

University-National Oceanographic Laboratory System

Research Vessel Operators Committee

NEWSLETTER Vol. 25, No. 1,

January 2000

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Editor's Note

Once again I find myself apologizing for the Newsletter being late. Perhaps I can use the excuse that all good things are worth waiting for. You be the judge.

Paul didn't say it in his column so I'll be the heavy. WE NEED YOUR HELP IDENTIFYING TOPICS FOR THE 2000 RVOC MEETING. Putting together an interesting and informative meeting agenda is an onerous task. It appears easy only because our Chairmen have worked so hard and done such a good job in the past. In reality it takes a lot of second-guessing and guru-man-ship to come up with appropriate RVOC meeting topics and their respective presenters.

So, please, the next time you have a few free minutes (driving home from work, listening to your spouse outline, in excruciating detail, how his/her day went, in the shower, we're not particular) take some time to think about what would make your next RVOC experience a productive one.

Remember, operators are standing by for your suggestions.

Steve Rabalais, Vice Chair

From the Chair

To RVOC Members:

The transfer of the UNOLS office to Moss Landing Marine Labs took place on 1 May. With that transfer, Jack Bash steps down after 9 years as Executive Secretary. I would like to take this opportunity again to thank Jack for a job well done - "Bravo Zulu".

At the same time Mike Prince will step aside as Marine Superintendent at Moss Landing and assume his new responsibilities as Executive Secretary of UNOLS. As most of you are aware Mike has been around the UNOLS community for the last 20 years since starting as a crewmember on the R/V CAYUSE. He participated as member of RVOC since 1984 and in the ensuing years Mike has served as Vice Chairman and Chairman of the Ship Scheduling Committee and Vice Chairman and Chairman of RVOC. Clearly he knows the "inner workings and hidden mechanisms" of UNOLS. We wish him success.

As Mike steps aside at Moss Landing I would also like to extend a welcome to his replacement as Marine Superintendent, Rich Muller.

The RVOC Meeting, this year, will be hosted by Oregon State University in Newport, OR. The dates for the meeting are 24-26 October. One of the business items you will have to deal with at the RVOC Meeting will be the election of a Chairman and Vice Chairman. At the last meeting I was asked to put together a slate for the election. The requirements established by the UNOLS charter for serving as Chairman and Vice Chairman are that the "Chairman and Vice Chairman are elected from among Marine Superintendents (or equivalent) at UNOLS operator institutions". I would ask that you provide me with your nominations by September 30. This will not however preclude the opportunity of making nominations during the meeting.

Finally, something we all need to be aware of is that a greater emphasis has been placed on trying to make group purchases of equipment. This can be seen of late in the planned group purchase of immersion suits, the effort spearheaded by Bill Hahn of URI with regards to a computer based maintenance systems, and the development of common specifications for projected purchase of six portable lab containers.

Best Regards-

Paul

Oregon State to Host 2000 RVOC Meeting

Oregon State University will be hosting the 2000 RVOC Meeting at OSU's Hatfield Marine Science Center in Newport, Oregon on October 24-26, 2000.

A block of rooms have been reserved at the Hallmark Resort (888 448-4449) which will honor the conference rate before and after the meeting as well as during. Information about the local area is available by selecting the "Newport" button on the OSU web page <http://www.oce.orst.edu/Vessels/martech/WecomaHome.html>.

The weather in late October is hard to predict - in an unusual year it can be much like a New England fall, in a more normal year it will probably be raining at least part of the time. We'll be mailing out travel and conference information packets in May. If you have any

Questions contact OSU Ship Operations at 541 867-0224 or e-mail to (lindao@ucs.orst.edu).

New Vessel for University of Miami

The R/V F. G. WALTON SMITH was delivered to the University of Miami on 31 January at Eastern Shipbuilding in Panama City, FL. The vessel arrived at the RSMAS dock on 6 February after a delivery/shakedown cruise back to Miami with a short stop in Key West to let some people off and put others on.

A NOAA funded cruise in Florida Bay/Florida Keys was the first research cruise on the new vessel. The second cruise was 20 days of NAVO work doing swath bathymetry, 3.5kHz profiling, side scan sonar, ADCP, and coring at a range off Ft. Lauderdale. The swath system was mounted through the moon pool. According to Dave Powell, RSMAS Marine Superintendent, this worked very well and reduced pitch and roll on the sensor. So far, scientists, captain, and crew are very pleased with vessel ride and sea keeping.

A commissioning ceremony for the WALTON SMITH was held on 3 March. Attendees included representatives from funding agencies (Dolly Dieter came for NSF), the UM Board of Trustees, UM senior management, donors, the shipyard, and faculty and staff from RSMAS

Small R/V Compendium

All sections of the Small R/V Compendium have been received and forwarded to the UNOLS office for assembly and review. Jack Bash will write the introduction for the Compendium.

