

UNIVERSITY - NATIONAL OCEANOGRAPHIC LABORATORY SYSTEM

ADVISORY COUNCIL MEETING School of Oceanography University of Washington Seattle, Washington

Minutes of Meeting June 28, 29, 1984

Advisory Council members and representatives from the National Science Foundation, National Oceanic and Atmospheric Administration and U.S. Geological Survey met in Room 123, Marine Science Building, University of Washington, Seattle, Washington. The meeting was called to order at 8:30 a.m. by Chairman Charles B. Miller.

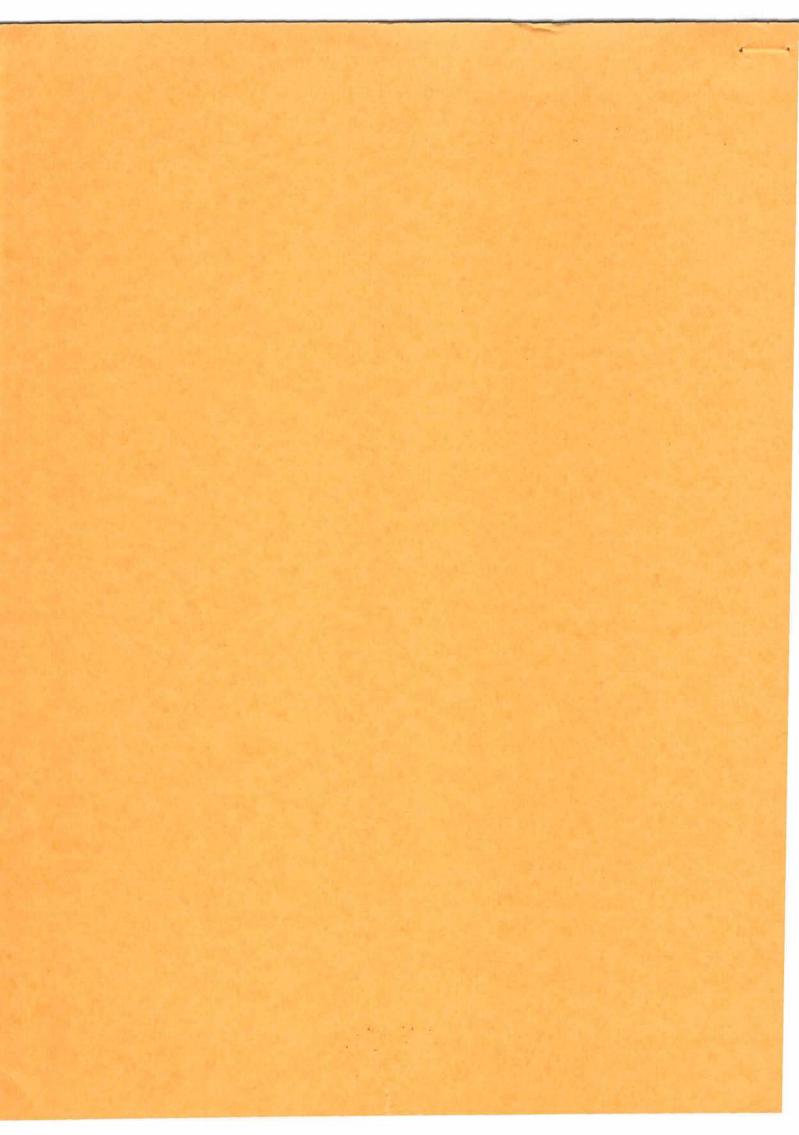
Attendees

Advisory Council Charles B. Miller, Chairman Harris B. Stewart, Jr., Vice Chairman Robertson P. Dinsmore Donn S. Gorsline Carl Lorenzen Bruce Robison Ferris Webster, *ex-officio* Robert W. Corell, *ex-officio*

Unable to Attend Thomas C. Malone Arthur E. Maxwell Observers Ronald R. La Count, NSF Larry Clark, NSF Richard Alderman, NOAA Robert Rowland, USGS

UNOLS Office William D. Barbee Mitchell Stebens





The Chairman then welcomed Carl Lorenzen, University of Washington, newly-elected Council member to his first meeting.

Except as noted the meeting followed the order shown in the Agenda (Appendix I).

The Advisory Council elected Charles Miller Chairman and Harris Stewart Vice Chairman, both for a second year.

