

UNITED STATES DEPARTMENT OF COMMERCE

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

MEMORANDUM FOR: Lieutenant Commander Nicholas Chrobak, NOAA

Commanding Officer, NOAA Ship Nancy Foster

FROM:

Captain Anita L. Lopez, NOAA

Commanding Officer, NOAA Marine Operations Center-Atlantic

SUBJECT:

Project Instruction for NF-13-08

EPA Fernandina Beach ODMDS Habitat Assessment & Mayport Post

Disposal SPI Survey

Attached is the final Project Instruction for NF-13-08, EPA Fernandina Beach ODMDS Habitat Assessment & Mayport Post Disposal SPI Survey, which is scheduled aboard NOAA Ship *Nancy Foster* during the period of 9 August – 15 August, 2013. Of the 7 DAS scheduled for this project, 7 DAS are program funded by EPA. 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.

Attachment

cc:

MOA1





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

Project Instructions

	•
Date Submitted	d: 2 9 2015
Platform:	NOAA Ship Nancy Foster
Project Number	NF-13-08
Project Title:	Fernandina Beach ODMDS Habitat Assessment & Mayport Post Disposal SPI Survey
Project Dates:	August 09, 2013 to August 15, 2013
Prepared by:	Christopher J. McArthur Chief Scientist
Approved by:	U.S. Environmental Protection Agency Region 4 Water Protection Division Mel Parsons Principal Investigator/Dive Master U.S. Environmental Protection Agency Region 4 Science and Ecosystem Support Division
Approved by:	Jennifer Derby Chief, Coastal and Ocean Protection Section
Approved by:	Captain Anita L. Lopez, NOAA Commanding Officer

Marine Operations Center - Atlantic

I. Overview

A. Brief Summary and Project Period

Pursuant to the Marine Protection, Research, and Sanctuaries Act, the U.S. Environmental Protection Agency is responsible for the management and monitoring of Ocean Dredged Material Disposal Sites (ODMDSs). There are two primary objectives of the survey: 1) assess hard bottom habitat within the Fernandina Beach ODMDS; and 2) Map the dredged material footprint at the Jacksonville ODMDS from disposal of dredged material from the Naval Station Mayport Deepening project. Both the Fernandina Beach and Jacksonville ODMDSs are managed by EPA Region 4 in cooperation with the U.S. Army Corps of Engineers. Both sites are located in an area abundant in scattered natural hard bottom habitats and are used in support of both civil works and U.S. Naval operations. The Naval Station Mayport Deepening Project changed the use of both sites from historical disposal practices in both the volume and type of dredged material disposed. The Mayport project commenced disposal operations at the Jacksonville ODMDS in November 2010 and at the Fernandina Beach ODMDS in April 2011 at the end of the northern right whale winter calving season. EPA Region 4 conducted pre-disposal Sediment Profile Imaging surveys at both sites in 2010 and 2011. Disposal operations were completed at the Fernandina Beach ODMDS November, 2011(small amount in May/June 2012) and at the Jacksonville ODMDS in August, 2012. A post-disposal SPI survey was conducted at the Fernandina Beach ODMDS in late April 2012 and images were also collected at the Jacksonville ODMDS prior to dredging project completion. Post disposal image collection is still needed at the Jacksonville ODMDS.

In addition, in response to public concerns raised regarding habitat at the Fernandina Beach ODMDS, EPA mapped habitat within the ODMDS in early 2011 using sidescan sonar and underwater towed video. Natural low relief hardbottom was identified in the southeastern portion of the ODMDS and higher relief hard bottom was identified in the western portion of the ODMDS. In late April 2012, EPA conducted a preliminary exploratory habitat assessment with three stations within each habitat type. Results showed high abundance of fish at the monitored sites warranting further studies. This study will be a screening level study. Final study results will be shared with a team consisting of the U.S. Army Corps of Engineers, NOAA National Marine Fisheries Service and the State of Florida to make decisions regarding future management of the ODMDS. Input and expertise from NOAA on these habitats is crucial to the project success.

