

UNIVERSITY - NATIONAL OCEANOGRAPHIC LABORATORY SYSTEM



UNOLS NEWS

UNOLS NEWS IS BORN — Most of the ship users in the marine science community have little knowledge of UNOLS and its role. In the golden days of the 1960's and 1970's this ignorance was probably of no great import and UNOLS's impact was minimal. With the increasing squeeze on research funding and the continuing problem of filling available ships the work of the system becomes critically important to ship users and they should be fully aware of what the system is and what it does. To meet this communication need, we have initiated the UNOLS News. Issued quarterly, the NEWS will keep you informed of UNOLS activities and the latest developments in support and composition of the academic research fleet. This introductory issue will focus on describing UNOLS and the activities included in the system. We will also list names and addresses of officers, headquarters and councillors. A list of the UNOLS Member Insitutions and their delegates is included.

WHAT IS UNOLS? -- To quote from the Charter, "Recognizing the need for improved coordinated use of Federally supported oceanographic facilities, the community of academic oceanographic institutions which operate those facilities by virtue of this Charter (adopted in September 1971)..." established a system which now includes 17 Members and 32 Associate Members. UNOLS includes the Member and Associate Member Institutions, the Advisory Council, Executive Committee, a UNOLS Office (presently at the University of Washington), National Oceanographic Facilities (the ALVIN is one), the Research Vessel Operators' Council (RVOC) and such other sub-bodies as may be founded to meet specific needs of the marine institutions community. Conditions for membership or associate membership are detailed in the Charter which is presently under review for possible updating and revision. If you are associated with a UNOLS Institution, your representative has a copy of the Charter. If you are a ship user at a non-UNOLS organization, you can obtain a copy of the Charter from the UNOLS Office (see address list). The system meets twice a year in Washington, D.C.; the Advisory Council meets four times a year or as often as may be necessary to meet specific needs. The Chairman and Vice-Chairman are elected at the May Semiannual Meeting plus three members of the Advisory Council (council members serve for three year terms, one-third elected each year). National Facility Committees and the RVOC elect their own chairmen who then serves as the representative of those groups.



Advisory Council membership includes individuals from both Member and Associate Member Institutions and nominations are designed to further provide geographic and disciplinary representation.

UNOLS CHAIRMAN 1983-84 - Dr. Ferris Webster, University of Delaware

UNOLS VICE-CHAIRMAN 1983-84 -- Dr. Joseph Curray, Scripps Institution of Oceanography

UNOLS ADVISORY COUNCIL CHAIRMAN 1983-84 -- Dr. Charles Miller, Oregon State University

ADVISORY COUNCIL MEMBERS --

Dr. Robert Corell, University of New Hampshire

Captain Robertson Dinsmore, Woods Hole Oceanographic Institution

Dr. Donn Gorsline, University of Southern California

Dr. Roger Larson, University of Rhode Island

Dr. Bruce Robison, University of California, Santa Barbara

Dr. Harris Stewart (Vice-Chairman), Old Dominion University

Dr. John Van Leer, University of Miami

EXECUTIVE SECRETARY -- Captain William D. Barbee, UNOLS Office, WB-15, School of Oceanography, University of Washington, Seattle, WA 98195

