

# UNIVERSITY - NATIONAL OCEANOGRAPHIC LABORATORY SYSTEM

ADVISORY COUNCIL MEETING  
NEW ENGLAND CENTER  
DURHAM, NEW HAMPSHIRE

Minutes of Meeting, July 28, 29, 1983

Advisory Council Members and representatives from the National Science Foundation and the Office of Naval Research convened in the Mansfield Room, New England Conference Center at 8:30 a.m. The meeting was called to order by outgoing Chairman, Bruce Robison.

## Attendees

### Advisory Council

Robert W. Corell  
Robertson P. Dinsmore  
Donn S. Gorsline  
Roger Larson  
Charles B. Miller  
Bruce Robison  
Harris B. Stewart, Jr.  
John C. Van Leer  
Joseph Curray, *ex-officio*  
Ferris Webster, *ex-officio*

### Observers

Ronald R. La Count, NSF  
Keith W. Kaulum, ONR

### UNOLS Executive Secretary

William D. Barbee

The agenda (Appendix I) was followed except as noted.

*The minutes of the Advisory Council meeting of May 25, 1983, held in Washington, D.C. were accepted.*

Before opening the meeting to the selection of Chairman and Vice Chairman, Dr. Robison informed the Council that he would not be available for the chair during 1983-1984.

*The Advisory Council elected Charles B. Miller as chairman and Harris B. Stewart, Jr. as Vice Chairman.*

Dr. Miller took the chair on his election.

*The Advisory Council passed a motion of thanks to Bruce Robison for his leadership and service as Advisory Council Chairman during the years 1981-1982 and 1982-1983.*



The Council recommended that the Chairman, UNOLS write outgoing UNOLS officers and Advisory Council members to acknowledge their terms and thank them for their service to UNOLS.

Agenda items to determine standing roles for 1983-1984 and to report the status of standing roles were combined.

Discussion of the role of Fleet Efficiency and Effectiveness centered on UNOLS Cruise Assessment Reports and summaries of these reports. (The summaries for operations during the first quarter of 1983 had been distributed to the panel prior to the meeting.) The reports and summaries were deemed a valuable aid for assessing efficiency and effectiveness of individual ships and institutions. They have been of value to sponsoring agencies and to individual institutions as well as to the Advisory Council. The principal shortcomings have been that reports are not received from some ships or institutions, some reports are not substantive and operator reactions or rebuttals are not collected systematically. *The Council directed the executive secretary to:*

- solicit reports from those UNOLS institutions not presently participating;*
- canvas UNOLS operating institutions to determine their reactions to the assessment system and to encourage suggested improvements, and*
- to discuss UNOLS Cruise Assessment Reports and Summaries with RVOC at their October, 1983 meeting.*

The Council deemed Fleet Efficiency and Effectiveness to be an appropriate concern. Joe Curray will continue in that role.

Robert Corell reviewed efforts concerning Access for Ocean Research based on the report to UNOLS by the Subcommittee on International Restrictions to Ocean Science Research (May, 1983 UNOLS Semiannual Meeting). At the Semiannual meeting UNOLS adopted two documents generated by the Subcommittee: a policy statement on access for research and a statement urging negotiated bilaterals, especially with Mexico and Canada. It was noted that UNOLS has not made use of the two documents. The UNOLS Executive Committee was urged to make use of the statements as appropriate.

As earlier directed by the Council, the Executive Secretary together with Warren Wooster of the Subcommittee and Lee Stevens of the Office of Marine Science and Technology Affairs, Department of State have been developing a method for UNOLS to collect information on international restrictions and the clearance process. The Council urged prompt action.

Harris B. Stewart briefly described his efforts toward developing and securing bilaterals with Caribbean countries. A record will be provided to the Advisory Council.

The Advisory Council recognized the importance of efforts to maintain access for ocean research. Robert Corell will continue in his standing role, and the Subcommittee on International Restrictions to Ocean Science Research will be continued with its current membership.

Roger Larson and Charles Miller jointly reported on Specialized Instrumentation Facilities for Ocean Research. They and the subcommittee formed to examine this issue have met with limited success. Surveys of the community to determine bases for and interest in cooperative instrumentation centers (a report is Appendix II) have not resulted in defined needs. A center for image analysis and perhaps one for mass spectrometry may be realistic options according to information gathered from last year's DOD Research Equipment Program.

Other instrumentation and equipment issues tentatively identified are questions concerning the appropriate number of facilities for multi-channel seismic profiling within UNOLS institutions and ocean community access to super computers. The multi-channel question is being addressed in a separate study.

Ron La Count noted that the Ocean Sciences Division is promoting the inclusion of oceanography in plans for NCAR's new AVS computer facility. A report on AVS could be included on agenda for October Advisory Council and UNOLS meetings.

Keith Kaulum reported briefly on the 1984-1985 continuation of the Department of Defense Research Equipment Program. (Subsequent to the meeting Mr. Kaulum received revised schedules for the program. Those revisions are reported herein.) A brochure announcing the two-year program will be mailed between October 1 and 15. Those who applied for the 1983 program will be included on the mailing list. December 15, 1983 will be the announced deadline for receipt of proposals. April 15, 1984 will be the target for announcing awards for combined 1984-1985 years.

The Advisory Council role on specialized instrumentation remains of concern, and the subcommittee remains active. Roger Larson and Charles Miller will continue in this standing role.

The Council reiterated its concern over Replacements, Additions and Retirements in the UNOLS Fleet. In particular they urged that the UNOLS Executive Committee act promptly to form the study committee established by UNOLS in October, 1982. At the request of UNOLS Chairman Ferris Webster, the Council discussed candidates for the study committee.

Given that many ships of the UNOLS fleet are middle aged and will grow old together, the Council's concern over fleet replacement continues. Charles Miller will continue in the standing role. Robertson Dinsmore will continue his activities with the Federal Oceanographic Fleet Coordinating Council and will chair the UNOLS Fleet Replacement, Addition and Retirement Study Committee.