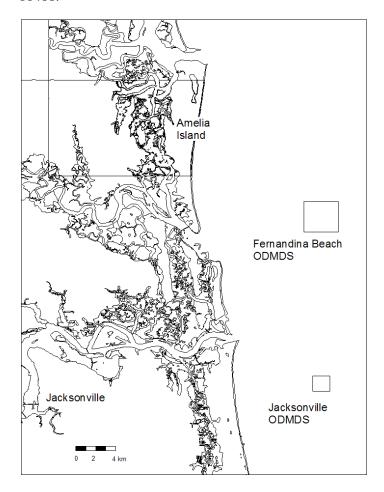
B. Service Level Agreements

All 7 DAS scheduled for this project are program funded by EPA HQ through an Interagency Agreement with NOAA.

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

The operating area includes the Fernandina Beach ODMDS and the Jacksonville ODMDS. The Fernandina ODMDS is located approximately 7.1 nmi offshore Fernandina

Beach, Florida and 11.8 nmi from the entrance to the St. Marys River. Center coordinates for the Fernandina Beach ODMDS are: 30°32.014′N; 81° 17.988′W. The Jacksonville ODMDS is located 4.5 nmi offshore Atlantic Beach, Florida and 5.5 nmi southeast of the entrance to the St. Johns River Entrance Channel. Center coordinates for the Fernandina Beach ODMDS are: 30° 21.02′N; 81° 17.99′W. Both sites can be found on NOAA Chart 11488.



D. Summary of Objectives

The survey's objective is to sediment map the Jacksonville ODMDS to evaluate and verify the spatial extent of impact as a result of the Mayport deepening project. The survey will also identify and quantify the hard bottom habitat within the Fernandina Beach ODMDS.

E. Participating Institutions

NOAA

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

Name (Last, First)	Title	Date	Date	Gender	Affiliation	Nationality
		Aboard	Disembark			
Blackburn, Steve	Life Scientist	8/8/13	8/16/13	M	EPA	USA
Campbell, Jed		8/8/13	8/16/13	M	EPA	USA
Derby, Jennifer	Supervisory	8/8/13	8/16/13	F	EPA	USA
	Life Scientist					
Hall, Rosemary	Ecologist	8/8/13	8/16/13	F	EPA	USA
Houda, Tara		8/8/13	8/16/13	F	Public	USA
					Health	
					Service	
Johnson, Doug	Life Scientist	8/8/13	8/16/13	M	EPA	USA
Kendall, Drew	Life Scientist	8/8/13	8/16/13	M	EPA	USA
McArthur,	Chief Scientist	8/8/13	8/16/13	M	EPA	USA
Christopher						
Parson, Mel	Dive Master,	8/8/13	8/16/13	M	EPA	USA
	PI					
John Nakayama	Technician	8/8/13	8/16/13	M	Newfields	
White, Greg	Environmental	8/8/13	8/16/13	M	EPA	USA
	Scientist					
Laurie Lindquist	Life Scientist	8/8/13	8/16/13	F	EPA	USA

G. Administrative

1. Points of Contacts:

Survey Chief Scientist: Christopher J. McArthur

Organization: U.S. EPA Region 4, Water Protection Division Organization Address: 61 Forsyth, S.W., Atlanta, GA 30306

Organization Telephone No.: (404) 562-9391; personal cell (404) 909-0347

FAX No.: (404) 562-9343

Email: mcarthur.Christopher@epa.gov

Habitat Assessment Principal Investigator/Chief Scientist Alternate: Mel Parsons Organization: U.S. EPA Region 4, Science and Ecosystem Support Division

