



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

June 12, 2017

MEMORANDUM FOR: Commander Nicholas Chrobak, NOAA

Commanding Officer, NOAA Ship Pisces

FROM:

Captain Scott M. Sirois, NOAA

Commanding Officer, NOAA Marine Operations Center-Atlantic

SUBJECT:

Project Instruction for PC-17-02

U.S. South Atlantic Marine Protected Area (MPA) Survey

Attached is the final Project Instruction for PC-17-02, U.S. South Atlantic Marine Protected Area (MPA) Survey, which is scheduled aboard NOAA Ship *Pisces* during the period of June 20 – July 5, 2017. Of the 16 DAS scheduled for this project, 16 days are funded by a Line Office Allocation. The 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.



U. S. DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration National Marine Fisheries Service Southeast Fisheries Science Center

> 3500 Delwood Beach Rd. Panama City, FL 32408

Project Instructions

Date Submitte	ed: 06/07/2017							
Platform:	NOAA Ship PISCES							
Cruise Numb	er: PC 17-02							
Project Title:	U.S. South Atlantic Marine Protected Area (MPA) Survey							
Cruise Dates:	06/20/2017 07/05/2017							
Prepared by:	HARTER.STACE Digitally signed by HARTER STACEY.L.1365824866 Date: 2017.06.07 08:09:35 -0500 Date: 06/07/2017							
Approved by:	DAVENPORT.GUY.S Digitally signed by DAVENPORT.GUY.STEWART.1 TEWART.1365872330 365872330 Date: 2017 06.08 08:45:38-05000 Date: 2017 06.08 08:45:38-05000 Date: 2017 06:08 08:45:38-0500 Date: 2017 06:08 08:45:38-0							
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Approved by:	Captain Scott M. Sirois, NOAA Commanding Officer Marine Operations Center - Atlantic							

I. Overview

A. Brief Summary and Project Period

Between 20 June - 5 July 2017, we will conduct ROV and multibeam sonar surveys inside and outside six marine protected areas (MPAs) as well as inside and outside the Oculina Experimental Closed Area (OECA) in the south Atlantic to assess the efficacy of this management tool to protect species of the snapper grouper complex and *Oculina* coral.

B. Days at Sea (DAS)

Of the 16 DAS scheduled for this project, 0 DAS are funded by an OMAO allocation, 16 DAS are funded by a Line Office Allocation, 0 DAS are Program Funded, and 0 DAS are Other Agency funded. This project is estimated to exhibit a _Medium__ Operational Tempo.

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

The cruise is planned for the continental shelf edge of the South Atlantic Bight between Port Canaveral, FL and Cape Hatteras, NC. We will be working in and around the following six MPAs and Oculina Experimental Closed Area (Figure 1):

- Florida MPA: Northwest corner at 30°29' N, 80°14' W; northeast corner at 30°29' N, 80°2' W; southwest corner at 30°19' N, 80°14' W; and southeast corner at 30°19' N, 80°2' W.
- Georgia MPA: Northwest corner at 31°43' N, 79°31' W; northeast corner at 31°43' N, 79°21' W; southwest corner at 31°34' N, 79°39' W; and southeast corner at 31°34' N, 79°29' W.
- Edisto MPA: Northwest corner at 32°24' N, 79°6' W; northeast corner at 32°24' N, 78°54' W, southwest corner at 32°18.5' N, 79°6' W and southeast corner at 32°18.5' N, 78°54' W.
- Charleston Deep Artificial Reef MPA: Northwest corner at 32°04' N, 79°12'W; northeast corner at 32°8.5'N, 79°7.75'W; southwest corner at 32°1.5'N, 79°9.3'W; and southeast corner at 32°6'N, 79°5'W.
- South Carolina MPA: Northwest corner at 32°53.5' N, 78°16.75' W; northeast corner at 32°53.5' N, 78°4.75' W; southwest corner at 32°48.5' N, 78°16.75' W; and southeast corner at 32°48.5' N, 78°4.75' W.
- Snowy Wreck MPA: Northwest corner at 33°25' N, 77°4.75' W; northeast corner at 33°34.75' N, 76°51.3' W; southwest corner at 33°15.75' N, 77°0' W; and southeast corner at 33°25.5' N, 76°46.5' W.
- Oculina Experimental Closed Area: Northern boundary at 27° 53'N, Southern boundary at 27° 30'N, Eastern boundary at 79° 56'W, Western boundary at 80°W.