The UNOLS ship scheduling process, based essentially on efforts of Regional Ship Scheduling Groups was reported to be working well. Discussion converged on the need for Advisory Council participation in Scheduling Group meetings. The Council agreed that standing representation was important and that the Advisory Council member at those meetings might be the only voice for UNOLS Associate Institutions. Bruce Robison will represent the Council at West Coast Scheduling Group meetings and Harris Stewart at East Coast Group meetings.

The Council discussed briefly the process whereby individual investigators are matched with ships.

UNEPC. George Shor, Chairman, UNOLS National Expeditionary Planning Committee (UNEPC) has been advised of Committee representation from all but two of the institutions to be represented. He plans an organization meeting for UNEPC to be coordinated with Ship Scheduling Group and UNOLS meetings in Washington, D.C. in October. He also intends to hold a workshop during winter 1983-1984 based on investigator-interest and intentions for future ALVIN and other expeditionary work. (See the schedule for UNOLS meetings later in this report.)

*The Advisory Council resolved that their representative to UNEPC should be chosen from among the Council's three Associate Institution members.*

*Robert Cornell was selected as Advisory Council member on the UNEPC.*

Additional discussion of Fleet Management was based on an earlier Advisory Council action: "The Council scheduled its recommended review of fleet composition and utilization for 1985. Their October, 1982 report will be the datum for Their considerations and the basis for further updates." (March 18, 1983).

A Council standing role was established to develop information for that review. Bruce Robison and Robertson Dinsmore will fill that role.

Platform Design Ideas were advanced by John Van Leer. He noted that helicopters are essential for extending ship operations in sea-ice margins and for other ice operations. Although helicopters are generally employed for this work they are not well equipped for the rigorous conditions encountered. Specially designed or adapted suites of navigational and piloting equipment as well as special sensing gear could increase the effectiveness and safety of helicopter ice operations.

Information was provided on a small sail and motor driven catamaran designed and used for research on the Great Barrier Reef. According to the information provided, the catamaran compares favorably with conventional small research vessels in terms of fuel efficiency, stability, payload, safety and cost.

The Council noted that for either of these design ideas to have effect on the UNOLS fleet replacement study a substantive report must be produced this summer.

An additional standing role on Communications was suggested, and accepted by the Council. Donn Gorsline will fill the Communications role.

In summary, Advisory Council standing roles for 1983-1984 will be:

1. Fleet efficiency and effectiveness - Curray
2. Access for ocean research - Corell
3. Specialized instrumentation facilities for ocean research - Larson, Miller
4. Replacements, additions, retirements of fleet - Miller, Dinsmore
5. Regional Ship Scheduling Groups:
  - East - Stewart
  - West - Robison
6. UNEPP, UNEPC and fleet management
  - UNEPC - Corell
  - Fleet report review - Robison, Dinsmore
7. Identification of new platform design ideas - Van Leer, Gorsline
8. Communications - Gorsline.

The Chairman opened the meeting to the Charter Revision issue by reading the Council's May 25, 1983 resolution *to deliberate on changes in the UNOLS Charter, including an examination of membership criteria*. The UNOLS membership was advised of this Council resolution by the AC Chairman during his annual report and again by the UNOLS Chairman during the UNOLS business meeting. In both instances UNOLS institutions were solicited for their ideas on revision. To date no institution has provided formal response. However, during May discussions among the assembled membership the University of Texas request that their vessel FRED H. MOORE be designated a UNOLS vessel raised questions concerning procedures and criteria for designating UNOLS vessels. Recent informal inquiries from the University of Hawaii *have implied additional interest in procedures and criteria for designating UNOLS ships*.

An additional issue, recent experience in scheduling and operating ALVIN has led to examination of ANNEX II to the Charter, *National Oceanographic Facilities*.

After discussion of a rationale for setting Membership criteria and for defining UNOLS ships the Council formed a working subcommittee to address the Charter revision issue, specifically to state membership criteria and formulate a definition of UNOLS ships. The subcommittee, made up of the UNOLS Executive Committee, Ferris Webster, Joe Curray, Charles Miller and William Barbee, together with Robertson Dinsmore and Bruce Robison was charged to draft revisions overnight and report to the Council on the following day. The Charter issue was then tabled until receipt of the subcommittee report.

The Executive Secretary reported briefly on the status of UNOLS Office activities in progress:

A UNOLS Annual Report is being prepared for the period July 1, 1982-June 30, 1983. The report will be essentially an activities report and will include the Advisory Council Report, reports of the ALVIN Review Committee, the Research Vessel Operator's Council, the Subcommittee on International Restrictions to Ocean Science Research and other standing committees in UNOLS. It will report on actions taken by the assembled membership and on other activities of the UNOLS Office. The draft report will be submitted for approval to the UNOLS Executive Committee for their submission to sponsoring agencies and UNOLS membership.

In addition to the provisional ship schedules that are being distributed as a part of the reports of East and West Coast Ship Scheduling meetings (February, May and October) the UNOLS Office will this year coordinate UNOLS institution's input to the Naval Oceanographic Office's National Oceanographic Fleet Operating Schedules for 1984. Ship characteristics input will be called for in August and scheduling information in November.

Protocols are being established so the UNOLS Ship Scheduling Bulletin Board on telemail can be used as a dynamic schedule (i.e., to list schedules for operating year and one out year for UNOLS institutions and ships; updates by institution about monthly, or as often as they find necessary).

Relatively little progress has been made on the Advisory Council's charge to determine the need and formulate a plan for UNOLS radio frequency spectrum management. *The Council directed that the UNOLS Office pursue this charge promptly.*

Chairman Robert Corell's report from the ALVIN Review Committee (ARC) emphasized continuing problems in scheduling, the causes of those problems and steps initiated to mend ALVIN scheduling problems.

