

**W00230**

NOAA FORM 76-35A

U.S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
NATIONAL OCEAN SURVEY

**DESCRIPTIVE REPORT**

*Type of Survey*      **Hydrographic Survey**  
*Field No.*                **NOAA NANCY FOSTER**  
*Registry No.*          **W00230**

**LOCALITY**

*State*                      **Louisiana**  
*General Locality*      **Gulf of Mexico**  
*Sub-locality*          **35 NM E of Pass a Loutre Entrance**

**2010**

CHIEF OF PARTY

LIBRARY & ARCHIVES

DATE

NOAA FORM 77-28 U.S. DEPARTMENT OF COMMERCE  
(11-72) NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

## HYDROGRAPHIC TITLE SHEET

REGISTRY NUMBER:

**W00230**

FIELD NUMBER: N/A

State/Territory: **Louisiana**

General Locality: **Gulf of Mexico**

Sub-Locality: **35 NM E of Pass a Loutre Entrance**

Scale: **1:10,000**

Date of Survey: **20100806-20100807**

Instructions Dated: **07/20/2010**

Project Number: **OSD-AHB-12**

Vessel: **NOAA Ship *Nancy Foster***

Soundings by: **Simrad EM1002**

Verification by: **Atlantic Hydrographic Branch**

Soundings in: **Meters at MLLW**

Remarks:

***1) All Times are UTC.***

***2) All soundings corrected with verified tides.***

***The purpose of this survey is to provide contemporary surveys to update National Ocean Service (NOS) nautical charts. All separates are filed with the hydrographic data. Revisions and Rednotes were generated during office processing. The processing branch concurs with all information and recommendations in the DR unless otherwise noted. Page numbering may be interrupted or non-sequential. All pertinent records for this survey, including the Descriptive Report, are archived at the National Geophysical Data Center (NGDC) and can be retrieved via <http://www.ngdc.noaa.gov/>.***

***UTM Zone 16N***



**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 Ralph R. Rogers, NOAA  
Commanding Officer, NOAA Ship *Nancy Foster*

FROM: Captain Michael S. Devany, NOAA  
Commanding Officer, NOAA Marine Operations Center – Atlantic

SUBJECT: Project Instruction for NF-10-14 DWHDC  
MS Canyon 252 Incident NRDA Tier 1 for Deepwater Communities

Attached is the final Project Instruction for NF-10-14 DWHDC, which is scheduled aboard NOAA Ship *Nancy Foster* during the period of July 21 – August 8, 2010. Acknowledge receipt of this Instruction via e-mail to [OpsMgr.MOA@noaa.gov](mailto:OpsMgr.MOA@noaa.gov) at Marine Operations Center – Atlantic.

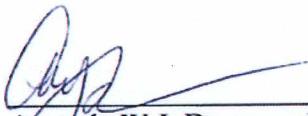
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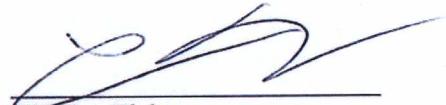
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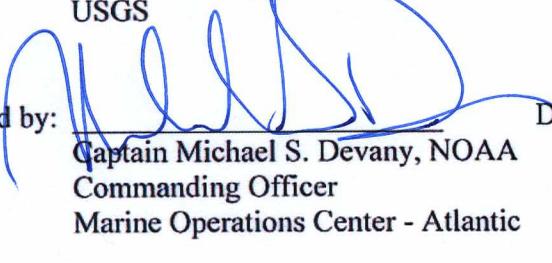
## Final Project Instruction

**Date Submitted:** 20 July 2010  
**Platform:** NOAA Ship *Nancy Foster*  
**Project Number:** NF-10-14 DWHDSC  
**Project Title:** Mississippi Canyon 252 Incident NRDA Tier 1 for Deepwater Communities  
**Project Dates:** 21 July – 8 August 2010

Prepared by:   
Amanda W.J. Demopoulos, Ph.D.  
Co-Chief Scientist  
USGS  
Dated: 20 July 2010

Approved by:   
Charles Fisher  
Chief Scientist Leg 1  
Pennsylvania State University  
Dated: 7/20/10

Approved by: \_\_\_\_\_  
Kenneth J. Sulak, Ph.D.  
Chief Scientist Leg 2  
USGS  
Dated: \_\_\_\_\_