UNOLS ADVISORY COUNCIL - WHAT IS IT? HOW DOES IT WORK? -- Charles Miller, Chairman of the Advisory Council has given us a brief introduction to that body's operation... The assigned function of the Advisory Council (AC) is to monitor the activities of UNOLS with particular attention to the effective use of oceanographic facilities. That includes evaluation of the size and suitability of the UNOLS fleet for oceanographic studies proposed by academic scientists and funded by federal agencies. The AC assists both members and federal agencies in obtaining data on ship use, ship performance, costs and funds available. It considers the need for specialized facilities like dedicated ships and shoreside laboratories, and it makes recommendations to federal agencies for initiatives in promising directions. Eight members are elected for terms of three years. Members typically have been active ocean scientists, although institute directors have sometimes been included. addition, the Chairman and Vice-Chairman of UNOLS are ex-officio members of the AC providing a close tie between the AC and the general membership. Work of the AC is accomplished at present by division of its responsibilities into standing roles. Each member has primary responsibility for accomplishing the work of the AC that falls under his/her standing role. The present role assignments are listed below and in this and following issues each councillor will describe that role in greater detail. Over the past two years the AC has been more active than in the preceding period. Several factors contributed to this awakening. First, the AC developed the standing roles approach under the leadership of Bruce Robison, Derek Spencer and Dirk Frankenberg (immediate past AC Chair, UNOLS Chair and Vice-Chair respectively) during the Summer 1980. Second there was an obvious gap between ship availability (excess) and ship use (deficit) during 1981 and early 1982. That led the AC under strong encouragement of funding agencies, to undertake a thorough, tough, written evaluation of the status of both the UNOLS Fleet and the funding for the Fleet (see UNOLS Report "Composition, Distribution and Management of the UNOLS Fleet", October 1982, available at UNOLS Office). The report generated much discussion in the ocean community with regard to ship use, and there was an immediate increase in requests for ship time. Many of the sterner recommendations of the report could be eased in an update of the report of March 1983, because of increased demand for ships, and because of unexpected increases in federal funding available for both ship and science support. The AC intends to maintain the current level of activity. We welcome information and suggestions from oceanographers to keep the system and the federal agencies abreast of the changing needs of science for facilities and facility support.

COUNCIL MEMBER ROLES 1983-84

R.	Corell	International Access for Ocean Research
R.	Dinsmore	Review of UNOLS Fleet Management
D.	Gorsline	Communications - Newsletter
R.	Larson	Specialized Instrumentation Facilities for Ocean Research
C.	Miller	Replacements, Additions and Retirements in the Fleet
В.	Robison	Fleet Management, Oversight of West Coast Ship Scheduling
н.	Stewart	Oversight of the East Coast Ship Scheduling
J.	Van Leer	Design Ideas for Oceanographic Research Platforms

Ex-officio Members

F. Webster UNOLS Executive Committee Chair
J. Curray Fleet Efficiency and Effectiveness (User Report Evaluation)

ROLE REPORTS -- We will review two or three in each of our next issues.

Charles Miller - (Replacements, Additions, Retirements in the Fleet)

Oceanographic ships are expensive on a scale which requires support from the federal government if academic institutions are to have access to ships for research. Over the past decade the number of ships available to the academic community in the U.S. has declined. This partly resulted from changes in the modes of research at sea. First, with electronic data collection we now gather data faster than improved computing capability allows us to process it. Therefore, the typical oceanographer is spending relatively more time ashore dealing with data than was once the case. Second, there has been a turn away from the far ranging, even globe-circling, cruises that were frequent in the 1950's and 1960's. We now work more in an intensive and critical mode, less in an extensive pattern-seeking mode (not that we have discovered all of the interesting patterns). That makes for less steaming relative to station and thus less ship use overall. Nevertheless, our present reduced fleet is the essential core of modern oceanography. It is very difficult to imagine the U.S. retaining a premier position in modern oceanography with an academic fleet smaller than we presently operate. That fleet is aging, and the distribution of age falls unevenly among the vessels with regard to size. All of the larger vessels (KNORR, MELVILLE, WASHINGTON, CONRAD, THOMPSON and ATLANTIS II) are over 13 years old, and four are over 18. If their reasonable life expectancy is 25-28 years, then the time to consider their replacement is upon us. It takes about eight years to organize, plan, fund and construct a new ship, baring the sort of The AC, through its standing role on crash program undertaken only for war. replacements, additions and retirements in the fleet, has been urging UNOLS for

several years to get on with the task of promoting large vessel replacement. The specter of fleet reduction that UNOLS faced in 1982 made it very difficult for UNOLS members to think about new ships as replacements for the currently aging stock of larger vessels. However, UNOLS now has responded by appointment of a panel of distinguished oceanographers, mostly influential institution directors, to press forward with this vital task. The composition and work of that panel will be the subject of reports in future newsletters.

