



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-15-08

Mapping Essential Fish Habitat in Long Island Sound to Inform MPA

Management

Attached is the final Project Instruction for NF-15-08 Mapping Essential Fish Habitat in Long Island Sound to Inform MPA Management, which is scheduled aboard NOAA Ship *Nancy Foster* during the period of September 14 to October 23, 2015. Of the 33 DAS scheduled for this project, 33 days are funded by Line Office Allocation. 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:

Tim Battista





## U.S. DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration NATIONAL OCEAN SERVICE NATIONAL CENTERS FOR COASTAL OCEAN SCIENCE CENTER FOR COASTAL MONITORING AND ASSESSMENT 1305 East West Highway N/SCI1, 9th Floor Silver Spring, MD 20910

## **FINAL Project Instructions**

Date	Su	bmitted:
Date	Du	Dimitteu.

August 7, 2015

Platform:

NOAA Ship Nancy Foster

**Project Number:** 

NF-15-08 (OMAO)

**Project Title:** 

Mapping Essential Fish habitat in the Long Island Sound to Inform MPA

Management

**Project Dates:** 

September 14, 2015 to October 23, 2015

Prepared by:

Battista

Chief Scientist

Center for Coastal Monitoring and Assessment

Approved by:

Director

Center for Coastal Monitoring and Assessment

Approved by:

Mary Erickson

National Centers for Coastal Ocean Science

Approved by:

Captain Anne K. Lynch, NOAA

Commanding Officer

Marine Operations Center - Atlantic

### I. Overview

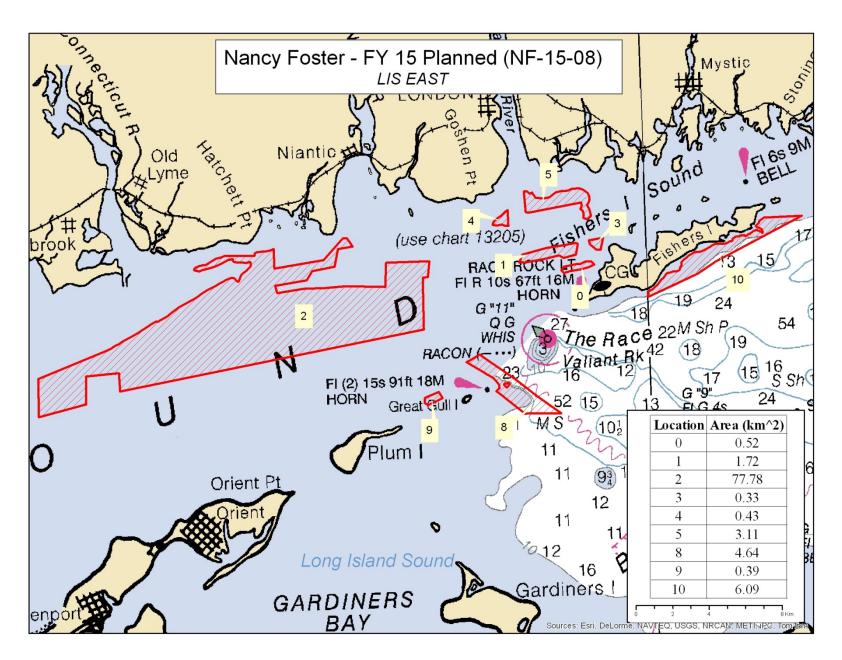
A. Brief Summary and Project Period

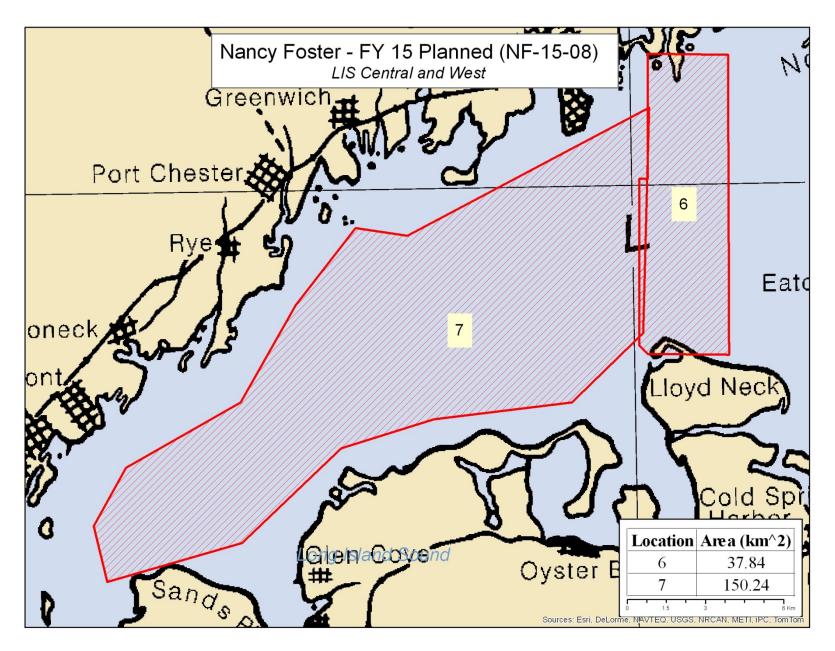
The Center for Coastal Monitoring and Assessment (CCMA) will be conducting the third year of an ongoing scientific research mission onboard NOAA Ship *Nancy Foster* funded by the Long Island Sound Program. The purpose of the cruise will be to collect swath bathymetry and acoustical backscatter at high priority sites within Long Island Sound to support management and coastal marine planning.