Approved by:   
Captain Michael S. Devany, NOAA  
Commanding Officer  
Marine Operations Center - Atlantic  
Dated: 21 July 2010

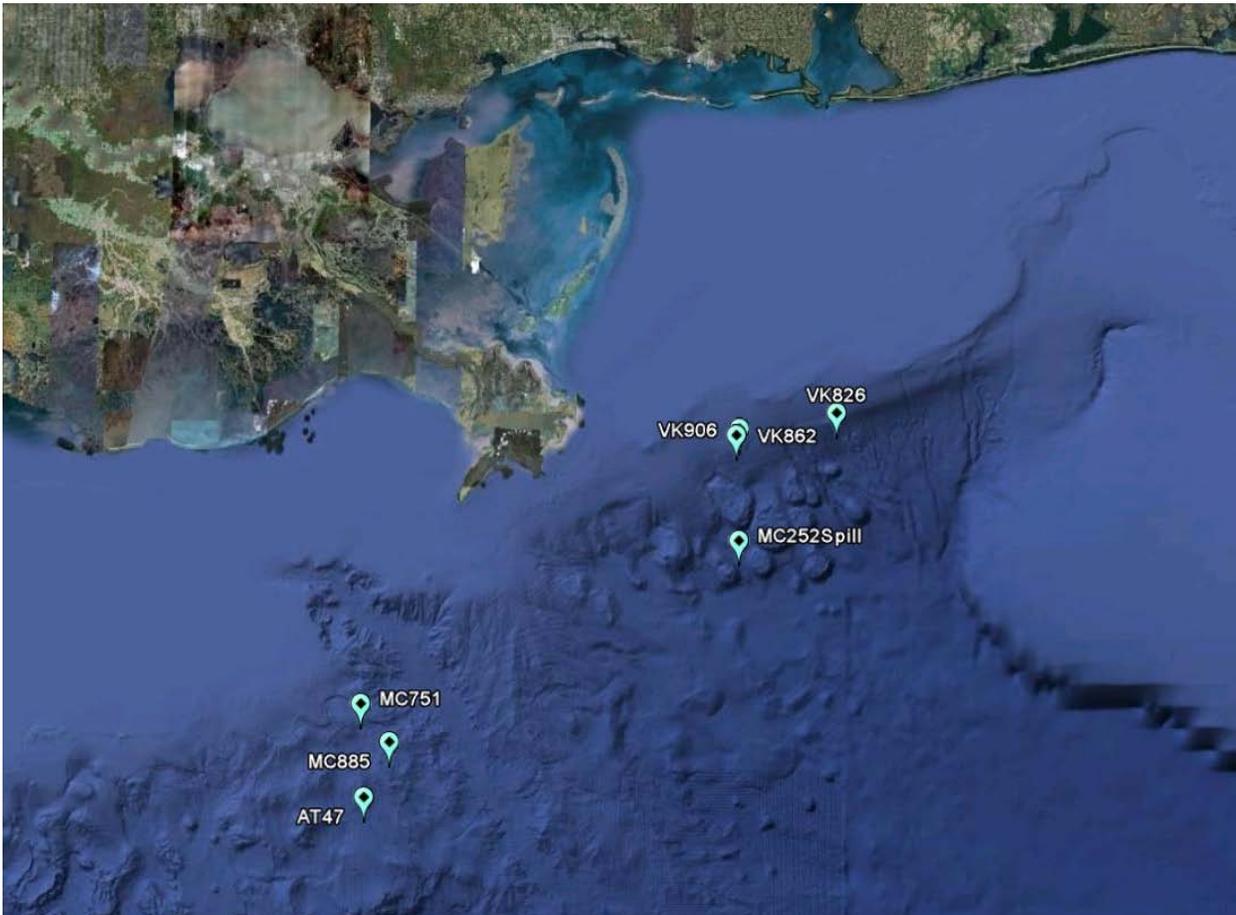
## I. Overview

A. Cruise Period: Leg 1: 21 July – 29 July 2010, Leg 2: 31 July – 8 August 2010

B. Operating Area:

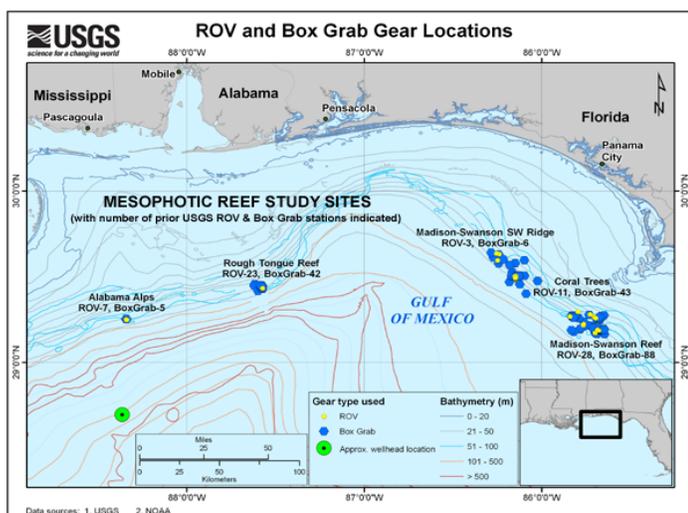
Northern Gulf of Mexico continental shelf and slope

Leg 1: For the deep-water coral environments, we will visit two target sites: VK 906 (29.069000 -87.622833, 400m depth) and VK 826 (29.156933 -87.989333, 465 m depth). Time permitting, we will examine two additional sites: MC 751 (28.189667 -88.202167, 460 m) and VK 862 (29° 05.9' N, 88° 23.1' W, 304-352 m).



Leg 2: For both Pinnacle and comparative W. Florida shelf-edge reef sites, the video/digital image archive has been accessed to determine the optimal high biological diversity (hard corals, gorgonians, black corals) stations to utilize as repeat station sites in 2010. General reef top reference coordinates indicated below:

- |                                       |          |          |     |
|---------------------------------------|----------|----------|-----|
| 1. Alabama Alps Reef                  | 29.25167 | 88.33833 | 70m |
| 2. Roughtongue Reef                   | 29.43907 | 87.57642 | 66m |
| 3. Control W. Florida Pinnacle reefs: |          |          |     |
| Madison-Swanson N. Ridge Reef         | 29.26023 | 85.69412 | 60m |
| Madison-Swanson S. Ridge Reef         | 29.18717 | 85.67848 | 70m |
| Coral Trees Reef                      | 29.50688 | 86.14520 | 80m |



