

# Appendix III

## Committee Reports UNOLS Council Meeting September 16, 1998

### Committee Reports

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#### **Report from the Chair of the UNOLS Arctic Icebreaker Coordinating Committee to the UNOLS Council - September 1998**

The UNOLS Arctic Icebreaker Coordinating Committee (AICC) provides scientific oversight of Arctic marine science support on US vessels, with primary focus on USCGC Polar Star, USCGC Polar Sea, and the new USCGC HEALY. The AICC held its most recent meeting 21-22 January 1998 in New Orleans, Louisiana. The next meeting will be 18-20 November 1998 at NSF headquarters in Arlington, VA. Interim business has been handled via e-mail, and AICC representatives have attended other meetings related to AICC business.

Construction progress on USCGC HEALY at the Avondale shipyard has been steady. Unofficial estimates are that delivery to the Coast Guard for their testing will be delayed by approximately six months due to the complexity of the vessel, its "first of type" status, and a severe shortage of skilled shipyard labor in Louisiana. There are no reports to the AICC of the sort of major problems that might bring construction to a halt.

The HEALY science systems testing program is being undertaken by a broad-based consortium of US oceanographic technical support groups coordinated by UNOLS RVTEC, working with a group assembled by NAVSEA and the Coast Guard. A positive, cooperative atmosphere is evident at meetings of the test group, and progress on the test plans is excellent.

Following a period of warm water tests by the yard, NAVSEA, and the Coast Guard, the HEALY's first ice contact could come approximately November 1999. Intense post-delivery testing may begin approximately February 2000, and may be completed by approximately July 2000. The AICC expects that there will be no "science of opportunity" on USCGC HEALY during this testing phase, although oceanographic data resulting from the science systems testing program will be made widely available. It is reasonable to assume that following the test program a degree of refit, adjustment, and training may be necessary. The AICC Chair estimates that it is possible, but by no means assured, that during the latter part of 2000 the Coast Guard might accommodate some SOO activity from the HEALY.

Present plans call for the HEALY's availability for agency-funded Arctic marine science support - the vessel's primary mission - beginning approximately January 2001. Anticipating that the Western Arctic Shelf-Basin Initiative field program may be one of the HEALY's early science customers, the AICC plans to help coordinate that program's planned ship and equipment needs with the Coast Guard so that the vessel and personnel are ready for the program, within the context of the HEALY's planned science systems support.

The 1998 US Coast Guard Arctic Science-of-Opportunity (SOO) program included science participation on cruises of both USCGC Polar Star and USCGC Polar Sea. A late spring - early summer cruise of the Polar Sea was accomplished within the intended framework of an advance announcement of opportunity

followed by AICC assessment of proposals for logistics compatibility, at which point participant and chief scientist selection were carried out by the Coast Guard. An opportunity for a late summer 1998 Polar Star SOO cruise developed too late for an announcement of opportunity, and after some discussion with the AICC, it was agreed that the Coast Guard should handle all aspects of the cruise, i.e. without AICC assessments.

The AICC intends to continue its annual logistics assessment of Arctic Science-of-Opportunity cruises by USCG icebreakers. Arctic SOO cruises are likely on one or more Coast Guard icebreakers each year. Each cruise will be preceded by a wide call for letter proposals for participation. The AICC is charged with assessing these proposals for logistic and overall compatibility with the SOO mission. No decisions are made by the AICC with regard to participation, and AICC comments are specifically not to be used to leverage agency support for any proposal. While up until now everyone has been accommodated one way or the other, this situation will likely change beginning in 1999. The AICC continues to caution the community that science support is not necessarily the chief mission of SOO cruises, and the AICC reminds all that the Coast Guard is now accepting and will continue to accept ship-time requests for funded Arctic science missions on the Polar-class vessels and the HEALY. For example, a ship-time request form is available from the UNOLS web site. On funded science missions the expectation and goal is that science will be supported in a manner and devotion to mission similar to that supported by the operators of large UNOLS vessels.

The Coast Guard continues to send Marine Science Technicians (MSTs) on UNOLS vessels on an opportunistic basis. This valuable program helps to bring together Coast Guard marine technical support with that from UNOLS, and has sufficient momentum within the Coast Guard that it continues with little AICC involvement. The AICC continues to discuss with the Coast Guard various means to help ensure close ties with the UNOLS technical and scientific communities, and to model its relationships with user-scientists upon that carried out by UNOLS large ship operators.