Roger Larson - (Specialized Instrumentation Facilities for Ocean Research)

Roger Larson (Univ. of Rhode Island) leads a committee to examine the possibility of developing a funding base for "Cooperative Instrumentation Centers for Oceanographic Research" (CICORs). This is an attempt to first identify and then develop a broad base of support for federal investment in instrument facilities whose cost and general applicability imply shared use. Generally speaking, such facilities would be expected to cost on the order of one million dollars or more, and would require a small staff of full-time operators for function and maintenance. We are trying to develop the CICOR concept along the same lines that physicists use to acquire and maintain particle accelerators, or that astronomers use for radio telescopes. Because oceanography is a more diverse group, the politics of the support base will be more complex, but the perception of use at elevated federal levels is as oceanographers as a group, not as individual disciplines, so it is probably in our best long-term interest to present as broad a front as possible. We would welcome suggestions of CICOR facilities and how they might work from the general oceanographic community. Please respond to either the Chairman or Charles Miller (Oregon State, Biological Oceanography); Tom Rossby (Rhode Island, Physical Oceanography); or Lou Gordon (Oregon State, Chemical Oceanography).

Harris Stewart — (East Coast Scheduling Overview and Associate Member Institution Representative)

Harris and his west coast counterpart, Bruce Robison, sit in on the deliberations of the East Coast and West Coast Ship Scheduling meetings and watch for problems, potential short falls and generally serve as liaison between these groups and the AC. Harris also serves as an AC member from an Associate Member Institution and passes along the following advisory: In the past, representatives of some of the 32 UNOLS Associate Member Institutions have registered mild complaints on their inability to inject their views into the UNOLS system. There is a way. As of the July meeting of the UNOLS Advisory Council, three Council members are representatives of UNOLS Associate Member Institutions and are willing, even eager, to bring your views to the attention of the Advisory Council. Call or write any of the following:

- Dr. Robert W. Corell, University of New Hampshire, Durham, NH 03824, (603) 862-2994
- Dr. Bruce H. Robison, Marine Science Institute, University of California, Santa Barbara, CA 93106, (805) 961-3764
- Dr. Harris B. Stewart, Jr., Center for Marine Studies, Old Dominion University, Norfolk, VA 23508-8512, (804) 440-3989

NATIONAL OCEANOGRAPHIC FACILITIES -- ALVIN

Dr. Robert Corell (Univ. of New Hampshire) is Chairman of the ALVIN Review Committee.

Bob Corell has distributed a call for suggestions to improve the scientific capabilities of ALVIN and those comments received have been incorporated in a report to Woods Hole Oceanographic Institution which will be the basis for a proposal to the federal funding agencies for a four-year program of ALVIN tasks. A forthcoming issue of the NEWS will feature a report by Bob on progress in the planning and funding of this facility.

RESEARCH VESSEL OPERATORS' COUNCIL -- OCTOBER ANNUAL MEETING

The RVOC Annual Meeting will be held at the University of Hawaii in the first week of October. At the time of preparation of copy we did not have the report of that meeting but the tentative agenda is listed here and we will publish a brief report in the Spring issue.

E. R. Dieter (Univ. of Alaska), Chair of RVOC reports that the annual meeting will be held at University of Hawaii, October 4-6, 1983. The agenda includes speakers on medical advisory systems, the NSF Ship Inspection Program, diving standards, navigation electronics, marine insurance, and the Sea Marc II System. Workshops have been scheduled on UNOLS Safety Standards (T. Treadwell), Ship Operations Costs (J. Bash), and Charter Vessel Policy (K. Palfrey).

The RVOC Office address is: RVOC Office, University of Alaska, Institute of Marine Sciences, Seward, AK 99664.