C. Summary of Objectives

D. Participating Institutions

E. Personnel (Science Party)

Leg 1.

NAME	AFFIL.	SEX	NAT.	POSITION
Dr. Charles Fisher	PSU	M	US	Chief scientist
Dr. Amanda Demopoulos	USGS	F	US	Co-Chief Scientist
Erin Becker	PSU	F	US	Scientist
Tina Enderlein	PSU	F	US	Scientist
Allison Strong	USGS	F	US	Scientist
Dr. Kate Buckman	WHOI	F	US	Scientist
Dr. Erik Cordes	TU	M	US	Scientist
Dorinda Ostermann	WHOI	F	US	Scientist
Leslie Wickes	TU	F	US	Scientist
Jay Lunden (alternate)	TU	M	US	Scientist
Steve Viada	ENTRIX/BP	M	US	Observer
Toshinobu Mikagawa	DSSI	M	US	ROV crew
Brandon Hartman	DSSI	M	US	ROV crew
Theodore Ventsias	DSSI	M	US	ROV crew
Michael Hill	DSSI	M	US	ROV crew
Jimmy Shepherd	DSSI	M	US	ROV crew

Leg 2

Dr. Ken Sulak	USGS	M	US	Chief scientist
Dr. Amanda Demopoulos	USGS	F	US	Co-chief Scientist
Michael Randall	USGS	M	US	Scientist
Ursula Garfield	USGS	F	US	Scientist
J. Elliot Hart (alternate)	USGS	M	US	Scientist
Peter Etnoyer	NOAA	M	US	Scientist

Jana Thoma	ULL	F	US	Scientist
Stacey Harter	NOAA	F	US	Scientist
Brian Graham	ENTRIX/BP	M	US	Observer
Toshinobu Mikagawa	DSSI	M	US	ROV crew
Brandon Hartman	DSSI	M	US	ROV crew
Theodore Ventsias	DSSI	M	US	ROV crew
Michael Hill	DSSI	M	US	ROV crew
Jimmy Shepherd	DSSI	M	US	ROV crew

F. Administrative

1. Points of Contacts:

Chief Scientist (Leg 1):

Charles Fisher  
 Acting Associate Dean, Eberly College of Science  
 Professor of Biology  
 208 Mueller Laboratory  
 The Pennsylvania State University  
 University Park, PA 16802  
 814 865-3365  
 cfisher@psu.edu