Organization Address: 980 College Station Rd., Athens, GA 30605

Organization Telephone No.: (706) 355-8714; personal cell (706) 202-5092

FAX No.: (706) 562-8726 Email: parsons.mel@epa.gov

NOAA Ship Nancy Foster LT Colin Kliewer, Operations Officer

Ship's Cell: 843-991-6326 Iridium: 808-434-5653

Email: colin.kliewer@noaa.gov

2. Diplomatic Clearances: N/A

3. Licenses and Permits: N/A

II. Operations

A. Project Itinerary

Date/Time	Activity
8/8/13: 1400-1600hr	Survey Team arrives at NOAA Ship Nancy
	Foster in Charleston, SC
8/8/13: 1600hr	Welcome Aboard/Safety Briefings
8/9/13: 0800-0900hr	Complete Equipment Loading
8/9/13: 0930hr	Depart Charleston, SC
8/9/13: 1000hr- 8/10/13: 0600hr	Transit to Fernandina Beach ODMDS, Project
	Briefings
8/10/13: 0800hr-1630hr	Dive Operations, Fernandina Beach ODMDS
	Diver Emergency Drill
8/10/13: 2000hr – 8/11/13: 0400hr	SPI Operations at the Jacksonville ODMDS
8/11/13: 0800hr-1630hr	Dive Operations, Fernandina Beach ODMDS
8/11/13: 2000hr – 8/12/13: 0400hr	SPI Operations at the Jacksonville ODMDS
8/12/13: 0800hr-1630hr	Dive Operations, Fernandina Beach ODMDS
8/12/13: 2000hr – 8/13/13: 0400hr	SPI Operations at the Jacksonville ODMDS
8/13/13: 0800hr-1630hr	Dive Operations, Fernandina Beach ODMDS
8/13/13: 2000hr – 8/14/13: 0400hr	SPI Operations at the Jacksonville ODMDS
8/14/13: 0800hr-1630hr	Dive Operations, Fernandina Beach ODMDS
8/14/13: 1630 – 8/15/13: 1230	Transit to Charleston
8/15/13: 1230 - 1400	Unload Equipment
8/15/13:1400	Survey Team Departs. Some survey team
	members may need to stay over until 8/16/13.

B. Staging and Destaging

Staging will occur in Charleston, SC. The survey team will arrive on 8/8/13 and room onboard NOAA Ship *Nancy Foster*. Survey equipment will be loaded in the morning on 8/9/13. A crane will be required to load the SPI camera (~1,000 lbs). The survey will demobilize on 8/15/13 in Charleston, SC. Some survey team members may remain on board until the morning of 8/16/13 if needed depending on travel requirements.

C. Operations to be Conducted

Habitat Assessment-Fernandina Beach ODMDS

Up to 40 habitat stations will be visited and up to 20 of those will undergo full assessment. Sample station locations are provided in Appendix A. Assessment will be conducted by divers. Two dive teams will be deployed simultaneously; one team as a scout team and one as an assessment team. Two stations will be assessed during the

morning dives and two in the afternoon. The scout team will visit as many stations as time allows.

Method Description: Two dive teams will be deployed simultaneously, a scout team and an assessment team. The scout team will first visit each station and verify the presence/absence of hard bottom habitat. The dive boat will navigate to within 3 meters of the station coordinates and drop the dive buoy marking the station. Live boat operations will be used. Two divers will descend the buoy and determine the presence/absence of hard bottom. If hard bottom is present, the dive buoy will be left in place, if absent the buoy will be removed. The scout team will then move on to the next station.

The assessment team will follow the scout team and assess only those stations where hard substrate has been identified. The assessment team will first confirm the dive buoy remains on station. Four divers will deploy for assessment in teams of two. Divers should not descend within 15 minutes of the scout team's dive at the station. Assessment will take approximately 40 minutes per site. Assessment will include: fish counts and biomass, macroinvertebrate counts, rugosity, coral cover, and sponge/tunicate counts.

Sediment Profile Camera-Jacksonville ODMDS

Up to 50 stations will be sampled. Sample station locations are provided in Appendix B. SPI sampling will occur during an 8 hour shift every evening.

Method Description: The SPI images will be acquired using a sediment-profile camera system (Ocean Imaging Systems, North Falmouth, MA). The SPI camera consists of a wedge-shaped prism with a Plexiglas faceplate; light is provided by an internal strobe. The back of the prism has a mirror mounted at a 45-degree angle to reflect the profile of the sediment-water interface toward the camera, which is mounted horizontally on the top of the prism. The prism is filled with distilled water, through which the photographs are obtained. Because the object (sediment) to be photographed is directly against the clear window (faceplate) comprising the front of the prism, turbidity of the ambient seawater is not a limiting factor.