B. Days at Sea (DAS)

Of the <u>\_33</u>\_ DAS scheduled for this project, <u>\_0</u>\_ DAS are funded by an OMAO allocation, <u>\_33</u>\_ DAS are funded by a Line Office Allocation, <u>\_0</u>\_ DAS are Program Funded, and <u>\_0</u>\_DAS are Other Agency funded. This project is estimated to exhibit a <u>\_Medium</u>\_\_\_ Operational Tempo.

C. Operating Areas





# D. Summary of Objectives

Scientists will collect high resolution multibeam data in shallow-water depths *approximately* 5 to 80 meters so as to continue to characterize seafloor habitats within Long Island Sound. The objective of this project is to collect a multibeam bathymetry dataset with 100% seafloor ensonification, along with multibeam backscatter suitable for seafloor characterization. Multibeam data will be collected to conform to IHO Order 1 (<100m) accuracy standards. The strategies developed for each survey area will take into account the minimum depths, general bathymetry, and time allotment. These areas have been identified based on Gap analysis of joint OCS/NCCOS ship-based surveys conducted in the Sound to support this project since 2012.

## E. Participating Institutions

NOAA (NCCOS, OCS), Solmar Hydro, and students from academic institutions.

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

Name (Last, First)	Title	Date	Date	Gender	Affiliation	Nationality
		Aboard	Disembark			_
Groshens, Garth	Student	9/13/15	9/25/15	Male	Student	U.S.
Hulsted, Rachel	Physical Sci.	9/13/15	10/20/15	Female	NOAA	U.S.
Saro, Kelsie	Student	9/13/15	9/25/15	Female	Student	U.S.
Sautter, Will	Physical Sci.	9/13/15	9/25/15	Male	NOAA	U.S.
Stecher, Mike	Hydrographer	9/13/15	9/25/15	Male	Contractor	U.S.
Gorton, Julia	Student	9/26/15	10/9/15	Female	Student	U.S.
Hughes, Kristen	Student	9/26/15	10/9/15	Female	Student	U.S.
Kracker, Laura	Physical Sci.	9/26/15	10/9/15	Female	NOAA	U.S.
Tormey, Sam	Hydrographer	9/26/15	10/9/15	Male	Contractor	U.S.
Miller, James	Physical Sci.	10/12/15	10/20/15	Male	NOAA	U.S.
Sautter, Will	Physical Sci.	10/12/15	10/20/15	Male	NOAA	U.S.

### G. Administrative

### 1. Points of Contacts:

Chief Scientist: Tim Battista, 1305 East West Hwy, Silver Spring, MD 20910, 301-713-3028 x171, <a href="mailto:tim.battista@noaa.gov">tim.battista@noaa.gov</a>

*Nancy Foster* Operations Officer: LT Lyndsey Davis, 1050 Register St., North Charleston, SC 29405, 843-991-6326, <a href="mailto:ops.nancy.foster@noaa.gov">ops.nancy.foster@noaa.gov</a>

### **Chief Scientist:**

<u>Leg 1</u> - Mike Stecher (Solmar Hydro), 31479 Camas Lane, Eugene, OR, 97405, (206) 200 8269, <u>solmarhydro@gmail.com</u>

<u>Leg 2</u> - Laura Kracker, 1305 East West Hwy, Silver Spring, MD 20910, 301-713-3028 x228, <u>laura.kracker@noaa.gov</u>

<u>Leg 3</u> - James Miller, 439 West York St, Norfolk, VA 23510, 757-441-6746 x111, <u>james.miller@noaa.gov</u>

## 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:

Actual survey locations will be made available to the Operations Officer during the daily operations meeting. Discussions with the ship's command by the Chief Scientist to determine optimize survey areas by date and time of day to minimize acquisition disruption from ship traffic, shoal waters, and night-time watch orders.

## B. Staging and Destaging:

Leg 1 personnel and processing gear will load in New York. Personnel change for Leg 2 and 3 will occur in New London, and Bridgeport, CT, respectively. Final personnel offloading will occur in Bridgeport, CT.

