



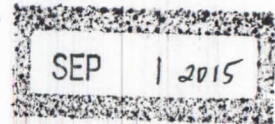
UNITED STATES DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration
NOAA Marine and Aviation Operations
Marine Operations Center
439 W. York Street
Norfolk, VA 23510-1114

MEMORANDUM FOR: Lieutenant Commander Jeffrey Shoup, NOAA
Commanding Officer, NOAA Ship *Nancy Foster*

FROM:


Captain Anne K. Lynch, NOAA
Commanding Officer, NOAA Marine Operations Center-Atlantic



SUBJECT: Project Instruction for NF-15-11
EPA Historic Area Remediation Site (HARS) New York

Attached is the final Project Instruction for NF-15-11 EPA Historic Area Remediation Site (HARS) New York, which is scheduled aboard NOAA Ship *Nancy Foster* during the period of September 2 – September 11, 2015. Of the 10 DAS scheduled for this project, 10 days are Other Agency funded by EPA. This project is estimated to exhibit a Medium Operational Tempo. Acknowledge receipt of these instructions via e-mail to OpsMgr.MOA@noaa.gov at Marine Operations Center-Atlantic.

Attachment

cc:
Charles LoBue





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

Project Instructions

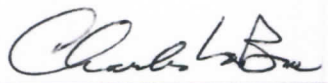
Date Submitted: August 27, 2015

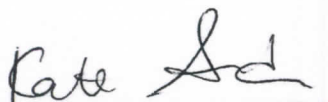
Platform: NOAA Ship *Nancy Foster*

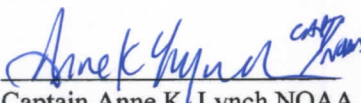
Project Number: NF-15-11 (OMAO), 1-02-HARS (EPA)

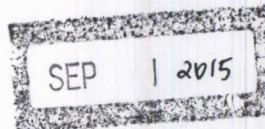
Project Title: ROV and diver monitoring of rock and glacial till at the Historic Area Remediation Site (HARS)

Project Dates: September 02, 2015 to September 11, 2015

Prepared by:  Dated: 8/27/15
Charles LoBue
Chief Scientist
Affiliation (Program or Lab)

Approved by:  Dated: 8/27/15
Kate Anderson
Chief
Clean Water Regulatory Branch, EPA Region 2

Approved by:  Dated: 9/1/2015
Captain Anne K. Lynch NOAA
Commanding Officer
Marine Operations Center – Atlantic



Template Date: 16MAR2015

I. Overview

A. Brief Summary and Project Period

In the first leg of the survey, EPA will deploy an ROV to collect digital underwater color video and still camera data at various locations within the HARS that are known to have received rock and till Remediation Materials and at various reference locations at a nearby artificial reef. In the second leg of the survey, divers will be deployed at locations selected from the video obtained using the ROV. Equipment will be loaded and offloaded at the selected port facility. Diver and ROV operations will be restricted to daylight hours.

Multibeam bathymetry and fishery acoustics surveys will be made of the selected areas during overnight periods. Multibeam data will be provided to the EPA team to allow for selection of the ensuing days ROV dives.

The project period for this survey extends from September 2, 2015 to September 11, 2015.

B. Days at Sea (DAS)

Of the 10 DAS scheduled for this project, 0 DAS are funded by an OMAO allocation, 0 DAS are funded by a Line Office Allocation, 0 DAS are Program Funded, and 10 DAS are Other Agency funded by EPA. This project is estimated to exhibit a Medium Operational Tempo.

C. Operating Area (include optional map/figure showing op area)

All operations are to be conducted in coastal areas off New Jersey (study area) and New York (reference area). All operations will occur within 5 nautical miles (nm) from shore and in waters less than 100 feet deep. The HARS Study Area is bounded by the following coordinates: 40° 25.352', 73° 53.546'; 40° 25.352', 73° 52.984'; 40° 23.497', 73° 53.546'; 40° 23.497', 73° 52.984'. The Hempstead Artificial Reef Reference Area is bounded by the following coordinates: 40°31.250 , 73°33.350 ; 40°31.500 , 73°31.370; 40°30.920 , 73°31.550 ; 40°30.670 73°33.520. See Appendix 1 for figures showing operational areas.

