

**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 06, 2012

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CRUISE: EX1202L2 Gulf Of Mexico  
Exploration

DATE/TIME FILED: 04/07/12 0900 CDT  
FILED BY: Jeremy Potter  
VESSEL: NOAA Ship *Okeanos Explorer*  
(EX)

GEOGRAPHIC AREA:  
Pascagoula Salt Dome

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)

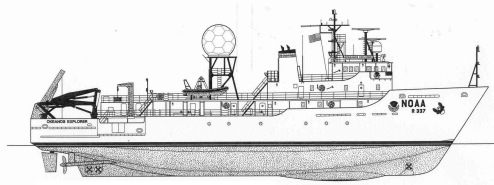
OTHERS:  
Tim Shank (WHOI/UCAR)  
Pen-Yuan Hsing (Penn State/UCAR)  
Dave Wright (OER/UCAR)  
Roland Brian (OER/UCAR)  
Art Howard (OER/UCAR)  
Ed McNichol (OER/UCAR)  
Thomas Kok (OER/UCAR)  
Gregg Diffendale (OER/UCAR)  
Bobby Mohr (OER/UCAR)  
Karl McLetchie (OER/UCAR)  
Jeff Williams (OER/UCAR)  
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 0830, ship and mission crew launched *Little Herc* and *Seirios* for the sixteenth and final dive of EX1202L2. The launch location was a water column target identified during Leg I. After approximately 2-hrs on bottom, EX Team successfully located a stream of bubbles emanating from the seafloor. The objective of ground-truthing the water column signature was achieved. The ROV and Camera Platform were safely recovered by 1800.





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Following recovery, the ship passed over the site several times to collect multibeam and EK60 data. By approximately 2000, the ship was transiting toward port in Pascagoula.

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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 Pascagoula 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.

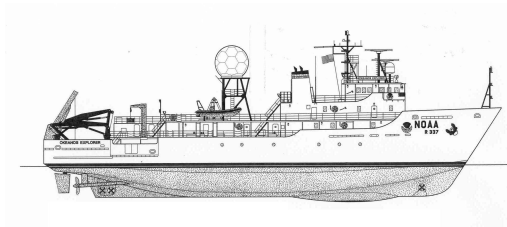
### **SCIENCE:**

Today was the final dive during EX1202L2. The original objective was to groundtruth a water column target identified on Pascagoula Dome during EX1202L1. At 2330 last night, another vessel planned to conduct a pipeline survey in our desired area. Plans were made to dive on the second, and less desirable, Leg I water column target. EX Command offered to monitor the other vessel’s position overnight in case their intended shiptrack changed.

At 0600, the OOD informed Mission Personnel that the other vessel had moved away and launching at our primary target was feasible.

At 0700, EX Command amended operations to support last minute request for mid-water column exploration with the ROV. 10min horizontal video transects were conducted every 100m between 600 and 1100 during descent. This was the second mid-water column exploration of the cruise. Operations went well.





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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.

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.

### VSAT:

None

### DATA MANAGEMENT:

None.

### ROV:

ROV personnel completed a sixteen successful dive.

### 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.

### - PLAN OF THE DAY -

Saturday April 7<sup>th</sup>, 2012

0000	Underway as before Conducting Mapping Operations until ~0700/Transiting toward Pascagoula
0700-0730	Arrive at Pascagoula Sea Buoy
0730	Set sea and anchor detail
~0930-1000	Arrive in Pascagoula, MS



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END OF SITUATION REPORT

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