The AICC intends to hold a meeting in spring 1999 in New Orleans, fit to the HEALY construction and testing schedule so that a grand tour of the completed vessel can be a central activity of the meeting. This meeting should provide a good opportunity for agency and community representatives to see the HEALY, and learn more about the AICC and future plans. Hence the AICC might solicit and expect larger- and broader-than-usual attendance at this meeting.

A major goal for the AICC during the coming months is to establish a mechanism for long-term Arctic expeditionary planning for the Coast Guard icebreakers that will provide an increasingly-likely (as each year draws nearer) temporal and regional palette of science missions, international programs, options, and requirements from which the Coast Guard and the funding agencies can draw annual operations, science, and funding scenarios. The success of UNOLS DESSC in similar regard will certainly provide a model for Arctic vessel use planning, probably including by 1999 an annual advance planning workshop held the same day - one day before the fall AGU meeting - as the DESSC long-term planning workshop.

### **Fleet Improvement Committee Report submitted by Larry Atkinson**

The Fleet improvement Committee has had three main activities since July.

The Sub-committee to develop a Science Mission Requirement document for the replacement of the Alpha Helix has delivered a draft document that is in review at this time.

The Subcommittee to develop a Science Mission Requirement document for an East Coast ship is meeting later this month to finalized the draft.

Both drafts should be ready for the next council meeting.

FIC has also been involved in the U.Hawaii SWATH planning. Several FIC and UNOLS council members met on July 29, 1998 at the Lockheed/Martin Facility in Sunnyvale, CA to review the plans and left many important comments.

## **Research Vessel Operators' Committee Report Submitted by Paul Ljunggren**

The RVOC Meeting is scheduled for 4,5, 6 November to be hosted by the University of Hawaii in Honolulu, HI. The major presentations or topics for discuss include:

-Presentations on new R/V's and an update on plans for the new AGOR.

-Presentation by Jamestown Marine Services on the NSF Ship Inspection program.

-Maritime Advisory System was awarded the contract by UNOLS to provide medical advice to our vessels. This contract was effective 1 July 1998. MAS will make a presentation on their organization and the services they offer.

-ABS Marine Services is scheduled to make two presentations on the second day. They are:

1. STCW Awareness Training- Providing knowledge on the impact of the 1995 Amendments to the International Convention on the Training and Certification of Watchkeepers.
2. Provide an overview of the International Safety Management Code (ISM). What are the requirements? How do you obtain certification? How does this apply to research vessels? How do we go about implementing ISM?

The Safety Committee has been continuing to work on two projects. They are the RVOC Safety Video and completing a revision to the Research Vessel Safety Standards.

-The video has been completed, reviewed by the committee, and copies are being reproduced for distribution. The committee's intent is to distribute one master for archive to each institution, a copy for the institution's use and one for each ship. In addition a master will be provided to UNOLS along with several copies and a copy will be sent to NSF.

-The Safety Standard revisions have been received by the Tom Smith, Safety Committee Chair. A draft of these revisions will be sent for review by the RVOC. Some the changes to the RVSS include addressing changes in the regulations such as Global Maritime Distress and Safety System (GMDSS). In addition the chapter on Stability has been rewritten.

### **Committee report from RVTEC to UNOLS Council**

While there have been no meetings since the summer UNOLS Council meeting in Rhode Island, there has been progress on some fronts.

The upcoming RVTEC/INMARTECH 98 meeting scheduled in La Jolla during the week of October 19th. The meeting will be hosted by the Marine Technical services group at Scripps Institution of Oceanography. To date all of the RVTEC meetings have involved primarily participants from UNOLS institutions, NSF, ONR, NOAA, NAVO and ASA. Last year representatives from the Polar operations group of the U.S. Coast Guard joined us. The 1998 meeting in La Jolla will involve participation from the international community. It is expected that there will be nearly 100 participants who will come from Japan, UK, Netherlands, Spain, South Africa and Australia. There have been 28 invitations to presenters for subjects ranging from Deck operations and Safety to Multibeam Sonar processing who will offer tutorial presentations in concurrent sessions during the 3-day meeting. The meeting will be interspersed with social and networking sessions beginning with a reception at the SIO Birch Aquarium facility. At this reception various poster sessions presented by academics and manufacturers will be hosted in an informal atmosphere with the understanding that it not be a sales presentation. The SIO group has worked very hard in their efforts to host a meeting accommodating the needs of both RVTEC and the international community. It is through the unflagging efforts of Annette DeSilva of UNOLS and Woody Sutherland, Technician group manager at SIO that this exciting program has moved forward.