D. Summary of Objectives

Project team shall seek to obtain video records of sessile and epibenthic fauna that have recruited to hard bottom materials placed as remedial cap at a former ocean dredged material disposal site and at a nearby artificial reef site. Project team will deploy a ROV during daylight hours and seeks to obtain a minimum of 12 hours of bottom footage (total). Exact locations and durations for deployment at the study and reference areas will be decided and communicated to ship on evening preceding operations.

Project team seeks to obtain fishery acoustic coverage and multibeam of the ROV dive areas during the overnight hours. If time (and recreational fishing boats) allow, project team would also seek to obtain fishery acoustics during daylight hours of the same areas.

In second leg of survey, project team shall make two dives at multiple locations (targeting 4 locations per day) with divers (two 2-person teams) to record video using handheld cameras along transects. The exact locations for these dives will be selected based on the ROV footage and communicated to ship on the evening preceding the dives.

E. Participating Institutions

U.S. Environmental Protection Agency, Region 2
290 Broadway
New York, NY 10007

F. Personnel/Science Party: name, title, gender, affiliation, and nationality

Name (Last, First)	Title	Date Aboard	Date Disembark	Gender	Affiliation	Nationality
SURVEY LEG 1- ROV OPERATIONS						
Campbell, Bill	ROV Pilot	9/3/2015	9/7/2015	Male	OceanEye	US
LoBue, Charles	Chief Scientist	9/3/2015	9/11/2015	Male	EPA	US
Ortiz, Arianna	Navigator	9/3/2015	9/7/2015	Female	DAMOS Vision	US
Ryther, John Jr.	Scientist	9/3/2015	9/7/2015	Male	DAMOS Vision	US
SURVEY LEG 2- DIVER OPERATIONS						
Adams, David	Diver	9/8/2015	9/11/2015	Male	Lockheed Martin	US
Gallo, Chris	Diver	9/8/2015	9/11/2015	Male	EPA/ERT	US
Grossman, Scott	Divemaster	9/8/2015	9/11/2015	Male	Lockheed Martin	US
Henry, Richard	Divemaster	9/8/2015	9/11/2015	Male	USFWS	US
Humphrey, Alan	Unit Dive Officer	9/8/2015	9/11/2015	Male	EPA/ERT	US
LoBue, Charles	Chief Scientist/ Divemaster	9/8/2015	9/11/2015	Male	EPA	US
Reiss, Mark	Scientist	9/8/2015	9/11/2015	Male	EPA	US

G. Administrative

1. Points of Contacts:

Chief Scientist. Charles LoBue. EPA Region 2, Clean Water Division. 290 Broadway. New York, NY. 10007 (212) 637-3798. lobue.charles@epa.gov

Chief Scientist (alternate). Mark Reiss. EPA Region 2, Clean Water Division. 290 Broadway. New York, NY. 10007 (212) 637-3799. reiss.mark@epa.gov

ROV Team Leader. Drew Carey. DAMOS/Vision. 215 Eustis Avenue. Newport, RI. 02840 (401-849-9236). drew@INSPIREenvironmental.com

Dive Leader. Alan Humphrey. EPA Region 2, Environmental Response Team. 2890 Woodbridge Avenue. Edison, NJ 08837 (609)865-4546. humphrey.alan@epa.gov

NOAA Ship *Nancy Foster*
LT Lyndsey Davis, Operations Officer
1050 Register Street, North Charleston, SC 29405
(843) 991-6326 or (301) 713-7780
Ops.nancy.foster@noaa.gov

2. Diplomatic Clearances

None Required.

3. Licenses and Permits

None Required.

II. Operations

The Chief Scientist is responsible for ensuring the scientific staff are trained in planned operations and are knowledgeable of project objectives and priorities. The Commanding Officer is responsible for ensuring all operations conform to the ship's accepted practices and procedures.

A. Project Itinerary:

September 2, 2015	<i>Nancy Foster</i> departs Norfolk, VA
September 3, 2015	<i>Nancy Foster</i> arrives in New York, NY, Intrepid pier
September 3, 2015	1800h-2000h ROV Crew boards, loads ROV equipment
September 4, 2015	0800h-1400h: EPA and ROV team assembles/mounts and tests ROV and transponder pole
	1400h-1700h: BEGIN LEG 1. TRANSIT 26 NM TO HARS
	1700h-2000h: ROV DIVE AT HARS
	2000h-overnight: MULTIBEAM/ACOUSTIC SURVEY (HARS STUDY AREA)

