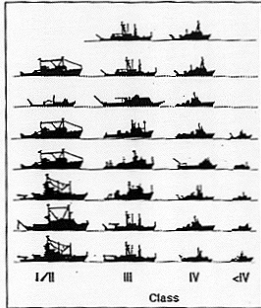


UNOLS NEWS

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Comments from the UNOLS Chair ...

Dear Colleague,

I begin my term as UNOLS Chair at a time when ocean science generally, and UNOLS in particular, face fresh opportunities and extraordinary challenges. We see a National Ocean Conference attended by the President and Vice President. We see serious effort, perhaps to be completed in the next Congress, to establish a "Stratton II" or National Ocean Commission. We see a remarkable celebration of the 50th anniversary of the founding of NSF, and a significant increase in the NSF budget for the first time in some years. We see, at last, a reversal of the decline of basic research funds in the Navy. All these take place in an International Year of the Oceans. All must be taken as positive signs.

On the other hand, the chances for success of an NSF ocean science proposal trend inexorably downward over the last decade, and in some programs the odds for success of a seagoing proposal are significantly worse than the odds for a non-seagoing one. The fleet continues to have excess capacity relative to the portfolio of funded work - as this is written, R/V KNORR is scheduled to be out of service in 1999. The mismatch between fleet capacity and funded work from the "conventional" basic research agencies is even greater - at this juncture the use of UNOLS ships to carry out various survey tasks for the Naval Oceanographic Office (NAVO) amounts to some 15% of the entire fleet operating budget. New ships are in various stages of planning, advocacy and contemplation in various quarters of our community. Will the mismatch be better or worse as these vessels come on line? There is good reason for concern.

This is the minefield of positive and negative indicators across which UNOLS must somehow navigate into the new century. Key to success will be to sustain and enhance those sensible partnerships, so ably initiated by my predecessor Ken Johnson, that draw new "customers" like NAVO and NOAA to use the UNOLS fleet for tasks that it does well and that serve the missions of those agencies in effective ways. The alternative would be to downsize the fleet to fit only the current demand of conventional customers NSF and ONR, thereby prematurely retiring various existing ships and, more importantly, their experienced crews, while rendering the utilization of new ships even more problematic. In the end, this would constrain the future options available to academic scientists and programs if, as we all hope, the transition to the new century brings with it a renewed emphasis on all kinds of research, including seagoing research, to study and comprehend the oceans and their full range of connections to the rest of earth's systems and to human welfare.

Rob Knox, UNOLS Chair

UNOLS 1998 Annual Meeting Highlights

The UNOLS 1998 Annual Meeting was held at the National Science Foundation on 17 September 1998. Ken Johnson, UNOLS Chair, presided over the

meeting and reported on 1997-1998 activities, current issues and issues continuing into 1999.

The meeting's keynote address was provided by Dr. Garrett W. Brass, Executive Director for the Arctic Research Commission. Garry opened by explaining that the Arctic is very sensitive to global change. Changes are currently being noticed in salinity levels, temperature and Bering Sea fish production. The Arctic has been studied by ships, submarines, aircraft, ice camps, satellites, and buoys. The U.S. Navy has made a major contribution to the science effort by making available a nuclear submarine for two months each year in a program named SCICEX. The program started in 1993 with a test cruise then restarted in 1995 under a five year agreement. This will end in 1999 and, with the retirement of the 637 Sturgeon Class, submarine the program's future looks dim. This year's program included a hull mounted SWATH mapping system to provide multi-channel data.

Aircraft science operations are limited and helicopter operations provide even less opportunities. Ice camps have been used in the past with SHEBA completing this year. The future for sustained study of the Arctic rests in icebreakers. HEALY will be on line in the near future to provide access to the Arctic Ocean. Its cost to the scientist is planned at \$20K per day. The UNOLS Arctic Icebreaker Coordinating Committee has been working closely with the Coast Guard to facilitate scientific access to Arctic science. This committee needs to transition into an expeditionary planning mode.

The Congressional budget for 1999 has included \$24M in the NSF budget for Arctic science. If this is signed into law it will make a major difference in the ability to work in the Arctic. It should provide funding for 200 days of icebreaker time. This funding is new, and as a result, the cost of Arctic science will not impact the resources available for lower latitude science. The future of submarine science is less clear at this time.

The Annual meeting continued with reports from UNOLS Committee Chairs and Agency representatives. Robert Hinton gave a status report on the AGOR 26 design and construction program. Ellen Kappel provided an update on SeaNet installation on UNOLS ships. Ken Johnson introduced a variety of issues of interest to the UNOLS community. The meeting concluded with membership votes and Council elections.