Chief Scientist (Leg 2)

Kenneth J. Sulak, Ph.D.  
 Research Fish Biologist  
 Lead Scientist  
 Coastal Ecology and Conservation Research Group  
 U.S. Geological Survey  
 Southeastern Ecological Science Center  
 7920 NW 71st St.  
 Gainesville, FL 32653  
 352-264-3500; FAX 352-378-4956  
 email: [ksulak@usgs.gov](mailto:ksulak@usgs.gov)

Co-Chief Scientist:

Amanda W.J. Demopoulos, Ph.D.  
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 Gainesville, FL 32653  
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 ademopoulos@usgs.gov

## Ops Officer

LT Abigail Higgins, NOAA  
Operations Officer  
NOAA Ship Nancy Foster  
439 West York Street  
Norfolk, VA 23510  
(843) 991-6326 (cellular)  
(808) 434-5653 (Iridium)  
ops.nancy.foster@noaa.gov

### 2. Diplomatic Clearances

This cruise involves Marine Scientific Research in waters under the jurisdiction of the USA.

### 3. Licenses and Permits

This cruise will be conducted under the Scientific Research Permit (U.S.)/Marine Mammal License (U.S.)/Foreign Fishing Vessel License (Canada)/Species at Risk Act permit (Canada) issued by NOAA on 12 June 2010 to Dr. Erik Cordes. There could be multiple permits/licenses. The National Marine Sanctuaries have special permitting processes, too. The Chief Scientist should be responsible for obtaining all permits, not the ship.

## II. Operations

### Cruise Plan/Itinerary:

19 July-Science crew arrives at Pascagoula, MS by noon to load the NOAA Ship *Nancy Foster*.

20 July-Continue loading and training for Trackpoint 4 software on the ship.

21 July-Leave the dock in mid afternoon to transit to VK 906 for an early AM arrival on site. Science crew organizes/stows gear before departing the dock. First crew and PI meetings on board will be held soon after we are underway.

22 July-VK 906 Upon arrival on site in early am, pass over site with multibeam to confirm ship and previous navigation. ROV dive launch at 8 am, recovery at 8 pm. Deploy elevator for July 23 dive either this evening or early am.

23 July-VK 906 ROV dive launch at 8 am, recovery at 8 pm. Recover elevator and deploy mooring at VK 906 after dive. Steam to VK 826.

24 July – VK 826 ROV dive launch at 8 am, recovery at 8 pm. Deploy elevator either this evening or early am at VK 826.

25 July –VK 826 ROV dive launch at 8 am, recovery at 8 pm. Recover elevator after ROV. Deploy elevator either this evening or early am at VK 826.

26 July – VK 826 ROV dive launch at 8 am, recovery at 8 pm. Recover elevator after ROV. Steam to VK 862 and deploy elevator and mooring.

27 July – VK 862. ROV dive launch at 7 am, recovery at 7 pm. Recover elevator after ROV. Steam to MC 751

28 July – MC 751 dive launch at 8 am, recovery at 8 pm. Begin steam to Pascagoula

29 July- Pascagoula, MS. Leg 1 ends, Disembark NOAA Ship *Nancy Foster*

30 July-Leg 2 Science crew arrives at Pascagoula, MS to load NOAA Ship *Nancy Foster* and be ready to depart the next day.

31 July-In port, Pascagoula, MS. Mesophotic Leg scientists mobilize. Anticipate 22:00 hrs departure and 18 hr transit to Coral Trees. ROV is configured with SPMD biobox, forward-looking HDTV, oblique-looking digital still camera.

1 Aug.-Priorities on Coral Trees: SPMD deployment, multiple video transects, digital still imagery, soft coral specimen collection. 06:00-12:00: ROV configured for SPMD deployment . 4 new SPMDs will be deployed. Sabiki sampling to obtain tissues for PAH analysis will be conducted from the RV Foster 06:00-08:00 while ROV is being readied and loaded for launch. ROV will be launched at 08:00 recovery at 8 pm. 16:00-20:00: ROV back on deck, sampling insert placed into biobox, transect marker blocks loaded onto work platform. Launch ROV to conduct as many 3-min linear video transects as possible using a Levy search pattern random compass direction format with transect starting points marked for revisit with numbered markers. Each 3-min transect will be followed by a 3-5 min period of close-up digital imagery of dominant soft coral taxa and other key taxa to assist in ID validation and assessment of injury. Selected specimens will be collected, imaged, and placed into the biobox to provide tissue samples for PAH and isotope analyses, as well as ID validation. 20:00: End of ROV dive operations. ROV to be reconfigured for carousel sampler and/or biobox with sediment core tubes for Day 3 tasks. With ROV secured on deck, conduct CTD cast using hydro winch. Following CTD cast, undertake short transit to position ship over off-reef soft sediment. Deploy box-grab to obtain multiple sediment samples for laboratory analyses of PAH, isotopes, and infauna. Box-grab station sites will attempt to match station sites samples from previous cruises.