UNOLS CRUISE ASSESSMENT FORMS -- WHAT ARE THEY? -- HOW ARE THEY USED?

Many ship users are probably not aware of the importance of the Cruise Assessment forms that are now required of each Cruise Leader and P.I. The forms are reviewed by an AC member (J. Curray's role) and then viewed and discussed in the AC meeting. These forms are the avenue for spotting equipment or operations problems in the fleet and are the basis for constructive solutions. They warn the federal funding agencies of upcoming equipment replacements and improvements and feed back to the ship operators enabling them to maintain the high standard of efficiency that is the hallmark of the UNOLS Fleet. GIVE THEM YOUR PRIME ATTENTION. They are read and the messages get through.

UNOLS REPORTS -- IMPORTANT INFORMATION SOURCES

UNOLS has published a number of specialized reports of which the following are a sampling. See your UNOLS Representative or if you are not in a UNOLS institution, write to Bill Barbee at the UNOLS Office for information and a report list.

"Basic Minimum Scientific Support Capabilities for UNOLS Vessels; Supply, Operation and Maintenance", July, 1979; Supplement, February, 1980.

"Serial ASCII Instrumentation Loop (SAIL) - Proposed Data Communication Standard for UNOLS Research Vessels" August, 1981.

"Composition, Distribution and Management of the UNOLS Fleet", October, 1982; Re-examination and Update, March, 1983.

HIGHLIGHTS OF THE SEMIANNUAL MEETING, MAY 26-27, 1983

Chairman Derek Spencer (WHOI) opened the meeting and addressed the group on the present state of oceanographic support. Derek cited several recent significant and positive factors that provide grounds for optimism and closed with the statement that "To capitalize (on these) the ocean community must learn to order its priorities and approach agencies with firmly conceived, well directed plans. The importance of ships and facilities to ocean science suggests a strong role for UNOLS in the endeavour."

Bruce Robison, Chairman of the AC reviewed the council's work and noted the results of their re-examination of Fleet composition. The funding picture has eased and no major changes are recommended at this time. Standing roles were reviewed and new assignments described (see earlier note in this issue). He reviewed the planned National Expeditionary Planning program. This was initially developed in the council's fleet study and was later in the meeting approved and a standing committee The UNOLS Expeditionary Planning Committee (UNEPC) shall formed under UNOLS. provide communications between scientists, operating institutions and funding agencies that will allow the timely and effective planning of major expeditionary The UNEPC shall establish such operations by UNOLS Member Institutions. communications mechanisms as are desirable and necessary to provide community-wide information on probable and possible future vessel operations pertaining to extended or logistically complex voyages and shall provide preliminary schedules for these The UNEPC, together with the ALVIN Review Committee and appropriate operating institutions, shall coordinate the planned use of facilities such as SEABEAM, Multichannel Seismic, submersible operations and others as may be deemed necessary with the expeditionary voyage schedules.

Dr. George Shor (SIO) is Chairman of the Committee.

A subcommittee has been established on International Restrictions to Ocean Science Research chaired by Bob Corell. A resolution was approved by the representatives.

UNOLS STATEMENT ON INTERNATIONAL RESTRICTIONS TO OCEAN SCIENCE RESEARCH

Scientific inquiry and the knowledge gained therefrom is of fundamental importance to all mankind. The ocean sciences, throughout the world, potentially face restrictions which may seriously limit access to oceanic and coastal regimes critical to scientific inquiry. The Law of the Sea Convention and recent jurisdictional claims of nation states with regard to marine scientific research provide the context for these concerns. Since the U.S. has not signed the convention, special arrangements are required for U.S. scientists to obtain access to areas under foreign jurisdictions and governed by the convention.