September 5, 2015	0700h – 1900h: ROV DIVES AT HARS 1900h-overnight: MULTIBEAM/ACOUSTIC SURVEY (REEF REFERENCE AREA)
September 6, 2015	0700h – 1600h: ROV DIVES AT REFERENCE AREA 1600h: END OF LEG 1. TRANSIT 25 NM TO NY, NY
September 7, 2015	0800h-1200h: ROV team disembarks
September 8, 2015	0800h –1000h: Dive team boards: ORIENTATION: DIVE OPS/COMPRESSOR 1100h-1400h: BEGIN LEG 2. TRANSIT 26 NM TO HARS/CONTINUE ORIENTATION 1400h-1700h: FIRST DIVE AT HARS 1900h-overnight: ACOUSTIC SURVEY (HARS STUDY AREA)
September 9, 2015	0800h - 1700: DIVES AT HARS 1900h-overnight: TRANSIT TO HEMPSTEAD REEF/ACOUSTIC SURVEY (REEF REFERENCE AREA)
September 10, 2015	0800h - 1600: DIVES AT REFERENCE AREA 1900h-overnight: END OF LEG 2. TRANSIT TO MCT
September 11, 2015	0800h-1100h: Post Cruise Meeting with Crew/EPA Team disembarks 1200h: END OF SURVEY

B. Staging and Destaging:

The survey shall be conducted in two legs.

Leg 1 will consist of ROV operations with a team of four scientists. Mobilization shall begin on or after 1800h of September 3. Loading of ROV and cable spool (on pallet) shall be assisted by deck crane. Pallet weight is less than 500 lbs. Monitors and piloting station for the ROV will be in the wet laboratory. Contractors will deploy their hydrophone using the 17 foot long pole mount stowed aboard (Permission to use the pole was granted by Tim Battista on 8/13/2015).

Contractors estimate that set up and testing of ROV, hydrophone and communications will take approximately 4 hrs. Demobilization of the ROV crew and gear is to occur on September 7 before 1000h

Leg 2 will consist of diver operations with a team of eight scientists/divers. Mobilization shall begin on or about 0800h of September 8. All gear will be transported to boat using hand carts/dollies. Divers will stow gear according to crew instructions and will spend in-port day training on use of compressor and meeting to coordinate operations with Operations Officer.

C. Operations to be Conducted:

ROV Operations

ROV Operations are only to be conducted during daylight hours (0700h-1900h). ROV is to be deployed using the port side J-Frame. EXACT SEQUENCE OF DEPLOYMENT TO BE DISCUSSED AND CHOREOGRAPHED WITH BOSUN AND OO PRIOR TO DEPARTURE.

Multibeam and acoustic survey

Overnight periods will be spent obtaining multibeam and fishery acoustic in the study and reference areas as per the itinerary. The study and reference areas are small and therefore line spacing and resolution are to be maximized. Study area measures approximately 1.5 nm x 850 yds; reference area measures 1 nm x 980 yds.

Diving Operations

Diving will be conducted from small boats. See draft dive plan (Appendix 2).

D. Dive Plan

All dives are to be conducted in accordance with the requirements and regulations of the NOAA Diving Program (<http://www.ndc.noaa.gov/dr.html>) and require the approval of the ship's Commanding Officer.

The Dive Plans encompassing all legs of NF-15-11 (OMAO) are presented in Appendix 2.

E. Applicable Restrictions

Conditions which preclude normal operations: ROV can be deployed to Sea State 4. EPA anticipates that recreational fishing (particularly during daylight) and presence of commercial fishing gear may affect ability to conduct acoustic surveys effectively. Ongoing dredged material placement activities will be occurring in areas east of the study area; dredged material transport tug captains will be aware of our presence via Notice to Mariners and Army Corps of Engineers communications but bridge should maintain radio contact with tug captains.

III. Equipment

A. Equipment and Capabilities provided by the ship (itemized)

- J-Frame and crane
- Wetlab space for ROV monitors and pilot station (bench) and dive gear maintenance/staging
- Hydrophone pole
- Multibeam and fisheries acoustics
- Dive compressor
- Small Boats

B. Equipment and Capabilities provided by the scientists (itemized)

- ROV (including cables, tools, hydrophone, spare parts)

- ROV 40” long, 24” wide, 20” tall, weight = 130 lb.
- The cable spool weighs 200 pounds
- 120 feet of cable on the tracking system hydrophone
- Dive tanks and gear
 - Eight 120 cu ft scuba tanks
- All measuring and recording equipment
 - Three standard 100-m measuring tape reels
 - One underwater housed HD video system with lighting
 - Two housed GoPro HD video systems with lighting

IV. Hazardous Materials

A. Policy and Compliance

No Hazardous Materials are being brought aboard the ship for this project.