Because this year the ARC addressed a schedule for eighteen months rather than the traditional one year, because the ATLANTIS II will be the ALVIN support ship and thus operational options are now much broader than ever before, because demand for ALVIN use is intense and extensive, and because various elements necessary to plan and schedule for ALVIN/ATLANTIS II have not been conducted in the appropriate sequence, formulation of a 1984 ALVIN/ATLANTIS II schedule has been delayed. This is a cause for concern to interested investigators, to program officials from the funding agencies, to the ALVIN Review Committee and to ALVIN/ATLANTIS II operators at WHOI.

The Chairman, ARC arranged an exploratory meeting to address the scheduling situation. At that meeting, held June 30 in Washington, D.C., representatives from ARC, funding agencies and WHOI defined terms for setting the 1984 schedule.

A planning and scheduling meeting was held July 27 in Durham, New Hampshire, attended by:

Robert Corell, Chairman, ARC	R. R. La Count, NSF
George Shor, Chairman, UNEPC	Robert Wall, NSF
John Donnelly, Marine Ops, WHOI	Elliott Finkle, NOAA
Barrie Walden, Submersible Ops, WHOI	Keith Kaulum, ONR
William Barbee, Exec. Sec., UNOLS	

Attendees discussed the roles of ARC, funding agencies and ALVIN operators as defined in the Memorandum of Agreement Concerning Support of the Deep Submergence Research Vessel (DSRV) ALVIN Program (Appendix III) and in Annex II to the UNOLS Charter (National Oceanographic Facilities). After reaching consensus on these various roles, the meeting was devoted to solving the short term problem of developing an ALVIN/ATLANTIS II schedule for 1984 and the longer term problems of establishing an adequate coordinated planning/scheduling process and improving communications with the community.

*An ALVIN/ATLANTIS II schedule for 1984 was accepted (with some late-in-the-year contingencies) and is currently being prepared for distribution.*

The group formulated a planning outline responsive to long term problems. The planning/scheduling process is in concert with UNOLS/UNEPC planning and scheduling. Explicit provisions are included for open communications with investigators and the ALVIN community. Milestones in the process include

- regularly scheduled workshops based on researchers interests and intent;
- annually published prospectus for submersible research programs;
- agency schedules for panels, reviews and funding decisions;
- ARC meeting, review, and report schedules; and
- ALVIN Flyer (research opportunity announcements).

*The Advisory Council agreed with the course of action taken and urged continued effort. The Council reviewed the Memorandum of Agreement concerning the ALVIN Program and endorsed it as submitted.*

No additional report was made for UNEPC.

The Council examined the tentative agenda for the Research Vessel Operator's Council (RVOC) meeting October 4-6. The Council endorsed the agenda, and suggested additions as follows:

The Chairman, UNOLS, expressed a need for stronger communications and coupling between UNOLS and RVOC. He suggested that the UNOLS Executive Committee should be represented at RVOC meetings. Joe Curray, UNOLS Vice Chairman will attend the October meeting and will be prepared to address RVOC as part of the UNOLS report.

Cruise Assessment Forms and Summaries and the Minimum List of Shared-Use Equipment for NECOR Vessels (Appendix IV) should be introduced to RVOC for their response.

The Workshop on Ship Operation Costs should be expanded to consider Marine Technician proposals.

Mr. Sam Applegarth should be invited to inform RVOC concerning NSF's Ship Inspection Program.

The Executive Secretary was directed to contact E.R. Dieter, RVOC Chair, concerning these additions.

The Council set a tentative schedule for major UNOLS meetings during the rest of the 1983-84 term for UNOLS officers. A major consideration was to confine the spring and fall meeting cycles to about three days while still allowing adequate time for individual meetings.

In Washington, D.C.:

Monday, October 24		Advisory Council
Tuesday, October 25	8:30 - 2:00 p.m.	Joint, East and West Ship Scheduling
	2:30 - 5:00 p.m.	UNEPC
	6:00 - 8:00 p.m.	Wine & Cheese for All UNOLS
Wednesday, October 26	8:30 - 5:00 p.m.	UNOLS Semiannual

In New Orleans, LA

Sunday, January 22, 1984		Workshops on ALVIN and other expedition plans, based on investigator interest and intent. (Immediately pre- cedes AGU/ASLO Ocean Sciences Conference.)
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In Pigeon Key, FL

Thursday, Friday, February 23, 24, 1984		Advisory Council
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In Washington, D.C.

Wednesday, May 23, 1984		Joint East and West Coast Ship Scheduling, UNEPC
Thursday, May 24, 1984	Morning	Advisory Council
	Afternoon	UNOLS Semiannual
Friday, May 25, 1984		UNOLS Semiannual

In addition, respective chairmen will call meetings of the East Coast Ship Scheduling Group and the West Coast Ship Scheduling Group, both probably in the last half of February, 1984 and of the ALVIN Review Committee, probably in mid-May, 1984.

The Council discussed the need for a UNOLS Newsletter and means for editing and publishing. The sense of the discussion was that such a newsletter would be of value if it would be tightly focused on UNOLS interests, activities and functions. Sponsoring agency representatives expressed potential interest, but only in a newsletter focused on UNOLS matters and produced within UNOLS. (i.e., They did not believe that they could support a newsletter produced outside of UNOLS or with a perhaps broader oceanographic content than that of UNOLS activities.)

*The Council directed the Executive Secretary to prepare a proposal for editing and publishing a UNOLS Newsletter and to begin implementation plans.*



*Later (in discussions on the last meeting day) Donn Goralsine offered (the Council accepted) to prepare, edit and produce a prototype issue. This issue would be distributed just prior to UNOLS meetings in October.*

#### Sponsoring Agency Information

Ron La Count noted that the National Science Foundation's FY-1984 budget had been approved at \$1.3203 Billion. This compares to the Administration request of \$1,2923 Billion and \$1.0939 in the current plan for FY-1983.