The RVTEC group will meet on Monday, 19 October prior to the international to conduct business specific to our group. This will include election of officers and reappointment of sub-committee chairs.

Committee reports from the Data Standards Sub-committee, Wire and Cable Sub-committee, On-line resources Sub-committee and the Long-Range Instrumentation Planning Sub-committee, will be heard at this time. The site of the RVTEC meeting for 1999 will also be chosen.

In other developments, RVTEC and the UNOLS Office have been continuing work with the US Coast Guard and the AICC in planning the scientific ice trial of the new Coast Guard icebreaker USCGC HEALY. There has been a great deal of progress both on the vessel itself and in the planning of the scientific ice trials planned to begin next year. A meeting was hosted at URI in August, which included the various groups participating in the HEALY trials as well as NAVSEA, Coast Guard and CREEL reps. The AICC was represented by Chair Dr. Jim Swift. Because it is clear that the Coast Guard is serious in making HEALY a first rate scientific platform for Arctic science operations, a great deal of value is being placed on the Science trials. It is anticipated that the science testing will occur in several phases, Multi-Beam Sonar installation and builders trial testing, warm water testing of science systems and finally full science systems and capability testing in Arctic conditions. It is anticipated that this phase of the operation will consist of scientific scenarios led by an AICC scientist who will plan and execute the testing sequences in a science cruise format. It is felt that this will allow a realistic testing sequence in which all major science system can be exploited and evaluated independently and as they interact with each other. The goal is to involve as many institutions in the testing program as possible in order to insure a broad spectrum of expertise in the final result.

The Coast Guard is continuing to look at a variation of the UNOLS model for technical staffing of the vessel considering both Coast Guard and civilian personnel possibly contracted to a UNOLS operating institution. Toward this end they have, at our invitation, sent Coast Guard Marine Science Technicians out on UNOLS vessel in order to become acquainted with UNOLS science operations and support practices.

Submitted,  
John S. Freitag Chair, RVTEC

### **DESSC Information for UNOLS Council Meeting Sept. 16.**

In June, the DESSC held its annual summer meeting at Woods Hole. Dr. P. Fryer, from the University of Hawaii and a present DESSC member, was selected to be the next DESSC Chair and will replace M. Perfit who has completed his three-year term. Two other members of the committee (Hugh Milburn and Carl Wirsén) rotated off the DESSC and nominations to replace them will be provided to K. Johnson and UNOLS.

Since the last UNOLS meeting, operations on the ATLANTIS have been going very well. ALVIN has had a number of successful dives in the N.E. Pacific. The ROVs were moved on to R/V THOMPSON for work on the Juan de Fuca Ridge after an ONR/JASON Foundation cruise in Guaymas. The vehicles are currently engaged in the very challenging "H20" experiment. JASON successfully located and cut the transoceanic cable on its first lowering and at last report the cable had been reterminated and tested on deck.

Some of the major and minor problems (e.g. modifications to main deck doors, crane upgrades, more robust capstan, more fume hoods) that were affecting the new ship have been addressed and the operator plans for additional upgrading ATLANTIS in the coming months (list of 29 items). The operators and DESSC will work together to get input from the science community to prioritize these upgrades. A number of advances with imaging, mapping and navigation have been made with Jason. The WHOI operators have continued to work on upgrades to the vehicles such as data logging and navigation systems, video upgrades, scanning sonar, and a ring laser gyroscope that were funded through the federal agencies.

SEACLIFF has been decommissioned and transferred (with some support equipment) to WHOI in early August. The federal agencies have funded an engineering study to be undertaken by WHOI to assess the potential uses of SEACLIFF and costs involved. The results of this study will be made available to the federal agencies and DESSC.

WHOI and DESSC have drafted an "Archiving Policy" that documents the obligations WHOI and PI's have with regard to oceanographic data and samples, as well as visual and digital information obtained using the vehicles and sensors of the National Deep Submergence Facility. DESSC hopes to have the policy approved by the federal agencies and in place in the near future.

Scheduling for ALVIN and the ROV's is nearly complete and the '99 schedule is entirely booked for ALVIN. There is again a good deal of proposal pressure for the traditional "yo-yo" regions (JdF-N EPR) but more cruises are being planned for the S. EPR, Mediterranean, and the northern Atlantic. The DESSC has had some success in developing global deep submergence initiatives and encourages proposals for the SW Pacific and Indian Ocean that could lead to field programs as early as 2000. Patty Fryer will be attending the MOMAR meeting in Portugal in October to give DESSC's perspective on long term monitoring the Mid Atlantic Ridge.