## C. Operations to be conducted:

#### Leg 1

13 September (Sunday): Science team arrives and prepares for mission.

#### 14 September (Monday):

Transit: (1000-2400). Transit from New York, NY to LIS East.

### 15 September (Tuesday) to 24 September (Thursday):

Survey: (2400-2400). MBES LIS East.

## 25 September (Friday):

Survey: (2400-1300). MBES LIS East.

Transit: (1300-1500). Transit to New London, CT

## 26 September (Saturday):

*In-Port:* New London, CT. Science personnel exchange.

### Leg 2

#### 27 September (Sunday):

Transit: (1000-1800). Transit from New London, CT to LIS Central.

Survey: (1800-2400). MBES LIS Central.

#### 28 September (Monday) to 30 September (Wednesday):

Survey: (2400-2400). MBES LIS Central.

### 1 October (Thursday):

Survey: (2400-0800). MBES LIS Central. Survey: (0800-2400). MBES LIS West.

## 2 October (Friday) to 8 October (Thursday):

Survey: (2400-2400). MBES LIS West.

### 9 October (Friday):

Survey: (2400-1200). MBES LIS West.

Transit: (1200-1500). Transit from LIS West to Bridgeport, CT.

## 10 October (Saturday) to 12 October (Monday):

*In-Port:* Bridgeport, CT. Science personnel exchange.

#### Leg 3

## 13 October (Tuesday):

Transit: (1000-1300). Bridgeport, CT to LIS West.

Survey: (1300-2400). MBES LIS West.

### 14 October (Wednesday) to 18 October (Sunday):

Survey: (2400-2400). MBES LIS West.

#### 19 October (Monday):

Survey: (2400-1200). MBES LIS West.

Transit: (1200-1500). LIS West to Bridgeport, CT.

Science: (1500-1800). Science party departs

#### 20 October (Tuesday) to 23 October (Friday):

Transit: Ship transits from Bridgeport, CT to Charleston, SC.

#### D. Dive Plan

All dives are to be conducted in accordance with the requirements and regulations of the NOAA Diving Program (<a href="http://www.ndc.noaa.gov/dr.html">http://www.ndc.noaa.gov/dr.html</a>) 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: Equipment failure: Mitigation - at sea repair, switch to alternate multibeam or operations.

Poor weather: Mitigation – switch to more protected area or suspend operations.

Safety concerns: Mitigation – discuss as safety briefing or with ships command.

## III. Equipment

- A. Equipment and Capabilities provided by the ship (itemized)
- 1) Hand held radios for communication between bridge and deck.
- 2) uCTD, and deployable CTD's (with spares) 5m and 100 m depth rating.
- 3) EM 710 and Reson Seabat 7125 Multibeam.
- B. Equipment and Capabilities provided by the scientists (itemized)
- 1) Five high end laptops.
- 2) CARIS, ArcGIS, Hypack/Hysweep, FMGT

#### IV. Hazardous Materials

A. Policy and Compliance

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

- B. Inventory
- 1) N/A
- C. Chemical safety and spill response procedures
- 1) N/A
- D. Radioactive Materials

No Radioactive Isotopes are planned for this project.

# V. Additional Projects

A. Supplementary ("Piggyback") Projects

No piggyback 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:

We request that the Ship's data storage be made available during the cruise to store all digital data (~ 3 TB). The science party will transfer that data from the Ship storage to scientist drives during the mid-cruise in-port and at the end of the cruise. The scientists will be responsible for providing data archives to NGDC and AHB as part of R2R within 12 months of the completion of the cruise. In order for this to be accomplished five scientist Government computers will need network access to the ship's data storage device so that the data can be moved from the acquisition computer to storage, and subsequently accessed by other Government computers tasked with data post-processing. The Chief Scientist will be provided a Full Local Administrative account for each of these computers to assist the Ship's ET in adding them to the Ship's network.

### VII. Meetings, Vessel Familiarization, and Project Evaluations

- A. <u>Pre-Project Meeting</u>: 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. <u>Vessel Familiarization Meeting</u>: 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. <u>Post-Project Meeting</u>: 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 <a href="http://www.omao.noaa.gov/fleeteval.html">http://www.omao.noaa.gov/fleeteval.html</a> 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 <a href="http://www.corporateservices.noaa.gov/noaaforms/eforms/nf57-10-01.pdf">http://www.corporateservices.noaa.gov/noaaforms/eforms/nf57-10-01.pdf</a>.

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 (<a href="http://ocio.os.doc.gov/ITPolicyandPrograms/IT\_Privacy/PROD01\_008240">http://ocio.os.doc.gov/ITPolicyandPrograms/IT\_Privacy/PROD01\_008240</a>).

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.