UNOLS Welcomes Two New Members

Elections were held at the UNOLS Annual Meeting in September to approve applications for UNOLS membership from the University of California at Santa Cruz (UCSC) and the University of Minnesota, Duluth (UM, Duluth). Both applications were approved. Tom Johnson will serve as the UNOLS representative from UM, Duluth.

UNOLS Office Transfer

The UNOLS Office is scheduled to transfer from the University of Rhode Island on 30 April 2000. In September, the UNOLS Chair solicited "letters-of-intent" from UNOLS Operator institutions. Responses are due by 13 November 1998. The Chair will then invite proposals from the interested institutions and appoint an evaluation committee from non-conflicting members of UNOLS. Proposals for running the UNOLS Office will be due 29 January 1999. An evaluation period will follow. The evaluation committee will forward their recommendations to the UNOLS Chair by 30 April 1999. In June/July the Council will forward their recommendation to the membership for concurrence. The successful institution will be notified by 6 August 1999. The UNOLS Office will be established at the new host institution on 1 May 2000.

UNOLS Council Election Results

Elections were held at the UNOLS Annual Meeting on 17 September to fill four UNOLS Council positions, including the positions of Chair and Vice Chair. Dr. Robert Knox was elected as Chair, which is a two year term. Bob is Associate Director of Ship Operations and Marine Technical Support at Scripps Institution of Oceanography (SIO). He is also a research oceanographer in the Physical Oceanography Research Division at SIO. Bob has served on the UNOLS Council from 1986-1989, 1991-1993, and 1994 to the present. His research areas are physical oceanography; global and equatorial ocean circulation and acoustic remote sensing.

Dr. Thomas Royer was elected for a second term as Vice Chair. Tom is Chair of Oceanography at Old Dominion University and a professor at the Center for Coastal and Physical Oceanography. He is a past member of the UNOLS Fleet Improvement committee and has served on the UNOLS Council since 1993. Tom's research area is physical oceanography and circulation of the North Pacific Ocean and air/sea interactions.

Dr. Charles Flagg was elected for a three year term to serve as a non-operator institution representative. Charlie is a physical oceanographer at Brookhaven National Laboratory, Oceanographic and Atmospheric Sciences Division, Department of Applied Sciences. He is presently serving as a member on the UNOLS FIC Subcommittee to develop Science Mission Requirements for an east coast intermediate research vessel. His research interests include physical oceanography; low frequency currents on continental shelves; hydrography of the Gulf of Maine/Georges Bank and Mid-Atlantic Bight; and structure and dynamics of fronts in coastal oceans.

Dr. Thomas Lee was elected to the at-large Council position which is a three year term. The at-large position can be filled by an individual affiliated with any UNOLS Member Institution. Tom is a research professor at the Rosentiel School of Marine and Atmospheric Science (RSMAS), University of Miami. He is the Chair of RSMAS Ship Operations Committee and also chairs the Harbor Branch Oceanographic Institution/ RSMAS Joint Marine Operations Oversight Committee. Tom's research area is physical oceanography; with experimental/observational studies of ocean currents, ranging from local coastal currents to large scale western boundary currents.

A special election was held for the Council position being vacated by Bob Knox (he vacated his seat when elected as Chair). This is an at-large position. Dr. Timothy Cowles, Professor and Associate Dean of the College of Oceanic & Atmospheric Sciences at Oregon State University, was elected. His research interests include zooplankton ecology; copepod swimming and feeding; mesoscale and microscale links between physical, chemical, and biological processes in the sea; and development of new instrumentation for Biological Oceanography.

UNOLS Charter Revision to be Voted by Mail Ballot

All UNOLS Institutional Member Representatives have been mailed a ballot to accept or reject the proposed UNOLS Charter Revision. All ballots are to be returned to the UNOLS Office prior to 7 December 1998.

A UNOLS Charter change was forwarded to all UNOLS Institutional Representatives thirty days prior to the 17 September 1998 UNOLS Annual Meeting. No vote was taken on this proposed Charter change at the Annual Meeting due to a lack of the required number of voting members. Paragraph 7 a. of the Charter presently requires a two-thirds vote of the UNOLS institutions to amend the Charter. There are now 59 UNOLS members, so 39 favorable votes are needed to approve a change.

The ballot to approve or disapprove the recommended Charter changes is divided into three separate parts in an effort to maximize the probability that some if not all of the proposed changes are passed. Part one of the ballot is a vote on all proposed changes to the Charter with the exception of a membership change concerning consortia and a change to relax voting requirements. Part two is a vote on the proposed change to consortia as members. This change requires that membership shall be by individual institution or by consortium. However, if a consortium is a UNOLS member, no constituent institution of that consortium may be a member. The third part of the ballot is a change that will relax the voting requirements for future Charter changes.

