

NOAA COMMISSIONED OFFICER BILLET DESCRIPTION

SECTION 1 - GENERAL INFORMATION

A. Billet Number	3320	B. Billet Title	Ocean Engineer
C. Grade Requested	O2 - LTJG	D. Type of Submission	ANNUAL RECERTIFICATION
E. Minimum amount of overlap between incumbent officer/reporting officer for continuity of duties	1 Month		
F. Duty Type	FIXED SHORE	G. Estimated Length of Assignment	3 years

SECTION 2 - DUTY STATION ADDRESS AND CONTACT INFORMATION

A. Street Address	7600 Sand Point Way NE	B. Street Address	Building 3, PMEL				
C. City	Seattle	D. State	Washington	E. Country	United States	F. Zip Code	98115
G. Office	2065266174	x		H. Mobile		I. Fax	

SECTION 3 - OFFICER EVALUATION REPORTING

A. Supervisor							
1. Name	Chris Meinig	2. Position	Division Leader, EDD	3. Grade	GS 15		
4. Email	christian.meinig@noaa.gov	5. Office	2065266149	x		6. Mobile	
B. Reporting Officer (2nd Level Supervisor)							
1. Name	Mark Wetzler	2. Position	Deputy Division Leader, PMEL	3. Grade	O5		
4. Email	mark.wetzler@noaa.gov	5. Office	2065266197	x		6. Mobile	
C. Reviewer (Normally the Reporting Officer's Supervisor)							
1. Name	Wade J. Blake	2. Position	Deputy Director, ESRL OAR Liaison	3. Grade	O6		
4. Email	wade.blake@noaa.gov	5. Office	3034976088	x		6. Mobile	

SECTION 4 - ACCOUNTING AND ORGANIZATION

Complete as many of the following fields as possible. If in doubt, leave the field blank

A. Organizational Hierarchy - Use common acronyms when possible.

1. Staff or Line Office	OAR	2. Office, Center, or Lab	Pacific Marine Environmental Lab. (PMEL)		
3. Division	Engineering Develop. Div.	4. Branch	(EDD)	5. Section or Team	
B. NOAA Goal/Subgoal	Climate Adaptation&Mitigation,Healthy Oceans		C. Program		
D. NOAA Org Code		E. NFC Org Code		F. Project-Task	

SECTION 5 - PROGRAM, PROJECT OR ACTIVITY OVERVIEW

This is a hands-on engineering position and requires a self-motivated person who wants to be challenged in the area of ocean engineering. The incumbent should be familiar with ocean engineering concepts, principles, and techniques applicable to the development of equipment used in oceanographic research. Some of this equipment includes aerial drones, unmanned wave-powered gliders, buoys, and other fixed systems.

The primary work environment is the office, with frequent opportunities to work in the machine shop. The office portion of the job involves design and planning, including the use of CAD software to produce detailed models and drawings. The incumbent will also be expected to analyze and interpret oceanographic data obtained on PMEL platforms. The shop portion includes assisting in fabrication and the use of state-of-the-art machining facilities.

The incumbent will be expected to familiarize oneself with existing systems and ready them for field operations by proposing and following through with design changes. The incumbent may accompany these systems, as well as newly developed systems, into the field to serve as field expert for a scientific party. Incumbent is responsible for successful system operation, training, and maintaining the system in the field.

The ability to interpret and create detailed mechanical parts and drawings, preferably using Solidworks, is a must.

SECTION 6 - DUTIES AND RESPONSIBILITIES

Property Accountability Officer - Administer and maintain a system of control and accountability for personal property as prescribed in OMAO's Personal Property Policy #1502

Property Custodians - Maintain all accountable personal property within your designated area of responsibility as prescribed in OMAO's Personal Property Policy #1502

6A. Description of Duties and Responsibilities

- * Provide engineers with support for projects within PMEL
- * Produce engineering analyses of oceanographic systems
- * Monitor and control PMEL assets throughout the world in real time
- * Analyze and interpret data obtained by oceanographic systems
- * Plan development schedules and meet project deadlines
- * Interact with scientists and technicians to design improvements to existing research systems
- * Act as Pilot in Charge of PMEL wave gliders during multi-month deployments throughout the world
- * Act as PMEL Safety Officer
- * Act as pilot of SP Hayes research boat
- * Interact with the general public by leading tours

6B. Division of Duties and Responsibilities, Total Must = 100%

Technical + Operational + Leading and Managing + Executive Leadership = 100%

SECTION 6 - DUTIES AND RESPONSIBILITIES (continued)

6C. Resources Managed

1. Human

Does the Officer supervise personnel? Yes No Number of personnel supervised

Grades of supervised personnel

Will the Officer lead people, but has no supervisory responsibilities? Yes No Number of personnel led

Grades of personnel led

2. Fiscal

Will the Officer have budget responsibility? Dollar Amount (K)

3. Assets - Will the Officer be directly responsible for managing Government assets such as ships, aircraft, boats, etc? If so, list the asset(s) below in terms of physical description and when known, replacement value (indicate if estimated):

