




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: Captain Shepard M. Smith, NOAA
Commanding Officer, NOAA Ship *Thomas Jefferson*

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

SUBJECT: Project Instruction for TJ-15-04
NEFSC Benthic Habitat Assessments of Northeast Outer
Continental Shelf Ecosystems

Attached is the final Project Instruction for TJ-15-04, NEFSC Benthic Habitat Assessments of Northeast Outer Continental Shelf Ecosystems, which is scheduled aboard NOAA Ship *Thomas Jefferson* during the period of June 22 – July 3, 2015. Of the 12 DAS scheduled for this project, 12 days are funded by Line Office Allocation. This project is estimated to exhibit a High Operational Tempo. Acknowledge receipt of these instructions via e-mail to OpsMgr.MOA@noaa.gov at Marine Operations Center-Atlantic.

cc:
Nathan J. Keith
William A. Karp





UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Northeast Fisheries Science Center
166 Water Street
Woods Hole, MA 02543-1026

Final Project Instructions

Date Submitted: June 8, 2015

Platform: NOAA Ship *Thomas Jefferson*

Project Number: TJ-15-04

Project Title: NEFSC Benthic Habitat Assessments of Northeast Outer
Continental Shelf Ecosystems

Project Dates: June 22, 2015 – July 3, 2015 (NEFSC travel June 21 and July 3)

Approved by: Russell W. Brown Date: 5/19/2015

William A. Karp, Ph.D.
Science and Research Director
Northeast Fisheries Science Center

Approved by: Anne K. Lynch CAPT mmx Date: 6/16/2015
Captain Anne K. Lynch, NOAA
Commanding Officer
Marine Operations Center - Atlantic

A. Brief Summary and Project Period

The National Marine Fisheries Service (NMFS) Northeast Fisheries Science Center (NEFSC) will conduct hydroacoustic survey operations off of southern New Jersey from June 22nd to July 3rd to support its regional Benthic Habitat Assessment (NEFSC BHA) project. For the NEFSC BHA project we will 1) characterize offshore benthic habitats that fall within Bureau of Ocean Energy Management (BOEM) designated New Jersey Wind Energy Areas (NJ WEA) and 2) develop benthic habitat maps, models, and other data products that can be used to improve NEFSC's analytical and decision-making capabilities with respect to a) offshore energy siting and monitoring, b) improved essential fish habitat definition, and c) data in support of alternative fisheries management strategies (e.g. area management) in the mid-Atlantic. Specific to this cruise, we will collect high-resolution multibeam (bathymetry and backscatter), sidescan sonar imagery (SSS), and CTD cast data from a range of bottom types in order to characterize important topographic, geologic, and summertime oceanographic features of benthic and demersal habitats within the New Jersey Wind Energy Area (NJ WEA).

B. Days at Sea (DAS)

Of the 12 DAS scheduled for this project, 12 DAS are funded by a Line Office Allocation. This project is estimated to exhibit a High Operational Tempo.

C. Operating Area

Our area of operation is located roughly 30 km from southern New Jersey, within the New Jersey Wind Energy Area (NJ WEA: Fig. 1). This area spans roughly 1000 km² and ranges from 20 to 30 meters water depth (mean = 26.2 m). Within this larger area, we will target a 280 km² priority mapping area (Fig. 2), which we have preselected in order to characterize a range of ecologically important benthic habitats (from topographically homogenous to complex).

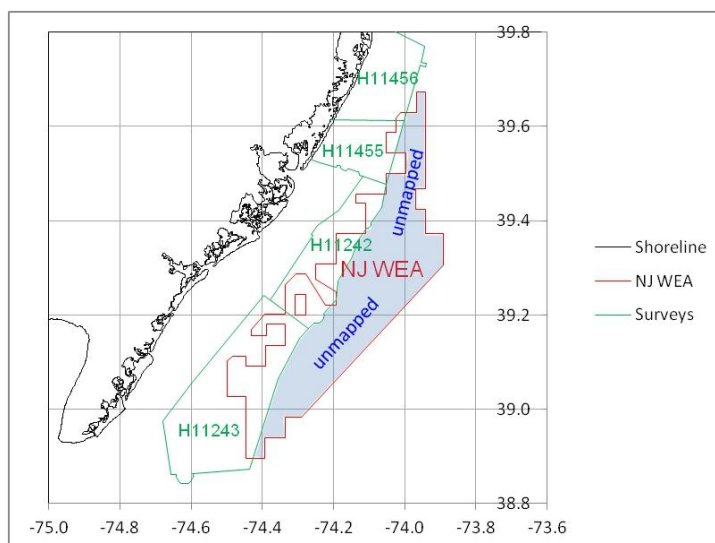


Fig. 1. New Jersey Wind Energy Area (NJ WEA) showing areas previously mapped by NOS OCS (survey limits and numbers in green) and the general area of operations for this cruise (unmapped area in blue).