To collect SPI data, the survey vessel will be piloted to each target sampling location. Once within a pre-determined distance of the target location, the SPI camera will be deployed. For the present survey, 50 m will be established as the initial goal, but the EPA Chief Scientist in consultation with the Commanding Officer (CO) will have the flexibility to change this as necessary or desirable depending on the conditions actually encountered in the field.

For deployment of the SPI camera system, it is first attached to the survey vessel's hydrowire. The camera prism is mounted on an assembly that can be moved up and down by producing tension or slack on the winch wire. As the camera is lowered through the water, tension on the wire keeps the prism in the "up" position. Once the camera frame contacts the bottom, slack on the wire allows the prism to vertically descend into the seafloor.

The rate at which the optical prism penetrates into the sediments is controlled by a passive hydraulic piston. This allows the optical prism to descend at approximately 6 cm per second and minimizes disturbance to the sediment column. As the SPI prism penetrates into the seafloor, a magnetic switch is triggered, and a photograph of the

sediment column is taken 15 seconds from the time of switch contact. This time delay allows for optimal penetration of the prism into the sediment.

As the camera is raised off the bottom, a wiper blade automatically cleans any sediment off of the prism faceplate. The digital camera is automatically ready to take another photograph, the strobes are recharged, and the camera can be lowered for another replicate image. Three replicates will be taken at each station. The instrument will be raised slightly off the bottom between replicates and will be retrieved and brought on deck between stations.

When the camera is brought to the surface, the frame count is verified and the camera prism penetration is estimated from a penetration indicator that measures the distance the prism fell relative to the camera base. If penetration is minimal, weight packs can be loaded to give the assembly increased penetration. If penetration is too great, adjustable stops (which control the distance the prism descends) can be lowered, and "mud" doors can be attached to each side of the frame to increase the bearing surface.

At the beginning of the survey, the times on the SPI and plan-view digital cameras will be synchronized with the time on the EPA Region 4's navigation system. Each replicate SPI and plan-view image then can be identified by matching the "time stamp" recorded upon creation on each digital image file with the corresponding time and position recorded in the navigation system and/or in the written logbook. The EPA Watch Chief or his/her designee will record a position fix in the navigation system for each of the three replicate camera drops at each SPI sampling station. As a back-up for the position fixes recorded electronically by the navigation system, the written sample log will be kept by the watch chief. Information recorded in the SPI field logbook includes:

At each sampling station:

- Time of each camera drop
- Latitude and Longitude of each replicate
- Replicate ID
- Frame Count
- Water Depth
- Penetration
- Weight

EPA will establish a GPS antenna on the vessel near the location of the camera deployment. At the end of each field day, the digital image files on the hard drive of the EPA laptop computer are copied to removable storage media (external hard drive) to provide a "working" electronic back-up. Navigation files from EPA's navigation system will also be backed up every 6 hours.

D. Dive Plan

All dives are to be conducted in accordance with the requirements and regulations of the EPA Diving Program pursuant to the January 8, 2013 Diving Reciprocity Agreement with the NOAA Diving Program (http://www.ndc.noaa.gov/dr.html) and require the approval of the ship's Commanding Officer.

The Dive Plan encompassing all legs of the survey is presented in Appendix C.

E. Applicable Restrictions

Conditions which preclude normal operations:

- Diving operations require good sea and weather conditions and good bottom
 visibility. Dive operations will only be undertaken when the CO, the Chief
 Scientist and the Dive Master all agree that conditions are safe. Dive operations
 should not be undertaken during a small craft advisory issued by the National
 Weather Service.
- SPI operations can be undertaken under a wider array of sea conditions.
 Operations should be suspended in the case of severe weather such as lightening.
 High seas can cause the camera to trigger prematurely and can make the camera dangerous to deploy and/or recover. Images will be reviewed to determine if seas conditions are not conducive to quality data. Operations should be suspended if the CO and/or Chief Scientist determines conditions are unsafe.
- The SPI system contains numerous electronics that can fail. The operations will be suspended if the camera malfunctions. A SPI technician will be on board to troubleshoot instrument failures.

