



University-National Oceanographic Laboratory System 2009 Annual Report



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at the University of Rhode Island,
Narragansett, RI.*

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Message from the UNOLS Chair

As I write this, the attention of the Nation and world are focused on the events associated with the Deepwater Horizon oil spill in the Gulf of Mexico which at this moment, is still flowing after 60 days of concerted efforts to shut it down. Called by some the “greatest environmental disaster in the Nation’s history,” this event will clearly have some long term effects on many of us. Most of these effects will, of course, be negative and I won’t dwell on those except to mention that thousands of families are praying that their lives and livelihoods will eventually recover. If there is a bright side to this disaster, it may be that new attention is being focused on the Gulf of Mexico and we can expect to learn a lot more about this economically, environmentally, and socially important environment.

One thing became clear early in the disaster response: one important limiting factor in understanding where the oil was, where it was going, and what its impact might be was the availability of ship time. At present, only one (1) UNOLS vessel is home ported along the entire “South Coast.” This vessel, the RV *Pelican* from LUMCON, is booked solid as always and additional vessels were brought in to help with the study, including the *Walton Smith*, the *Cape Hatteras*, the *Endeavor*, and the *Oceanus* resulting in 86 days of ship time (as of the first week in June 2010) being added to the UNOLS schedule in response to this demand. In addition, non UNOLS vessels have been engaged in studies, including the *Weatherbird II* from FIO/USF, the *Brooks McCall*, and several NOAA vessels, including the *Gordon Gunter* and the *Thomas Jefferson*. Combined with the remotely operated vehicles, drilling platforms, skimmer ships, work boats, and the *Enterprise* drill ship doing the siphoning work, the local area AIS display resembled a crowded harbor more than it did a blue water site greater than 50 miles from the nearest land.

As part of the early response, I was privileged to participate in cruises on both the *Pelican* and the *Walton Smith* and thought I would take this opportunity to make some observations on how well these vessels are run. First, I was impressed with the efficiency of both vessels. Each carried a crew of only 6 or 7 persons to operate the vessel, accomplish the science tasks, and ensure safety. When a 24 hour, non-stop schedule is factored in, it seems incredible that things run so well and the scientists continue to compliment the ships and crews. Second, I was impressed with how safe all operations are on these vessels and how everyone works together to ensure that this is accomplished. Because of the special challenges of dealing with the oil contamination, we all participated in HAZWOPER training and we followed reasonable protocols to avoid hazards, but more than that, the total attitude of safety in terms of drills, training in the use of gear, *(continued on next page)*



Message from the Chair

Message from the UNOLS Chair (continued)

and especially deck operations was stressed on both vessels but in a way that was supportive of safe operations without nagging or criticizing the scientific team.

Third, I need to mention the technicians on these vessels, or, more accurately the technician on each vessel. How do you carry out 24 hour CTD casts with just one ET? Well, if you're Jordan on the *Pelican* or Dennis on the *Walton Smith*, you accept the offers of help from the scientists, train some of them to run the equipment, and turn some operations over to them. Honestly, I was surprised at how well this worked, a testament to how well installed the equipment is and how well established their protocols of operation are. I would be remiss if I failed to mention the food. Oh my! I've spent nearly 1,100 days at sea and have sampled food of all ilks but I have to say that the food on each of these ships was simply fabulous! Lynn, on the *Walton Smith*, was a gourmet chef with decidedly New England tastes and Kelly, on the *Pelican*, was a southerner with distinctly Cajun flavorings who provided healthy, flavorful, and attractive entrees at every meal. Which was better? That would be hard to say but I think the scales tipped in favor of Kelly when she showed up on Saturday night in port with a cooler full of boiled crawfish!

And finally, I need to mention how much work we accomplished on these diminutive vessels. The *Pelican* is only 115' and the *Walton Smith* a mere 95' although its catamaran configuration makes it far more spacious than its length would predict. Far from hampering the science work, these smaller vessels have several advantages over their larger cousins. For one thing, they are nimble and wire operations commence immediately upon reaching station with little time spent slowing down or maneuvering. The reduced science parties (12 -14 on each) mean that competition for wire time is reduced and communication within the team is facilitated, so I would ask readers to consider the advantages of these vessels when planning research.

In other UNOLS news, while forecasts for demand in 2011 continue to be worrisome many bright spots remain and I will leave their descriptions to the respective Chair persons in their reports below. Yes, challenges remain but we have some incredibly talented and dedicated people working to face each one as it arises. The academic research fleet continues to provide a vital service to the research community and, with your input, we will continue to work toward maintaining and enhancing our fleet and its operations.



- *Vernon Asper, UNOLS Chair*
University of Southern Mississippi



Forward, What is UNOLS, & 2009 Election Results

Forward

The UNOLS organization marked 2009 with several significant milestones. The UNOLS Office successfully transitioned to the University of Rhode Island's Graduate School of Oceanography in May 2009 from Moss Landing Marine Laboratories. The University of Alaska's new research vessel, R/V *Sikuliaq*, was funded and a shipyard contract was signed, and significant progress on the new Office of Naval Research Ocean Class research vessels was accomplished. These are just a few of the many highlights of 2009.