The 1983 NSF Ship Inspection Program is being conducted for NSF through a Department of Transportation, Maritime Administration contract with American Bureau of Shipping, Worldwide Technical Services. Dick West is the NSF Program Official, Murray Wood, MARAD Contract Officer, and the ABS inspection team is Sam Applegarth, Safety and Safety Equipment, John Ennis, Engineering and Hull, and Robertson Dinsmore, Scientific Equipment. The inspection program covers eleven NSF ships. First inspections were in March, 1983, and nine ships have been inspected to date. These inspections are thorough, requiring two or three days. They include a sea voyage and exercise safety and scientific equipment as completely as practical. A debriefing is held with operators on site at the conclusion of inspections to cover highlights and matters of urgency in the findings. The formal report is submitted to NSF through ABS and MARAD. NSF provides copies to operators.

Mr. La Count suggested that the inspection program might be extended to institution-owned ships in the fleet.

Information was provided on NSF support for oceanographic instrumentation. In 1982, 33 proposals were considered. Of these, nine instrument development proposals were funded for about \$500,000, seventeen instrument acquisition proposals were funded for \$1,800,000 and six proposals were declined. In 1983, 45 proposals were considered, fourteen instrument development proposals are funded for \$500,000, 23 instrument acquisition awards total \$1,700,000 and six proposals are declined. Although the number of proposals increased to 45 in 1983 from 33 in 1982, total funding declined slightly from \$2,300,000 to \$2,200,000. Community response to NSF instrumentation support (i.e., the quality and scope of proposals received) is disappointing.

The day's meeting was adjourned at 5:15 p.m.

The meeting was resumed at 8:30 a.m., July 29.

Keith Kaulum reported on various ONR items:

ONR's inspection program for Navy-owned oceanographic ships, INSERV, is a modification of the standard Navy inspection system. A Navy team thoroughly inspects hull, engineering and safety equipment. A sea voyage is required. Scientific equipment is not inspected exhaustively. To date the GYRE has been completed, MELVILLE is scheduled in August and CONRAD in September.

The WASHINGTON is beginning mid-life refit. Bids received appear satisfactory and consistent with estimates.

The MOANA WAVE is undergoing re-conversion for return to the oceanographic fleet. Specialized equipment has been removed. Sensitive negotiations between the University of Hawaii and the Navy continue. Stretch of the MOANA WAVE would follow re-conversion.

ONR jointly with NSF is funding Al Driscoll, University of Rhode Island to consider winches on all major ships and report on suitability for projected use, recommended changes, etc.

In addition ONR has a technical study with WHOI to investigate motion compensation winches to see if they might safely handle larger packages with existing wire sizes.

Hopefully, these studies in combination will result in sound recommendations for motion compensation systems or new winch systems, primarily for heavier packages on larger ships.

The Special Focus Program for upgrading ships and ships equipment has been funded for approximately \$11M over three years. Essentially, it will cease at the end of FY-1984.

Mr. Kaulum noted his satisfaction with UNOLS' ship scheduling procedure in 1983 (for 1984) and cited improvements in the practice. At the same time he expressed his and ONR program manager's reservations concerning UNEPP: it may be an unnecessary additional administrative level in the scheduling process.

In recent competition for FY-1985 starts for new research options, ocean sciences did not fare well. The special focus for research in the South Atlantic looks solid but bioluminescence, among others, may be in jeopardy. Lack of success by ocean science in competition for research starts takes on special significance since over the last five years about one half of ONR funding for ocean science has shifted from core programs to special focus (and is thus subject to this competitive success/failure).

*The Advisory Council considered the two agency ship inspection programs and made the following endorsement:*

*The UNOLS Advisory Council strongly approves the ship inspection programs of ONR and NSF and urges that they be extended to include the institution-owned ships of the academic fleet. We urge continued communication and*

*coordination between the two agency programs and that they be extended to include scientific equipment where this is not presently being done.*

The Chairman re-opened discussion of UNOLS Charter revision by introducing the draft modifications produced earlier by the working group. He explained the working groups rationale: to establish membership criteria based on an institution's academic purpose, on significant federal funding for oceanography and on operations in accord with UNOLS safety standards, scheduling, cost accounting and performance standards. UNOLS vessels would be defined as seagoing ships operated by UNOLS institutions, scheduled by UNOLS procedures, operated in accordance with UNOLS performance and safety standards, and designated by UNOLS.

The modifications would also establish a periodic review of the membership consistent with criteria and provide a means for designating UNOLS vessels.

The Council discussed the working group's draft and made additions and changes to (1) make criteria for Associate institutions consistent with and similar to those for Member institutions and (2) change Annex II to the Charter, National Oceanographic Facilities, to make it internally consistent, in conformance with existing practice and in accord with sponsoring agency requirements.

*The Advisory Council adopted the Charter revisions drafted on membership criteria, definition of UNOLS vessels and National Oceanographic Facilities. The Council recommends these revisions to UNOLS for adoption.*

The recommended charter revisions are part of Appendix V.

The Council directed its Chairman and the Executive Secretary to distribute the recommended revision to UNOLS Members and Associate Members and solicit their comments without delay so that finally recommended revisions can be presented to UNOLS membership 30 days prior to the October UNOLS meeting (in accordance with the Charter).

Under Other Business the Chairman, UNOLS, introduced a letter received from Congressman Norman E. D'Amours (D, N.H.), Chairman, Subcommittee on Oceanography, House Merchant Marine and Fisheries Committee. The letter solicits views on the state of health of U.S. Oceanography, suggests a hearing to be held by the Subcommittee and asks for suggested themes and witnesses. In a general discussion it was suggested that a factual response from UNOLS might be appropriate.

*The Advisory Council recommended that a factual UNOLS response to Congressman Norman D'Amours' inquiry be prepared within the Executive Committee and that the UNOLS response be signed and transmitted by UNOLS officers.*

It was noted that such a response from UNOLS does not preclude any recipient from making an individual response.

The Executive Secretary noted that in many instances when UNOLS takes an action or defines a policy, there is no prescribed execution or follow-up,

(e.g., as earlier noted concerning UNOLS policy statements on international restrictions to ocean research). The Advisory Council responded:

*It is the Advisory Council's expectation that the Executive Committee will follow up those Advisory Council and UNOLS recommendations and other action items as appropriate.*

The meeting was adjourned at 11:05 a.m.