Marine Technicians from Around the World Attend INMARTECH '98

by Annette DeSilva (UNOLS Office)

The 1998 International Marine Technician Symposium (INMARTECH '98) was held on October 20-22, 1998 at Scripps Institution of Oceanography (SIO) in La Jolla, California. Close to 120 people registered in advance of the meeting and many on-site registrations were also accepted. The meeting participants came from 12 different countries including; Australia, Belgium, Canada, Denmark, France, Mexico, Netherlands, South Africa, Spain, UK and the U.S. Among the United States participants, 20 academic institutions were represented along with representatives from NSF, NOAA, NAVO, USCG, ODP, Jamestown Marine Services and industry.

The symposium began on Tuesday morning, 20 October, with an opening session by SIO personnel. Woody Sutherland started the meeting by welcoming everyone to SIO and giving a brief description of SIO's Shipboard Technical Support programs. He was followed by Bob Knox, UNOLS Chair and SIO Associate Director, who gave a history of SIO's oceanographic activities as well as a description of UNOLS and its role. Lisa Shaffer gave a presentation on SIO's international activities. Sandy Shor, Program Director for NSF's Instrumentation and Technical Services Program, followed the SIO presentations with a report on the U.S. academic technical support programs and organization.

Over the course of the three day symposium seven technical sessions were held with a total of 30 technical presentations. Each session included presentations by three to five speakers and included time for open discussion and a question/answer period. Sessions were held on Underway Sampling Systems; Geophysical Technologies; ROV and Towed Vehicles; Bottom Sampling Techniques and Deck Operations; Acoustic, Doppler, Current Profilers; Shipboard Networking and SeaNet; and CTD Packages.

Other highlights of INMARTECH '98 included an evening reception and exhibit session at the Birch Aquarium. Academic representatives as well as marine industry representatives were invited to exhibit their information and hardware. The evening offered an informal atmosphere for networking among the meeting participants. On Wednesday, 21 October, participants were able to tour SIO's Marine Facilities including R/V MELVILLE and FLIP. Underway sampling system demonstrations as well as a multibeam processing demonstration were conducted on MELVILLE.

The final report of the INMARTECH '98 Symposium will be compiled and distributed in 1999. It will include a transcript of the proceedings as well as technical papers submitted by presenters. The final report will also be posted on the INMARTECH '98 web page <<http://gso.uri.edu/unols/inmartech98/>>.

Personally, I would like to thank the many people who helped make INMARTECH '98 possible (if I leave any names off the list, please accept my apologies in advance). Assistance and input was provided throughout the planning process by the Steering Committee of Ken Robertson, Cok van Bergen Henegouw, John Freitag, Sandy Shor, and Woody Sutherland. I would like to thank all of the Technical Session chairs and presenters. The session chairs were Tony Amos, Paul Henkart, Marc Willis, Woody Sutherland, Eric Firing, and Barrie Walden. The presenters were Tony Amos, David Hosom, J. Derksen, John Diebold, Graham Kent, Lester LeBlanc, Dale Chayes, Robert Elder, John Hildebrand, Bill Kirkwood, Mark Rognastad, Lindsay Pender, Peter Kalk, Richard Muller, Ronald Comer, Eric Firing, Martin Visbeck, Helen Beggs, Daniel Schwartz, George White, Steve Hartz, Barrie Walden, Andrew Maffei, Steve Lerner, Dennis Shields, James Akens, Rich Findley, Frank Delahoyde, Kristen Sanborn, Jim Swift, Paul Ridout, and Sven Ober.

A team of people were instrumental in seeing that the symposium ran smoothly. Their administrative support was greatly appreciated. These people are Mary D'Andrea, UNOLS; and Romy Asch, Brenda Ayers, and Joanne Digre all from SIO. SIO also provided a team of drivers to shuttle the meeting participants to and from the meeting site. These people are Bob Williams, Darrel Lawrence, Dennis Long, Doug Masten, Leonard Lopez, Mary Johnson, Robert Palomares, Ron Patrick, Scott Hiller, Stacey Anfusio, and Virginia Wells.

Last, but certainly not least, I would like to thank Woody Sutherland of SIO for all his time and effort in coordinating INMARTECH '98. Somehow he even managed to arrange for beautiful weather. It was a pleasure working with Woody on this project.

COMMITTEE REPORTS

Greetings from the new DESSC Chair...