These activities, which are detailed in the meeting minutes found on the inserted CD, point to the continued dedication of the ocean science community members who serve the UNOLS organization so well. It is through the efforts of many volunteer committee members, scientists, ship operators, technical support and crew personnel that make UNOLS such a strong consortium.

We owe our gratitude in large part to the federal agency representatives at the National Science Foundation, Office of Naval Research, National Oceanic and Atmospheric Administration, U.S. Coast Guard, U.S. Geological Survey, and the Minerals Management Service for their continued support.

The UNOLS Office looks forward to the years ahead in supporting the goals, challenges, and opportunities which make this consortium an outstanding organization.

- Jon Alberts, UNOLS Executive Secretary



What is UNOLS?

The University-National Oceanographic Laboratory System is an organization of 61 U.S. institutions that have academic research and education programs in the ocean sciences and an interest in promoting the best possible national shared-use facilities to support these programs. Sixteen of the UNOLS institutions are operators of these major shared-use facilities, including research vessels, submersibles, aircraft and major instrumentation. Facilities are owned either by one of the Federal Agencies or by individual institutions. UNOLS serves in an advisory role to the facility operators and to the supporting institutions.



UNOLS Elections held in October 2009

The following persons were elected to terms on the UNOLS Council:

Dr. Robert Collier, Oregon State University - Re-elected to a 2nd term as Operator Representative
Dr. Wilf Gardner, Texas A&M University - Elected as Non-Operator Representative



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Meeting Minutes:

October 2008

- Research Vessel Technical Enhancement Committee - Florida State University, Tallahassee, FL

December 2008

- Arctic Icebreaker Coordinating Committee Meeting - USCG Integrated Support Center, Seattle, WA
- Deep Submergence Science Committee Meeting - Fall AGU Meeting, San Francisco, CA
- Marcus Langseth Science Oversight Committee Meeting - Fall AGU Meeting, San Francisco, CA

February 2009

- Research Vessel Operators' Committee and Research Vessel Technical Enhancement Committee Crew and Technician Recruitment and Retention Workshop - Austin, TX

March 2009

- Fleet Improvement Committee Meeting - Moss Landing Marine Laboratories and Monterey Bay Aquarium Research Institute, Moss Landing, CA
- UNOLS Council Meeting - Moss Landing Marine Laboratories and Monterey Bay Aquarium Research Institute, Moss Landing, CA

April 2009

- Research Vessel Operators' Committee Meeting - University of Texas, Port Aransas, TX

June 2009

- Scientific Committee for Oceanographic Aircraft Research Meeting - via Teleconference
- Deep Submergence Science Committee Meeting - Woods Hole Oceanographic Institution, Woods Hole, MA
- Arctic Icebreaker Coordinating Committee Meeting - National Science Foundation, Arlington, VA

July 2009

- UNOLS Council Meeting - via Teleconference
- Ship Scheduling Committee Meeting - National Science Foundation, Arlington, VA

August 2009

- Marcus Langseth Science Oversight Committee Workshop - Denver, CO

October 2009

- Fleet Improvement Committee Meeting - National Science Foundation, Arlington, VA
- UNOLS Council Meeting - National Science Foundation, Arlington, VA
- UNOLS Annual Meeting - National Science Foundation, Arlington, VA

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Other Items of Interest:

- Message from the UNOLS Chair - Dr. Vernon Asper, University of Southern Mississippi
- Foreword - Jon Alberts, UNOLS Executive Secretary
- 2009-2010 Important Issues and Objectives
- UNOLS Committee News
- UNOLS Charter
- Council and Committee Members
- Contact Lists and Ship Information: Marine Operations, Ship Scheduling, and RVTEC Points of Contact



Insert the CD into your CD-ROM drive. If you do not have Adobe Acrobat Reader, please open the READ ME file and follow the instructions. To access the report, open the file: **2009 UNOLS Annual Report**. *Note: Mac users - Not all functions work in Preview.*



UNOLS Vision/Mission, 2010 Goals/ Priorities, & Contact Information

UNOLS Vision and Mission Statements

Vision - A healthy and vigorous United States research and education program in the ocean sciences with broad access to the best possible mix of modern, capable, efficiently run, and well-operated research vessels, aircraft, submersibles and other major shared-use facilities.

Mission - UNOLS provides a primary forum through which the ocean science research and education community, research facility operators and the supporting Federal agencies can work cooperatively to improve access, scheduling, operation and capabilities of current and future academic oceanographic facilities.



UNOLS Goals and Priorities for 2010

- Promote broad, coordinated access to oceanographic research facilities
- Support continuous improvement of existing facilities
- Plan for and foster support for the oceanographic facilities of the future
- Explore the relationship of working with NSF's Office of Polar Programs to coordinate support for Antarctic Research Vessels
- Explore how to make the present and future fleet more environmentally sustainable



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Visit UNOLS on the web at www.unols.org

For Ship Time Requests please visit <http://strs.unols.org>



Acknowledgements & Disclaimer

The UNOLS Office would like to acknowledge the continued support of the following federal agencies:

The National Science Foundation
The Office of Naval Research
The National Oceanic and Atmospheric Administration
The U.S. Coast Guard
The U.S. Geological Survey
The Minerals Management Service



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R/V Blue Heron
University of Minnesota - Duluth



R/V Cape Hatteras
Duke/University of North Carolina



R/V F.G. Walton Smith
University of Miami

August 2010