Therefore, we urge the United States Government to adopt and implement the following policy principles for the United States of America:

- Recognize the jurisdictional claims, consistent with the Law of the Sea Convention, of other coastal nations over marine science research.
- Permit access for marine scientific research by scientists of any nation within those coastal and oceanic areas beyond the territorial sea under U.S. jurisdiction.
- Initiate efforts in selected geographic areas to develop bilateral and/or regional arrangements to facilitate marine scientific research in selected areas.
- 4. Process and facilitate clearance requests for U.S. academic institutions that wish to conduct research within the coastal regions under jurisdiction of other nation states.

A resolution supporting efforts to attain bilateral agreement on marine research, especially and urgently with Mexico and Canada was adopted by UNOLS. Text is available from the UNOLS Office.

Representatives of NSF and ONR reviewed the outlook for marine research support for FY 1984, 1985 Ship and Program Support. 1984 promises to be a year of heavy ship use. Support for Ocean Sciences Research Section has increased from \$49.7 M in 1983 to \$55.7 M in 1984. Office of Facility Support has increased from \$30.7 M in 1983 to \$33.4 M in 1984. It was noted that special problems have affected OFS budgets including the marked rise in fuel costs in the past decade. There is a need for more uniformity in ship operation costs procedures and reporting. ONR reported that ship support would be essentially level at from \$3.5 M to \$4.0 M. Emphasis will shift to Special Focus Programs.

NOAA and USGS representatives reported on their agencies programs and noted that NOAA ship budgets remain uncertain. USGS budgets will be at or above present levels in 1984. NOAA and NSF have completed a Memorandum of Understanding that will allow for more convenient exchange of and arrangement for ship time on NOAA vessels.

Department of State reps reviewed permit procedures and recent developments in the U.S. attitudes on national Exclusive Economic Zones. Problems were reviewed. Note resolution above.

Ship scheduling groups offered the following recommendations:

- All ships should be funded for operation in 1984. All ship schedules are strong, and no ships are vulnerable to lay up.
- In order to plan and schedule effectively, a more prompt and timely submission of ship time requests is required.
- 3. UNOLS should sponsor a workshop on ship operation costs. (Note RVOC agenda).

Old Dominion University was approved as an Associate Member.

HIGHLIGHTS OF THE JULY 1983 ADVISORY COUNCIL MEETING --

Charles Miller was elected Chairman and a unanimous vote of thanks was extended to Bruce Robison for his stewardship of the Council in 1981-82.

New roles were assigned and reviewed (see previous note).

The Council began a review of the Charter and initiated recommendations for changes to be considered by UNOLS at the October Semiannual Meeting.

The UNOLS NEWS was approved and initiated under Donn Gorsline's direction on a trial basis.

The Council endorsed the NSF and ONR ship inspection programs; urged they be extended to institution-owned ships and to always include scientific equipment.

Dates were set for Council and general meetings:

Semiannual Meeting, Advisory Council, and East-West Ship Scheduling October 24-26, 1983

Washington, D.C.

Workshops On ALVIN and Other Expeditions January 22, 1984

New Orleans, LA

Advisory Council Meeting February 2-3, 1984

Pigeon Key, FL

Semiannual Meeting, Advisory Council, and East-West Ship Scheduling May 23-25, 1984

Washington, D.C.

UNOLS INSTITUTIONS AND REPRESENTATIVES -

We have appended an updated list of the UNOLS Institutions and representatives for your convenience. If you are at a UNOLS Institution, contact your rep for a look at reports, minutes and other communications of the System. We welcome your suggestions and comments. Pass this on to other interested readers at your institution and have them write to the UNOLS Office if they wish to be added to the mailing list.