Patty Fryer (University of Hawaii), DESSC Chair

Although attempting to fill Mike Perfit's shoes will be a tough job, I do look forward to serving the deep submergence science community as we approach the next decade. It is my hope that the increasing need for deep submergence tools as a consequence of the development of new research initiatives and international science projects will pave the way for cooperative efforts in deep submergence science. With increasingly demanding needs for submersible capabilities, it is clear that innovation in design will be a focus of the DESSC. If we strive to go to greater depths, for example, advancements in development of ROVs and AUVs is a clear arena for exploration by DESSC. The possibilities for and mechanisms by which both time-series work and expeditionary efforts can be accommodated, within the scope of existing assets and funding limits, need vigorous pursuit.

The DESSC will be responding to such new directions in research and will be requesting input from the community. Finding ways by which the U.S. scientific community can most effectively benefit from its submersible assets (the WHOI facilities, other academic and private sectors, possibly even commercial facilities, and the military) will require continued communication via the standard DESSC meetings, such as the December DESSC meeting traditionally scheduled immediately before AGU, in San Francisco. However, certain aspects of community organization and facility cooperation would benefit from focused workshops.

The next regular fall DESSC meeting will be held on Saturday, December 5th at the Cathedral Hill Hotel from 8:30 am to 5:00 pm.

The meeting agenda highlights include:

Early morning:

- o Reports from the recent users of deep submergence assets (both WHOI and others).

Late morning:

- o Reports from the WHOI operators (with special highlights regarding the SEACLIFF engineering study, a review of the WHOI approach for design of a new ROV, ALVIN/ROV upgrades, and 1999-2000 Scheduling).
- o Reports from agencies.

Early Afternoon:

- o Long-range planning: future science plans

Late Afternoon:

- o Long Range Planning:
- o Traditional vs. expeditionary science
- o UNOLS Workshop

The last item on the agenda is to be a discussion of a UNOLS plan to propose a workshop focused on "Deep Submergence Science" for early next year. In addition to UNOLS, the organizing committee includes the Chairs of RIDGE, MARGINS, ODP, and DESSC. This workshop will request input on what the participants view as the current important deep submergence science research, what the participants forecast will be the important deep submergence research directions over the next five to ten years, and what deep submergence vehicles the participants feel will be needed to accomplish their research objectives.

Fleet Improvement Committee Fall Meeting Plans

The Fleet Improvement Committee (FIC) will meet on November 12-13 in Baltimore, Md. A full agenda is planned with presentations and discussions on Fleet improvement issues. Bob Knox, UNOLS Chair; and Larry Atkinson, FIC Chair; will address the Committee's directions and role for the future. Jim Meehan from the NOAA/National Marine Fisheries Service will provide an update on NOAA's fishery needs and will report on the status of their vessel construction efforts.

An AGOR 26 status report will be provided by Robert Hinton. Robert is the on-site shipyard representative for the University of Hawaii. FIC has maintained an involvement in the U.Hawaii SWATH planning. Representatives of FIC and the UNOLS Council members met on July 29, 1998 at the Lockheed/Martin Facility in Sunnyvale, CA to review the design plans and left many important comments.

Tom Weingartner (U. Alaska) will review the draft Alaska Science Mission Requirements (SMRs). The SMRs call for ice strengthening, the capability of towing trawls for fisheries research, as well as conducting general academic oceanographic science. Larry Atkinson will review the status of the East Coast Science Mission Requirements (ECSMR).

Since its founding in 1992, one major effort of the Research Vessel Technical Enhancement Committee (RVTEC) of UNOLS has been to improve communication and cooperation between shipboard technical support groups at the various operator institutions, as well as between support groups and the community of scientific ship users. One of RVTEC's earliest projects was a paper catalog of UNOLS technical support resources, including lists of scientific equipment and lists of technical resumes. In 1995, the information in this catalog formed the basis of RVTEC's website, known as the "Home Port". The RVTEC Home Port is intended to provide public information that results in better planning and more successful execution of scientific cruises.

The Home Port continues to grow and develop as an information source for the oceanographic community. The "UNOLS resources" page contains direct links to shipboard technical support groups throughout UNOLS, including points of contact, seagoing scientific equipment available, and home pages of vessels. The "Other resources" page provides pointers to other information on the Web pertaining to the logistics of oceanographic cruises, ranging from the status of radionavigation systems to recommended immunizations for travel to foreign countries. Native content currently being added includes reports from RVTEC subcommittees working on hydrographic cables, data distribution standards, advanced instrumentation, and other topics.

The RVTEC Home Port is located at <http://www.gso.uri.edu/unols/rvtec/rvtec.html>

We look forward to your continuing visits, as well as feedback on what can be done to make the Home Port an even more effective resource for seagoing oceanographers.