D. Summary of Objectives

The goal of the cruise is to gather additional data on habitat and fish assemblages in six of the South Atlantic MPAs and OECA as part of a long term sampling program to document changes in these areas before and after fishing restrictions are implemented. The southernmost boundary of our work areas will be Port Canaveral, FL while the northern-most boundary will be Cape Hatteras, NC. Efficacy testing of this management tool will aid fishery managers in future use of area restrictions for the protection of valuable habitat and fishery resources. Specific objectives include:

- Daytime Operation: Conduct ROV transect surveys of habitat and fish assemblages during daylight hours.
- Daytime Operation: Conduct total water column CTD profiles
- Night Operation: Conduct multibeam mapping to find areas to dive on with the ROV the following day.
- Night Operation: Conduct XBT casts to collect sound velocity data for the mapping.

E. Participating Institutions

NOAA/NMFS/SEFSC Panama City Laboratory, Harbor Branch Oceanographic Institute/Florida Atlantic University, University of North Carolina at Wilmington.

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

Name (Last,	Title	Leg	Date	Date	Gender	Affiliation	Nationality
First)			Aboard	Disembark			
Horn, Lance	ROV Pilot	1	June 19	July 5	M	UNCW/UVP	USA
White, Jason	ROV Pilot	1	June 19	July 5	M	UNCW/UVP	USA
Glidden, Eric	ROV Pilot	1	June 19	July 5	M	UNCW/UVP	USA
Harter, Stacey	FPC/PI	1	June 19	July 5	F	NOAA	USA
David, Andy	PI	1	June 19	July 5	M	NOAA	USA
Drummond,	Scientist	1	June 19	July 5	F	NOAA	USA
Felicia							
Reed, John	PI	1	June 19	July 5	M	HBOI/FAU	USA
Farrington,	Scientist	1	June 19	July 5	F	HBOI/FAU	USA
Stephanie							
Platt, Matthew	Scientist	1	June 19	July 5	M	College of	USA
						Charleston	
McCormack,	Scientist	1	June 19	July 5	F	College of	USA
Mallory						Charleston	

G. Administrative

1. Points of Contacts:

Field Party Chief (FPC): Stacey Harter, 3500 Delwood Beach Rd, Panama City, FL, 32408, 850-234-6541x202, stacey.harter@noaa.gov

Operations Officer: NOAA Ship *Pisces*, 151 Watts Ave, Pascagoula, MS 39567; VOIP 541-867-8917 (Ops.Pisces@noaa.gov)

2. Diplomatic Clearances

None Required.

3. Licenses and Permits

This project will be conducted under the Scientific Research Permit (U.S.) issued by NOAA/NMFS good from Jan 1, 2017 through Dec 31, 2021.

II. Operations

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

A. Project Itinerary:

Date	Location	Days
19 June 2017	Mobilization of Science Party	
20 June 2017	Pisces departs Mayport, FL and transits to OECA	1
21 June 2017	Pisces arrives at OECA, conducts ROV ops during the day,	
	maps overnight	1
22 June 2017	Pisces conducts ROV ops at OECA during the day,	
	maps overnight	1
23 June 2017	Pisces conducts ROV ops at OECA during the day,	
	transit to Florida MPA overnight	1
24 June 2017	Pisces conducts ROV ops at Florida MPA during the day,	
	map overnight	1
25 June 2017	Pisces conducts ROV ops at Florida MPA during the day,	
	transit to Charleston Deep Artificial Reef MPA	
26 June 2017	Pisces conducts ROV ops at Charleston Deep Artificial	
	Reef MPA, transits to Edisto MPA, continues ROV ops during	1
27 June 2017	the day, maps overnight Piggs conducts POV one at Edicto MPA during the day.	1
27 June 2017	Pisces conducts ROV ops at Edisto MPA during the day, transits to Snowy Wreck MPA overnight	1
28 June 2017	Pisces conducts ROV ops at Snowy Wreck MPA during the day,	1
28 Julie 2017	maps overnight	1
29 June 2017	Pisces conducts ROV ops at Snowy Wreck MPA during the day,	1
2) June 2017	transits to Northern South Carolina MPA overnight	1
30 June 2017	Pisces conducts ROV ops at Northern South Carolina MPA,	1
50 June 2017	during the day, maps overnight	1
1 July 2017	Pisces conducts ROV ops at Northern South Carolina MPA	1
1 July 2017	i isces conducts NO v ops at Northern South Carollila MFA	