III. Equipment

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

Equipment	Activity
Main Deck Crane	Loading/Unloading SPI Camera (816lbs)
A-Frame or J-Frame	SPI Camera Deployment, Jacksonville ODMDS
Winch	SPI Camera Deployment, Jacksonville ODMDS
Shallow water multibeam echo	SPI Camera Data Record, Jacksonville ODMDS
sounder: Reson 7125 System (400	[will be calibrated prior to SPI stations, location
kHz and 200 kHz, 250m max)	TBD]
HYPACK data acquisition and	SPI Camera Position Recording, Jacksonville
navigation software	ODMDS
Nitrox Dive Compressor (36%)	Dive Operations, Fernandina Beach ODMDS
Dive Boat – 3 divers	Dive Operations, Fernandina Beach ODMDS
NF3 - Northwind Marine Dive	
Boat	
Dive Boat – 5 divers	Dive Operations, Fernandina Beach ODMDS
NF4 - Northwind Marine Dive	
Boat	
Dive Tanks	Dive Operations, Fernandina Beach ODMDS
Dynamic Position	May be required for SPI deployment dependent
	on sea conditions.

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

Equipment	Activity
SPI Camera and Frame	Sediment Profile Images, Jacksonville ODMDS
GPS and antennae	Sediment Profile Images, Jacksonville ODMDS
HYPACK data acquisition and	SPI Camera Position Recording, Jacksonville
navigation software	ODMDS
Dive Tanks (19 steel 100s - DIN;	Dive Operations, Fernandina Beach ODMDS
16 aluminum 80s); EPA will	
provide DIN adaptor for	
compressor	
Dive Equipment	Dive Operations, Fernandina Beach ODMDS
Dive Scooters (2) – 60lbs	Dive Operations, Fernandina Beach ODMDS
Dive Buoys (4)	Mark station locations and provide down lines,
	Fernandina Beach ODMDS

IV. Hazardous Materials

A. Policy and Compliance

The Chief Scientist is responsible for complying with FEC 07 Hazardous Materials and Hazardous Waste Management Requirements for Visiting Scientific Parties (or the OMAO procedure that supersedes it). 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, or absorbents in amounts adequate to address spills of a size equal to the amount of chemical brought aboard, and a chemical hygiene plan. Documentation regarding those requirements will be provided by the Chief of Operations, Marine Operations Center, upon request.

Per FEC 07, the scientific party will include with their project instructions and provide to the CO of the respective ship 60 to 90 days before departure:

- A list of hazardous materials by name and anticipated quantity
- Include a chemical spill plan the addresses all of the chemicals the program is bringing aboard. This shall include:
 - Procedures on how the spilled chemicals will be contained and cleaned up.
 - A complete inventory (including volumes/amounts) of the chemical spill supplies
 and equipment brought aboard by the program. This must be sufficient to clean
 and neutralize all of the chemicals brought aboard by the program.
 - A list of the trained personnel that will be accompanying the project and the training they've completed.

Upon embarkation and prior to loading hazardous materials aboard the vessel, the scientific party will provide to the CO or their designee:

An inventory list showing actual amount of hazardous material brought aboard

- An MSDS for each material
- Confirmation that neutralizing agents and spill equipment were brought aboard sufficient to contain and cleanup all of the hazardous material brought aboard by the program.

Upon departure from the ship, scientific parties will provide the CO or their designee an inventory of hazardous material indicating all materials have been used or removed from the vessel. The CO's designee will maintain a log to track scientific party hazardous materials. MSDS will be made available to the ship's complement, in compliance with Hazard Communication Laws.

Scientific parties are expected to manage and respond to spills of scientific hazardous materials. Overboard discharge of scientific chemicals is not permitted during projects aboard NOAA ships.

No Hazardous Materials will be utilized or brought on board for this survey.