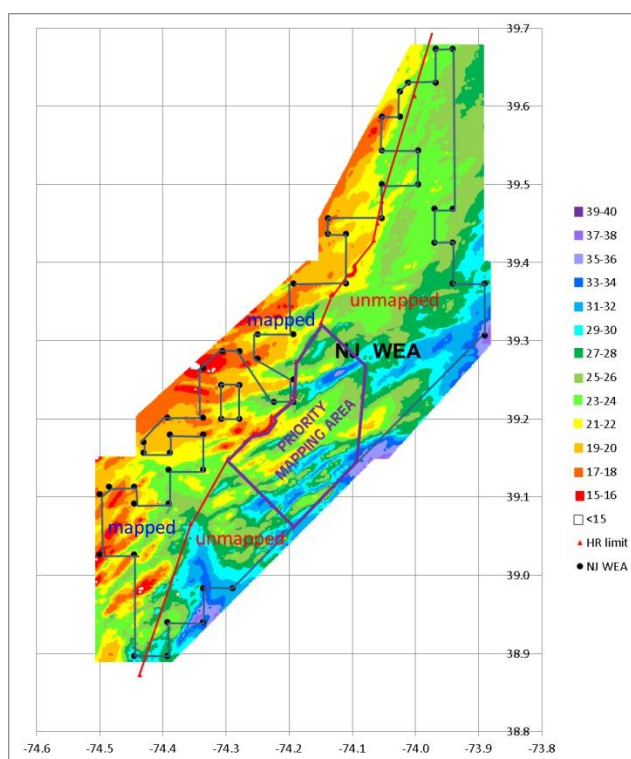


Fig. 2. New Jersey Wind Energy Area (NJ WEA) contour map showing priority mapping area within larger unmapped region.

D. Summary of Objectives

The operational objectives are to collect: (1) high resolution (2x2m) multibeam bathymetry, backscatter, and sidescan sonar imagery, (2) survey-directed CTD casts, and (3) survey-directed Ponar grab samples throughout the NJ WEA priority area. Survey-directed CTD casts will be completed and stored periodically at the discretion of active

sonar technician(s) and NEFSC scientist(s) (ideally every 2 hours) for 1) real-time sound-velocity profile correction and 2) later analyses of local oceanographic conditions. Survey-directed Ponar grab samples will also be collected and stored on the final day of operations (weather dependent) for grain size analysis ashore for use in ground-truthing of collected backscatter and sidescan data.

E. Participating Institutions

NMFS- Northeast Fisheries Science Center
Bureau of Ocean Energy Management (U.S Dept. of Interior: BOEM)

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

Name (Last, First)	Title	Date Aboard	Date Disembark	Gender	Affiliation	Nationality
McHenry, Jennifer	Field Scientific Lead	06/22/2015	07/03/2015	F	NEFSC	US
Rosendale, John	Data Collection Specialist	06/22/2015	07/03/2015	M	NEFSC	US
Welch, Heather	Data Collection Specialist	06/22/2015	07/03/2015	F	NEFSC	US

G. Administrative

1. Points of Contacts:

Chief Scientist – Vincent Guida, Ph.D.
office: 732-872-3020; email: Vincent.guida@noaa.gov

Field Scientific Lead- Jennifer McHenry
office: 732-872-3055; Jennifer.mchenry@noaa.gov

Commanding Officer NOAA Ship *Thomas Jefferson*
office cell: 757-390-1167; Co.thomas.jefferson@noaa.gov

Ops. Officer NOAA Ship *Thomas Jefferson* – LT Joseph Carrier
Office cell: 757-418-0629; ops.thomas.jefferson@noaa.gov

Agent: Nathan Keith, Vessel Coordinator
office: 508-495-2224; Nathan.Keith@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:

22 June: Depart from Norfolk, VA and commence cruise operations upon arrival to operation area 1.

3 July: Complete cruise operations, and steam for Norfolk, VA.

B. Staging and Destaging:

19 June: Begin cruise staging at in Norfolk (if required).

22 June: Complete cruise staging, load, and setup remaining scientific equipment (e.g., CTD, Ponar) (if required). Embark scientific personnel early Monday morning and complete CTD, Ponar and SCS work station setup on the transit to the New Jersey WEA

3 July: Dock in Norfolk, disembark scientific personnel, and off-load scientific equipment and data.

C. Operations to be Conducted:

Operations Summary: Hydroacoustic transects (multibeam, backscatter, and sidescan sonar), survey-directed CTD sampling, and survey-directed grab sampling (ground-truthing) will be conducted throughout the NJ WEA priority area (Figure 1). During the collection of hydroacoustic and CTD data, several of the ship's systems will need to be configured both to run and log continuously including the Reson 7125 SV2, Klein 5550, Brooke Ocean Moving Velocity Profiler 100, Applanix POS M/V, Trimble SPS351, all associated standard Scientific Computer Stations (SCS). CTD casts will be conducted at the discretion of the active sonar technician(s) and NEFSC scientist(s), and the frequency will depend of the quality of the surface sound speed data. During the first 10 days of operation, active sonar technician(s) and NEFSC scientist(s) will also collaboratively monitor the multibeam and SSS returns to select optimal ground-truthing sites. Then on the final day, grab sampling operations will commence with only SCS required to populate the ships Event Logger running. The survey progress will depend on the sea state and water depth of the area, with rough weather and shallower areas likely requiring closer survey line spacing, and deeper areas requiring slightly more time to retrieve the CTD and grab sampler. In addition to the ship's SCS, hand written log notebooks will also be maintained by throughout the cruise for hydroacoustic, CTD, and grab sampler activities (Figure 2-4).

Hydroacoustic Survey Operations: For the first ten (10) days of operation, Reson 7125 SV2 and Klein 5550 survey operations will be conducted continuously within the New Jersey priority area at the highest speed that will meet data density requirements to support a 2m x 2m resolution. The two systems will be configured and optimized to log data continuously in 20-30m water depth, and survey lines will be planned and spaced for the collection of high resolution multibeam (bathymetry and backscatter) and sidescan imagery (both at least 2 m X 2 m). Acting survey personnel will include at least 1-2 sonar technicians and a NEFSC scientist. Sonar technician(s) will be responsible for monitoring both instruments at all times 1) to ensure high quality hydroacoustic data collection and 2) to reduce "cross-talk" between systems. Meanwhile, at least one NEFSC scientist will be present to direct survey flow and monitor the waterfall display(s) to identify interesting features or return signatures for potential ground-truthing on the final day of cruise operations. While the ships SCS will record standard track information, the acting technicians and NEFSC scientists will also record the time and location of major events throughout survey activities within the NEFSC Electronic Event Log, including the start and end of survey lines, the location/time of all CTD casts, as well as any other survey events that might be pertinent to later interpretation and/or analysis of collected data.

CTD Stations: During hydroacoustic operations, a Seabird CTD will be deployed at the discretion of the acting technician and NEFSC scientist (approximately one cast every 1-2 hours) to collect both water-column (e.g. conductivity, temperature, and depth) and sound speed profiles. In terms of the setup, the CTD will be mounted on an oceanographic EM cable with a 10 kg weight beneath and will be wired to a CTD station located within the ship's dry lab or other suitable dry location. The CTD station will consist of a dedicated computer and monitor to display pertinent ship SCS data output, such as the UTC date and time, fathometer, GPS position, surface temperature and salinity at a minimum. Operating personnel will include 1) the ship's hydroacoustic winch operator, 2) one or more of the ship's deck crew and/or NEFSC scientists with proper safety gear to handle the instrument on deck at the launch site, and 3) one CTD operator (either ship's survey technician or scientific crew) at the computer in the dry location to monitor instrument operations. All three stations (winch, deck, and computer) should be in voice contact with one another and the bridge, preferably with hand-held radios.