Tom Wilson, Marine Sciences - State University of New York
Chair, RVTEC On-line Resources Subcommittee
e-mail: twilson@cmail.sunysb.edu

Ship Scheduling Committee Report

The full Ship Scheduling Committee met on 15 September at the National Science Foundation to review and firm the 1999 proposed ship schedules. The table below (presented by Don Moller at the UNOLS Council Meeting) provides a list, by ship, of the operating days from 1995 through 1999 (projected). The totals reflect a near record high number of days for 1998 at 5355. In 1998, EWING and ENDEAVOR were slated for lay ups. However, both ships were successful in scheduling programs. EWING scheduled private work and ENDEAVOR scheduled a NOAA fisheries program.

The total days projected for 1999 is 4795 with a likelihood of growing. Demand for the smaller UNOLS vessels is high. Additionally, the funded programs for ALVIN provide a full schedule for ATLANTIS. An aggressive schedule for the ROVs is also slated. Only one large ship program was funded in the ATLANTIC for 1999 and will be conducted from EWING. KNORR is scheduled for lay up next year and the Intermediate ships have less than optimal schedules.

In 1999, NOAA has a significant increase in UNOLS ship use which is primarily the result of BROWN not being available for NOAA's Pacific work while it completes an expedition to the Indian Ocean. The major unresolved issue at the September meeting was the funding by NOAA of the GLOBEC and ECOHAB programs which affect five ship schedules. NAVO will be using 431 days of UNOLS ship time in 1998 and anticipate using 460 days in 1999. The 1998 and 1999 work will be done using eight ships from seven institutions.

**Charge/Operating Days
(1995-1996-1997-1998-1999)**

	1995 Total	1996 Total	1997 Total	1998 Total	1999 Proj't
A-II / Atlantis	319	93	185	273	339
Ewing	310	315	273	245	323
Knorr	350	279	284	265	0
Melville	297	297	308	216	252
Revelle		80	288	316	277
Thompson	333	246	214	277	272
Edwin Link	175	186	214	141	79
Endeavor	228	147	201	158	234
Gyre	122	219	184	121	111
Moana Wava	195	144	202	169	170
New Horizon	240	174	259	241	191
Oceanus	187	168	209	236	195
Seward Johnson	271	304	284	265	213
Wecoma	145	198	199	226	174
Alpha Helix	144	73	118	172	135
Cape Mataras	175	0	221	205	151
Cape Henlopen	198	185	206	195	186
Longhorn	72	130	46	63	49
Pelican	182	201	206	231	231
Pt. Sur	164	118	188	193	184
Sea Diver	180	132	105	133	48
Sprout	145	155	182	157	137
Weatherbird	154	167	151	132	136
Days	4586	4011	4733	4646	4087
Barnes	77	86	126	119	110
Bluefin	75	96	82	95	136
Calanus	48	50	111	174	138
Laurentian	91	72	44	148	215
Urraca	0	0	0	173	109
Grand Total Days	4877	4315	5096	5355	4785

*Overhaul or partial service

Note: Based on data available on 11 Sept '98.

New Ship Scheduling Procedures to be Tried in 1999

The Ship Scheduling Committee (SSC) has approved a change in the scheduling process and will implement the new procedure in 1999 on a trial basis. There have been concerns that the ship scheduling process is not as responsive as it should be. Don Moller and the SSC developed procedural changes to address the problem. The recommendations include a more efficient scheduling meeting process. The procedure calls for the elimination of the preliminary ship schedules which are normally posted by operator institutions in the early/mid spring timeframe. Instead, operators will issue letters of intent listing potential cruises. These letters of intent will be provided in May of the scheduling year and offer wide distribution. The letters would include all programs planned for a particular ship for the coming year. They should include the area of operation, funding agency, and number of ship days, however, the order of cruises and how they might fit on a schedule need not be presented. The purpose of this letter of intent is to identify double bookings and early conflicts as well as providing an inventory of potential cruises to ensure all programs have been accounted for.

The traditional June Scheduling Review Group meeting will not be held. As funding decisions become known in June, operator institutions will prepare their respective schedules. A full meeting of UNOLS schedulers would be held in early July to review all schedules and address conflicts. The Scheduling Review Group would meet immediately after the scheduling meeting. Institutions would be encouraged to coordinate with ship operators where efficiencies could be realized during the remainder of July and August. Large ship operators would be required to coordinate their schedules most likely through electronic or conference call methods. In September, the Scheduling Review Group would meet again to finalize schedules. If contentious issues exist the affected ship schedulers would be invited to this meeting to assist in the resolution of the problems. This process will be tried next year for planning 2000 operations, after which a decision will be made as to whether it will be a permanent change. This modestly revised process is designed to smooth out some of the communications problems and produce schedules that are less speculative.