Small R/V Under Construction for Oregon State University

Rozema Boatworks, Inc. of Mt. Vernon, WA is constructing the 54', aluminum, R/V ELAKHA for Oregon State University. The hull is complete, the engine is being installed and the deckhouse fabricated. (Additional information including construction photographs can be found on the OSU Ship Operations Web Page). Primary funding, \$400,000, for the construction of the vessel came from The David and Lucile Packard Foundation through a grant to OSU for the Partnership for Interdisciplinary Studies of Coastal Oceans (PISCO). The OSU Research Office contributed \$100,000, and OSU's College of Oceanic and Atmospheric Sciences, \$20,000 to outfit the vessel. ELAKHA will replace the 37' R/V SACAJAWEA which has been in service since the mid-sixties and will be based at the OSU Ship Operations facility in Newport, OR. The vessel will be maintained and operated by the College of Oceanic and Atmospheric Sciences. Fees charged to users of the vessel will cover Operational and maintenance costs for the ELAKHA.

The name "Elakha" continues OSU's long-standing tradition of naming research vessels in honor of Oregon's Native Americans and Native American culture. Elakha (e-lak'ha) is the Chinook Jargon (a trade language used in the Pacific Northwest by diverse inter-tribal groups as a common language) word for sea otter. R/V ELAKHA was selected because of the sea otter's ecological significance to the U.S. West Coast.

The vessel is being built on a fixed-cost "design and build" contract. A small group consisting of the marine superintendent and four research PI's wrote a requirements document and requested proposals in response. The same group evaluated the three proposals that were received and selected Rozema's based on the functionality of their proposed preliminary design and their reputation for building quality boats within cost. According to Fred Jones, Marine Superintendent at OSU, "Rozema has been great to work with so far and there have been no problems. At this point construction is staying at cost and on time."

The vessel will have a 600-horsepower diesel engine, hydraulically powered bow thruster and an 8 kW generator. Normal cruise speed will be around 10 knots with a maximum speed of about 14. The range is 575 miles, and maximum endurance is 72

hours. Scientific capabilities include a 2,000-pound-capacity A-frame and winch, and a flow-through water sampling system. The vessel will have a laboratory area, berthing for four, and a galley. Completion is anticipated by early July, followed by delivery to Newport, where outfitting will take place. The vessel should be fully functional for research by the beginning of August. The vessel should be available for inspection by attendees to the 2000 RVOC meeting in Newport OR.

Operators Meet to Discuss Future of Regional R/V's

Marine Superintendents from 7 UNOLS institutions met in Baltimore MD on 22-23 March 2000 to discuss future plans for the upgrade or replacement of the regional vessels that they operate. Representatives from the UNOLS Fleet Improvement Committee, National Science Foundation, Office of Naval Research, and the UNOLS Office were also present. The group discussed the impact of new national and international regulations on regional vessels, and developed revisions to the 1988 Science Mission Requirements (SMR's) for this class vessel. Plans for midlife re-fits on selected regional vessels were reviewed by the operators in attendance.

GPS Selective Availability Turned Off

The intentional degradation, through Selective Availability (SA), of the Global Positioning System (GPS) was turned off at midnight on May 1, 2000. This will result in a 10 fold increase in the accuracy of the civilian GPS signal. The degraded signal was accurate to within 100meters 95% of the time. With SA off the signal will now be accurate to 12 meters about 95% of the time and accurate to less than 6 meters half of the time. Digital GPS (DGPS) will also benefit from the undithered GPS signal. SA required marine DGPS beacons to make corrections every few seconds. With SA off the corrections could be slower which may drive manufacturers to optimize receivers for better GPS accuracy. (For more details see "Degrading GPS Signal May End" in Misc. Section of Notes and Clippings).

Group to Draft Standards for Lab Van

Matt Hawkins at the University of Delaware is spearheading a group of 5 UNOLS Institutions (Scripps, University of Delaware, Oregon State, University of Washington, and University of Texas) to develop a set of common specification for

portable lab containers. Specifications for 2 standard size containers (20' and 10') have been developed and are out for review by the group.

It is anticipated that these standards will be used by operators when preparing specifications for the construction of new containers and by funding agencies when making decisions to fund institutions for new vans. The standards will set general specifications for basic laboratory containers, but it will be the responsibility of the operating institution to provide the required modifications needed to adapt the vans to the required mission.

Notes and Clippings

Regulatory

- I. Louisiana Offers STCW Training
- II. Vessel Injury Claims
- III. When Does OSHA Have Jurisdiction
- IV. Unions Turn up Heat on Operators
- V. DSC to Change Marine Radios

Safety

- I. Staying Safe on Deck
- II. Training Brochure
- III. Location, Location
- IV. Develop Safety Culture
- V. Safe in the Saddle
- VI. Crane Safety Video
- VII. Do Not Ignore Tag

New Equipment

- I. WAP Over Water
- II. Aerial Photo CD-Roms
- III. Systems Approach
- IV. Killing the Critters
- V. New Subsea Support Vessel
- VI. Emission Accomplished
- VII. Electronic Update for Digital Charts
- VIII. Unique Fairlead

Misc.

- I. Iridium a Users Perspective
- II. New Vessel for Massachusetts
- III. Shotgun Used for Cleaning Hold
- IV. Air It Out
- V. Looking for Hot Sites

Training

- I. Computer-based Training
- II. Scientists Gain Training at Sea
- III. How Effective is Your Training