Once word is given to the bridge that a CTD sound velocity profile is required, the ship will come to a full stop. Next, a member of the deck crew will turn on the CTD, the bridge will indicate the site depth, and the winch operator will position the CTD over the side into the water where it will equilibrate for 1-3 minutes. At the CTD operators signal, the winch operator will begin the descent using the standard default ascent/descent rates used for NOAA CTDs. As the instrument approaches 5m above the bottom, the CTD operator will signal to slow and halt the decent at roughly 1-2m off bottom. However, should the sea conditions cause the vessel to pitch, heave, and/or roll, the CTD operator may need to halt the decent much sooner. Again, after the CTD operator's signal, the winch operator will then bring the CTD back to the surface and swing it onto the deck. Then, the deck CTD handler will download data (if not taken in real time), turn off the instrument, secure all associated equipment for transit, and communicate to the bridge that the CTD is completed. Meanwhile, the CTD operator will ensure the each cast event is recorded in the NEFSC Electronic Event Log and that the data file is properly stored and label.

Benthic Grab Stations: During hydroacoustic survey operations, sonar technician(s) and NEFSC scientist(s) will monitor the multibeam and SSS waterfall displays to select sites that require further ground-truthing (e.g. site that fall within the full spectrum of returns, as well as potentially interesting features). Then, on the last day of survey operation, a Ponar grab sampler will be deployed at each selected site to record visual substrate characterization, conduct a numbered surface photo, and collect triplicate samples of sediment for further grain-size analysis. In terms of setup, the grab sampler will be mounted to the oceanographic winch. Operating personnel will include the ship's hydroacoustic winch operator, one or more ship's deck crew and/or scientists with proper safety gear to handle the instrument on deck at the launch site, and 1-2 sample processors who will collect, catalog, and store sediment samples from each site. All three stations (winch, deck, and processing) should be in voice contact with one another and the bridge, preferably with hand-held radios.

Prior to commencing grab sampling operations, NEFSC scientists will provide a compiled and prioritized list of survey-identified ground truthing locations. The ship will then transit to each of these locations based on proximity and priority. Once on site, the bridge will position the ship for sampling activities, the sample processor(s) will record the appropriate site information (see sample recording sheet, Figure 3), and the deck operator(s) will arm the grab sampler for deployment. When given the signal from the bridge that the ship is in position, the grab sampler will then be lifted over the side by the winch operator, and sent down to the bottom at the fastest speed allowable. Once on bottom, the winch operator will return the sampler to the surface and lower it onto its stand. *If the sample is adequate as judged by the scientist collecting the sample (jaws closed and bucket at least 2/3 full)*, this information will be passed to the bridge so that they can get underway for the next station as soon as possible. Grab information will be recorded (see sample recording sheet, Figure 3), a photo of its surface will be taken by a member of the scientific crew, and then a 3 cm (1 3/16") diameter plastic core tube will be used to take a subsample of at least 5 cm (2"...use a ruler) depth for grain size analysis. That tube

will then be capped on top, carefully removed from the grab, capped on the bottom, recorded, labeled, and stored upright in a refrigerator (preferable) or freezer (if necessary). *If the sample is inadequate, this will be communicated to the bridge so that they can either reposition the ship for another grab or give the signal to redeploy the sampler.* To avoid wasting time, the team shall attempt to sample a single location no more than 3 times and any unsuccessful attempts will be recorded in the Benthic Grab Field Notebook (Figure 3).

BENTHIC GRAB FIELD LOG								Samples transferred to alcohol <input type="checkbox"/>		(post cruise)	
CRUISE		STATION NAME		CONSECUTIVE STA #		DATE					
Replicate	Time on Deck (UTC)	Photo Checkoff	Grain Size Core		No. of Jars Filled		Notes on grab success, sediment appearance, visible fauna				
			Core No.	Core Depth (in.)	Gal.	half Gal.					
1			1								
2			2								
3			3								

CRUISE		STATION NAME		CONSECUTIVE STA #		DATE				
Replicate	Time on Deck (UTC)	Photo Checkoff	Grain Size Core		No. of Jars Filled		Notes on grab success, sediment appearance, visible fauna			
			Core No.	Core Depth (in.)	Gal.	half Gal.				
1			1							
2			2							
3			3							

CRUISE		STATION NAME		CONSECUTIVE STA #		DATE				
Replicate	Time on Deck (UTC)	Photo Checkoff	Grain Size Core		No. of Jars Filled		Notes on grab success, sediment appearance, visible fauna			
			Core No.	Core Depth (in.)	Gal.	half Gal.				
1			1							
2			2							
3			3							

Figure 3: Template datasheet used in the Benthic Grab Field Notebook.