	during the day,	1
2 July 2017	Pisces conducts ROV ops at Northern South Carolina MPA	
	during the day, transits to Georgia MPA overnight	1
3 July 2017	Pisces conducts ROV ops at Georgia MPA during the day,	
	map overnight	1
4 July 2017	Pisces conducts ROV ops at Georgia MPA during the day,	
	transits to Mayport overnight	1
5 July 2017	Pisces arrives Mayport, FL, science party disembarks	1
TOTAL		
SEA DAYS	16	

B. Staging and Destaging:

Staging and Destaging will be conducted in Mayport, FL. Loading and unloading of gear should take < 2 hr, the ship will need to provide a crane operator for loading and unloading the ROV gear. A forklift will need to be reserved from the Mayport naval base to move the ROV gear between the trailer and the pier for both staging and destaging. Traditionally on *Pisces*, the ROV is stored on the starboard sampling station. Loading for the ROV and science crew will take place the morning of Monday June 19. Unloading will take place on Wednesday July 5 for everyone.

C. Operations to be Conducted (including mitigation measures):

Vessel operations will be on a 24 h workday. Typically, sonar operations will be carried out at night and ROV operations will be carried out during the day, to take advantage of any available light. Two crew members will be required on deck to work the winch, A-frame and other equipment for deployment and recovery of the ROV and other gear (unless the CB or CO requires more than two crew members). One crew member will operate the winch from the 02 deck while the other will assist with deployment and recovery from the 01 deck at the starboard sampling station. ROV operations will be conducted from approximately 0700 to 1900 and multibeam operations from 1900 to 0700. We would like to request that the survey tech be on night watch (approximately 1900 to 0700) to run the ME-70. We will be bringing two mappers with us that will work to process the data collected.

a. ROV: NURC/UNCW's SubAtlantic Mohawk 18 ROV will be used for transect surveys and video documentation of habitat and reef fish communities. The A frame and hydro winch are required for deployment and recovery of the ROV and downweight during ROV operations. The hydro winch will need to be manned during ROV operations as depths may fluctuate during the dives. ROV dives will be conducted during daylight hours (from approximately 0700 to 1900).

Brief synopsis of ROV operations are as follows:

- A set and drift will be conducted to determine the optimal ROV deployment location and ship orientation, this will ensure the ship will drift away from the ROV in case of a loss of power.
- 2. Once on station and with bridge consent, the ROV tracking pole is lowered into the water at the starboard sampling station and secured. Once the tracking pole is deployed, the ship is restricted to speeds of 2.0 kt or less.
- 3. After consent to launch the ROV is received from the bridge, the ship will go dead in the water and the ROV is picked up with a hydro winch from the starboard sampling station and boomed over the side with the A-frame.
- 4. Once at the water surface, the ROV is released from the winch cable using a quick-release spinnaker shackle.
- 5. The ROV will drive ~30m off the beam and hold position at the surface.
- 6. A downweight is attached to the hydro winch cable and the ROV umbilical is secured at the weight-cable connection point.
- 7. The weight is then deployed with the winch and A-frame and slowly lowered to the operating depth (~10 m above bottom).
- 8. During the cable lowering procedure, the umbilical is secured to the hydro wire at 17m intervals with soft line.
- Once final depth has been achieved, a final attachment is made between the umbilical and the wire is made with soft line to keep the umbilical from rubbing on the hull.
- 10. A winch operator will need to remain in the winch booth during the entire dive in order to be able to immediately haul in or pay out cable in response to unexpected depth changes.
- 11. During the ROV dive, ROV and deck crew will keep the bridge informed of wire angle (fore and aft, inboard and outboard). Adjustments to the ship's course and speed may be required to maintain acceptable angles.
- 12. In the event of depth changes, the wire will be boomed in and the final wire-umbilical attachment will be removed, allowing the wire-umbilical to be paid out or reeled in as required. Once the new depth is attained, the surface wire-umbilical attachment is restored and the wire is boomed out.
- 13. Recovery is generally the reverse of deployment.
- 14. The cable-weigh-umbilical is slowly retrieved with the umbilical being detached from the cable every ~17m and manually coiled on deck.
- 15. Once the weight is at ~30 m depth the ship will go dead in the water and the ROV will be surfaced off the starboard beam.
- 16. The weight is then recovered to the deck and detached from the hydro wire.
- 17. The wire is connected to a detachable hook attached to a fiberglass pole.
- 18. The ROV is slowly driven towards the ship with the umbilical being recovered by hand.
- 19. Once alongside, the ROV is hooked on the frame by a ROV crew member who reconnects the vehicle to the hydro wire allowing the winch and A-frame to recover it to the deck.