D. Radioactive Materials

No Radioactive Isotopes are planned for this project.

V. Additional Projects

A. Supplementary (“Piggyback”) Projects

No Supplementary Projects are planned.

B. NOAA Fleet Ancillary Projects

No NOAA Fleet Ancillary Projects are planned.

VI. Disposition of Data and Reports

Disposition of data gathered aboard NOAA ships will conform to NAO 216-101 *Ocean Data Acquisitions* and NAO 212-15 *Management of Environmental Data and Information*. To guide the implementation of these NAOs, NOAA’s Environmental Data Management Committee (EDMC) provides the *NOAA Data Documentation Procedural Directive* (data documentation) and *NOAA Data Management Planning Procedural Directive* (preparation of Data Management Plans). OMAO is developing procedures and allocating resources to manage OMAO data and Programs are encouraged to do the same for their Project data.

A. Data Classifications: *Under Development*

a. OMAO Data N/A

b. Program Data N/A

B. Responsibilities: *Under Development*

VII. Meetings, Vessel Familiarization, and Project Evaluations

- A. Pre-Project Meeting: The Chief Scientist and Commanding Officer will conduct a meeting of pertinent members of the scientific party and ship's crew to discuss required equipment, planned operations, concerns, and establish mitigation strategies for all concerns. This meeting shall be conducted before the beginning of the project with sufficient time to allow for preparation of the ship and project personnel. The ship's Operations Officer usually is delegated to assist the Chief Scientist in arranging this meeting.
- B. Vessel Familiarization Meeting: The Commanding Officer is responsible for ensuring scientific personnel are familiarized with applicable sections of the standing orders and vessel protocols, e.g., meals, watches, etiquette, drills, etc. A vessel familiarization meeting shall be conducted in the first 24 hours of the project's start and is normally presented by the ship's Operations Officer.
- C. Post-Project Meeting: The Commanding Officer is responsible for conducted a meeting no earlier than 24 hrs before or 7 days after the completion of a project to discuss the overall success and short comings of the project. Concerns regarding safety, efficiency, and suggestions for future improvements shall be discussed and mitigations for future projects will be documented for future use. This meeting shall be attended by the ship's officers, applicable crew, the Chief Scientist, and members of the scientific party and is normally arranged by the Operations Officer and Chief Scientist.
- D. Project Evaluation Report

Within seven days of the completion of the project, a Customer Satisfaction Survey is to be completed by the Chief Scientist. The form is available at <http://www.oma.noaa.gov/fleeteval.html> and provides a "Submit" button at the end of the form. Submitted form data is deposited into a spreadsheet used by OMAO management to analyze the information. Though the complete form is not shared with the ships', specific concerns and praises are followed up on while not divulging the identity of the evaluator.

VIII. Miscellaneous

- A. Meals and Berthing

The ship will provide meals for the scientists listed above. Meals will be served 3 times daily beginning one hour before scheduled departure, extending throughout the project, and ending two hours after the termination of the project. Since the watch schedule is split between day and night, the night watch may often miss daytime meals and will require adequate food and beverages (for example a variety of sandwich items, cheeses, fruit, milk, juices) during what are not typically meal hours. Special dietary requirements for scientific participants will be made available to the ship's command at least seven days prior to the project.

Berthing requirements, including number and gender of the scientific party, will be provided to the ship by the Chief Scientist. The Chief Scientist and Commanding Officer will work together

on a detailed berthing plan to accommodate the gender mix of the scientific party taking into consideration the current make-up of the ship's complement. The Chief Scientist is responsible for ensuring the scientific berthing spaces are left in the condition in which they were received; for stripping bedding and linen return; and for the return of any room keys which were issued. The Chief Scientist is also responsible for the cleanliness of the laboratory spaces and the storage areas utilized by the scientific party, both during the project and at its conclusion prior to departing the ship.

All NOAA scientists will have proper travel orders when assigned to any NOAA ship. The Chief Scientist will ensure that all non NOAA or non Federal scientists aboard also have proper orders. It is the responsibility of the Chief Scientist to ensure that the entire scientific party has a mechanism in place to provide lodging and food and to be reimbursed for these costs in the event that the ship becomes uninhabitable and/or the galley is closed during any part of the scheduled project.

