

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

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NOAA OCEAN EXPLORATION AND RESEARCH SITUATION REPORT FOR March 22, 2012

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CRUISE: EX1202L2 Gulf Of Mexico
Exploration

DATE/TIME FILED: 03/22/12 2230 EDT
FILED BY: Jeremy Potter
VESSEL: NOAA Ship *Okeanos Explorer*
(EX)

GEOGRAPHIC AREA:
West Florida Escarpment

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:

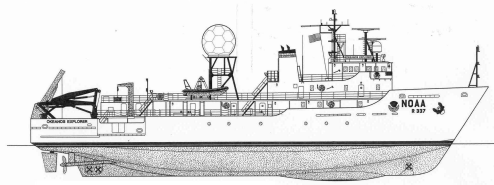
Tim Shank (WHOI/UCAR)
Pen-Yuan Hsing (Penn State/UCAR)
Dave Wright (OER/UCAR)
Roland Brian (OER/UCAR)
Art Howard (OER/UCAR)
Ed McNichol (OER/UCAR)
Thomas Kok (OER/UCAR)
Gregg Diffendale (OER/UCAR)
Bobby Mohr (OER/UCAR)
Karl McLetchie (OER/UCAR)
Jeff Williams (OER/UCAR)
Tara Smithee (Stanford/UCAR)
Christopher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

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SUMMARY:

Following early morning mapping operations, the NOAA Ship *Okeanos Explorer* arrived at the primary EX-12-02 Leg II Dive 02 location west of the Florida Escarpment at ~0330. Due to opposing wind and currents, the CO and ROV Coordinator determined that a dive later in the morning was highly unlikely. The ship immediately transited to the back-up location east of the Florida Escarpment and at a much shallower depth. At approximately 0830, ship and mission crew launched *Little Herc* and *Seiros* for Dive 02. An electrical fire in Silver Spring caused a series of problems for ship and shore personnel. Work arounds were developed for most issues. Shore-side video problems





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continued. The ROV and Camera Platform were safely recovered by 1700. Mapping operations continued following recovery.

SURVEY:

Multibeam sonar EM 302 and Single Beam sonar EK 60 data were collected. Training of new mapping watchstanders continued. Fledermaus 7 is being used to create daily bathymetry products. Cumulative geotiffs and kmz are being created despite known offsets.

SCIENCE:

Mission personnel continue engaging a largely new group of shoreside science participants. However, improvements over Dive 01 were evident. Shore-side participation varied during the dive but included individuals from University of North Carolina – Wilmington, Temple University, Woods Hole Oceanographic Institution, NOAA Northeast Fisheries Science Center, NOAA National Centers for Coastal Ocean Science, Louisiana State University, C&C Technologies, and NOAA Office of National Marine Sanctuaries. As expected, there is still a steep learning associated with the Collaboration Tools for some participants.

The combined use of a telecon, Adobe Connect, URI Internet 1 links, and the eventlogger are confusing for more than a few participants. Ship-board and shore-side mission personnel are working to mitigate issues.

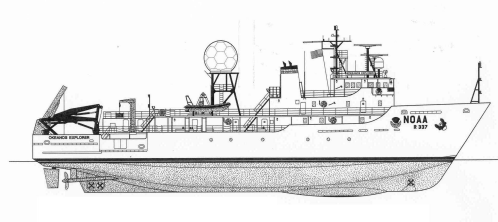
The fire in Silver Spring prevented the ship from using the telecon so audio communication from the ship was limited to science participants at WHOI (i.e., all other science participants were at locations without an RTS unit).

Consistent I1 feeds and telecon capabilities should dramatically improve the shore-side user experience.

TELEPRESENCE:

Telepresence Team continued assisting shore-side participants and trouble-shooting on board internet issues. Shore-side participants reported various quality levels of video. Silver Spring is currently inoperable. WHOI reported degraded I2 video quality. LSU and Temple reported high quality I2 video, though Temple was inconsistent at times. The I1 issue is related to a bottleneck at URI. Shore-side personnel implemented a solution which they believe has fixed the issue. The I1 equipment was moved to a cooler location because of overheating. URI believes the I1 feed will be strong and stable on 22-MAR.





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Both I2 and I1 issues are related to the shore-side network and beyond direct NOAA control. Stennis ECC is not yet active.

Because SS was inoperable, Skarke at UNH initiated the Adobe Connect work-around. That will continue on Friday as a back-up to the URI I1 feed.

Pinner worked with URI staff on a capability that should dramatically improve the ship’s ability to communicate with shore-side scientists participating in ROV dives and working from non-ECC locations. The capability was successfully tested during a post-dive science call today.

VSAT:

The EX is the only NOAA Ship with an operable VSAT. All other ships are down as a result of the Silver Spring fire.

DATA MANAGEMENT:

No updates.

ROV:

ROV personnel completed a second successful dive.

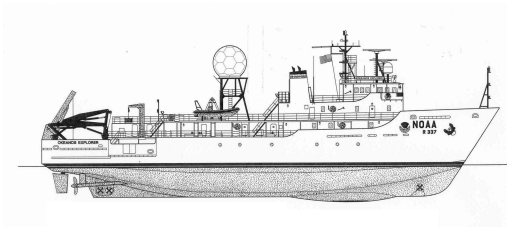
BOW/STERN THRUSTER:

Ship personnel are closely monitoring the bow thruster temperature. It reached 142° today. Additional fans were used to aid cooling. The issue is likely to increase as summer nears and ocean temperature increase. This situation provides additional justification for a more robust cooling system.

OTHER:

- The Silver Spring fire has impacted the ship, but not nearly as severely as other NOAA vessels. On EX, ship’s internet is down but the wireless is working. The VOIP line is inoperable.
- Pinner plans to have an onboard videographer produce a short highlight video for each dive. The timeline for completion following a dive is TBD. Dive 01 highlights are in production. Oceanexplorer.noaa.gov is one location for these videos.





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- PLAN OF THE DAY -

Friday March 23rd, 2012

0000	Underway as before Mapping Operations
~0730	Arrive at Dive Location West Florida Escarpment 1
0745	Safety Brief (Bridge)
~0800	Commence ROV deployment
1500	Ops Brief (Forward Lounge)
~1700	ROV on deck/ CTD test deployment/start overnight mapping
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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