

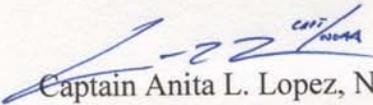


UNITED STATES DEPARTMENT OF COMMERCE

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

MEMORANDUM FOR: Commander Peter Fischel, NOAA
Commanding Officer, NOAA Ship *Pisces*

JUN 28 2013

FROM:  Captain Anita L. Lopez, NOAA
Commanding Officer, NOAA Marine Operations Center-Atlantic

SUBJECT: Project Instruction for PC-13-03
Deepwater Coral Survey

Attached is the final Project Instruction for PC-13-03, Deepwater Coral Survey, which is scheduled aboard NOAA Ship *Pisces* during the period of 1 July – 14 July, 2013. Of the 14 DAS scheduled for this project, 14 DAS are base funded in support of NMFS. 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:
MOA1



U. S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Southeast Fisheries Science Center
3209 Frederic St.
Pascagoula, MS 39567

Project Instructions

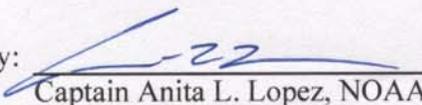
JUN 28 2013

Date Submitted: 06/13/2013
Platform: NOAA Ship PISCES
Cruise Number: PC 13-03
Project Title: Deepwater Coral Survey
Cruise Dates: 07/01/2013 - 07/14/2013

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Field Party Chief
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Date: 06/13/2013

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Dr. Lisa Desfosse
Director, Mississippi Laboratory
NMFS, Pascagoula, MS
Date: 06/27/2013

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Dr. Bonnie Ponwith
Director, SEFSC
NMFS, Miami, FL
Date: 06/28/2013

Approved by: 
Captain Anita L. Lopez, NOAA
Commanding Officer
Marine Operations Center - Atlantic
Date: 28 JUN 13

Commanding Officer

NOAA Ship: PISCES

PROJECT INSTRUCTIONS

NOAA Ship PISCES Cruise PC-13-03 (14)

I. Overview

- A. Cruise Period: 1 - 14 July 2013
- B. Operating 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 5 Marine Protected Areas (Figures 1&2):
- 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.
 - 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.
- C. Summary of Objectives: The goal of the cruise is to gather additional data on habitat and fish assemblages in 5 of the South Atlantic MPAs as part of a long term sampling program to document changes in these areas before and after fishing restrictions are implemented. We will also want to visit some sites a bit north and south of the established MPAs as the South Atlantic Fishery Management Council is in the process of establishing additional MPAs to protect speckled hind and Warsaw grouper. 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.
- Education and Outreach: We will have a Teacher-at-Sea participating on this cruise as well as a videographer that will be producing a cruise video and providing materials for Harbor Branch Oceanographic Institute's website.

D. Participating Institutions: NOAA/NMFS/SEFSC Panama City Laboratory, Harbor Branch Oceanographic Institute/Florida Atlantic University, University of North Carolina at Wilmington, NOS/NCCOS, NOAA Teacher-at-Sea Program, College of Charleston, Boston University

E. Personnel (Science Party)

<u>Name</u>	<u>Title</u>	<u>Sex</u>	<u>Organization</u>	<u>Citizenship</u>
Stacey Harter	Field Party Chief/ Principal Investigator	F	NOAA/NMFS/PC	USA
Andrew David	Co-PI	M	NOAA/NMFS/PC	USA
LTJG Heather Moe	Scientist	F	NOAA/NMFS/PC	USA
Steven Matthews	Scientist	M	NOAA/NMFS/PC	USA
Marta Ribera	Scientist	F	Boston University	USA
Lance Horn	ROV Pilot	M	UNCW	USA
Glenn Taylor	ROV Pilot	M	UNCW	USA
John Reed	Co-PI	M	HBOI/FAU	USA
Stephanie Farrington	Scientist	F	HBOI/FAU	USA
Brian Cousins	Videographer	M	HBOI/FAU	USA
Laura Kracker	Scientist	F	NOS/NCCOS	USA
Freidrich Knuth	Scientist	M	College of Charleston	USA
Jennifer Petro	Teacher-At-Sea	F	NOAA TAS	USA