## UNIVERSITY-NATIONAL OCEANOGRAPHIC LABORATORY SYSTEM

An association of institutions  
for the coordination and support  
of university oceanographic facilities

UNOLS Office, WB-15  
School of Oceanography  
University of Washington  
Seattle, Washington 98195

## UNOLS ADVISORY COUNCIL

## AGENDA FOR MEETING

8:30 A.M.  
28, 29 July 1983

New England Conference Center  
Durham, New Hampshire

- Accept Minutes of May 25, 1983 Meeting
- Choose Chairman, Vice Chairman, Advisory Council
- Determine Standing Roles for 1983-84
- Status Report, Standing Roles
  - Fleet Efficiency & Effectiveness (Cruise Assessment Summaries) - Curry
  - Access for ocean research (Subcommittee on International Restrictions) - Correll
  - Specialized instrumentation facilities for ocean research (Instrument Facilities Committee) - Larson, Miller
  - Replacements, additions, retirements to fleet (Include discussion of Executive Committee appointment of 3-person study committee) - Miller
  - Regional Ship Scheduling Groups - ?, Hobison
  - UNEP, UNEPC and Fleet Management (Include Advisory Council appointment to UNEPC) - ?
  - Platform design ideas - Van Leer, Gorsline
- Charter Revision Issues
  - Membership criteria
  - Ship designation criteria (Note U Texas, U Hawaii)
  - Other
- Status of Tasks, UNOLS Office
  - Annual UNOLS Report
  - Ship Scheduling
  - Ship Schedule bulletin board
  - UNOLS Frequency Management
- Reports on UNOLS Committees
  - ALVIN Review Committee
  - UNEPC
  - RVOC - Examine Agenda for October 4, 5, 6, 1983 meeting
- Schedule of UNOLS Meetings
  - RVOC (see above)
  - Advisory Council (October, 1983, May, 1984 and ?)
  - UNOLS Semiannual (final dates for week of October 24-28, noting that there will be preceding Advisory Council, UNEPC and Regional Ship Scheduling meetings)
- Discussion of a UNOLS Newsletter - Requested by R. La Count
- Sponsoring Agency Information to the Advisory Council
  - R. La Count, NSF - NSF Ship Inspection Program, Comments on Advisory Council reports on User Manuals and on Winches and Wire, 1984 budget
  - K. Kaulum -
- Other Business

Report on Survey by the Committee on Specialized Instrumentation Facilities  
for Oceanographic Research (West Coast Branch)

A request was sent out soliciting interest and general instrumentation ideas to serve as a basis for the Cooperative Instrumentation Centers for Oceanographic Research (CICOR's) proposed at the May 1983 AC meeting. It went to Lou Gordon (Oregon State), Mike Mullin (Scripps), and M. J. Perry (U. Washington). Each was asked to survey their institutions for ideas. None were forthcoming, although each was recontacted in person or by telephone and the matter discussed at length. The conclusion is clear. In the absence of a definite bundle of money people will not discuss machinery in the abstract. 1) If they have ideas, they want to keep them secret until an actual negotiation for dollars known to exist (with high probability) is underway. Or 2) there isn't an appropriate match of ideas and machines in the price range that would make CICOR's a reasonable funding mode.

Survey of the requests for funds from the DOD Research Equipment Program of last year (just those germane to oceanography) shows recurrent interest in two areas of shoreside instrumentation that might have promise. A variety of specialized interests require mass spectrometry. Some of the machines involved are not particularly expensive (under \$ 100K), others are impressively expensive. The strongest common theme was image analysis. This is appearing in a) satellite oceanography, where expensive computations are required for conversion of multifrequency pictorial data to useful scientific estimates; b) in a variety of taxonomic applications where image analysis can now be used to evaluate large suites of plant, animal, or fossil samples in automated, rapid fashion. Often the combined suites of equipment involved in one application cost on the order of \$ 1M. In some cases parts of those suites, particularly computers and software, would be interchangeable between applications. It is not yet clear, but it is under study, the degree to which the fundamental requirement for an effective image analysis center would be material and to what extent expertise. It seems likely that the principal component is expertise. Thus a geological and biological oceanographic image analysis center for species identification might be comprised primarily out of a small group of experts on analysis serving a range of user applications. In most cases an important part of the process is image creation (conversion of a group of individual fossils or animals to a group of readily compared electronic signals), and that process appears to be quite highly specialized. It is possible that the right direction for an image analysis center would be a site for specialized analysis of video tapes of suites of images, arrays of photographs, etc.

It will be proposed to the Specialized Oceanographic Facilities Committee that IMAGE ANALYSIS laboratories are a strong candidate for support under the CICOR's concept. We will pursue this by development of a prospectus for review by federal agencies and by potential user groups. The possibility of producing means for expensive modes of MASS SPECTROMETRY will be followed later. This will begin to work and be self-generating when people realize it does work.

MEMORANDUM OF AGREEMENT CONCERNING SUPPORT OF  
THE DEEP SUBMERGENCE RESEARCH VESSEL (DSRV) ALVIN PROGRAM

In the belief that DSRV Alvin is a unique national asset and provides a significant capability to the oceanographic research community; and in the further belief that a reasonable assurance of operating support is a necessary pre-condition to the establishment of a sound scheduling and utilization program, the Department of the Navy, the National Oceanic and Atmospheric Administration (NOAA), and the National Science Foundation (NSF), hereafter referred to as the supporting agencies, agree to the following:

1. GENERAL PROVISIONS AND UNDERSTANDINGS

1. Within the limits imposed by Congressional action and/or the availability of funds, the agencies will provide support for operating costs of DSRV Alvin for a period of three years, from 1 January 1981 through 31 December 1983. Funds will be provided in accordance with the terms set out in Section III, below.
2. The Woods Hole Oceanographic Institution (WHOI) will operate DSRV Alvin during this period as a National Oceanographic Facility of the University-National Oceanographic Laboratory System (UNOLS). Proposals for use of Alvin by WHOI personnel shall be subject to the same reviews and conditions as all other proposals.
3. An Alvin Review Committee (ARC) named by UNOLS will examine scientific requests to use Alvin and recommend to the operating institution those programs most appropriate for scheduling. Final selection of projects and establishment of scheduling priorities remain at the discretion of the supporting agencies. The Committee develops long range scientific utilization plans to encourage high quality investigators and programs and to ensure the effective use of Alvin for multidisciplinary scientific and technological research. The Committee also provides recommendations to UNOLS and WHOI with respect to new techniques and instrumentation, operating policies, support and use arrangements, and other matters relating to Alvin.
4. Title to Alvin is retained by the Navy, and nothing in this agreement shall be construed as impinging upon the basic conditions controlling the assignment of the vessel to WHOI for operation and maintenance. The submersible Alvin must be maintained in a material condition that will allow uninterrupted Navy certification. If a situation arises in which primary Navy assets cannot perform a search and recovery mission, and it is within the capability of Alvin, the Navy retains the right under such an emergency to preempt Alvin scheduling. The cost during such a mission would be funded by the Navy in accordance with Section III, paragraph 6, below. Preempted projects would be appropriately rescheduled.

II. SCHEDULING AND UTILIZATION

1. The unique capabilities and logistic complexity of Alvin require careful planning to ensure effective and economical use. To this end, the following general principles should be observed in establishing utilization plans and schedules:

- a. Outlines of major programs including scientific objectives, operating areas, and probable sources of support should be identified at least two years in advance;
- b. Opportunities for smaller scale or short lead-time programs to fill in a schedule or take advantage of scientific or geographic circumstance should be carefully preserved;
- c. A "full use schedule" of approximately 180 use days per year, average, should be a goal to minimize unit costs.

2. Scheduling necessarily involves several iterations and extensive consultation among the principals. In general, however, the following cycle should be observed:

- a. CY - 18 to 36 months -- Review Committee recommends to WHOI operating areas and key programs for the out-years based on scientific proposals and agency plans.
- b. CY - 12 to 24 months -- Funding agency decisions confirm or reject major scientific programs; shorter lead-time programs develop to round out a schedule.
- c. CY - 9 to 12 months -- Operator institution proposes a tentative schedule and an operations budget for review by Review Committee and the supporting agencies.
- d. CY - 6 months -- Operator institution completes arrangements for operations support and carries out specific pre-cruise planning and preparation with users. Operator institution ensures compliance with certification procedures.
- e. CY -- Calendar year operations begin.



3. Ultimate responsibility for implementing the schedule rests with the operating institution, which shall give appropriate consideration to the recommendations of the Committee, the requirements of the supporting agencies, and its own financial and operational responsibilities. Substantial changes not of an emergency nature must be approved in advance by the supporting agencies.

III. FUNDING

1. The provisions of this section apply to "operations costs" for DSRV Alvin and the surface support vessel R/V Lulu only. The following categories of costs are specifically excluded from coverage under this agreement:

- a. Scientific project costs.
- b. Costs of escort vessel(s) when required. The operating costs of the escort vessel, where required, shall be borne by the program(s) or agency(s) which supports the scientific effort and is specifically excluded from the funding support of Alvin operations under this Agreement.

2. The supporting agencies will among them fund 150 use days per calendar year. Generally, this will distribute 3:1:1 use days among NSF, Navy and NOAA. From year to year this ratio may change by mutual consent among the agencies and the total may be adjusted somewhat depending on outside user demands, maintenance requirements, as well as individual agency concerns.

3. The balance of the schedule (approximately 30 days) may be made available at cost for additional use by the supporting agencies or by other users. The operating institution is encouraged to fill out the schedule with other scientific users, with appropriate review by the ARC. In addition, non-scientific users may be accommodated following consultation with the ARC Chairman and the supporting agencies, provided that such additional use does not interfere with the scientific programs recommended and scheduled.

4. The term use day as used in this Agreement is defined as an operating day assigned for the accomplishment of a scientific or operational mission. This does not include vehicle/pilot certification operating days or non-diving transit legs except transits unique to single-user, distant projects. It does not include in-port days except when the major objective of the day is to install or otherwise service users' equipment; it does include days of departure and arrival.

5. The Woods Hole Oceanographic Institution shall prepare an operational plan and budget each year for review and approval by the principal supporting agencies.
6. All operating costs for use of DSRV Alvin by Federal agencies or their grantees or contractors, including, but not limited to, the signatories of this Agreement, shall be distributed in direct proportion to time utilized. Daily rates for all users shall be established in accordance with regular Federal accounting and auditing procedures.
7. Solely for coherence of administration and accountability, funds provided by the supporting agencies under this Agreement will be transmitted through a single grant or other arrangement administered by the National Science Foundation, which shall incorporate a statement of responsibilities of the parties consistent with this Agreement.

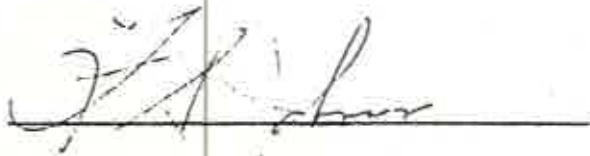
#### IV. TERMINATION

1. Approximately one year before the termination of this Agreement, the supporting agencies, UNOLS, and WHOI will review and evaluate the DSRV Alvin program to determine the future disposition and use of the system.
2. This Agreement may, by mutual agreement, be renewed or extended.
3. An agency wishing to terminate this Agreement prior to the established termination date of 31 December 1983, or alter its obligations hereunder, must provide written notice to the other participants at least six months in advance.

#### V. LIAISON

1. For the Department of the Navy, Office of Naval Research, Director, Ocean Science and Technology Detachment.
2. For the National Oceanic and Atmospheric Administration, Director, NOAA Undersea Research Program.
3. For the National Science Foundation, Head, Office for Oceanographic Facilities and Support.