2 Aug.-06:00-08:00: While ROV is being prepped, conduct Sabiki sampling. 08:00-12:00: Deploy ROV, to obtain soft coral, invertebrate, planktivore, and sediment samples for multiple laboratory analyses, imaging all ROV operations. Demopoulos in charge of ROV science tasks. 12:00-16:00: Deploy ROV, north end of CT. Same tasks as for south end. Offload samples, load transect markers. 16:00-20:00: Redeploy ROV, same site. Conduct a series of ROV 3-min standardized linear transects, alternating with 3-5 min sessions of digital imagery and specimen collection.

3 Aug.-06:00-08:00: While ROV is being prepped, conduct Sabiki sampling. 08:00-12:00: Deploy ROV, south end of CT, to obtain soft coral, invertebrate, planktivore, and sediment samples for multiple laboratory analyses, imaging all ROV operations. Demopoulos in charge of ROV science tasks. When complete, undertake short transit to north end of CT. 12:00-16:00: Deploy ROV, north end of CT. Same tasks as for south end. Offload samples, load transect markers. 16:00-20:00: Redeploy ROV, same site. Conduct a series of ROV 3-min standardized linear transects, alternating with 3-5 min sessions of digital imagery and specimen collection. 20:00-22:00: One CTD cast plus multiple off-reef sediment grab sampling, followed by 10 hr transit to RTR. ROV to remain configured for Day 4 as already configured on Day 3.

4 Aug.-Roughtongue Reef (RTR): Except for retrieval of SPMDs, follow ROV and surface deployed sampling itinerary as conducted on AA, moving from SW corner of reef on Day 4 to center of reeftop on Day 5. SPMDs will be deployed at one site only on Day 5, allowing more time for transects, imagery, and specimen collection. ROV will be configured for SPMD deployment on Day 4, following completion of ROV dives.

5 Aug.-Roughtongue Reef (RTR): Same as August 4<sup>th</sup>. follow ROV and surface deployed sampling itinerary as conducted on CT, moving from SW corner of reef on Day 4 to center of reeftop on Day 5. SPMDs will be deployed at one site only on Day 5, allowing more time for transects, imagery, and specimen collection. ROV will be configured for SPMD deployment on Day 4, following completion of ROV dives. 5 hr transit to Alabama Alps.

6 Aug.-Alabama Alps, MS: SPMD retrieval and deployment, multiple video transects, digital still imagery, soft coral specimen collection. Repeat itinerary as conducted on Coral Trees, except that with ROV already configured for SPMD deployment, that activity will proceed on Day 6. 4 previously placed SPMDs will be retrieved. After completion of Day 6 dives, ROV will be reconfigured with carousel sampler for Day 7.

7 Aug. –AA, MS: Repeat itinerary as conducted on Coral Trees, except that with ROV already configured for SPMD deployment, that activity will proceed on Day 6. After completion of Day 6 dives, ROV will be reconfigured with carousel sampler for Day 7.

8 Aug.-18 hr transit back to Pascagoula.

## B. Staging and Destaging

All of the equipment for this expedition, including ROV and sampling gear, will be loaded and installed onboard the NOAA Ship *Nancy Foster* at Singing River Island in Pascagoula, MS during 19-21 July 2010. All science equipment and personnel will be removed from the ship in Singing River Island in Pascagoula, MS. We anticipate that de-staging will begin on August 8th and end on Aug. 9th.

## C. Operations to be Conducted

### ROV OPS

The primary data to be collected using the ROV includes digital video and still photographic imagery, CTD with DO and pH sensors, sediment samples, live coral and sponge samples. Other data streams from the ROVs, such as vehicle attitude, acoustic data, and sonar imagery are recorded by networked computers in the control van. Navigational data for both the ship and ROV systems will also be recorded.

