University-National Oceanographic Laboratory System

Research Vessel Operators' Committee

NEWSLETTER Vol. 24, No. 1

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Editor’s Note

As you can see from this issue of the RVOC Newsletter, there are a lot of new things happening in RVOC. The van study headed by Joe Coburn will provide operators, and funding agencies with new guidelines for purchasing, building, and utilizing vans on our ships. The winch and wire seminars to be funded by NSF will finally give us a replacement for the old "green book" and update our common reference on shipboard load handling gear. Fresh looks at Computerized Maintenance Systems and Stability Programs, should provide interesting information on the commercial market for these services. The Safety Committee’s effort to unravel the regulatory issues defining un-

inspected R/Vs may resolve some long standing unanswered (and possibly some unasked) questions. In addition, a number of new vessels, large and small, are being built or are in the final design stages.

This issue also contains information on the 1999 meeting. But, a final decision on the location of the Y2K meeting has been delayed in order to address questions raised by funding agencies about the ramifications of meetings in high cost areas.

Thanks to all of this issue's contributors.

Steve Rabalais

From the Chair

I wanted to take this opportunity to pass along some information to the membership regarding events that are being planned or issues that we can expect to hear more about.

- First, NSF is planning to sponsor a winch and wire symposium later this year to look at issues which are expected to include:

a) - The next generation of wire
b) - Structural/equipment changes required by a new generation of wire
c) - Long coring

d) - Quality of winches

Attendees are expected to be wire manufacturers, winch manufacturers, operators, and technicians.

- At the November RVOC meeting hosted by the University of Hawaii the subject of automatic external defibrillators came up. The NSF will be funding the acquisition of automatic external defibrillators for UNOLS research vessels. Mike Prince of Moss Landing has been coordinating this effort.

- A common item identified during the last two years of ship inspections has related to the use of computerized stability programs. The ship's master, as a standard practice, should check stability of a vessel prior to departure, at mid- points through a cruise, and en-route to port. The logic applied is that these programs make it easier for the operators to check the vessel's stability and therefore it will be more likely that the ship's trim and stability will be checked throughout a cruise. Many UNOLS institutions have computerized stability programs and should be consulted if you decide your time has come to acquire such a system.

- An instance similar to the stability program is the Computerized Management Maintenance System that Bill Hahn of URI is investigating. The NSF wants to encourage the evaluation and acquisition of systems that can benefit a group of operators rather than institution specific systems. It is clear that at some point the systems become organization/vessel specific, but we should expect continued emphasis being placed on coordinated evaluation of products and, when possible, group purchasing .

- As a final item, I would suggest you begin to examine how you might benefit from team training for ship's crews. Funding of such training has yet to be addressed, but you can anticipate further discussion of this topic.

Paul Ljunggren

***Calanus* Replacement**

The Rosenstiel School made a presentation early this year to the Executive Committee of the University of Miami Board of Trustees seeking approval to proceed with the financing and construction of a replacement for R/V *Calanus*. Approval was granted and plans are underway for construction of the new vessel. The replacement will be the 96' by 40' aluminum catamaran described at the last UNOLS meeting. It will have accommodations for 20 which could be a combination of 16 - 18 scientists and two - four crew depending on the work. The ship will have dynamic positioning capability and there will be a moon-pool for drilling/coring work, flowing seawater systems, ADCP system, 3.5 kHz array, ability to carry small boats, vans, etc.

A contract has been finalized and construction should start in April. Estimated time for construction is nine - 12 months and it will be built at a Gulf Coast yard.

Defibrillators

Sudden cardiac arrest claims more than 350,000 lives each year, mostly because life-saving treatment (defibrillation) does not reach the victims within the first critical minutes. New advances in Automatic External Defibrillators (AEDs) have made the units very light, portable, and easy to use, and many airlines and shipping companies have instituted early defibrillation programs.

Dolly Dieter (NSF) has agreed to support an early response program on all UNOLS vessels by providing funding for a group purchase of defibrillators through Moss Landing Marine Laboratories. This will provide an AED with training materials for every ship in the UNOLS fleet that does not already have one on board. Funding for two training sessions per ship will be included in the NSF program package. AED training will be provided to anyone taking the four day medical responder training from either MAS or MHS. For more information about AEDs check the Heartstream web site at:

http://www.heartstream.com/forerunn.htm

Winch and Wire Seminar

The UNOLS Office has a pending proposal to conduct a Winch and Wire Symposium. The proceedings from this symposium will be edited into a manual that will replace the *Second Edition of the Handbook of Oceanographic Winch, Wire and Cable Technology*.

If the proposal is funded, a steering committee will be formed later this spring for the purpose of structuring and scheduling the symposium. This committee will also review the edited proceedings before publication. The symposium is envisioned to have speakers from industry and experts from academia giving presentations on winch and wire operational safety, the next generation requirements of the fleet for winches and wires, and winch and wire maintenance and care. A new manual for the community, and an inventory of winches and wires currently in the fleet will be developed. If schedules can be worked out the symposium will be held in September of this year.