Review of UNOLS Membership. The UNOLS Charter, as amended October 26, 1983 and readopted May 25, 1984 directs that the Advisory Council periodically will review the list of Members and Associate Members and recommend to UNOLS additions, status changes and terminations on the basis of Member Institution and Associate Institution definitions. The Council conducted such a review, based on the Members and Associate Members listed in the UNOLS Directory dated 5/84 (Appendix II), with the following recommendation:

The Advisory Council has reviewed the list of UNOLS Member and Associate Members. We find that all of the Member Institutions are active in the organization and continue to fit the critieria for membership. In the instance of the University of Michigan we recommend that they be urged to enhance their activities in several respects:

- 1) to strengthen their participation and ties within the UNOLS communities (especially among UNOLS institutions with Great Lakes programs),
- 2) to intiate and promote, with the advise and aid of UNOLS, Great Lakes regional research ship scheduling and interactive utilization of ship facilities, and
- 3) to enhance their efforts to gain ship support funding from the various Federal agencies that conduct shipboard research in the Great Lakes.

This will strengthen UNOLS overall, improve access to Great Lakes research for scientists generally, and strengthen marine science activities at the University of Michigan.

A number of Associate Member institutions now appear to be inactive (listed below). We recommend that the Executive Committee inquire as to their continued interest and activity.

Associate Member Institutions to whom inquiries are directed:

University of Alabama	Marine Science Consortium
Cape Fear Technical Institute	New York State University College at Buffalo
University of Connecticut	NOVA University*
Florida Institute of Technology	Occidental College
Florida State University*	University of Puerto Rico
Hobart & Willian Smith Colleges	San Diego State University
University of Maine	Walla Walla College

*No UNOLS representative currently designated

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In addition, Associate Members with Great Lakes programs were informed of the Advisory Council recommendation to the University of Michigan:

> New York State University, College at Buffalo, University of Wisconsin at Madison, University of Wisconsin at Milwaukee.

Associate Members actively participating and recommended for continued Associate Membership:

Bermuda Biological Station	Massachusetts Institute of Technology
Bigelow Laboratory for Ocean Science	Naval Postgraduate School
Brookhaven National Laboratory	University of New Hampshire
University of California	New York State University
at Santa Barbara	at Stony Brook
Florida Institute for Oceanography	North Carolina State University
Harbor Branch Foundation	University of North Carolina
Lehigh University	at Wilmington
Louisiana Universities Marine	Old Dominion University
Consortium	University of South Florida
University of Maryland	Virginia Institute of Marine Science

Review and Recommendation for Vessels designated as UNOLS Vessels. The UNOLS Charter, after modification on May 25, 1984, requires that the Advisory Council review the makeup of the UNOLS fleet and recommend to UNOLS those vessels to be designated UNOLS vessels.

Section 2, paragraph (g):

UNOLS vessels are defined as those United States research vessels which are operated by UNOLS Member Institutions and are significantly funded by the Federal government. They are operated in accordance with UNOLS Safety Standards and are schedules by established UNOLS procedures. Designation or removal of designation of UNOLS vessels is by vote of UNOLS Members, after review and recommendation by the Advisory Council.

The Council first considered those vessels on The University-National Oceanographic Laboratory System List of Research Vessels (<20m) Operated by UNOLS Institutions (dated 3/6/84) (Appendix III). Each vessel was considered individually, and was assessed against Charter criteria concerning mode of operation and history of Federal funding.

The Advisory Council recommends that all vessels on the UNOLS List of Research Vessels be designated UNOLS vessels.

The Council next considered several vessels operated by Member Institutions and for which the question of UNOLS designation had been raised recently. The University of Hawaii's KANA KEOKI will be replaced by the MOANA WAVE in Fall, 1984. Disposition of the KANA KEOKI has not been finally decided, and should it continue to operate as a research vessel, it is not clear what funding arrangements would avail.

The Advisory Council recommends that KANA KEOKI not be designated a UNOLS vessel.

The University of Texas' LONGHORN had in the past been part of the UNOLS fleet, and UT has recently requested that FRED H. MOORE be included in the UNOLS fleet. The LONGHORN has not received significant Federal funding over the last several years. The FRED H. MOORE is submitted to the UNOLS scheduling process and operates under UNOLS Safety Standards.

The Advisory Council recommends that the LONGHORN not be designated a UNOLS vessel.

The Advisory Council recommends that the FRED H. MOORE be designated a UNOLS vessel.

The University of Michigan operates the LAURENTIAN and the MYSIS. The LAURENTIAN has been operating off West Africa on a USAID project. Some NSF supported operation in the Great Lakes is anticipated after the ship's return in about May, 1984.