B. Radioactive Isotopes

N/A

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

All habitat assessment data is the responsibility of the Principal Investigator. Data will be recorded on field sheets and transcribed into Excel spreadsheets at the end of each survey day. All SPI data is the responsibility of the Chief Scientist. Images will be downloaded from the camera periodically and stored on a laptop and backed up on an external hard drive. An operational survey report will be developed and provided to EPA HQ within 21 days of survey completion. A Site Monitoring and Assessment Report for each ODMDS will be written and provided to EPA HQ by 6/1/14.

B. Pre and Post Project Meeting

Prior to departure, the Chief Scientist will conduct a meeting of the scientific party to train them in sample collection and inform them of project objectives. Some vessel protocols, e.g., meals, watches, etiquette, etc. will be presented by the ship's Operations Officer.

Post-Project Meeting: Upon completion of the project, a meeting will arranged and attended by the Commanding Officer, Operations Officer, and the Chief Scientist to review the project. Concerns regarding safety, efficiency, and suggestions for improvements for future projects should be discussed.

C. Ship Operation Evaluation Report

Within seven days of the completion of the project, a Ship Operation Evaluation form is to be completed by the Chief Scientist. 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

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 survey. One scientist will require vegetarian meals.

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 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: 02 JAN 2012) 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. 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 project 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 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

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. Hard hats and work vests will be provided by the ship when required.

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 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* 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 these requirements prior to boarding the ship is required and applies to any operating system.

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.

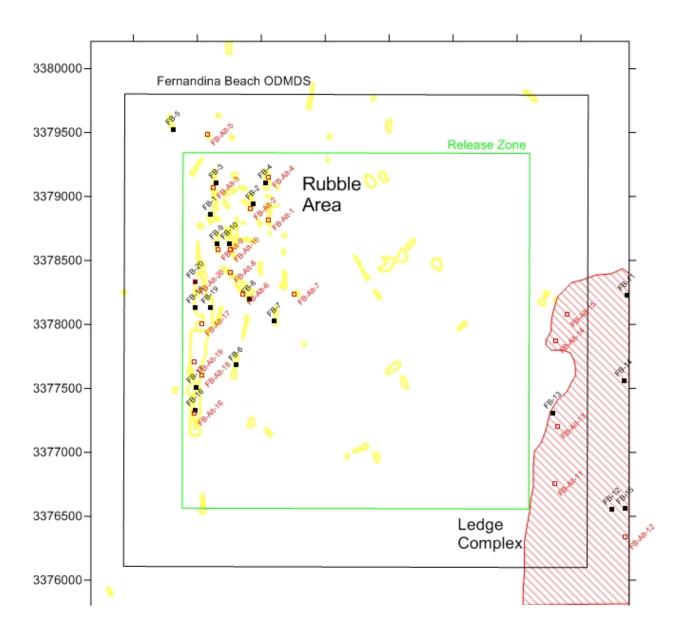
F. Foreign National Guests Access to OMAO Facilities and Platforms

No Foreign Nationals

Appendix A.

Fernandina Beach ODMDS Dive Locations

Station I.D.	La	titude	Lo	ngitude	Station I.D.	Latitude		Lor	Longitude	
FB-1	30	32.5051	81	18.7023	FB-Alt-1	30	32.4840	81	18.4165	
FB-2	30	32.5506	81	18.4924	FB-Alt-2	30	32.5288	81	18.5066	
FB-3	30	32.6402	81	18.6728	FB-Alt-3	30	32.6184	81	18.6870	
FB-4	30	32.6407	81	18.4326	FB-Alt-4	30	32.664	81	18.4170	
FB-5	30	32.8647	81	18.8836	FB-Alt-5	30	32.8433	81	18.7178	
FB-6	30	31.8677	81	18.5736	FB-Alt-6	30	32.1682	81	18.5399	
FB-7	30	32.0554	81	18.3868	FB-Alt-7	30	32.1688	81	18.2900	
FB-8	30	32.1488	81	18.5120	FB-Alt-8	30	32.2617	81	18.6027	
FB-9	30	32.3826	81	18.6689	FB-Alt-9	30	32.3552	81	18.6654	
FB-10	30	32.3827	81	18.6064	FB-Alt-10	30	32.3553	81	18.6030	
FB-11	30	32.1687	81	16.6632	FB-Alt-11	30	31.3698	81	17.0156	
FB-12	30	31.2625	81	16.7330	FB-Alt-12	30	31.1441	81	16.6672	
FB-13	30	31.6696	81	17.0241	FB-Alt-13	30	31.6115	81	17.0018	
FB-14	30	31.8062	81	16.6766	FB-Alt-14	30	31.9739	81	17.0101	
FB-15	30	31.2649	81	16.6678	FB-Alt-15	30	32.0847	81	16.9561	
FB-16	30	31.6757	81	18.7721	FB-Alt-16	30	31.6627	81	18.7782	
FB-17	30	31.7725	81	18.7709	FB-Alt-17	30	32.0426	81	18.7432	
FB-18	30	32.1097	81	18.7735	FB-Alt-18	30	31.8256	81	18.7425	
FB-19	30	32.1099	81	18.7012	FB-Alt-19	30	31.8797	81	18.7789	
FB-20	30	32.2182	81	18.7739	FB-Alt-20	30	32.2182	81	18.7739	



