF FLIGHT, NAVIGATION, AND INFRASTRUCTURE (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E6	CORE	Compose tropical cyclone Conditions of Readiness (COR) recommendations and messages
E7	NON-CORE	Coordinate International Submarine Escape and Rescue Liaison Office (ISMERLO) support requirements
E5	NON-CORE	Develop International Submarine Escape and Rescue Liaison Office (ISMERLO) forecasts and recommendations
E7	CORE	Develop Optimum Track Ship Routing (OTSR) surveillance advisories and recommendations
E7	CORE	Develop tropical cyclone aircraft sortie recommendations
E7	CORE	Develop tropical cyclone ship evasion and sortie recommendations
E5	CORE	Evaluate forecasted environmental conditions in the event of a mishap (e.g., aircraft, ship, infrastructure, personnel, etc.)
E7	CORE	Maintain continuity of support with other Meteorology and Oceanography (METOC) activities
E7	CORE	Manage aviation safety Meteorological and Oceanographic (METOC) support requirements
E7	CORE	Manage environmental mishap reconstruction (e.g., aircraft, ship, infrastructure, personnel, etc.)
E7	CORE	Manage maritime safety Meteorological and Oceanographic (METOC) support requirements
E6	CORE	Provide mitigation strategies to avoid hazardous environmental conditions

TACTICAL/OPERATIONAL ASSESSMENTS AND RECOMMENDATIONS

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E5	CORE	Assess environmental impacts to the Electromagnetic Spectrum (EMS)
E5	NON-CORE	Brief ballistic wind forecasts and recommendations
E6	NON-CORE	Brief chaff dispersion forecasts and recommendations
E4	CORE	Brief Chain of Command (COC) of environmental conditions impacting operations
E4	NON-CORE	Brief change detection and contact fusion analyses
E5	CORE	Brief Chemical, Biological, Radiological, and Nuclear Explosive (CBRNE) forecasts and recommendations
E4	CORE	Brief communications forecasts, impacts, and recommendations
E4	CORE	Brief current local weather conditions, advisories, and warnings
E4	CORE	Brief current/forecasted Meteorological and Oceanographic (METOC) conditions in support of warfare operations (e.g., Undersea Warfare (USW), Mine Warfare (MIW), Strike Warfare (STW), Intelligence, Surveillance, and Reconnaissance (ISR), etc.)

TACTICAL/OPERATIONAL ASSESSMENTS AND RECOMMENDATIONS (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E5	CORE	Brief current/forecasted tactical Meteorological and Oceanographic (METOC) recommendations in support of warfare operations (e.g., Undersea Warfare (USW), Mine Warfare (MIW), Strike Warfare (STW), Intelligence, Surveillance, and Reconnaissance (ISR), etc.)
E4	CORE	Brief forecasted atmospheric refractive conditions
E5	NON-CORE	Brief Humanitarian Assistance and Disaster Relief (HADR) forecasts and recommendations
E4	NON-CORE	Brief impacts of clutter density data to mission timelines
E6	CORE	Brief Meteorological and Oceanographic (METOC) support capabilities
E5	NON-CORE	Brief Non-combative Evacuation Operation (NEO) forecasts and recommendations
E4	CORE	Brief oceanographic acoustic prediction assessments and recommendations
E5	CORE	Brief Operating Area (OPAREA) forecasts, impacts, and recommendations (e.g., port operations, gas and oil platform, inner harbor, etc.)
E5	CORE	Brief Search and Rescue (SAR) forecasts and recommendations
E5	CORE	Brief surf forecasts and recommendations
E5	CORE	Brief target area forecasts and recommendations
E5	CORE	Calculate evasion and detection depths
E5	CORE	Develop Chemical, Biological, Radiological, and Nuclear Explosive (CBRNE) forecasts and recommendations
E5	NON-CORE	Develop ground operating area forecasts and recommendations (e.g., civil affairs, direct action mission, ground operations, etc.)
E5	NON-CORE	Develop Humanitarian Assistance and Disaster Relief (HADR) forecasts and recommendations
E6	NON-CORE	Develop hydrographic mission planning recommendations
E5	CORE	Develop Meteorological and Oceanographic (METOC) pre-deployment briefs
E5	NON-CORE	Develop Non-combative Evacuation Operation (NEO) forecasts and recommendations
E5	CORE	Develop Search and Rescue (SAR) forecasts and recommendations
E5	NON-CORE	Develop special operations forecasts and recommendations (e.g., psychological, swimmer, strategic and tactical reconnaissance, etc.)
E5	NON-CORE	Develop Special Warfare (SPECWAR) mission forecasts and recommendations (e.g., Sea, Air, and Land (SEAL) Delivery Vehicle (SDV), Special Boat Team (SBT), technical operations (tech ops), etc.)
E5	CORE	Develop surf forecasts and recommendations
E5	CORE	Develop tactical oceanographic acoustic prediction assessments and recommendations
E5	CORE	Develop tactical recommendations based on Tactical Decision Aid (TDA) output
E5	CORE	Develop target area forecasts and recommendations
E5	NON-CORE	Develop Unmanned Systems (UxS) forecasts and recommendations
E5	CORE	Evaluate impact of upwelling on operations

TACTICAL/OPERATIONAL ASSESSMENTS AND RECOMMENDATIONS (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E6	CORE	Exploit bathythermograph data
E6	CORE	Exploit climatological data for long-range mission planning
E6	CORE	Exploit meteorological features and elements on upper air data
E6	CORE	Exploit physical and biological properties of the oceans
E5	CORE	Forecast atmospheric effects on electro-optic sensors and weapons
E7	CORE	Formulate Meteorological and Oceanographic (METOC) Operational Risk Management (ORM) outcomes and recommendations (i.e., offensive and defensive)
E7	CORE	Liaise with Defense Threat Reduction Agency (DTRA) to support Chemical, Biological, Radiological, and Nuclear Explosive (CBRNE) events
E6	CORE	Provide Meteorological and Oceanographic (METOC) impact recommendations for warfare mission plans
E7	CORE	Provide recommendations for sensor and weapon employment and laydown