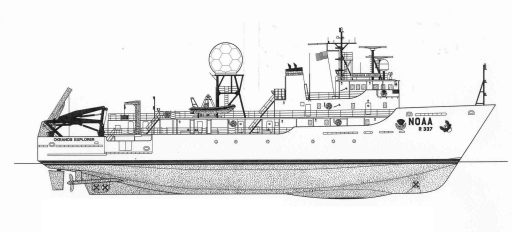

NOAA SHIP OKEANOS EXPLORER R-337

"America's Ship for Ocean Exploration"

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NOAA OCEAN EXPLORATION AND RESEARCH SITUATION REPORT FOR April 05, 2012

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CRUISE: EX1202L2 Gulf Of Mexico Exploration

DATE/TIME FILED: 04/06/12 1100 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 1015, ship and mission crew launched *Little Herc* and *Seirios* for the fifteenth dive of the 2012 field season. This was the fifth and final ROV dive in the vicinity of Deepwater Horizon. The ROV and Camera Platform were safely recovered by 1945. Mapping operations continued following recovery. Ability to extend mapping coverage into new areas is difficult due to existing coverage and location of dive targets.

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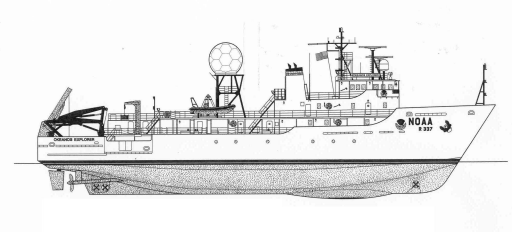

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SURVEY:

Multibeam sonar EM 302 and Single Beam sonar EK 60 data were collected. Water column data was collected over the Uchupi Dome target identified during Leg I. 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. Due to heavy ship traffic in the area, we are trying to arrive at the dive site earlier than usual.

SCIENCE:.

In the wake of the Deepwater Horizon oil spill, determining the types and extents of damage to the ecosystems of the Gulf of Mexico has been – and continues to be - a high priority. This has been especially difficult with regard to deep water habitats. Though the expedition is not a NRDA cruise, it does provides a good opportunity to assist with this NOAA and national priority.

Today's dive in Mississippi Canyon (MC) lease block 036 was the fifth of five dives in the vicinity of DWH this leg.

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. Due to weather in the vicinity of the ship, shore-side video quality was reduced in the morning.

The ISC continues to trouble-shoot RTS. EX Team continues to work to identify the best mechanism to enable two-way audio discussion with shore-side scientists at non-ECC locations. VOIP line was used for the ROV telecom.

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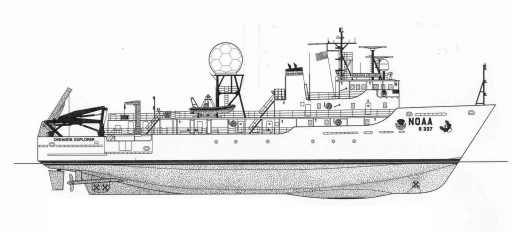

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VSAT:
Speed/quality of ship to shore data transmission was reduced due to weather.

DATA MANAGEMENT:
None.

ROV:
ROV launch was delayed due to weather. ROV personnel completed a fifteenth successful dive. Successfully deployed first marker from Little Hercules using new mechanism developed by ROV team this week.

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 will visit the ship in Pascagoula, MS.
- No issues with inboard sheave.
- Informal event with Congressional staff in the Silver Spring ECC was canceled.
- As of 2330, another vessel was operating in the vicinity of the desired ROV targe for Friday 06-April. Science selected an alternative dive location. The alternative target (i.e. Leg I water column target on Uchupi Dome) is less desirable than the initial target on Pascagoula Dome.
- Pinner continued to tweak/refine ROV dive track map based on Science Team input
- ROV Team completed trouble-shooting of standard Google Earth navigation products.

- PLAN OF THE DAY –

Friday April 6th, 2012

0000	**Underway as before Mapping Operations**
~0730	**Arrive at Dive Location #16**

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0745	**Safety Brief (Bridge)**
~0800	**Commence ROV deployment**
1500	**Ops Brief (Forward Lounge)**
~1700	**ROV on deck/ start mapping transit toward Pascagoula**
TBD	**Resume Overboard Discharge**

- Conduct ROV dive in DP
- Continue multibeam operations
- XBTs conducted as necessary

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END OF SITUATION REPORT

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