The New On-Line Ship Time Request Form is now Available

A new two-part ship time request form for electronic submission on the Web has been designed. Section 1 has been condensed to one page and contains information necessary for peer review panels to determine ship needs and for schedulers to make up tentative schedules. Like the older form it is automatically transmitted to the PI, funding agency, UNOLS Office, and the ships likely to schedule the cruise. The information appears in a sortable inventory list accessed through the UNOLS homepage. In addition, the data is posted on an electronic world map on the Web, and positioned in the geographic location of the proposed cruise. The complete ship time request can be accessed by clicking on the geographical block on the map. A screen comes up listing all requests for that area and year. Clicking on the specific PI's name will permit the entire ship time request form to be viewed. Maps for out years, with the respective ship time requests, are also available. This type of presentation permits tracking of the individual requests by all interested persons as well as providing a planning tool for proposed cruises. The very process encourages collaboration among scientists and presents a complete picture of planned scientific efforts.

Continued on next page...

After funding has been secured, or upon request of the appropriate Program Manager, Section 2 should be completed by the PI. Section 2 is a continuation of the requirements of the cruise and permits more extensive dialogue for the PI. It will be used by co-PIs, accompanying scientists, and the ship operators for detailed cruise planning. The format of Section 2 is designed for greater verbiage. In addition to the form (Section 1 and Section 2), parties interested in cruise coordination can access a message file that archives messages relating to the specific cruise. This file will contain any message, appropriately addressed, that is sent for cruise planning. This not only provides a common repository for cruise messages but will permit ship operators to "come up to speed" in the event the cruise is moved from one ship to another.

The revised forms have completed their Beta testing and are now being implemented on the UNOLS Web page. Some additional changes are anticipated and encouraged as the forms get exercised under full operating conditions. However, the basic system is installed and operational.

Arctic Icebreaker Coordinating Committee

(Excerpts from Jim Swift's report provided at the fall UNOLS Council Meeting)

The next AICC meeting will be held on 18-20 November 1998 at NSF in Arlington, VA.

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.

The HEALY science systems testing program is being undertaken by a broad-based consortium of U.S. 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 shipyard, NAVSEA, and the Coast Guard; HEALY's first ice contact could come in November 1999. Intense post-delivery testing may begin approximately in February 2000, and may be completed by July 2000. The AICC expects that there will be no community opportunities for "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.

Present plans call for the HEALY's availability for agency-funded Arctic marine science support, the vessel's primary mission, to begin approximately in January 2001. Anticipating that the Western Arctic Shelf-Basin Initiative field program may be one of 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 HEALY's planned science systems support.

The 1998 U.S. 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

AICC Report continued from page 10...

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 HEALY. 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 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, 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 HEALY, and learn more about the AICC and future plans.

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 a 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.

NSF Academic Fleet Review Update

The NSF Academic Research Fleet Review Committee, headed by Dr. Roland Schmitt, has met twice. The first meeting, held in June at NSF, was primarily for information gathering of UNOLS and NSF programs associated with the Fleet. The second meeting was held on 1-3 September at Scripps. On the first day, the committee held a site visit of SIO's Marine Facility where they were able to tour ATLANTIS, ALVIN, MELVILLE and SPROUL. The next two days were dedicated to a variety of briefings on science trends and opportunities; and comparative operations. Presentations were made by Ken Brink, Ocean Studies Board; Ken Johnson, UNOLS; Don Heinrichs, NSF; RADM Bill Stubblefield, NOAA; Steve Ramberg, ONR; Al Sutherland, OPP; CMD Jim Trees, NAVO; Steven Peck, Canadian Coast Guard; Paul Stone, UK/NERC program; and Mike Reeve, NSF.

As part of the NSF Review Study NSF solicited letters from ship users asking how they perceived the fleet. Fifty responses were received prior to the second meeting. Most of the letters were favorable and expressed that the fleet is in good state and is an effective system. Some problems were cited such as the need for more shipboard technical support, more equipment upgrades and that there are too many scheduling scenarios. There were comments on the need to start the replacement of intermediate ships. Don will continue to update the survey as new letters arrive.

A third meeting is scheduled at the University of Rhode Island on 2-3 December. The Committee will hear the report of financial consultant Bill Humphreys. The remainder of this meeting will be a closed session for deliberation and preparation of the report. The Committee's report should be out after the first of the year.

Agency Personnel Changes

In recent months, a number of personnel changes have taken place among Federal Agencies. Dick West of NSF, retired on 3 October. Dick served as the NSF Program Manager for Shipboard Equipment and he oversaw the inspection of UNOLS (non-Navy) ships. He was also program manager for the UNOLS Office grant. Dick's programs will be split between Dolly, Sandy and Don for the short run while long term arrangements are made.

Andy Silver will be leaving the Office of Naval Research where he worked in the Oceanographic Facilities Office with Sujata Millick. Andy will be returning to work with the Navy labs. Tim Pfeiffer, Marine Superintendent at the University of Delaware, will be his replacement.