20. The tracking pole is recovered to the deck and the ship is again free to maneuver.

The ROV crew remains in constant contact with the bridge during all ROV operations via handheld radio. All tracking pole and ROV launches and recoveries are conducted only after approval is received from the bridge. Additionally, the ROV crew will provide a navigation feed to the bridge to allow direct observation of the ROV's position relative to the ship as well as the position of the ship and ROV relative to target features on the bottom. The ROV is stored on the starboard sampling station. The umbilical is also stored on the starboard sampling station, it will be coiled on deck manually. The tracking pole is stored on the starboard sampling station as well. It is mounted to the gunwale using holes created on *Pisces'* first cruise in November 2009. The pole is secured during deployment with stay ropes fixed ~10m fore and aft of the attachment point on the gunwale.

- b. Multibeam Mapping: The ME70 multibeam mapping system on *Pisces* will be used during night hours (from approximately 1900 to 0700) to find bottom features on which we will conduct ROV dives. Scientific party will provide two personnel to work the night shift along with the survey tech.
- c. Standard Oceanographic Data: We would like to utilize the ship's CTD for physical oceanographic data acquisition. No water samples will be taken. Typically, a CTD cast will be conducted first thing in the morning and at the end of ROV ops before mapping ops begin. Therefore, no overnight CTDs will be conducted. XBT's, however, will be launched approximately 2-3 times during the night when mapping is occurring. This can be completed by one of the science crew on night watch.

Mitigation Measures for Protected Species

Under the Preferred Alternative, the SEFSC will initiate a formalized "Move-on" Rule. If any marine mammals, sea turtles or other protected species are sighted around the vessel before setting the gear, the vessel may be moved away from the animals to a different section of the sampling area if the animals appear to be at risk of interaction with the gear at the discretion of the FPC (Chief Scientist) and Scientific Watch Leader. In most cases, fishing gear is not deployed if marine mammals or sea turtles have been sighted near the ship unless those animals do not appear to be in danger of interactions with the gear, as determined by the judgment of the FPC (Chief Scientist) and Scientific Watch Leader.

The SEFSC will initiate a process for its FPC (Chief Scientist), Scientific Watch Leaders and vessel officers to communicate with each other about their experiences with protected species interactions during research work with the goal of improving decision-making regarding avoidance of adverse interactions. As noted in the Status Quo Alternative description of mitigation measures, there are many situations where professional judgment is used to decide the best course of action for avoiding protected species interactions before and during the time research gear is in the water. The intent of this mitigation measure would be to draw on the collective experience of people who have been making those decisions, provide a forum for the exchange of information about what went right and what went wrong, and try to determine if

there are any rules-of-thumb or key factors to consider that would help in future decisions regarding avoidance practices. The SEFSC would coordinate not only among its staff but also with those from other fisheries science centers with similar experience.

The SEFSC deploys a wide variety of gear to sample the marine environment during all of their research cruises, such as plankton nets, oceanographic sampling devices, video cameras, and ROVs. These types of gear are not considered to pose any risk to protected species because of their small size, slow deployment speeds, and/or structural details of the gear and are therefore not subject to specific mitigation measures. However, the officer on watch and crew monitor for any unusual circumstances that may arise at a sampling site and use their professional judgment and discretion to avoid any potential risks to protected species during deployment of all research equipment.

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 CO.

Scientific dives are not planned for this project. If the ship must conduct dive ops while at sea the CO will confer with the FPC as to when the dive ops will occur so the dive will have the least impact on the scientific work.

E. Applicable Restrictions

Conditions which preclude normal operations:

- 1. Poor weather conditions as determined by either the ROV pilots or ship's crew.
- 2. Equipment failure.
- 3. If a safety concern arises, operations will be aborted until the issue is resolved.