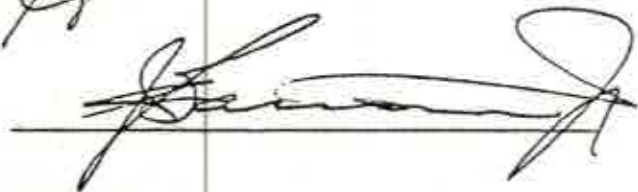
Signatures/Dates



For the National Science Foundation,  
Dr. Francis S. Johnson

 11/11/50

For the National Oceanic and Atmospheric  
Administration, Dr. Ned A. Ostenso



For the Department of the Navy,  
RADM Albert J. Baciocco, Jr., USN

APPENDIX B

Approved by NECOR Executive Committee

8 July 1983

MINIMUM LIST OF SHARED-USE EQUIPMENT  
FOR NECOR VESSELS

This equipment will be made available upon request\*  
to any scientist using a NECOR vessel.

Precision Depth Recorders

Transducers

3.5 kHz and 12 kHz

XBT Systems

Deck Unit

Two Launchers (port and starboard)

Calibration Probe

Navigation

Satellite Navigation with Automatic Speed  
and Heading Inputs

Loran C

Satellite Communications (ATS)

Basic Equipment for Voice

PCM Modem

RS-232 Terminal

Slip Ring Assembly for Conducting Winch

Ship Parameter Network (SAIL)

Ship Speed

Gyrocompass

Navigation (Loran C and Satellite)

Seawater Temperature

Time

Water Sampling Equipment

Niskin Bottles

Messengers

Reversing Thermometers and Frames

Refrigerators and Freezers

Salinometer

Spectrophotometer

Oxygen Titration Equipment

\* Lead times required vary with equipment and institution

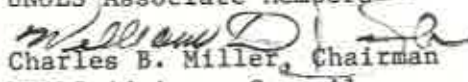
## UNIVERSITY-NATIONAL OCEANOGRAPHIC LABORATORY SYSTEM

An association of institutions  
for the coordination and support  
of university oceanographic facilities

UNOLS Office, WB-15  
School of Oceanography  
University of Washington  
Seattle, Washington 98195

August 10, 1983

To: UNOLS Members  
UNOLS Associate Members

From:   
Charles B. Miller, Chairman  
UNOLS Advisory Council

Subject: Recommended revisions to UNOLS Charter.

The Advisory Council at its May, 1983 meeting determined to examine the UNOLS Charter, and to deliberate on changes including examination of membership criteria and procedures for designating UNOLS ships. The Council's intent was also introduced at the UNOLS Semiannual meeting in May. At its July, 1983 meeting the Advisory Council made its examination of the Charter. Our recommendations for revision are attached to this letter. The Council's rationale for recommended changes is:

1. Membership - to establish criteria based on an institution's academic purpose, on significant federal funding for oceanography, on operation of UNOLS vessels or facilities in accord with UNOLS safety standards, scheduling procedures, cost accounting and performance standards.
2. Associate Membership - to establish criteria consistent with and similar to those for Members.
3. UNOLS Vessels - to define UNOLS vessels and provide a mechanism for designation of specific ships as UNOLS vessels.
4. National Oceanographic Facilities (Annex II) - to make Annex II internally consistent and in conformance to existing practice.
5. A mechanism is established by which there will be periodic review of membership. Institutions appropriate for inclusion as members or associate members will be identified. Members and Associate Members that no longer fit the definitions of those categories will be identified and changes recommended.

I solicit your suggestions concerning the Advisory Council's recommended Charter changes at your earliest convenience (by September 10 at the latest). Based on suggestions, appropriate changes will be made in the Council's recommendations. Then, in accordance with the Charter, the Council's final recommended changes will be distributed to UNOLS members at least 30 days prior to the October, 1983 Semiannual meeting, at which time the assembled membership will act on the recommendation.

## Recommended Modifications for the UNOLS Charter

Add to paragraph (d) of section 2 on organization:

*The Advisory Council periodically will review the list of Member and Associate Institutions and recommend additions and terminations on the basis of the Member Institution and Associate Institution definitions.*

Revise paragraph (1) of part (e) of section 2 to read:

*Member Institutions operate UNOLS vessels (defined below) or National Oceanographic Facilities (Annex II) for academic purposes, and for which a significant proportion of the funding is provided by the federal government. Member Institutions agree to operate their UNOLS vessels in accord with UNOLS safety standards, to participate fully in the UNOLS scheduling process, and to meet cost accounting and performance standards according to UNOLS uniform procedures. Facilities operated by Member Institutions as UNOLS vessels or National Oceanographic Facilities are regularly available to users outside of the operating institution when funding is provided by the sponsor of the intended research or by the user. Institutions will normally be expected to show evidence of three or more years of continuous operation of shared research facilities in order to qualify for membership. Election as a UNOLS Member Institution will be considered by the Advisory Council upon receipt for evaluation of a written application indicating their facilities qualifying as a UNOLS vessel or vessels or National Oceanographic Facilities, the graduate level research and academic program of the institution, its history as an operator of shared significant facilities, and a projection of the use of facilities for the next year, including user charges. Elections to membership will be held at a regular UNOLS meeting and require a majority vote of the Member Institutions present or by proxy if absent.*

\*Revise paragraph (2) of part (e) of section 2. to read:

*Associate Institutions conduct academic programs in the marine sciences and use on a recurrent basis, but do not necessarily operate, seagoing oceanographic facilities for academic purposes. Election as UNOLS Associate will normally be done after submission of a written application to the Advisory Council for evaluation of the institution's academic programs and its probable involvement in UNOLS activities. Election will be made at a regular UNOLS meeting by a vote of UNOLS institutions. A simple majority vote of UNOLS Member and Associate Institutions present or by proxy if absent will be sufficient for election.*

Add as paragraph (g) under section 2:

*UNOLS Vessels are a defined part of the fleet of research boats and ships operated by academic institutions in the United States. Qualifying vessels are seagoing ships that are greater than 20m length overall, operate in accord with performance and safety standards established by UNOLS, are scheduled by*

*established UNOLS procedures, are operated by UNOLS Member Institutions, and are so designated by UNOLS.*

Revise paragraph 1. of ANNEX II, National Oceanographic Facilities:

In addition to regular institutional UNOLS facilities there may be identified National Oceanographic Facilities, defined as those facilities, specialized and otherwise, that are made available for the use of qualified scientists from any institution and the use of which shall be *recommended* by a UNOLS Review Committee.