The Advisory Council recommends that the LAURENTIAN be designated a UNOLS vessel.

The Advisory Council recommends that the MYSIS not be designated a UNOLS vessel.

The list of ships recommended for designation, and to be so presented to UNOLS:

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MOANA WAVE University of Hawaii	
ALPHA HELIX University of Alaska	
T.G. THOMPSON University of Washington C.A. BARNES	
WECOMA Oregon State University	
CAYUSE Moss Landing Marine Laboratories	
VELERO IV University of Southern California	
MELVILLE University of California, San Diego,	Scripps
T. WASHINGTON NEW HORIZON	
E.B. SCRIPPS	
CYPE Texas A & M University	
FRED H. MOORE University of Texas	
LAUDENTIAN University of Michigan	
ISELIN University of Miami, R.S.M.A.S.	
CAPE FLORIDA	
CALANUS	
DITUE ETN University System of Coordia Skidawa	у
CAPE HATTERAS Duke/University of North Carolina Con	
R. WARFIELD Johns Hopkins University	

CAPE HENLOPEN CONRAD ENDEAVOR KNORR ATLANTIS OCEANUS University of Delaware Columbia University, LDGO University of Rhode Island Woods Hole Oceanographic Insititution

In addition, the Advisory Council recommends that the DSRV ALVIN be designated a UNOLS National Facility

The Advisory Council noted that having accepted responsibility to review membership and ships periodically, those reviews will be conducted about annually.

Consideration of and Recommendation on Actions That Would Affect the UNOLS Fleet. At their meeting February 2, 3, 1984, in response to a charge from the Oceanographic Facilities Support Section, National Science Foundation, the Advisory Council accepted responsibility to review and provide recommendations on all major actions involving composition of the academic fleet. The Council determined that discharge of their responsibility would require a standing review process and that central to that process would be a review at each Council meeting of potential actions that would affect the fleet.

Three items of potential consequence to the UNOLS fleet were pending:

University of Hawaii plans for KANA KEOKI (C. Helsley letter of May 24, 1984, Appendix IV).,

Advisory Council recommendation concerning possible relocation of the ISELIN (Advisory Council Minutes, May 24, 1984), and

Offer to sell two submersibles and support vessels to National Science Foundation (Nekton, Inc.)

In discussion concerning the KANA KEOKI the Council noted that they had at their February, 1984 meeting considered the University of Hawaii's suggestion to retain the vessel after MOANA WAVE's stretch and entry into service to academic ocean research. The Council had recommended against such retention (letter to C. Helsley dated 13 February 1984, Advisory Council Minutes of February 2, 3, 1984, Appendix V). Again, in their review for designation of UNOLS ships the Advisory Council recommended that KANA KEOKI not be so designated. The Council declined to take further action.

In considering their earlier recommendation to the National Science Foundation that the R/V COLUMBUS ISELIN be temporarily relocated to the West Coast if projections for the ship continue to indicate underutilization, the Advisory Council noted that they had no new data. The recommendation thus remains unresolved.

Nekton, Inc. had made inquiry concerning National Science Foundation's interest in acquiring the submersible support vessel R/V SEAHAVEN, together with shallow water submersibles ALPHA and BETA. Mr. Daniel K. Steussy made a short presentation to the Council on the characteristics, operational history and cost of operations of the vessels.

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In Council discussions following the presentation it was noted that there is currently a new generation of submersibles available through commercial channels (e.g., ROVERS, WASP). These new submersibles would seem to have greater research potential than do the ALPHA and BETA. Furthermore, NOAA's Undersea Research Program (NURP) is progressing toward its objective of providing shallow water submersible facilities for government-sponsored researchers (e.g., new Avery Point, Connecticut facility).

The Advisory Council declined from an explicit recommendation on acquisition of the SEAHAVEN and submersibles. The Council did suggest that the submersibles being offered are not state-of-the-art, that better facilities for shallow submersible research exist elsewhere and thus the offer before NSF does not represent an exciting opportunity.

Further discussion raised the question: Should UNOLS become involved in submersibles other than ALVIN? The Submersible Science Study supported ALVIN as a National Facility because it was the only deep submersible available to the academic community. At the same time the study implied that shallow submersibles were available commercially, or could be made available through programs such as NURP. It was suggested that a presentation on NOAA's undersea research program might be arranged to the Advisory Council, UNOLS membership or both.