- * Incumbent will act as Pilot of SP Hayes, PMEL's 38-foot research boat
- * Incumbent will act as Pilot in Charge of NOAA wave gliders

SECTION 7 - LEADERSHIP PREREQUISITES

GRADE	LEADERSHIP MATURITY LEVEL	LEADERSHIP COMPETENCIES NEEDED FOR THIS BILLET
ENS (O1)	Leading Self	<input checked="" type="checkbox"/> Core Values & Conduct <input checked="" type="checkbox"/> Health & Well Being <input checked="" type="checkbox"/> Responsibility <input checked="" type="checkbox"/> Followership <input checked="" type="checkbox"/> Adaptability
LTJG (O2)		<input checked="" type="checkbox"/> Interpersonal Skills <input checked="" type="checkbox"/> Continuous Learning <input checked="" type="checkbox"/> Technical Proficiency <input checked="" type="checkbox"/> Listening <input checked="" type="checkbox"/> Speaking
LT (O3)	Leading Others	<input type="checkbox"/> Writing <input type="checkbox"/> Team Building <input type="checkbox"/> Leveraging Diversity <input type="checkbox"/> Influencing Others <input type="checkbox"/> Developing Others <input type="checkbox"/> Execution
LCDR (O4)		<input type="checkbox"/> Decisiveness <input type="checkbox"/> Problem Solving <input type="checkbox"/> Conflict Management <input type="checkbox"/> Customer Focus <input type="checkbox"/> Entrepreneurship
CDR (O5)		<input type="checkbox"/> Creativity & Innovation <input type="checkbox"/> Human Capital Management <input type="checkbox"/> Financial Management <input type="checkbox"/> Technology Management
CAPT (O6) and RADM (O7/O8)	Leading Organizations	<input type="checkbox"/> External Awareness <input type="checkbox"/> Strategic Thinking <input type="checkbox"/> Political Savvy <input type="checkbox"/> Vision <input type="checkbox"/> Partnering

Leadership Prerequisite Comments (Optional)

SECTION 8 - OPERATIONAL PREREQUISITES

A. Marine Prerequisites

- Officer of the Deck Senior Watch Officer ECDIS Dynamic Positioning Boat Deployment MedPIC
 Coxswain/OIC HAZWOPER AUV Deployment U/W UAS Deployment Buoy/Mooring Qualified
 Trawl Qualified Longline Qualified Hydro Launch PIC Foreign Port Calls

B. Aviation Prerequisites

- Co-Pilot Pilot Aircraft Commander Mission Commander Instructor Pilot Hurricane Qualified
 Alaska/Wilderness Qualified Flight Meteorologist International Flights UAS Pilot

C. Dive Prerequisites

- Scientific Diver Working Diver Advanced Working Diver Master Diver Dive Master Dive Medic
 Unit Diving Supervisor

D. Additional Operational Prerequisites (security clearances, special training) and Operational Prerequisite Comments (Optional)

* An officer with a strong background in small boat operations is preferred but not required. Familiarity with mooring, glider, and buoy deployment/recovery is also recommended but not required.

SECTION 9 - PROGRAM, PROJECT, OR ACTIVITY PREREQUISITES

List specific qualifications, knowledge, skills or abilities required prior to reporting to this billet. For example: budget (MARS, CBS); personnel; contracting (COTR, Warrants); Scientific (IHO Category A, scientific papers/publications, GIS); engineering (marine survey, ABYC, ABS, FAA); regulatory (US Code, CFR); information technology (databases, networks, programming).

Incumbent should have a strong technical background. A BS in engineering (mechanical, ocean, or electrical) is preferred. Incumbent should also be familiar with CAD software and technical drawing best practices, along with machining and shop processes.

SECTION 10 - LEADERSHIP DEVELOPMENT

GRADE	LEADERSHIP MATURITY LEVEL	LEADERSHIP COMPETENCIES DEVELOPED IN THIS BILLET
ENS (O1)	Leading Self	<input checked="" type="checkbox"/> Core Values & Conduct <input checked="" type="checkbox"/> Health & Well Being <input checked="" type="checkbox"/> Responsibility <input checked="" type="checkbox"/> Followership <input checked="" type="checkbox"/> Adaptability
LTJG (O2)		<input checked="" type="checkbox"/> Interpersonal Skills <input checked="" type="checkbox"/> Continuous Learning <input checked="" type="checkbox"/> Technical Proficiency <input checked="" type="checkbox"/> Listening <input checked="" type="checkbox"/> Speaking
LT (O3)	Leading Others	<input checked="" type="checkbox"/> Writing <input checked="" type="checkbox"/> Team Building <input type="checkbox"/> Leveraging Diversity <input checked="" type="checkbox"/> Influencing Others <input type="checkbox"/> Developing Others <input checked="" type="checkbox"/> Execution
LCDR (O4)		<input type="checkbox"/> Decisiveness <input checked="" type="checkbox"/> Problem Solving <input type="checkbox"/> Conflict Management <input type="checkbox"/> Customer Focus <input type="checkbox"/> Entrepreneurship
CDR (O5)	Leading Performance and Change	<input type="checkbox"/> Creativity & Innovation <input type="checkbox"/> Human Capital Management <input type="checkbox"/> Financial Management <input type="checkbox"/> Technology Management
CAPT (O6) and RADM (O7/O8)		<input type="checkbox"/> External Awareness <input type="checkbox"/> Strategic Thinking <input type="checkbox"/> Political Savvy <input type="checkbox"/> Vision <input type="checkbox"/> Partnering

Leadership Development Comments (Optional)

* Incumbent will have the opportunity to lead engineering projects, including driving deadlines and coordinating among NOAA scientists and engineers.