### Multibeam Operations:

The shipboard swath bathymetric sonar system is required for this cruise. Multibeam data already exists for much of the region where we are diving the ROV. During vehicle down times, we intend to increase the coverage by surveying in regions where we do not have coverage. We anticipate that raw multibeam data and geo-referenced images of the bathymetry will be needed following the survey for integration into the navigation system of the ROV. The scientific party will provide areas and coverage parameters.

### Mooring OPS

In order to quantify sinking inorganic particulate matter and plankton/larvae, we will be deploying two sediment trap moorings located at VK 862 and VK 906. The figure below illustrates the sediment trap moorings schematic. Each mooring includes 1 sediment trap, 1 acoustic release, 1 current meter, floatation, wire rope, chain with an anchor.

The proposed mooring deployment procedure plan utilizes the anchor first method through the A-frame and uses the ship's trawl wire for lifting. A vertical chain stopper is attached to the A-frame in order to stop-off and attach the mooring instruments and hardware during the mooring deployment. The mooring will then be lowered by the trawl wire with an acoustic transponder/release connecting the end of the trawl wire to the top of the mooring. This transponder/release will be used to accurately navigate the mooring over a predetermined position. Both moorings will remain for 1 year and be recovered with the use of the acoustic release on the lower portion of each mooring.



Fig. 1. Schematic illustration of the short (~50 m) moorings that we will deploy in the northern Gulf of Mexico in July 2010 to ensure continuity of time-series sample collection – provisionally at the VK 862 and VK 906 sites. Two sets of similar moorings, already in place since September 2009, will continue to collect samples over a time series at the MC751 and VK 826 sites until at least Oct/Nov 2010 when they are due to be collected on an already-funded MMS/NOAA-OER cruise. These 3<sup>rd</sup> and 4<sup>th</sup> trap moorings, to be deployed as part of the NRDA effort and recovered on that same Oct-Nov cruise, will double our spatial coverage of instantaneous settling fluxes at the seafloor - at locations to be finalized based on our prior knowledge of strategically significant deep-water ecosystems and the most up-to-date information available at the time of the cruise sailing dates on potential oil-spill dispersion at the ocean surface and at depth.

#### Elevator OPS

During some of the dives in Leg 1, we will be deploying an elevator to facilitate our sediment sampling activities. The elevator is launched using the ship's crane and once released, it will sink to the bottom. Once samples have been secured on the elevator on the seafloor, an acoustic command is sent to release the drop weights, allowing the elevator to float to the surface. The elevator is recovered by shipboard crew members using grappling hooks. The sediment samples brought to the surface in the elevator will be processed onboard, in the ship's wet lab.

#### D. Dive Plan

##### TYPICAL ROV INVESTIGATION PROCEDURE

Each ROV dive is scheduled for 12 hours, 0800-2000 hr, although this is subject to change. We will typically plan for an hour deployment and an hour recovery of the ROV allowing 10 hrs of bottom time per dive. The lead scientist will control the dive activities and guide the ROV operations. We will need the ROV's position tracked and recorded continually and as accurately as possible throughout the dives. The video camera(s) with scaling lasers will be used in every dive.

Science logs will be kept (in addition to ROV logs) for each dive. The Chief Scientist will assign a science team member to this task at the beginning of each shift. The science logs entries should be clear and concise and will be typed up at the end of each dive.

#### E. Applicable Restrictions

Current NOAA regulations for operations in the vicinity of the spill area.

### III. Equipment

#### A. Equipment and Capabilities Provided by the Ship

1. Seabeam or equivalent multibeam bathymetric mapping sonar
2. Differential GPS navigation and serial data output

3. Heading and water depth instruments with serial data output
4. A-frame for launching ROV (see below)
5. Power to the winch and vans (see below)
6. Dynamic positioning system for vessel station-keeping
7. INMARSAT satellite telephone service for voice and data (email)
8. Networked computer printers
9. Narrow band Acoustic Doppler Current Profiling (ADCP) system
10. Laboratory and storage space
11. PC based SCS workstations
12. Zodiac, or equivalent, and motor for ROV contingencies, and video and still photo acquisition
13. Crane support for all equipment during mobilization and demobilization in Pascagoula
14. Access to and use of the moon pool and transducer

B. Equipment and Capabilities Provided by the Scientists

The scientific party will provide the following items and will be responsible for their maintenance:

1. All biological sampling equipment and supplies including backup still camera system, and sampling gear.
2. Navigational transponders associated w/ ROV operations
3. ROV winch system
4. Control van
5. Mooring and elevator equipment

**IV. Hazardous Materials**

A. Policy and Compliance

The Chief Scientist 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 Chief Scientist.