F. Administrative

1. Points of Contacts: Field Party Chief: Stacey Harter, 3500 Delwood Beach Rd, Panama City, FL,32408, 850-234-6541x202, Stacey.Harter@noaa.gov

Operations Officer: LT Kyle Byers, NOAA Ship Pisces, 151 Watts Ave, Pascagoula, MS 39567; 301.713.7774 (Ops.Pisces@noaa.gov)

2. Diplomatic Clearances: None

3. Licenses and Permits: None

II. Operations

A. Cruise Plan/Itinerary

Date	Location	Days
30 June 2013	Mobilization of Science Party	
1 July 2013	PISCES departs Mayport, FL, arrives at North Florida MPA, conduct ROV operations, map overnight	1
2 July 2013	PISCES conducts ROV operations at North Florida MPA during the day, map overnight	1
3 July 2013	PISCES conducts ROV operations at North Florida MPA during the day, transit to Edisto overnight	1
4 July 2013	PISCES conducts ROV operations at Edisto MPA during the day, map overnight	1
5 July 2013	PISCES conducts ROV operations at Edisto MPA, transit to Snowy Wreck MPA overnight	1
6 July 2013	PISCES conducts ROV operations at Snowy Wreck MPA, map overnight	1
7 July 2013	PISCES conducts ROV operations at Snowy Wreck MPA, map overnight	1
8 July 2013	PISCES conducts ROV operations at Snowy Wreck MPA, transit to South Carolina MPA overnight	1
9 July 2013	PISCES conducts ROV operations South Carolina MPA, map overnight	1
10 July 2013	PISCES conducts ROV operations South Carolina MPA, map overnight	1
11 July 2013	PISCES conducts ROV operations South Carolina MPA, Transit to Georgia MPA overnight	1
12 July 2013	PISCES conducts ROV operations Georgia MPA, map overnight	1
13 July 2013	PISCES conducts ROV operations Georgia MPA,	

transit to Mayport, FL overnight	1
14 July 2013 PISCES arrives Mayport, FL, science party disembarks	1
TOTAL SEA DAYS	14

B. Staging and Destaging

Staging and Destaging will be conducted in Mayport, FL. Loading and unloading of gear should take <2 hrs, the ship will need to provide a crane operator for loading and unloading gear. Loading will take place on Sunday June 30 and unloading will take place on Sunday July 14.

C. Operations to be Conducted

Vessel operations will be on a 24 hour 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. Crew members will be required on deck to work the crane and other equipment for deployment and recovery of the ROV and other gear.

a. ROV: NURC/UNCW's Phantom SII ROV will be used for transect surveys and video documentation of habitat and reef fish communities. A crane is required for deployment and recovery of the ROV and downweight during ROV operations. The crane 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). A brief ADCP survey will be conducted prior to each ROV dive to assess surface and midwater current speed and direction.

b. Multibeam Mapping: The ME70 multibeam mapping system on the 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 at least two personnel to work opposite watch of the survey tech.

c. Stationary Video: **This gear will only be used if the ROV fails.** A 4 camera array will be deployed at selected sites to obtain habitat and fish abundance and distribution data. The array is linked to surface floats with 7/16" Spectra line (Samson Amsteel Blue). The array is deployed by suspending it over the side from a lifting line attached to a crane. A spinnaker shackle quick release is used to separate the array from the lifting line and drop the array into the water. The Spectra line is paid over the side and terminates at a poly ball float with a smaller witness float. The array is deployed for 30 min and is retrieved via a pothauler. The floats are retrieved with a boat hook or grapple and the line fed to the pothauler. Upon reaching the surface, a Kong hook is attached to the array with a pole and the crane is used to recover the array to the deck. The science party will supply the Spectra line for the array. Rapid recovery is important to prevent damage to the array from collision with rocks on the bottom.

d. 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 nightwatch.