UNIVERSITY OF ALASKA Dr. Thomas C. Royer

UNIVERSITY OF DELAWARE Dr. William S. Gaither

DUKE/UNIVERSITY OF NORTH CAROLINA Dr. Dirk Prankenberg

UNIVERSITY OF HAWAII Dr. Charles E. Heleley

THE JOHNS HOPKINS UNIVERSITY Dr. Laurence Hardina

COLUMBIA UNIVERSITY, LAMONT-DOHERTY GEOLOGICAL OBSERVATORY Dr. Marcus Langesth

UNIVERSITY OF HIAMI, ROSENSTIEL SCHOOL OF HARINE AND ATMOSPHERIC SCIENCE Mr. James Gibbons

UNIVERSITY OF MICHIGAN, GREAT LAKES AND MARINE WATERS CENTER Dr. Alfred M. Beston

OREGON STATE UNIVERSITY Dr. Douglas Caldwell

UNIVERSITY OF RHODE ISLAND
Dr. James J. Griffin

UNIVERSITY OF CALIFORNIA, SAM DIEGO SCRIPPS INSTITUTION OF OCEANOGRAPHY Dr. George G. Shor, Jr.

UNIVERSITY SYSTEM OF GEORGIA SKIDAVAY INSTITUTE OF OCEANOGRAPHY Dr. David W. Menzel

UNIVERSITY OF SOUTHERN CALIFORNIA Dr. Don Walsh

UNIVERSITY OF TEXAS

Dr. Arthur E. Maxwell

TEXAS A 6 M UNIVERSITY Captain T. K. Treadwell

UNIVERSITY OF WASHINGTON Dr. Brian Lewie

WOODS HOLK OCEANOGRAPHIC INSTITUTION Dr. Derek W. Spencer

ASSOCIATE MEMBERS

University of ALABAMA
Dr. George F. Crozier

BERMUDA BIOLOGICAL STATION
Dr. Wolfgang E. Sterrer

BIGELOW LABORATORY FOR OCEAN SCIENCES Dr. Charles S. Yentsch

BROOKHAVEN NATIONAL LABORATORY Dr. Terry E. Whitledge

UNIVERSITY OF CALIFORNIA, SANTA BARBARA

Dr. Bruce H. Robleon

CAPE FEAR TECHNICAL INSTITUTE
Mr. Edward Foss

UNIVERSITY OF CONNECTICUT Professor Sung Peng

FLORIDA INSTITUTE FOR OCEANOGRAPHY
Dr. William W. Behrenz

FLORIDA INSTITUTE OF TECHNOLOGY Mr. Jack Morton

FLORIDA STATE UNIVERSITY Dr. George W. Flagler

BARBOR BRANCH FOUNDATION Dr. Robert S. Jones

HOBART 6 WILLIAM SMITH COLLEGES Mr. F. Richard Wilkins

Dr. Adrian P. Richards

Dr. Bermand J. McAlice

MARINE SCIENCE CONSORTIUM Dr. Robert W. Hinds

UNIVERSITY OF MARYLAND Dr. Ian Morris

MASSACHUSETTS INSTITUTE OF TECHNOLOGY Dr. John M. Edmond

MOSS LANDING MARINE LABORATORIES

Dr. John B. Martin

UNIVERSITY OF NEW HAMPEHIRE Professor E. Eugene Allmendinger

NEW YORK STATE UNIVERSITY COLLEGE AT BUFFALO Dr. Robert A. Suseney

NEW YORK STATE UNIVERSITY AT STONY BROOK Dr. J.R. Schubel

NORTH CAROLINA STATE UNIVERSITY Dr. Robert H. Weisberg

UNIVERSITY OF NORTH CAROLINA AT WILMINGTON Dr. Robert Y. George

NOVA UNIVERSITY
Dr. George E. Launiczak

OCCIDENTAL COLLEGE Dr. John S. Stephene, Jr.

OLD DOMINION UNIVERSITY
Dr. Harris B. Stewart, Jr.

UNIVERSITY OF PUERTO RICO Dr. Thomas Tosteson

SAN DIEGO STATE UNIVERSITY Dr. Richard F. Ford

VIRGINIA INSTITUTE OF MARINE SCIENCE Dr. John M. Zeigler

WALLA WALLA COLLEGE Dr. Laurence McCloskey

UNIVERSITY OF WISCONSIN AT MADISON Dr. Robert A. Ragotzkie

UNIVERSITY OF WISCONSIN AT MILWAUKER Dr. David N. Edgington