NOAA Ship *Nancy Foster* will operate in full compliance with all environmental compliance requirements imposed by NOAA. All hazardous materials and substances needed to carry out the objectives of the embarked science mission, including ancillary tasks, are the direct responsibility of the embarked designated Chief Scientist, whether or not that Chief Scientist is using them directly. NOAA Ship *Nancy Foster* Environmental Compliance Officer will work with the Chief Scientist to ensure that this management policy is properly executed, and that any problems are brought promptly to the attention of the Commanding Officer.

In accordance with NC Instruction 6280B, the Chief Scientist will provide an inventory of all hazardous material, including Material Safety Data Sheets (MSDS) and quantities, to the Commanding Officer at least two weeks prior to sailing. The inventory shall be updated at departure, accounting for the amount of material being removed, as well as the amount consumed in science operations and the amount being removed in the form of waste. The Chief Scientist shall have copies of each MSDS available when the hazardous materials are loaded aboard. Hazardous material for which the

MSDS is not provided will not be loaded aboard. Compressed gas storage cylinders (including those containing air) will also be included in the inventory with the date of the last hydrostatic certification.

## B. Radioactive Isotopes

There will be no radioactive isotopes in use during the cruise.

## C. Inventory

Hazardous Material	amount	concentration	neutralizer buffer absorbent	MSDS
Ethanol 200 proof	15 gallons	100%	water	YES
Formaldehyde	17 gallons	37%	spill absorbant	YES
Acetone	500 ml	100%	spill absorbant	YES
Methanol	4 L	100%	spill absorbant	YES

The ship's dedicated HAZMAT Locker contains two 45-gallon capacity flam cabinets and one 22-gallon capacity flam cabinet, plus some available storage on deck. All HAZMAT, except small amounts for ready use, must be stored in the HAZMAT Locker. If science party requirements exceed ship's storage capacity, excess HAZMAT must be stored in dedicated lockers meeting OSH/NFPA standards to be provided by the science party. Scientific groups requiring Hazmat storage should compute volume of storage required prior to the cruise and ensure adequacy onboard.

The scientific party, under supervision of the Chief Scientist, shall be prepared to respond fully to emergencies involving spills of any mission HAZMAT. This includes providing properly trained personnel for response, as well as the necessary neutralizing chemicals and clean-up materials. The ship's Environmental Compliance Officer will review the onboard inventory of MSDS's and will advise Chief Scientist if ship already has compounds listed in Appendices. Ship's personnel are not first responders and will act in a support role only in the event of a spill. The Chief Scientist shall provide a list of science party members that are properly trained to respond in the event of hazmat spills.

The Chief Scientist is directly responsible for the handling, both administrative and physical, of all scientific party hazardous wastes. No liquid wastes shall be introduced into the ship's drainage system. No solid waste material shall be placed in the ship's garbage.

The oncoming Chief Scientist will work with the departing Chief Scientist and the ship's environmental Compliance Officer to ensure proper tracking of inherited hazardous materials.

## 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

The Chief Scientist is responsible for the disposition, feedback on data quality, and archiving of data and specimens collected on board the ship for the primary project. The Chief Scientist is also responsible for the dissemination of copies of these data to Co-PI's in a timely manner. The ship may assist in copying data and reports insofar as facilities allow.

The Chief Scientist will receive all original data gathered by the ship for the primary project. This data transfer will be documented on NOAA form 61-29 "Letter Transmitting Data."

The Commanding Officer is responsible for all data collected for ancillary projects until those data have been transferred to the Projects' principal investigators or their designees. Data transfers will be documented on NOAA Form 61-29. Copies of ancillary project data will be provided to the Chief Scientist when requested. Reporting and sending copies of ancillary project data to NESDIS (ROSCOP form) is the responsibility of the program office sponsoring those projects.

The science party will be responsible for the collection and organization of all data (other than shipboard digital data and ROV data) relative to meeting the goals and objectives of their projects. This includes working with the appropriate ship's personnel to obtain relevant data collected by the Scientific Computer System (SCS), and compilation of metadata records associated with physical samples.