The Council learned that Scripps had been successful in acquiring a replacement vessel for the ELLEN B. SCRIPPS. The replacement vessel, formerly MIDNIGHT ALASKA, is larger than the E. B. SCRIPPS. Reliable characteristics, dimensions, etc. were not available to the Council.

Workshop on Marine Technicians. Larry Clark, OFS/NSF discussed OFSsponsored marine technician programs at UNOLS Member Institutions. Indications from reports, investigator comments and other communications are that the program is working well at all institutions. The marine technicians provide valuable at-sea service to principal investigators, especially visiting scientists.

Overall success notwithstanding, there have been some misunderstandings and problems that deserve attention. There is no uniformity among institutions concerning the kinds and degree of technical services provided. Since, in general, manuals or handbooks have not been developed describing the services, instrumentation covered, etc., it is difficult for a visiting investigator to learn in advance what will be provided. Further, valuable technical service elements and procedures initiated at one UNOLS institution are not always effectively transferred to other insitutions. Suggestions have been received for a marine technician program workshop to address these and other questions. Mr. Clark asked for Advisory Council comments on the need for a workshop, how it might be organized, who should represent UNOLS institutions and what should be covered.

The Advisory Council endorsed both OFS management of the marine technician program and the program's operational success. They declined, however, from commenting either on the need for a workshop or its organization without first seeing a more concrete statement on workshop structure and content.

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Schedule of UNOLS Meetings. The Council had earlier scheduled fall UNOLS meetings:

Advisory Council meeting	October	24,	1984	Washington,	D.C.
Ship Scheduling meetings	October	25,	1984	Washington,	D.C.
UNEPC meeting*	October	25,	1984	Washington,	D.C.
UNOLS Semiannual meeting	October	26,	1984	Washington,	D.C.

*Set by Chairman UNEPC

The winter Advisory Council meeting was tentatively set for 21-23 January 1985 Santa Barbara, California

(This meeting will emphasize the Council's update of their report Composition, Distribution and Management of the UNOLS Fleet, October, 1982.)

Spring UNOLS meetings were scheduled:

Advisory Council	May 20,	1985	Washington, D.C.
Ship Scheduling	May 21,	1985	
(and UNEPC)			
UNOLS Semi-Annual	May 22,	1985	

Other UNOLS meetings and workshops were noted:

RVOC	October 15-17, 1984	Bermuda
ALVIN Planning Workshop	December 2, 1984	San Francisco
	(tentative)	
UNEPC Workshop	December 6, 1984	San Francisco
	(tentative)	

East and West Coast spring scheduling meetings will be held in the first week in March, 1985.

Update of Advisory Council Report. An update of the Advisory Council's report Composition, Distribution and Management of the UNOLS Fleet is due in mid-1985. The Council has already begun collecting data for the report, and will present a draft to UNOLS members in early 1985.

Some issues identified in the 1982 study remain unresolved, and were discussed in detail:

- perceived underutilization of ISELIN in its present Miami location,

- high costs and underutilization of ALPHA HELIX

- declining condition and utilization of VELERO IV,

- inappropriate location of CAYUSE given sea conditions in her region, and

 need for a mode of cooperation in ship use among central California institutions (USC, UCSB, MLML, NPG, etc.) Several other immediate problems need to be addressed:

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- demand for large, general-capability vessels has expanded dramatically and should be a factor in planning for fleet replacement,

 community pressure to build more ships specialized for geological and geophysical investigations continues, but must be weighed against a potential oversupply in these vessels if funding agencies respond fully. Good general purpose capability should also be included in designs for these new ships.

The Council also notes that several important problems have been resolved since the 1982 report:

between TAMU and the University of Texas,

UNEPC has developed and initiated effective long range planning,

underutilization of larger, general purpose vessels (Class A) has been

realized.

The Council directed that UNOLS institutions be informed of plans to reexamine fleet composition (See Charles Miller's July 17, 1984 letter to UNOLS members, distributed separately from this report.)

Sponsoring Agency Information to Advisory Council

Ron La Count noted that the National Science Foundation's FY-1985 budget was before Congress, and should be forthcoming within weeks.

Richard Alderman reported that National Oceanic and Atmospheric Administration's budget situation is similar to that of recent years, wherein Congressional action has restored most, if not all, of the authorization and appropriation cuts proposed in the Administration's budget. Indications are for a similar cycle for the FY-1985 budget.