# UNIVERSITY - NATIONAL OCEANOGRAPHIC LABORATORY SYSTEM

## Excerpts From The UNOLS Charter

### 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, do hereby establish such a system.

#### 1. Objectives

- (a) To create a mechanism for coordinated utilization of and planning for oceanographic facilities through an association of academic institutions in a national system whereby institutions can work together and with funding agencies to assist in the effective use, assessment and planning for oceanographic facilities for graduate level research and educational programs.
- (b) To optimize federal and other support for academic oceanography, thereby continuing and enhancing the excellence of this nation's oceanographic program.

#### 2. Organization

- (a) The purpose of the organization is to provide for community-wide coordination and review of the utilization of academic oceanographic facilities, opportunity for access to those facilities, assessment of the current match of facilities to the needs of academic oceanographic programs and appropriate recommendations of priorities for replacing, modifying or improving the numbers and mix of facilities for the community of users.
- (b) The organization shall be named the University-National Oceanographic Laboratory System (UNOLS).
- (c) The organization shall be comprised of the UNOLS institutions, the Advisory Council, Executive Committee, a UNOLS Office, and other sub-bodies which may be provided for from time to time.
- (d) Membership in UNOLS is open to academic institutions having graduate level marine science programs and which operate or use sea-going oceanographic facilities supported to a significant degree by federal funds. Membership shall be on an institutional basis. Each UNOLS Institution shall designate a representative to UNOLS who normally will speak and act for the institution. In his absence he will be represented by an authorized alternate. Membership shall become effective upon application by an institution and a majority concurrence of the existing memberships specified herein. Membership may be voluntarily terminated by



Excerpts From The UNOLS Charter

-2-

any member on written notice to the UNOLS Chairman, and involuntarily terminated by a two-thirds vote of the Member Institutions when that member is no longer considered qualified for that category of membership.

- (e) UNOLS institutions are divided into two groups to promote coordination and sharing of facilities and to facilitate information transfer about operating procedures and practices.

(1) Member Institutions operate seagoing oceanographic research facilities for academic purposes, for which the majority of the funding comes from the federal government. These facilities are regularly available to users outside of the operating institution when funding is provided by the sponsor of the intended research or by the user. Institutions will normally be expected to show evidence of three or more years of continuous operation of shared research facilities in order to qualify for membership. Election as a UNOLS Member Institution will be considered by the Advisory Council upon receipt for evaluation of a written application indicating the facilities involved, the graduate level research and academic program of the institution, its history as an operator of shared significant oceanographic facilities, and a projection of the use of facilities for the next year, including user charges. Elections to membership will be held at the Annual Meeting and require a majority vote of the Member Institutions present or by proxy if absent.

(2) Associate Institutions. Academic institutions which conduct graduate level research and instructional programs in the marine sciences and which use on a recurrent basis, but do not necessarily operate, seagoing oceanographic facilities for academic purposes are eligible for election as UNOLS Associate Institutions. Election as UNOLS Associate will normally be done after submission of a written application to the Advisory Council for evaluation of the institution's research and academic programs and its probable involvement in UNOLS activities. Election will be made at the Annual Meeting by a vote of the UNOLS institutions. A simple majority vote of UNOLS Member and Associate Institutions present or by proxy if absent will be sufficient for election.

- (f) The Chairman of UNOLS will be elected from among the Member Institutions. The Vice Chairman may be elected from among the Associate Member Institutions. Each will serve for a term of one year and will not serve more than three successive terms. The Vice Chairman will serve in the absence of the Chairman. If neither the Chairman nor Vice Chairman are present at a meeting, the members present shall elect an Acting Chairman for the duration of the meeting.

## UNIVERSITY - NATIONAL OCEANOGRAPHIC LABORATORY SYSTEM

Excerpts From The UNOLS Charter

## ANNEX II

## TO THE CHARTER

## National Oceanographic Facilities

1. In addition to regular institutional UNOLS facilities there may be identified National Oceanographic Facilities, defined as those facilities, specialized and otherwise, that are made available for the use of qualified scientists from any institution and the use of which shall be determined by a UNOLS Review Committee.
2. A research vessel or other research facility may be designated a National Oceanographic Facility upon the approval of UNOLS institutions after review by the UNOLS Advisory Council, with the concurrence of the owner and operator of the facility and with reasonable assurance of support. National Oceanographic Facilities may be multi or special purpose facilities and may be designated for the entire annual operating period or any significant period thereof.
3. The purpose of National Oceanographic Facilities is:
  - To provide oceanographic vessel and other facility support to scientists who do not operate or have available the required facilities.
  - To provide for the support and use in academic research of specialized and unique facilities.
4. A Review Committee for each facility shall be established for the purpose of considering proposals for facility use and for recommending programs to be scheduled. Members of the Committee shall be nominated by the UNOLS Advisory Council and shall be appointed by UNOLS. Members shall serve for terms of three years on a rotating basis. Each institution operating a National Oceanographic Facility may designate an ex-officio member in addition to those members appointed by UNOLS. The Review Committee shall elect its own Chairman from among the members appointed by UNOLS.
5. In recommending the allocation of facility time the Review Committee shall act primarily on the scientific merit of the proposed research and its compatibility with the individual facility.
6. Operational scheduling of the facility will be the function of the operating institution. The time frame for scheduling generally shall be in accordance with Annex I of the UNOLS Charter.