SECTION 11 - OPERATIONAL DEVELOPMENT

A. Marine Development

Officer of the Deck Senior Watch Officer ECDIS Dynamic Positioning Boat Deployment MedPIC
 Coxswain/OIC HAZWOPER AUV Deployment U/W UAS Deployment Buoy/Mooring Qualified
 Trawl Qualified Longline Qualified Hydro Launch PIC Foreign Port Calls

B. Aviation Development

Co-Pilot Pilot Aircraft Commander Mission Commander Instructor Pilot Hurricane Qualified
 Alaska/Wilderness Qualified Flight Meteorologist International Flights UAS Pilot

C. Dive Development

Scientific Diver Working Diver Advanced Working Diver Master Diver Dive Master Dive Medic
 Unit Diving Supervisor

D. Additional Operational Development (security clearances, special training) or Operational Development Comments (Optional)

* Incumbent will gain small boat experience as pilot of SP Hayes, including deploying and recovering moorings, gliders, and other oceanographic instruments.

SECTION 12 - PROGRAM, PROJECT, OR ACTIVITY DEVELOPMENT

List specific qualifications, knowledge, skills or abilities to be developed in this billet. For example: budget (MARS, CBS); personnel; contracting (COTR, Warrants); Scientific (IHO Category A, scientific papers/publications, GIS); engineering (marine survey, ABYC, ABS, FAA); regulatory (US Code, CFR); information technology (databases, networks, programming).

- * Engineering design and drawing best practices
- * CAD/CAM software usage
- * Machining and shop best practices
- * Analysis of scientific data, along with data processing and graphing
- * Research into new technologies and methods for advancing research & development

SECTION 13 - CRITICAL SUCCESS CRITERIA

Provide brief measurable performance goals which would represent successful performance in this billet.

- * Gain an understanding of NOAA oceanographic platforms, including the design of specific components
- * Produce detailed models and drawings that conform with engineering best practices and follow-through to see parts produced by the machine shop
- * Utilize 3D printer to rapid-prototype parts, test design changes, and produce production-quality models
- * Work with civilians, scientists, and NOAA Corps line officers to solve problems, assist in the collection of data, and further PMEL's mission
- * Monitor data-acquisition platforms, including buoys and autonomous wave gliders, and identify large-scale trends present within the data

SECTION 14 - ROUTING, REVIEW, RECOMMENDATION AND APPROVAL

A. Developer's Statement

"I certify that I have written this billet description and certify that it is a true and correct representation of the billet."

1. Signature	O'LEARY.MATTHEW.H.129 1075998	<small>Digitally signed by O'LEARY.MATTHEW.H.1291075998 DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=NOAA, cn=O'LEARY.MATTHEW.H.1291075998 Date: 2014.09.03 12:48:08 -07'00'</small>	2. Date	9/3/14
3. Name	LT Matthew O'Leary	4. Title/Position	Ocean Engineer, PMEL	

B. Supervisor's Statement

"I have reviewed this billet description and certify that it is a true and correct representation of this billet "

1. Signature	Christian Meinig	<small>Digitally signed by Christian Meinig DN: cn=Christian Meinig, o=PMEL, ou=OAR, email=christian.meinig@noaa.gov, c=US Date: 2014.09.03 13:44:26 -07'00'</small>	2. Date	9/3/14
3. Name	Christian Meinig	4. Title/Position	Division Leader, EDD	

C. Reviewing Officer's Statement

"I have reviewed this billet description and certify that this billet is a priority for my Line, Staff, or Headquarters Office."

1. Signature		<small>Digitally signed by BLAKE.WADE.JAMES.1025936538 DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=NOAA, cn=BLAKE.WADE.JAMES.1025936538 Date: 2014.09.03 14:54:47 -06'00'</small>	2. Date	03 SEP 2014
3. Name	CAPT Wade J. Blake, NOAA	4. Title/Position	OAR Liaison Deputy Director, ESRL	

D. Commissioned Personnel Center Endorsement

"I am the OMAO/CPC Officer Career Management Division representative. I recommend of this billet."

1. Signature		2. Date	2015-09-11	
3. Name	CDR Kurt Zegowitz, NOAA	4. Title/Position	Chief, Officer Career Management Division	

E. Director, NOAA Corps Endorsement

"I am the and I approve this billet."

1. Signature		2. Date	2015-10-2	
3. Name	RADM David A. Score, NOAA	4. Title/Position	Director, NOAA Corps	

Print Form

Submit to CPC (Reviewer Use Only)