Scientific Computer System (SCS): In addition to paper logs, the *Thomas Jefferson* SCS and EventLog program (s) will be configured for NOAA standard Hydroacoustic Survey, CTD Cast, and Grab Sample data collection, and will be used by the technicians and scientists to document all operational events (*e.g.*, beginning and end of track lines, cast log, gear deployments). Date and time for data collections from computers, instrumentation, and logsheets recording will be synchronized using the vessel's GPS master clock and Dimension IV software. The NEFSC and *Thomas Jefferson's* ET are responsible for ensuring data collection and logging.

Data: At the end of the cruise the ship will provide the Field Scientific Lead with copies of the data from the Ship's navigation system (cruise track), Reson 7125, the Klein sidescan, the CTD casts, the event log system, and any auxiliary post-processed datasets required for processing multibeam and sidescan data in Caris HIPS/SIPS. A copy of the SCS data should also be provided to DMS personnel in Woods Hole.

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.

Dives are not planned for this project.

E. Applicable Restrictions

Conditions which preclude normal operations:

Should the sea conditions (e.g. high wind, wave height, visibility etc.) inhibit normal hydroacoustic survey operations, the NEFSC scientific crew and the Thomas Jefferson's Captain and Operations Officer(s) will discuss an alternative survey plan. At the discretion of the Captain and/or Operations Officer, we will either seek refuge until poor sea conditions abate or we will seek an alternative survey location.

III. Equipment

A.

Equipment and Capabilities provided by the ship (itemized)			
	Purpose	Item	Quantity
1	CTD Sampling	SeaCat SBE19+ CTD profiler	1
	CTD Sampling	Computer(s) (meeting NOAA security standards) and electronic storage for running and retrieving CTD cast data	1
2	Hydroacoustic Surveys	Reson 7125 SV2 Multibeam Echosounder	1
3	Hydroacoustic Surveys	Klein 5550 Side Scan Sonar	1
4	Hydroacoustic Surveys/CTD Sampling	Computer(s) (meeting NOAA security standards) and electronic storage for running and logging hydroacoustic operations	ample
5	Grab Sampling Operations	Ponar Wilco Grab Sampler	1
6	Grab Sampling Operations	Refrigerator (preferred) or Freezer space (if available)	ample
7	Grab Sampling Operations	VHF Radios	ample
8	Grab Sampling Operations	Deck hose	1

B.

Equipment and Capabilities provided by the scientists (itemized)			
1	Grab Sampling Operations	Backup Van-Veen Grab Sampler with stand	1
2	Grab Sampling Operations	Grab Sampler Toolbox, inc:	1
3	Grab Sampling Operations	WD-40	1
4	Grab Sampling Operations	Zip ties (various sizes)	ample

5	Grab Sampling Operations	Duct tape	ample
6	Grab Sampling Operations	Electrical Tape	ample
7	Grab Sampling Operations	Wrenches	set
8	Grab Sampling Operations	Scientific Fisher Rulers for measuring sediment depth	ample
9	Grab Sampling Operations	Coring tubes and caps	ample
10	Grab Sampling Operations	Core labels	ample
11	Grab Sampling Operations	Sharpies	ample
12	Grab Sampling Operations	Baggies (for double packing samples)	ample
13	Grab Sampling Operations	Digital Camera (for photographing grab samples, water-resistant and drop-proof ideal)	2
14	Grab Sampling Operations	Rite in Rain Paper cut into small strips (for labeling photos, and double cores)	ample
15	NEFSC Data Retrieval/ Logs	3-5TB Hard Drive	1
16	NEFSC Data Retrieval/ Logs	Rite in Rain Field Notebooks	ample
17	NEFSC Data Retrieval/ Logs	Pens and pencils	ample
18	NEFSC Data Retrieval/ Logs	Premade datasheets in three ring binders for grab samples	ample and 1
19	NEFSC Data Retrieval/ Logs	Laptop computer (meeting NOAA security standards) for cruise tracking and data manipulation in field	1
20	NEFSC Data Retrieval/ Logs	Scientific Drybox	1
21	NEFSC Personal Protective Equipment	Foul Weather Gear (for scientific crew)	3
22	NEFSC Personal Protective Equipment	Hard Hats (for scientific crew)	3
23	NEFSC Personal Protective Equipment	Boots (for scientific crew)	3
24	NEFSC Personal Protective Equipment	Gloves (for scientific crew)	3

