

**NOAA SHIP OKEANOS EXPLORER R-337**  
“America’s Ship for Ocean Exploration”

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NOAA OCEAN EXPLORATION AND RESEARCH SITUATION REPORT FOR April 04, 2012

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CRUISE: EX1202L2 Gulf Of Mexico  
Exploration

DATE/TIME FILED: 04/05/12 0730 EDT  
FILED BY: Jeremy Potter  
VESSEL: NOAA Ship *Okeanos Explorer*  
(EX)

GEOGRAPHIC AREA:  
Vicinity of Deepwater Horizon

MISSION PERSONNEL ON BOARD:

NOAA / OER:  
Dave Lovalvo (NOAA OER)  
Meme Lobecker (NOAA OER)  
Webb Pinner (NOAA OER)  
Jeremy Potter (NOAA OER)  
LTJG Brian Kennedy (NOAA OER)

OTHERS:  
Tim Shank (WHOI/UCAR)  
Pen-Yuan Hsing (Penn State/UCAR)  
Dave Wright (OER/UCAR)  
Roland Brian (OER/UCAR)  
Art Howard (OER/UCAR)  
Ed McNichol (OER/UCAR)  
Thomas Kok (OER/UCAR)  
Gregg Diffendale (OER/UCAR)  
Bobby Mohr (OER/UCAR)  
Karl McLetchie (OER/UCAR)  
Jeff Williams (OER/UCAR)  
Tara Smithee (Stanford/UCAR)  
Christopher Pinero (OER/UCAR)

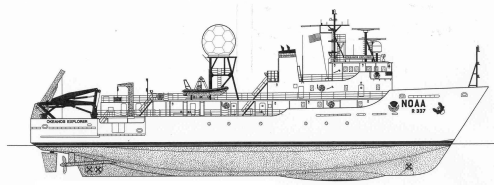
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**SUMMARY:**

The NOAA Ship *Okeanos Explorer* (EX) conducted overnight mapping operations to extend coverage beyond EX mapping efforts in 2011. At approximately 0815, *Little Herc* and *Seirios* launch was delayed due to a passing thunderstorm. The weather deteriorated throughout the morning and the dive was eventually canceled. Mapping operations continued following dive cancellation. Ability to extend mapping coverage into new areas is difficult due to existing coverage and location of dive targets. Some gaps were filled overnight.

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### **SURVEY:**

Multibeam sonar EM 302 and Single Beam sonar EK 60 data were collected. Fledermaus 7 is being used to create daily bathymetry products. Cumulative geotiffs and kmz are being created despite known offsets. Fledermaus scene files created during the ROV dive planning process are being provided to shore in the multibeam folder under /OkeanosCruises/EX1202L2/Multibeam/EX1202L2\_MB\_HIRES. The scene files typically include the following layers: 1) backscatter mosaics draped over bathymetry; 2) bathymetry; and 3) start / end points of dive.

Due to extensive EX mapping coverage in the vicinity of the current operating area, ability to extend overnight survey operations into new areas is very limited. Survey is doing the best they can based on priority for ship to be at dive location in early morning.

### **SCIENCE:**

Today’s dive in Mississippi Canyon (MC) lease block 036 was cancelled due to weather. We will attempt to dive at this location on Thursday.

Two scientists, Chuck Fisher and Miles Saunders, departed the Stennis ECC.

Combined use of a telecon, I2, URI Internet 1 links, and the eventlogger continued.

### **TELEPRESENCE:**

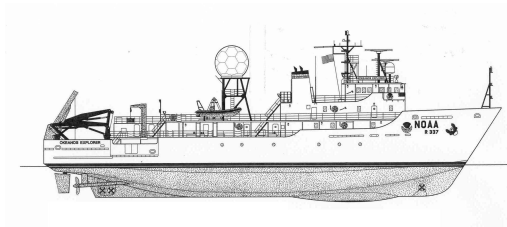
Telepresence Team continued assisting shore-side participants and trouble-shooting various systems. Practically all shore-side participants reported very high quality internet feeds. Telepresence Team will continue to monitor video quality.

VOIP is functioning well again. Ship provided the Fleet 77 as a backup for use while VOIP was down due to shore-side changes. Extensive use of VOIP during ROVs was first discussed during Tampa in-port.

The ISC continues to trouble-shoot RTS issues.

EX Team continues to work to identify the best mechanism to enable two-way audio discussion with shore-side scientists at non-ECC locations. When ISC-established bridge functioned properly, it seemed to be the best option for the shipboard personnel. However, bridge inconsistency led Mission Personnel to increasingly rely on VOIP telecons.





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**VSAT:**  
None

**DATA MANAGEMENT:**  
None.

**ROV:**  
Stemming from a shore-side Science Team request, ROV personnel developed a mechanism to drop a physical bottom marker from Little Herc.

**BOW/STERN THRUSTER:**  
Ship personnel continue to monitor the bowthruster HPU temperature.

- OTHER:**
- No update on the designated rescue boat - Fast Rescue Boat (FRB EX02). The boat is fully operational.
  - EX01 is not operational and was CASREP'd during the Tampa, FL inport. A manufacturer's service rep visit is being coordinated for Pascagoula, MS.
  - Engineering identified and rectified the issue with the inboard sheave for the 0.68 cable.
  - Pinner developed a script to easily generate ROV dive track maps. Discussions about whether – and how – to make this a standard product will occur after ROV ops are completed for FY12.

**- PLAN OF THE DAY -**

Thursday April 5<sup>th</sup>, 2012

<b>0000</b>	<b>Underway as before Mapping Operations</b>
<b>~0730</b>	<b>Arrive at Dive Location #16</b>
<b>0745</b>	<b>Safety Brief (Bridge)</b>
<b>~0800</b>	<b>Commence ROV deployment</b>
<b>1500</b>	<b>Ops Brief (Forward Lounge)</b>
<b>~1700</b>	<b>ROV on deck/ start overnight mapping</b>
<b>TBD</b>	<b>Resume Overboard Discharge</b>

- Conduct ROV dive in DP



- Continue multibeam operations
- XBTs conducted as necessary

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END OF SITUATION REPORT

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