D. Dive Plan: N/A

E. Applicable Restrictions: None

III. Equipment

A. Equipment and Capabilities Provided by the Ship

1. Electrical power for ROV control station in dry lab. 30 A at 110 VAC
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 300m.
4. Winch to deploy and retrieve CTD. Max depth of 300m.
5. Pothauler for retrieving camera array if it is used
6. ME70 Multibeam mapping system
7. Freezer space

B. Equipment and Capabilities Provided by the Scientists

1. ROV
2. Camera Array
3. Deployment & retrieval gear for ROV and camera array

IV. Hazardous Materials

A. Policy and Compliance

The FPC is responsible for complying with MOCDOC 15, Fleet Environmental Compliance #07, Hazardous Material and Hazardous Waste Management Requirements for Visiting Scientists, released July 2002. Documentation regarding those requirements will be provided by the Chief of Operations, Marine Operations Center, upon request.

By Federal regulations and NOAA Marine and Aviation Operations policy, the ship may not sail without a complete inventory of all hazardous materials by name and the anticipated quantity brought aboard, MSDS and appropriate neutralizing agents, buffers, and/or absorbents in

amounts adequate to address spills of a size equal to the amount of chemical brought aboard. The amount of hazardous material arriving and leaving the vessel shall be accounted for by the FPC.

B. Radioactive Isotopes N/A

C. Inventory: None

V. Additional Projects

A. Supplementary (“Piggyback”) Projects: N/A

B. NOAA Fleet Ancillary Projects: N/A

VI. Disposition of Data and Reports

A. Data Responsibilities – Prior to demobilization, the ship is required to provide a copy of the ME70/EK60 data, CTD data and bridge logs to the FPC. Science party will provide hard drives to store ME70/EK60 data.

B. Pre and Post Cruise Meeting

Pre-Cruise Meeting: On the ship prior to departure, the FPC will conduct a meeting of the scientific party to train them in sample collection and inform them of cruise objectives. Some vessel protocols, e.g., meals, watches, etiquette, etc. will be presented by the ship’s Operations Officer.

Post-Cruise Meeting: Upon completion of the cruise, a meeting will normally be held at 0830 (unless prior alternate arrangements are made) and attended by the ship’s officers, the FPC and members of the scientific party, the Vessel Coordinator and the Port Captain to review the cruise. Concerns regarding safety, efficiency, and suggestions for improvements for future cruises should be discussed. Minutes of the post-cruise meeting will be distributed to all participants by email, and to the Commanding Officer and Chief of Operations, Marine Operations Center.

C. Ship Operation Evaluation Report

Within seven days of the completion of the cruise, a Ship Operation Evaluation form is to be completed by the FPC. The preferred method of transmittal of this form is via email to OMAO.Customer.Satisfaction@noaa.gov . If email is not an option, a hard copy may be forwarded to:

Director, NOAA Marine and Aviation Operations
NOAA Office of Marine and Aviation Operations
8403 Colesville Road, Suite 500
Silver Spring, MD 20910

VII. Miscellaneous

A. Meals and Berthing

Meals and berthing are required for up to 13 scientists. Meals will be served 3 times daily beginning 1 hour before scheduled departure, extending throughout the cruise, and ending 2 hours after the termination of the cruise. 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 survey (e.g., FPC is allergic to fin fish).

Berthing requirements, including number and gender of the scientific party, will be provided to the ship by the FPC. The FPC 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 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 cruise 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 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 7, 1999 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, Revised: 12/11) must be completed in advance by each participating scientist. The NHSQ can be obtained from the FPC or the NOAA website at <http://www.corporateservices.noaa.gov/~noaaforms/eforms/nf57-10-01.pdf>. The completed form should be sent to the Regional Director of Health Services at Marine Operations Center. The participant can mail, fax, or scan the form into an email using the contact information below. The NHSQ should reach the Health Services Office no later than 4 weeks prior to the cruise to allow time for the participant to obtain and submit additional information that health services might require before clearance to sail can be granted. Please contact MOC Health Services with any questions regarding eligibility or completion of the NHSQ. Be sure to include proof of tuberculosis (TB) testing, sign and date the 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.

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

E-mail MOA.Health.Services@noaa.gov

Prior to departure, the FPC must provide a listing of emergency contacts to the Operations Officer for all members of the scientific party, with the following information: name, address, relationship to member, and telephone number.