Projection: UTM NAD83

Appendix B.

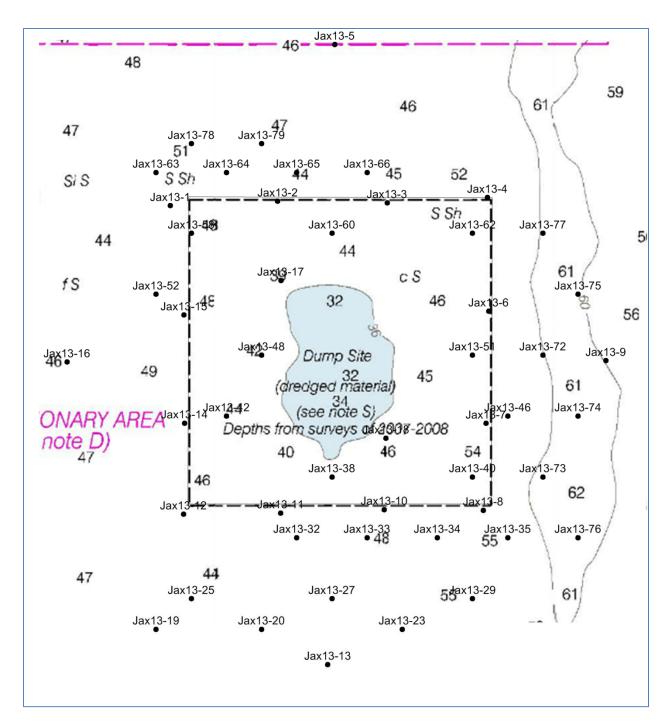
Jacksonville ODMDS SPI Locations

SPI Stations

	Station I.D.		ude	Longit	ude
Jax13-	1	30	21.4851	81	18.6273
Jax13-	2	30	21.5007	81	18.2239
Jax13-	3	30	21.4963	81	17.8129
Jax13-	4	30	21.5144	81	17.4356
Jax13-	5	30	22.0120	81	18.0116
Jax13-	6	30	21.1440	81	17.4301
Jax13-	7	30	20.7784	81	17.4393
Jax13-	8	30	20.4939	81	17.4487
Jax13-	9	30	20.9838	81	16.9892
Jax13-	10	30	20.4955	81	17.8203
Jax13-	11	30	20.4830	81	18.2097
Jax13-	12	30	20.4786	81	18.5747
Jax13-	13	30	19.9917	81	18.0313
Jax13-	14	30	20.7768	81	18.5715
Jax13-	15	30	21.1287	81	18.5749
Jax13-	16	30	20.9747	81	19.0141
Jax13-	17	30	21.2427	81	18.2115
Jax13-	18	30	20.7294	81	17.8146
Jax13-	19	30	20.1048	81	18.6766