IV. Hazardous Materials

A. Policy and Compliance

No Hazardous Materials are being brought aboard the ship 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
 - b. Program Data
- B. Responsibilities: *Under Development*

Protected Resources:

North Atlantic right whale protection: The vessel is requested to adhere to right whale protection regulations. Information on Seasonal Management Area (SMA) and Dynamic Management Area (DMA) regulations and information for protecting right whales from collisions with vessels are provided through the NOAA Protected Resources website (<http://www.nmfs.noaa.gov/pr/shipstrike/>), Right Whale Sighting Advisory System (SAS) website (<http://www.nefsc.noaa.gov/psb/surveys/>), the U.S. Coast Guard’s “Notices To Mariners” and NOAA weather radio.

Mariners are urged to use caution and proceed at safe speeds in areas where right whales occur. U.S. Law (50 CFR 224.105) prohibits operating vessels 65 feet (19.8 meters) or greater in excess of 10 knots in Seasonal Management Areas (SMAs) along the U.S. east coast. Mariners are also requested to route around voluntary speed restriction zones, Dynamic Management Areas (DMAs) or transit through them at 10 knots or less. Approaching within 500 yards of right whales is prohibited, unless the Chief Scientist is in possession of an ESA/MMPA permit allowing such approaches.

Whale sightings: Sightings of right whales, or dead or entangled whales of any species, are extremely valuable and reports are urgently requested. Please report all right whale sightings north of the Virginia-North Carolina border to 866-755-6622; right whale sightings south of that border should be reported to 877-WHALE HELP. Right whale sightings in any location may be reported to the U.S. Coast Guard via VHF channel 16. Protocols for reporting sightings are described in the Guide to Reporting Whale Sightings placard. The placard is available online (http://www.nefsc.noaa.gov/psb/surveys/documents/20120919_Report_a_Right_Whale.pdf) and laminated copies will be provided by the Protected Species Branch upon request. It is requested that this placard be kept on the bridge for quick reference and to facilitate rapid reporting (via satellite phone if necessary). Opportunistic sightings of other marine mammal species that are live and well may be reported using the Platforms of

Opportunity (POP) forms and protocols. To information regarding the WhaleALERT application <http://stellwagen.noaa.gov/protect/whalealert.html>. For information on reporting a dead whale http://www.nefsc.noaa.gov/psb/surveys/documents/20120919_Report_a_Dead_Whale.pdf.

Endangered Species Act and Marine Mammal Protection Act reporting requirements:

This reporting is required and is in addition to the reports in the above two sections. If the ship has an interaction with a sturgeon, Atlantic salmon, whale, dolphin, porpoise, marine turtle, or seal (e.g., collision with a whale or bycatch of a sea turtle), the NMFS Greater Atlantic Regional Fisheries Office must be notified within 24 hours of the interaction. All e-mail correspondences should be made to the following e-mail address: incidental.take@noaa.gov. Please indicate in the subject line which protected species was encountered. If the take involves a marine mammal, or sea turtle that is alive, injured and in need of assistance or monitoring, please call the NOAA Northeast Region marine animal hotline at: [866-755-6622](tel:866-755-6622). The chief scientist will be notified before reports are made.

If the vessel's company notices an animal that is entangled, injured, in distress, or dead, outside the scope of scientific operations, they should contact the Northeast Regional Office's 24-hour hotline at 866-755-6622 to report the incident and receive further instructions.

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. Arrangements should also be made to ensure that NEFSC scientists with dietary restrictions are accommodated.

Name (Last, First)	Title	Date Aboard	Date Disembark	Dietary Needs
McHenry, Jennifer	Field Scientific Lead	06/22/2015	07/03/2015	Vegan (e.g. does not eat meat, fish, or animal products including milk, cheese, eggs, honey etc.)
Rosendale, John	Data Collection Specialist	06/22/2015	07/03/2015	NA
Welch, Heather	Data Collection Specialist	06/22/2015	07/03/2015	Vegetarian (e.g. does not eat meat or fish)

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.