Paul Wolff, Assistant Administrator for Ocean Services and Coastal Zone Management is aggressively managing the NOAA fleet. Among his concerns are the state of equipment on the ships, data and information processing backlog and increasing utilization of the ships, especially among non-NOAA users. He has initiated programs to modernize equipment quickly, to reduce or eliminate the processing backlog and to attract outside ship users. NOAA has initiated A-76 studies covering many aspects of the agency's programs. (The Office of Management and Budget's circular A-76 sets policy for contracting to the private sector functions and activities not essentially governmental in nature.) Some of the studies are of NOAA's marine operations, and results could affect NOAA's modes of fleet operation and management.

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Robert Rowland described USGS's planned ocean programs for 1985 and 1986. Secretary of Interior, William Clark, is making Exclusive Economic Zone

(EEZ) surveys and description the centerpiece of his tenure. FY-1986 could be the first year of an expanded program. Indications are that the successful program would receive adequate funds but relatively few positions. Thus, much of the work would be accomplished through grants and contracts.

Recent activities include S.P. LEE work in the Antarctic, (for which data have already been released), publication of a Symposium Volume on Interior's EEZ Workshop, GLORIA surveys conducted by the PARNEL, and a contract with the Defense Mapping Agency to conduct gravity surveys.

The USGS anticipates the need for significant UNOLS ship time in the Pacific.

Richard Alderman reported that the Federal Oceanographic Fleet Coordination Council (FOFCC) Second Annual Report on the Federal Fleet for 1983 is available.

FOFCC will hold a Workshop (July, 1984) open to the public with briefs by Federal operators on ship operations.

The FOFCC has underway a study on Needs for Polar Research Vessels. They have gathered preliminary requirements from agencies, and determined that needs exist. In addition to acquisition or construction of a polar research vessel, needs might be met by Coast Guard icebreakers, by private icebreakers or by foreign vessels.

Advisory Council Standing Roles.

Fleet Efficiency and Effectiveness. The Council will continue to emphasize this role, especially Cruise Assessment Reports. Carl Lorenzen agreed to take this role for 1984-1985.

Access for Ocean Research. At his request, Robert Corell is stepping down as Chairman, International Restrictions on Ocean Science (IROSC) Subcommittee. After Council discussion, the AC Chairman appointed Harris B. Stewart, Jr. new Subcommittee Chairman. The Council also decided to establish fixed, overlapping terms for Subcommittee members and to slightly expand membership.

The approved membership:

Harris B. Stewart, Jr.	Old Dominion University, Chairman	2 years
Robert Corell	University of New Hampshire	l year
Thomas A. Clingan	University of Miami	2 years
Dirk Frankenberg	University of North Carolina	l year
John Knauss	University of Rhode Island	l year
David Ross	Woods Hole Oceanographic Institution	2 years
Warren Wooster	University of Washington	2 years

Specialized Instrumentation Facilities. Charles Miller, in reporting on specialized instrumentation facilities noted that although there are new and improved technologies that might be utilized in advancing oceanography, the UNOLS community has not, so far, responded to Advisory Council efforts to bring these new technologies into use. Further, there is no clear agreement we wantitud a galaatayee raise state of the second states are a

on policies, strategies and management schemes that might be employed by UNOLS.

In discussion of new technologies (especially new-generation submersibles for research, satellites, aircraft as observation platforms and facilities for flow cytometry, long coring). The Council agreed on several steps that should help bring technological advances into oceanographic research:

review a broad range of potentially helpful technologies to set priorities for facilities, equipment and techniques that should be employed in ocean research;

devise and implement policies, strategies and management schemes that would encourage funding for new technologies and while making them available to a broad segment of ocean investigators and research programs; and

foster a coordinated, cooperative program to support funding for technology acquisition.

The sense of the Council's discussion was that the issue should be put before the UNOLS membership. Charles Miller will develop a prospectus for the October meeting.

Fleet Replacements, Additions and Retirements/Fleet Management. Robertson Dinsmore, Chairman, reported that the Fleet Replacement Committee (FRC) would meet on July 10 at the Moss Landing Marine Laboratory, and again in early October in Washington, D.C. The FRC, especially the Chairman, has been tracking individual institution efforts to acquire new or replacement vessels.

Scripps has already acquired a E.B. SCRIPPS replacement. USC continues to examine tuna boats and other hulls to replace VELERO IV. USC is aware of the Advisory Council recommendation concerning the R/V ISELIN. USC operators and users are concerned that if CAPE FLORIDA were transferred it, too, would be too small for operating areas north of Point Conception. USC has prepared a draft research vessel replacement plan (available to the Council).