#### B. Pre and Post Cruise Meeting

Meetings will be arranged and conducted at the discretion of the Chief Scientist. During transit to the site and periodically throughout the cruise science meetings will be held in the ship's lounge or the main science lab.

**Pre-Cruise 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 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 Chief Scientist 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 Chief Scientist. The preferred method of transmittal of this form is via email to [OMAO.Customer.Satisfaction@noaa.gov](mailto: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 15 scientists. Meals will be served 3 times daily beginning one hour before scheduled departure, extending throughout the cruise, and ending two 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.

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 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 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.

The Chief Scientist is responsible for assigning berthing for scientific party within the spaces designated as scientific berthing. The Chief Scientist is responsible for returning the scientific berthing spaces back over to the ship 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 cruise and its conclusion prior to departing the ship.

In accordance with NC Instruction 5355.0, Controlled Substances Aboard NOAA Vessels dated 06 August 1985; all persons boarding NOAA vessels give implied consent to conform to 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.

#### B. Medical Forms and Emergency Contacts

The NOAA Health Services Questionnaire (NHSQ) must be completed in advance by each participating scientist. Scientists are required to be medically approved by NOAA Marine Operations Center Atlantic prior to sailing should reach the ship no later than 1 week prior to the cruise. This will allow time to medically clear the individual and to request more information if needed. All personnel must also provide results of PPD (TB) test taken within 12 months of sailing. We ask that all personnel bring any prescription medication they may need and any over-the-counter medicine that is taken routinely (e.g. an aspirin per day, etc.). The ship maintains a stock of medications aboard, but supplies are limited and chances to restock are few.

Prior to departure, the Chief Scientist will provide a listing of emergency contacts to the Executive Officer, *Nancy Foster* for all members of the scientific party, with the following information: name, name of contact, address of contact, relationship to member, and contact telephone number. Protocol for entering and exiting port areas will vary. In US ports, you must have a government ID to enter. All others (visitors and scientists outside of the government) may (depending on port security) require an escort to and from the ship. All personnel, including crew, are still checked against lists supplied to port security.

#### D. Shipboard Safety

Safety of operations is of utmost importance. Scientists will attend all safety briefings as required by the vessel Command. Wearing open-toed footwear of any kind outside of private berthing areas (i.e. to and from showers) is not permitted onboard this ship. This shipboard safety regulation is included in the Commanding Officer's Standing Orders, and will be enforced. All members of the scientific party should be aware of this regulation before embarking.

## E. 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 modes of communication, the ship is able to maintain contact with the Marine Operations Center on an as needed basis. These methods will be made available to the Chief Scientist upon request, in order to conduct official business. Due to a new directive from Marine Operations Center, the ship must charge the science party for all calls made on the cell telephone. INMARSAT, and cellular communication costs shall be reimbursed to the ship for telephone calls made by all scientific personnel. Currently, Sky Cell and cellular telephone services are about \$0.89 per minute and INMARSAT Mini-M is around \$1.68 per minute for voice. These charges will be assessed against the program after the ship receives the bill. There is generally a three-month delay receiving the bill for review. The Chief Scientist will be required to keep a log of all calls made by the science party.

The NOAA Ship *Nancy Foster* will communicate daily with the NOAA Marine Operations Center-Atlantic.

The Chief Scientist, his designee, or the ROV Operations Manager may request the use of the ship's radio to communicate with other research or commercial vessels in the operating area.

## F. 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

## **Appendix I: Tides and Water Levels**

**-none**

## **Appendix II: Supplemental Survey Records and Correspondence**

**-none**

## **Appendix III: Feature Report**

**AWOIS: none**

**DtoNs: none**

**Maritime Boundary: none**

**Wrecks: none**

APPROVAL PAGE

W00230

Data meet or exceed current specifications as certified by the OCS survey acceptance review process. Descriptive Report and survey data except where noted are adequate to supersede prior surveys and nautical charts in the common area.

The following products will be sent to NGDC for archive

- W00230\_DR.pdf
- Collection of depth varied resolution BAGS
- Processed survey data and records
- W00230\_GeoImage.pdf

The survey evaluation and verification has been conducted according current OCS Specifications, and the survey has been approved for dissemination and usage of updating NOAA's suite of nautical charts.

Approved For: \_\_\_\_\_

**LT Abigail Higgins**  
Chief, Atlantic Hydrographic Branch