Dave Evans has been named the new administrator for NOAA's OAR. Alan Thomas has moved to the Office of Global Change. His former position as Deputy of OAR will be filled by Louisa Koch. Scott Gudes has been named Deputy Undersecretary for NOAA.

Elizabeth Maruschak has been hired to work with Tom Cocke at the Department of State. Liz will be working on communications including increased use of the Web.

Federal Agency Representatives Participate in Round Table Discussion

The fall UNOLS Council meeting was highlighted by a round table discussion by agency representatives. Prior to the meeting, the UNOLS Office invited agency science program managers to discuss UNOLS Fleet issues.

Program managers from NSF, ONR, NOAA and USCG held an open discussion period on ship needs, projections and fleet issues. Included in the discussion were NSF: Dave Garrison, Dave Epp, Connie Sancetta, Kendra Daly and Paul Dauphin; ONR: Tom Kinder, Lou Goodman, Ron Ferek, James Eckman and Scott Tilden; NOAA: Steve Piotrowicz and Liz Clark; and USCG, George Dupree. Each of the program managers had an opportunity to discuss their views on UNOLS and its ability to support the fleet operations. Over the hour and a half, discussion of the fleet revolved primarily around technical support, scientific tools and the coordination and support of these tools. Very few comments were made on the ships, ship management or scheduling. There is a perceived need for more support for onboard systems such as multibeam and IMET. More specialized equipment is likely to come into use.

The group discussed programs that are on the horizon such as long term ocean observation, GLOBEC, ECOHAB, LWAD, CLIVAR, Deep Ocean Carbon, Australian Monsoon program, and the OBS program. The Navy is moving toward more coastal studies. More emphasis is on sensors that are remote,

autonomous and expendable. There is a need to improve coring capability to successfully deploy a 30 meter core. NOAA is anticipating more need for charters in fish research.

In general there seemed to be a consensus for the need to push for new technologies and that the technical support to scientists needs to grow as the technical advances are introduced into the academic fleet.

SEA CLIFF Delivered To Woods Hole Oceanographic Institution

The Naval Sea Systems Command transferred custody of SEA CLIFF to the Office of Naval Research on 22 June. ONR in turn directed that SEA CLIFF be shipped to and stored at the National Deep Submergence Facility at WHOI. SEA CLIFF, along with two trucks of miscellaneous support equipment, arrived in Cape Cod on 5 August. The vehicle is currently in temporary storage at Otis Air National Guard Base while the support equipment is being stored at WHOI.

WHOI is currently devising a lay-up maintenance program to ensure that SEA CLIFF is adequately maintained and preserved. SEA CLIFF's manipulators and its new replacement trim system were not transferred with the vehicle. WHOI is pursuing with the Navy to have those parts transferred. The permanent records for all SEA CLIFF maintenance and engineering are currently held by Portsmouth Naval Shipyard and are about to be shipped to the federal archives. WHOI plans to inspect these records and retain those necessary for the operation or conversion of SEA CLIFF.

WHOI has been funded to perform an engineering study. The study will look at the integration of SEA CLIFF and ALVIN systems into a 6,000m submersible. The study will entail a detailed examination of the SEA CLIFF systems. Additionally, WHOI plans to investigate the 6,000m submersible component market and inspect the currently-operating 6,000m submersibles. They will investigate sphere construction and viewport location issues. The study is scheduled to take about a year. WHOI will prepare a report detailing design concepts, options and cost projections.

Ship Construction and Operations

AGOR 26 Construction Update - Robert Hinton, University of Hawaii AGOR 26 shipyard representative, provided a report on the status of AGOR 26 at the UNOLS Annual Meeting. The AGOR 26 project was funded for \$45M to build a SWATH vessel. Lockheed Martin has teamed with Ingalls Shipyard to design and build the ship. The process includes two phases; Phase I for design and Phase II for construction. Phase I is close to completion. The design process started with the UNOLS FIC Science Mission Requirements statement. The design process is evolving through various options for cost, draft and range.

First cut construction cost comparisons have been made with the Japanese SWATH vessel, KAIYO, and AGOR 24. The current design costs are higher than the budget and a reevaluation is underway. Completion of Phase I is expected in November or December of this year. The ship is scheduled for delivery in 2001 and ready for operations by the end of that year.

Ship Replacement Plans - The shipyard has been selected for construction of Skidaway's new ship, SAVANNAH. This vessel will replace BLUE FIN. The ship should be ready for operation in 2000. The design has been selected for the CALANUS replacement. Model tests have been completed and the final design should be near completion.