The University of Texas has developed vessel requirements and is funding conceptual designs of several ships. These designs would emphasize geology and geophysics, but would provide general purpose capabilities. A new vessel would be considerably more than a FRED H. MOORE replacement. The University of Texas is cooperating with the Fleet Replacement Committee, and will make their conceptual designs available to the UNOLS replacement study.

The Moss Landing Marine Laboratories, Naval Postgraduate School and other central California users are examining their ship needs to determine what would be appropriate vessels for their programs. ACANIA is at Mare Island, and may not work again. CAYUSE is not well suited to central California programs and operating areas. The Navy's 100 foot SWATH ship KAIMALINO may become available, and both MLML and NPGS would be interested in acquiring it for cooperative use.

Meanwhile program development at Skidaway is such that BLUE FIN may not remain adequate to meet requirements. Captain Dinsmore outlined his and FRC's plans for developing a UNOLS newship program.

The Advisory Council discussed orderly replacement for the UNOLS fleet, and especially an appropriate mix of ships for central California programs.

The Advisory Council encourages appropriate Federal agencies to investigate possibilities for transferring the SSP KAIMALINO for use in the UNOLS fleet. The Council notes that their own investigations will consider this question together with an examination of consequences of such an assignment.

Platform Design Ideas. The Council noted that their emphasis on new concepts for research vessels had, during 1983-84 produced a report and had raised active response from the Fleet Replacement Committee and the UNOLS Community. It was the sense of the Council that the Fleet Replacement Committee is considering innovative design concepts, and further development of new design ideas should rest with the FRC. New design ideas as an Advisory Council standing role was dissolved.

Regional Ship Scheduling Groups. Bruce Robison and Harris B. Stewart will remain as Advisory Council observers at Ship Scheduling meetings. There was no further discussion.

RVOC Meeting and Agenda. The Council examined tentative agenda for the October, 1984 meeting, as provided by Chairperson E. R. Dieter. The Council (and UNOLS Executive Committee) endorsed the agenda.

Accept minutes of May 24, 1984 Advisory Council meeting. After making modest corrections, the Advisory Council accepted the minutes of their May 24, 1984 meeting.

Other Business. Robert Corell described a conference held at the University of New Hampshire on The Present and Potential Roles of Microcomputers and Microelectronic Systems in the Ocean Sciences and Technologies. The conference, sponsored by ONR and NSF covered

personal computers,	software,
applications (instrumentation),	shipboard applications,
demonstration of applications,	

(The agenda and list of participants are Appendix V.)

The workshop appeared to be a success and of value to participants. One result is the establishment of a bulletin board on Telemail, OCEAN.MICRO, to facilitate communications concerning microcomputers and applications.

The Advisory Council endorsed the workshop and results. Since there were only two West Coast participants for the New Hampshire workshop, it was suggested that a similar one might be held on the West Coast. The possibility will be investigated.

There being no further business, the meeting was adjourned.

UNOLS Advisory Council Agenda for Meeting 8:30 a.m. - 5:00 p.m., June 28, 1984 8:30 a.m. - 12:00 noon, June 29, 1984 Room 123 Marine Sciences Building, School of Oceanography University of Washington Seattle, Washington

ACCEPT MINUTES OF MAY 24, 1984 A/C MEETING.

CHOOSE 1984 CHAIRMAN, VICE CHAIRMAN ADVISORY COUNCIL -Incumbents C. Miller, Chairman and H. Stewart, Vice Chairman, remain members of the Advisory Council.

ADVISORY COUNCIL STANDING ROLES-

STATUS REPORTS - (As necessary to augment reports of May 24, 1984, and to organize roles for 1984-85.)

FLEET EFFICIENCY AND EFFECTIVENESS - No new summaries of reports will be available. Decision to continue role and select responsible A/C member.

ACCESS FOR OCEAN RESEARCH (Subcommittee on International Restrictions) - The Subcommittee has recommended a more structured membership scheme and R. Corell wishes to end his chairmanship. A/C action required. - R. Corell.

SPECIALIZED INSTRUMENTATION FACILITIES - No report was made at May meeting, since neither responsible member was prsent. A/C consideration on role. - C. Miller.

REPLACEMENTS, ADDITIONS, RETIREMENTS TO FLEET/FLEET MANAGEMENT - Interface with UNOLS Committee on Fleet Replacement - R. Dinsmore. Other considerations. - C. Miller. (Update of A/C Report on Fleet Management is a separate agenda item.)