All persons boarding NOAA vessels give implied consent to comply with all safety and security policies and regulations which are administered by the Commanding Officer. All spaces and equipment on the vessel are subject to inspection or search at any time. All personnel must comply with OMAO's Drug and Alcohol Policy dated May 17, 2000 which forbids the possession and/or use of illegal drugs and alcohol aboard NOAA Vessels.

B. Medical Forms and Emergency Contacts

The NOAA Health Services Questionnaire (NHSQ, NF 57-10-01 (3-14)) must be completed in advance by each participating scientist. The NHSQ can be obtained from the Chief Scientist or the NOAA website <http://www.corporateservices.noaa.gov/noaaforms/eforms/nf57-10-01.pdf>.

All NHSQs submitted after March 1, 2014 must be accompanied by [NOAA Form \(NF\) 57-10-02](#) - Tuberculosis Screening Document in compliance with [OMAO Policy 1008](#) (Tuberculosis Protection Program).

The completed forms should be sent to the Regional Director of Health Services at the applicable Marine Operations Center. The NHSQ and Tuberculosis Screening Document should reach the Health Services Office no later than 4 weeks prior to the start of the project to allow time for the participant to obtain and submit additional information should health services require it, before clearance to sail can be granted. Please contact MOC Health Services with any questions regarding eligibility or completion of either form. Ensure to fully complete each form and indicate the ship or ships the participant will be sailing on. The participant will receive an email notice when medically cleared to sail if a legible email address is provided on the NHSQ.

The participant can mail, fax, or email the forms to the contact information below. Participants should take precautions to protect their Personally Identifiable Information (PII) and medical information and ensure all correspondence adheres to DOC guidance (http://ocio.os.doc.gov/ITPolicyandPrograms/IT_Privacy/PROD01_008240).

The only secure email process approved by NOAA is [Accellion Secure File Transfer](#) which requires the sender to setup an account. [Accellion's Web Users Guide](#) is a valuable aid in using this service, however to reduce cost the DOC contract doesn't provide for automatically issuing full functioning accounts. To receive access to a "Send Tab", after your Accellion account has been established send an email from the associated email account to accellionAlerts@doc.gov requesting access to the "Send Tab" function. They will notify you via email usually within 1 business day of your approval. The "Send Tab" function will be accessible for 30 days.

Contact information:

Regional Director of Health Services
Marine Operations Center – Atlantic
439 W. York Street
Norfolk, VA 23510
Telephone 757-441-6320
Fax 757-441-3760
Email MOA.Health.Services@noaa.gov

Prior to departure, the Chief Scientist must provide an electronic listing of emergency contacts to the Executive Officer for all members of the scientific party, with the following information: contact name, address, relationship to member, and telephone number.

C. Shipboard Safety

Hard hats are required when working with suspended loads. Work vests are required when working near open railings and during small boat launch and recovery operations. Hard hats and work vests will be provided by the ship when required.

Wearing open-toed footwear or shoes that do not completely enclose the foot (such as sandals or clogs) outside of private berthing areas is not permitted. At the discretion of the ship CO, safety shoes (i.e. steel or composite toe protection) may be required to participate in any work dealing with suspended loads, including CTD deployment and recovery. The ship does not provide safety-toed shoes/boots. The ship's Operations Officer should be consulted by the Chief Scientist to ensure members of the scientific party report aboard with the proper attire.

D. Communications

A progress report on operations prepared by the Chief Scientist may be relayed to the program office. Sometimes it is necessary for the Chief Scientist to communicate with another vessel, aircraft, or shore facility. Through various means of communications, the ship can usually accommodate the Chief Scientist. Special radio voice communications requirements should be listed in the project instructions. The ship's primary means of communication with the Marine Operations Center is via email and the Very Small Aperture Terminal (VSAT) link. Standard VSAT bandwidth at 128kbs is shared by all vessels staff and the science team at no charge. Increased bandwidth in 30 day increments is available on the VSAT systems at increased cost to the scientific party. If increased bandwidth is being considered, program accounting is required and it must be arranged through the ship's Commanding Officer at least 30 days in advance.

E. IT Security

Any computer that will be hooked into the ship's network must comply with the *OMAO Fleet IT Security Policy* 1.1 (November 4, 2005) prior to establishing a direct connection to the NOAA WAN. Requirements include, but are not limited to:

- (1) Installation of the latest virus definition (.DAT) file on all systems and performance of a virus scan on each system.
- (2) Installation of the latest critical operating system security patches.
- (3) No external public Internet Service Provider (ISP) connections.