C. Shipboard Safety

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. 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 and all other over the side operations. Hard hats and work vests will be provided by the ship when required. (A safety meeting will be held daily between ship's command, department heads, and field party chief)

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 e-mail 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 it must be arranged at least 30 days in advance.

E. IT Security

Any computer that will be hooked into the ship's network must comply with the *NMAO Fleet IT Security Policy* 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 these requirements prior to boarding the ship is preferable.

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: N/A

Maps of operational areas:

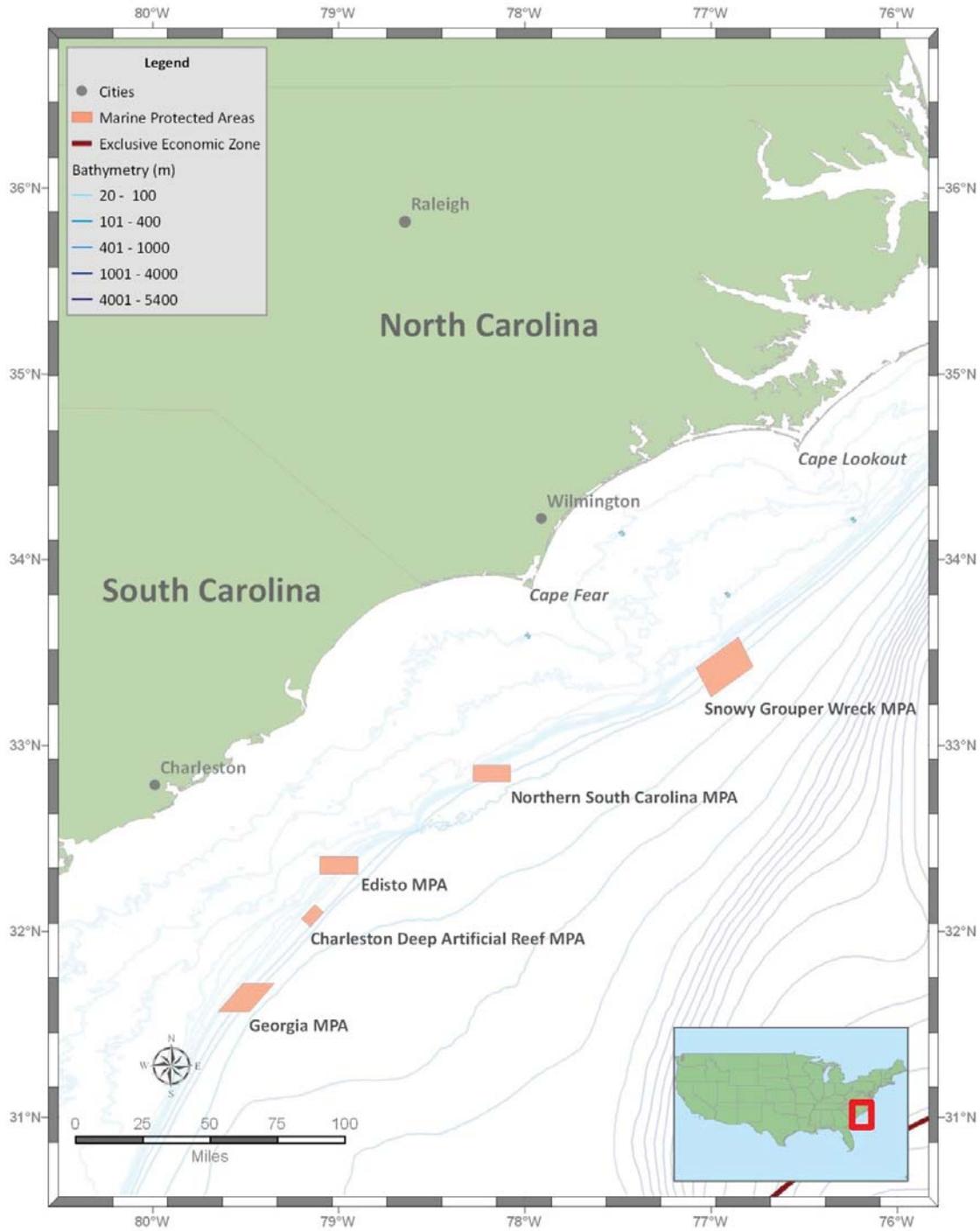


Figure 1. North Carolina to Georgia MPAs. All will be visited during this cruise except for the Charleston Deep Artificial Reef MPA.