PLATFORM DESIGN IDEAS - Discussion of the role. Responsible AC Member, John Van Leer, no longer on AC. New design ideas addressed in proposal for fleet replacement. AC consideration on this role and selection of responsible member, if required. - Council.

COMMUNICATIONS - Discussion of UNOLS NEWS, Vol. 1, No. 3, June, 1984. Suggestions for contents of next issue. - Gorsline.

REGIONAL SHIP SCHEDULING GROUPS - Since the groups have not met since the May AC meeting, reports, if any, will be brief.

SPONSORING AGENCY INFORMATION TO ADVISORY COUNCIL - Reports (as they wish) from R. Alderman, K. Kaulum, R. La Count, R. Rowland on matters relative to NOAA, ONR, NSF, USGS and other sponsoring agencies. CONSIDERATION AND RECOMMENDATIONS ON ACTIONS THAT WOULD AFFECT THE UNOLS FLEET - In response to the Agency charge and the Advisory Council's acceptance (February, 1984) a review of any major actions that might affect the UNOLS fleet should become a standard agenda item. Actions pending include:

Status of KANA KEOKI - See Helsley letter of May 24, 1984. Status of ISELIN - See AC recommendation of May 24, 1984. Nekton, Inc. - Offer to sell two submersibles and support vessel to NSF.

UPDATE OF ADVISORY COUNCIL REPORT - Address update of the AC Report, Composition, Distribution and Management of the UNOLS Fleet, October, 1982 and A Reexamination---, March, 1983. (See data and information of ship availability, usage and costs projected through 1985.) - B. Robison.

REVIEW OF UNOLS MEMBERSHIP - Advisory Council review as specified in UNOLS Charter, and as a prerequisite to recommending ships to be designatd UNOLS Ships.

REVIEW AND RECOMMENDATIONS FOR SHIPS DESIGNATED AS UNOLS FLEET -After modification - May 25, 1984, the UNOLS Charter states under Section 2, paragraph (g):

UNOLS vessels are defined as those United States research vessels which are operated by UNOLS Member Institutions and are significantly funded by the Federal government. They are operated in accordance with UNOLS Safety Standards and are scheduled by established UNOLS procedures. Designation or removal of designation of UNOLS vessels is by vote of UNOLS Members, after review and recommendation by the Advisory Council.

This new procedure should be activated, to provide recommendations to UNOLS at the October, 1984 Semi-annual meeting.

RVOC MEETING AND AGENDA - Consider suggested agenda for 1984 meeting, and provide input as appropriate. (RVOC suggested agenda will be available.)

SCHEDULE OF UNOLS MEETINGS - October 24, 25, 26, 1984 AC, Ship Scheduling and UNOLS meetings are scheduled. Select dates, places for AC meeting in early 1985 and for A/C UNOLS, etc. in about May, 1985.

OTHER BUSINESS - ??Suggestions??

APPENDIX II

UNOLS DIRECTORY (with designated representatives)

MEMBERS

UNIVERSITY OF ALASKA Dr. Thomas C. Royer

UNIVERSITY OF DELAWARE

Dr. William S. Gaither

DUKE/UNIVERSITY OF NORTH CAROLINA Dr. Dirk Frankenberg

UNIVERSITY OF HAWAII Dr. Charles E. Helsley

THE JOHNS HOPKINS UNIVERSITY Dr. Lawrence Harding

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

UNIVERSITY OF MIAMI, ROSENSTIEL SCHOOL OF MARINE AND ATMOSPHERIC SCIENCE Mr. James Gibbons

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

- MOSS LANDING MARINE LABORATORIES Dr. John H. Martin
- OREGON STATE UNIVERSITY Dr. Douglas Caldwell
- UNIVERSITY OF RHODE ISLAND Dr. James J. Griffin