The steering committee is to be made up of scientists and operational persons actively involved in the use and handling of oceanographic winches and wires. The UNOLS Office would welcome volunteers or names of those persons who would be appropriate for the steering committee. Recommendations for symposium speakers also would be welcome.

RVOC 1999

Harbor Branch Oceanographic Institution will be hosting the 1999 RVOC Conference at our facility in Ft. Pierce, Florida, November 2-4, 1999. Travel and conference information will be available at the Harbor Branch web site www.hboi.edu. Complete information packages will be mailed in May. For further information, contact the Marine Operations Office at 561-465-2400, ext. 279/271.

***Cape Henlopen* Begins Modernization Program**

In February and March of 1999, after 22 years of service, R/V *Cape Henlopen* began a phased modernization program to upgrade her capabilities and improve her accommodations. A phased program was used in order to keep the vessel in active service to the scientific community during the modernization process.

The University of Delaware provided funding for Phase 1, which greatly modified the aft deck arrangement. The work included a new port towing frame, improvements to the stern A-frame, creation of a new electronics compartment, and the capability to carry a standard 20-foot container in addition to the ship's 16-foot portable laboratories. This phase also increased the amount of usable deck space and improved the lifting capabilities and reach of the frames.

Funding for a portion of Phase 2, which will begin in 2000, has been provided by the National Science Foundation. The modifications supported by NSF include a deep centerline transducer well and associated tank modifications, keel coolers, and new switching gear for the generators. The transducer well will provide improved performance to the ship's acquisition transducers. The generator switching gear will allow one ship's service generator to power the vessel, and the other to feed an auxiliary circuit to the aft deck for equipment with heavy power requirements.

Additional funds are needed to improve the galley arrangement and bring the appliances up to date. It is anticipated that funds for this work will be provided through the University of Delaware. The galley will be renovated as part of Phase 2.

New R/V for Great Lakes Science Center

All of the shell plating in place, and nearly all of the major equipment has been delivered for the Great Lakes Science Center new 107’ R/V *Kiyi.* (Pronounced Ki-eye: the common and scientific name of a fresh water corigonid (chub) that inhabits the deep water of Lake Superior. It once inhabited Lakes Huron, Michigan and Ontario but no longer exists there.) The main engines, shafts and completed pilot house will be set by mid April. Work on the generators, electrical and plumbing features will have begun before April 26th. According to Bob Nester, "This is an excellent yard (Patti Shipyard, Pensacola, FL) to work with and so far there have been no problems. They take a great deal of pride in their work and it shows in the finished product."

Van Study

At the request of NSF, and by the direction of Paul Ljunggren, a committee consisting of Joe Coburn, Tom Althouse, Tim Askew, Fred Jones, and Paul Ljunggren has been appointed to look into the issues of vans on UNOLS vessels. The purpose of the group will initially be to develop an inventory of portable labs/vans with information on their condition and use/capabilities. Because vans are not all under the jurisdiction of marine superintendents, this should be an UNOLS-wide inventory. Joe Coburn, the committee chair, indicated that it will a greater effort to include all vans in the UNOLS inventory but is certainly doable, and needs to be done.

The group will look at issues like:

- Are portable labs/vans Coast Guard compliant? Coast Guard regulations apply only to berthing, hazardous chemical and power vans on inspected vessels. (WHOI's policy is that all vans, other than for simple storage, be manufactured and maintained to Coast Guard standards, just as though they were to be inspected.)

- The requirements/standards that UNOLS portable vans/labs should be complying with in order to be used on board UNOLS R/Vs. See above.

- Schedules for replacement or up-grading of portable vans/labs.

- How should portable labs/vans be secured on board research vessels.

A copy of the WHOI Van Policies has been included in the Notes and Clippings Section.

New NVIC for GMDSS

The Coast Guard released NVIC 3-99, a major revision of NVIC 3-93 updated for GMDSS. The circular summarizes GMDSS requirements for various categories of vessels and includes EPIRB requirements for non-GMDSS vessels. NVIC 3099 may be accessed on Coast Guard website at http://www.uscg.mil/hq/g-m/nvic, as can all NVICs.

Notes and Clippings

Regulatory

I. **Make Space for AIS**
II. ***New Carissa***
III. **Living with ISM**
IV. **Turn Coats**
V. **Blow by Blow**
VI. **IMO Ch 16**
VII. **Environ. Standards**

VIII. **Physical Standards**

Insurance

I. **PREMED**
II. **Marine Disability**

New Equipment

I. **Ship to Shore Data**
II. **Azimuthing Thruster**
III. **Silent Treatment**
IV. **Iridium System**
V. **UHP Waterjetting**

Management

I. **ABS SeaNet**
II. **Mariner Fatigue**

Misc.

I. **Optical Confusion**
II. **Storm Warning**
III. **R/V *Connecticut***
IV. **SatCom Wars**
V. **Yard Work**
VI. **Y2K**
VII. **Sate Gov. & R&D**
VIII. **Wire Rope**
IX. **WHOI Van Study**