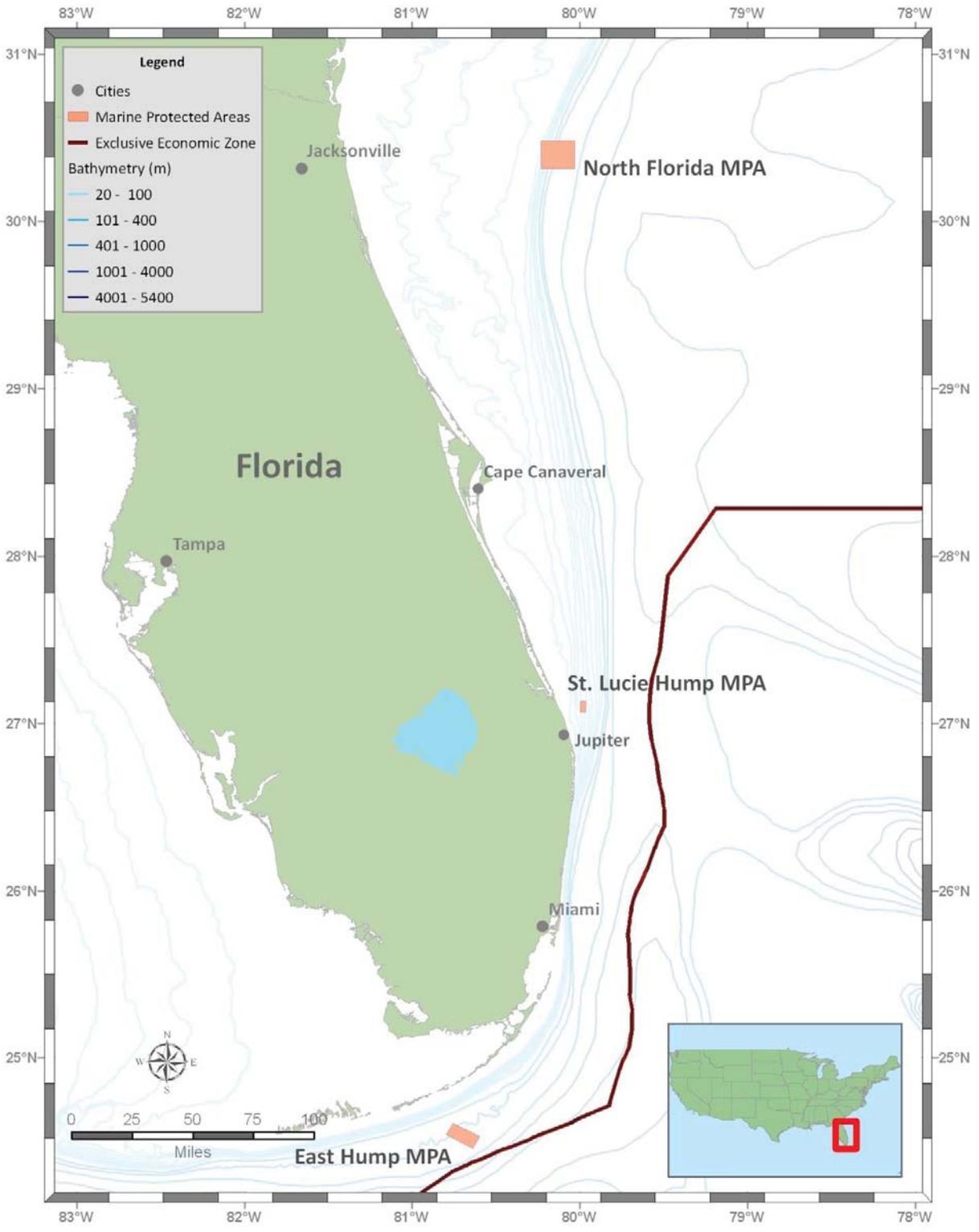


Figure 2. Florida MPAs. The only one we will be visiting on this cruise is the North Florida MPA.