Completion of the above requirements prior to boarding the ship is required.

Non-NOAA personnel using the ship's computers or connecting their own computers to the ship's network must complete NOAA's IT Security Awareness Course within 3 days of embarking.

F. Foreign National Guests Access to OMAO Facilities and Platforms

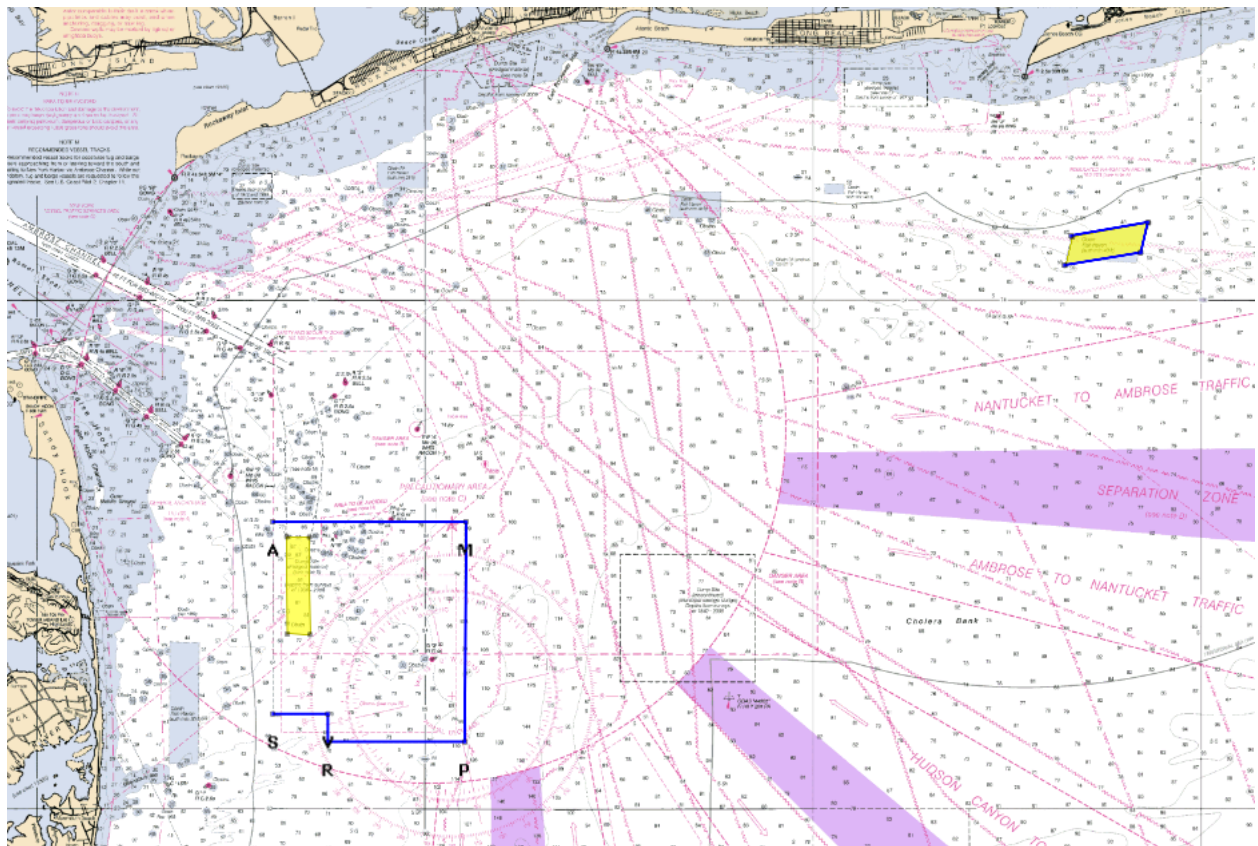
Foreign National access to the NOAA ship or Federal Facilities is not required for this project.

VIII. Appendices

1. Figure showing Study and Reference Areas.
2. DRAFT Dive Plan

APPENDIX 1: LOCATION OF STUDY AND REFERENCE AREAS

Study Areas are in yellow. Specific coordinates for preliminary candidate ROV and dive locations to be provided to ship based on pending bathymetric survey information.



APPENDIX 2: DRAFT DIVE PLAN (see attached electronic files)