Non-UNOLS Vessels - Florida Institute of Oceanography has plans for the replacement of SUN COASTER. The University of Connecticut will soon complete construction of their new research vessel. The University of Minnesota at Duluth's vessel, BLUE HERRON, has been operating successfully. WHOI has been working on a design for a 120' SWATH vessel. Model testing analysis is completed. The ship is designed to operate in a Sea State 5.

Welcome Aboard

In 1998, the terms of some of the UNOLS Committee members came to an end and new members were appointed. Patty Fryer (U. Hawaii) was appointed to serve as the new DESSC Chair. Mike Perfit will stay on board the DESSC until after their December planning meeting. Mike and Patty will co-chair the meeting. Bob Embly (NOAA/PMEL) and Anna-Louise Reysenbach (Rutgers) have been appointed to the DESSC Committee. Mike Prince (MLML) was appointed to replace Don Moller as the Ship Scheduling Committee (SSC) Chair and Joe Ustach (Duke/UNC) will serve as the SSC Vice Chair. Chris Measures (U. Hawaii) has been appointed to the Fleet Improvement Committee.

Farewells

Over the past few months, the terms of various UNOLS Council members and committee members came to an end. The UNOLS Community would like to thank these individuals for their service and commitment to UNOLS over the recent years. Their efforts on UNOLS Council/Committees have been greatly appreciated and we wish them well in their future ventures.

Outgoing Council members are Ken Johnson (UNOLS Chair), Dick Pittenger, Bob Wall, Mike Perfit (DESSC Chair), and Don Moller (SSC Chair).
Outgoing Committee Members are Hugh Milburn, DESSC; Carl Wirsén, DESSC; Eric Firing, FIC; and Suzanne Strom, FIC.

UNOLS ACTIVITIES DURING THE FALL AGU MEETING

A variety of UNOLS activities will take place during the week of fall AGU Meeting, 5-10 December. Please mark your calendar:

**The DEEP SUBMERGENCE SCIENCE COMMITTEE
will hold their Fall Meeting on
Saturday, December 5, 1998
Cathedral Hill Hotel, Telegraph Hill Rooms A & B
San Francisco, CA
8:30 a.m. to 5:00 p.m.**

The DEep Submergence Science Committee (DESSC) invites you to attend their fall meeting. The meeting will take place on Saturday, December 5, 1998 at the Cathedral Hill Hotel, Telegraph Hill Room. The agenda can be viewed on the UNOLS/DESSC Website: <<http://gsosun1.uri.edu/unols/dessc/dessc.html>>

**Please Visit the
UNOLS Booth
at the
1998 Fall AGU Conference
San Francisco, CA
December 7-9
Booth #325**

Be sure to visit the UNOLS booth at AGU to gain the latest information on the academic research fleet. The booth will include posters and literature on UNOLS, its committees, ships, and facilities. On-line demonstrations of the latest electronic ship scheduling procedures will be featured.

Stop by the UNOLS Poster

UNOLS will present a poster during the AGU Meeting, General Ocean Sciences Section on Thursday, 10 December at 2:00 pm. The poster titled, UNOLS and the Academic Research Fleet, will provide an overview of recent UNOLS activities. The latest improvements to the UNOLS ship scheduling process will be outlined. Additionally, the poster will describe the role of UNOLS in fleet improvement planning. The UNOLS Fleet Improvement Committee (FIC) provides guidance to match the number, mix, and overall capability of ships in the UNOLS Fleet with science needs. FIC is currently planning for the next generation east coast vessels and a vessel to work in Alaskan waters. This poster will provide a description of FIC's recent efforts in developing Science Mission Requirements for these vessels.

Calendar for UNOLS Meetings:

MEETING	LOCATION	DATES
FIC	Baltimore, MD	12-13 November 1998
AICC	Arlington, VA	18-20 November 1998
DESSC	San Francisco, CA	5 December 1998
UNOLS AGU Booth	San Francisco, CA	10 December 1998
UNOLS Poster	San Francisco, CA	10 December 1998
UNOLS Council Meeting	Miami, FL	16-17 February 1999
Deep Submergence Workshop	TBD	Late winter 1999 (TBD)
AICC	New Orleans, LA	Spring 1999 (TBD)
RVTEC	Pt. Aransas, TX	20-22 October 1999
RVOC	Ft. Pierce, FL	2-4 November 1999

To view UNOLS News on the Web, visit the UNOLS Homepage site:

<http://gso.uri.edu/unols/unols.html>

I would like to thank all who contributed information and articles for this issue of the Newsletter. Articles are always welcome and encouraged. Copy can be submitted via mail, FAX or e-mail. The next newsletter is planned for Winter/Spring 1999.

Thank you, Annette DeSilva - Editor, UNOLS News

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