III. Equipment

- A. Equipment and Capabilities provided by the ship (itemized)
 - 1. Electrical power for ROV control station in dry lab.
 - 2. Crane capable of lifting 750 lb and reaching 10 ft beyond the rail of the vessel (for ROV)
 - 3. CTD with temperature, depth, and salinity (conductivity) sensors. Max depth of 300 m
 - 4. Winch to deploy and retrieve CTD. Max depth of 300 m
 - 5. ME70 Multibeam mapping system
 - 6. Cabled XBT hand launcher located at the side sampling station, and XBT software program.
 - 7. POS MV GPS data feed for ROV
 - 8. ROV navigation feed wiring and monitor for Bridge display
- B. Equipment and Capabilities provided by the scientists (itemized)
 - 1. ROV and all gear to operate it

- 2. Deployment & retrieval gear for ROV
- 3. XBTs
- 4. ROV tracking pole
- 5. Laptop and software for processing ME-70 data

IV. Hazardous Materials

A. Policy and Compliance

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

B. 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
 - b. Program Data
- B. Responsibilities: *Under Development*

VII. Meetings, Vessel Familiarization, and Project Evaluations

A. <u>Pre-Project Meeting</u>: The FPC and CO 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 FPC in arranging this meeting.

- B. <u>Vessel Familiarization Meeting</u>: The CO 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 CO is responsible for conducting a meeting no earlier than 24 hrs before or 7 days after the completion of a project to discuss the overall success and shortcomings 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 FPC, and members of the scientific party and is normally arranged by the Operations Officer and FPC.

D. Project Evaluation Report

Within seven days of the completion of the project, a Customer Satisfaction Survey is to be completed by the FPC. The form is available at http://www.omao.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 three 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 FPC. The FPC and CO will work together on a detailed berthing plan to accommodate the gender mix of the scientific party taking into consideration the current makeup of the ship's complement. The FPC 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 FPC 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 FPC will ensure that all non NOAA or non Federal scientists aboard also have proper orders. It is the responsibility of the FPC 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 CO. 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 FPC 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 four 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 FPC 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 FPC to ensure members of the scientific party report aboard with the proper attire.

D. Communications

A progress report on operations prepared by the FPC may be relayed to the program office. Sometimes it is necessary for the FPC to communicate with another vessel, aircraft, or shore facility. Through various means of communications, the ship can usually accommodate the FPC. 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

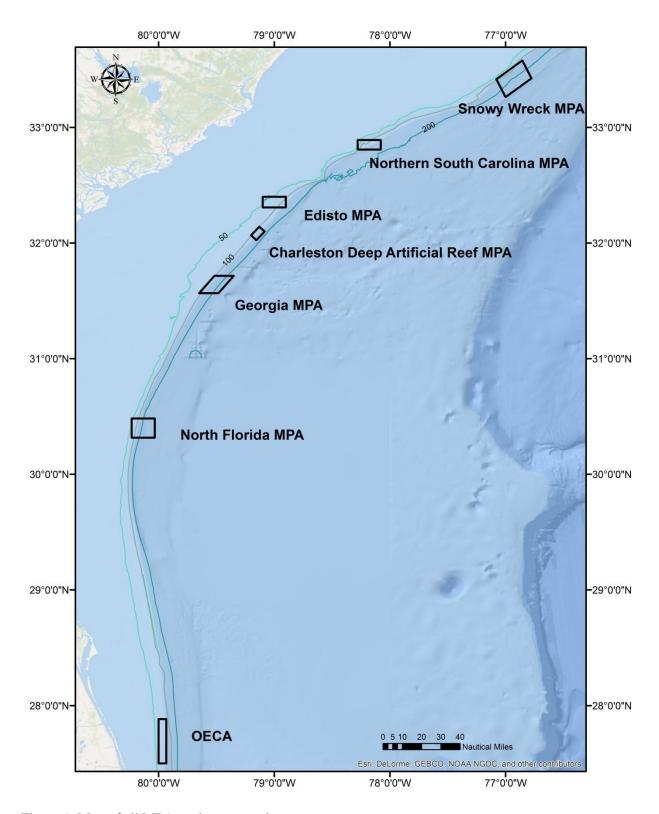


Figure 1. Map of all MPAs to be surveyed.