Stat	tion I.D.	Latit	ude	Longit	ude
Jax13-	20	30	20.1058	81	18.2802
Jax13-	23	30	20.1070	81	17.7518
Jax13-	25	30	20.2043	81	18.5448
Jax13-	27	30	20.2055	81	18.0163
Jax13-	29	30	20.2067	81	17.4879
Jax13-	32	30	20.4037	81	18.1490
Jax13-	33	30	20.4043	81	17.8848
Jax13-	34	30	20.4049	81	17.6206
Jax13-	35	30	20.4055	81	17.3564
Jax13-	38	30	20.6025	81	18.0175
Jax13-	40	30	20.6037	81	17.4891
Jax13-	42	30	20.8001	81	18.4145
Jax13-	46	30	20.8025	81	17.3575
Jax13-	48	30	20.9988	81	18.2830
Jax13-	51	30	21.0007	81	17.4902
Jax13-	52	30	21.1964	81	18.6800
Jax13-	58	30	21.3952	81	18.5485
Jax13-	60	30	21.3964	81	18.0200
Jax13-	62	30	21.3976	81	17.4914
Jax13-	63	30	21.5933	81	18.6813
Jax13-	64	30	21.5940	81	18.4170
Jax13-	65	30	21.5946	81	18.1527

0.00.	Station I.D.		Latitude		ude
Jax13-	66	30	21.5952	81	17.8884
Jax13-	72	30	21.0012	81	17.2260
Jax13-	73	30	20.6043	81	17.2248
Jax13-	74	30	20.8031	81	17.0933
Jax13-	75	30	21.2000	81	17.0944
Jax13-	76	30	20.4061	81	17.0921
Jax13-	77	30	21.3982	81	17.2272
Jax13-	78	30	21.6873	81	18.5494
Jax13-	79	30	21.6880	81	18.2851



Appendix C.
Fernandina Beach ODMDS Dive Plan

US-EPA REGION 4 DIVE PLAN
DATE OF REQUEST: JUNE 28, 2013 APPROVAL: MICHAEL 1/30/13
LOCATION: OFF SHORE, FERNANDINA, FL DIVE DATES: AUGUST 10-14, 2013
SURVEY OBJECTIVES: CONDUCT HABITAT ASSESSMENTS AT THE FERNANDINA ODMDS
DIVEMASTER: MEL PARSONS TENDER(s): ANY DIVERS LISTED BELOW
DIVERS: MEL PARSONS, CHRIS McARTHUR, GREG WHITE, JED CAMPBELL, DREW KENDALL, STEVE BLACKBURN, TARA HOUDA, ROSEMARY HALL, NOAA SHIPBOARD DIVERS
LAUNCH SITE/PLATFORM: R/V NANCY FOSTER
EMERGENCY ASSISTANCE - 911, COAST GUARD CH-16, DAN (919) 684 8111
HOSPITAL: BAPTIST MED. CTR BEACHES (904)627-2900 - NON-EMERGENCY 1350 13 Th AVE. S., JACKSONVILLE BEACH or BAPTIST MED. CTR NASSAU (904)321- 3500, 1250 S. 18 TH ST., FERNANDINA BEACH
CHAMBER LOCATION: BAPTIST MEDICAL CENTER (904)202-1151 - 7 PERSON MULTIPLACE CHAMBER - THOMAS BOZZUTO
***** OXYGEN WILL BE ON SITE *****
ANTICIPATED CONDITIONS: MAX DEPTH: 65' AIR/H2O TEMP: 85/85 MAX CURRENT: <1kt. to 2kts. TIDAL INFLUENCES: MODERATE VESSEL TRAFFIC: MODERATE POLLUTION SOURCES: N/A BIOLOG. HAZARDS: JELLYFISH STINGS VISIBILITY: 0-2' OTHER: N/A
EQUIPMENT: VIKING DRY SUIT AGAX SURFACE SUPPLY STANDARD SCUBAX OTHER
SPECIAL INFORMATION: DIVING WILL BE CONDUCTED UTILIZING NITROX II (36%)
WATER TEMP AIR TEMP/WEATHER CURRENTS VISIBILITY BIOLOG. HAZARD OTHER (TIDES, POLLUTION, VESSEL TRAFFIC,ETC) PROCEDURAL NOTES EQUIP.NOTES (REPAIRS?,ETC)

DIVEMASTER SIGN. __