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

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

UNIVERSITY OF SOUTHERN CALIFORNIA Dr. Robert Douglas

UNIVERSITY OF TEXAS Dr. Arthur E. Maxwell

TEXAS A & M UNIVERSITY Captain T. K. Treadwell

UNIVERSITY OF WASHINGTON Dr. Brian Lewis

WOODS HOLE 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. Robison

CAPE FEAR TECHNICAL INSTITUTE Mr. Edward Foss

ASSOCIATE MEMBERS (CONT'D) UNIVERSITY OF CONNECTICUT Professor Sung Feng FLORIDA INSTITUTE FOR OCEANOGRAPHY Dr. William W. Behrens FLORIDA INSTITUTE OF TECHNOLOGY Mr. Jack Morton FLORIDA STATE UNIVERSITY HARBOR BRANCH FOUNDATION Dr. Robert S. Jones HOBART & WILLIAM SMITH COLLEGES Mr. F. Richard Wilkins LEHIGH UNIVERSITY Dr. Bobb Carson LOUISIANA UNIVERSITIES MARINE CONSORTIUM Dr. Donald F. Boesch UNIVERSITY OF MAINE Dr. Bernard J. McAlice MARINE SCIENCE CONSORTIUM Dr. Robert W. Hinds UNIVERSITY OF MARYLAND Dr. Ian Morris MASSACHUSETTS INSTITUTE OF TECHNOLOGY Dr. John M. Edmond NAVAL POSTGRADUATE SCHOOL Dr. Christopher N. K. Moores UNIVERSITY OF NEW HAMPSHIRE Professor E. Eugene Allmendinger NEW YORK STATE UNIVERSITY COLLEGE AT BUFFALO 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 OCCIDENTAL COLLEGE Dr. John S. Stephens, Jr. OLD DOMINION UNIVERSITY Dr. Harris B. Stewart, Jr. UNIVERSITY OF PUERTO RICO Dr. Thomas Tosteson SAN DIEGO STATE UNIVERSITY Dr. Richard F. Ford UNIVERSITY OF SOUTH FLORIDA Dr. Peter R. Betzer VIRGINIA INSTITUTE OF MARINE SCIENCE Dr. John M. Zeigler WALLA WALLA COLLEGE Dr. Lawrence McCloskey UNIVERSITY OF WISCONSIN AT MADISON Dr. Robert A. Ragotskie

UNIVERSITY OF WISCONSIN AT MILWAUKEE Dr. David N. Edgington

5/84

APPENDIX III

THE UNIVERSITY-NATIONAL OCEANOGRAPHIC LABORATORY SYSTEM LIST OF RESEARCH VESSELS (>20M) OPERATED BY UNOLS INSTITUTIONS

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OPERATOR	NAME	LOA (FT/M)	BUILT/ CONVERTED	NUMBER OF SCIENTISTS	OWNER	SHIP SCHEDULING CONTACT
University of Hawaii Hawaii Institute of Geophysics 2525 Correa Road Honolulu, Hawaii 96822	MOANA WAVE	174/53	1973	20	NAVY	Mr. J. Frisbee Campbell Scientific Coordinator for Marine Operations (808) 948-7654
University of Alaska Institute of Marine Science Fairbanks, Alaska 99701	ALPHA HELIX	133/41	1966	15	NSF	Professor Thomas C. Royer Associate Professor (907) 474-7835
University of Washington School of Oceanography, WB-10 Seattle, Washington 98195	T.G. THOMPSON ONAR C.A. BARNES	209/64 65/20 65/20	1965 1954/1963 1966/1983	23 6 6	NAVY NAVY U.W.	Dr. Brian T.R. Lewis Director (206) 543-6487
Oregon State University School of Oceanography Corvallis, Oregon 97331	WECOMA	177/54	1975	16	NSF	Ms. Mary Jo Gutierrez Ship Scheduler (503) 754-4447
Moss Landing Marine Laboratories P.O. Box 223 Moss Landing, California 95039	CAYUSE	80/24	1968	8	NSF	Mrs. Gail Johnston Ship Scheduler (408) 633-3304
University of Southern California Inst. for Marine & Coastal Studies Los Angeles, California 90089-0341	VELERO IV	110/34	1948	12	USC	Mr. Don Newman, Mgr. Marine Support Facility (213) 743-6977
University of California, San Diego Scripps Institution of Oceanography La Jolla, California 92093	MELVILLE T. WASHINGTON NEW HORIZON E.B. SCRIPPS	245/75 209/64 170/52 95/29	1970 1965 1978 1965	29 21 13 8	NAVY NAVY U.C. U.C.	Dr. George Shor, Jr. Ship Scheduler Code A-010 (619) 452-2840
University of Michigan Great Lakes & Marine Waters Center Ann Arbor, Michigan 48109	LAURENTIAN	80/24	1974	10	U.M.	Mr. Clifford Tetzloff Marine Superintendent (313-763-3183
Texas A & M University Department of Oceanography College Station, Texas 77843	GYRE	174/53	1973	22	NAVY	Captain T.K. Treadwell Marine Operations Office (409) 845-7211
The University of Texas Port Aransas Marine Laboratory Port Aransas, Texas 78373	LONGHORN	80/24	1971	10	U.T.	Mr. John H. Thompson Assoc. Director - Admin. (512) 749-6760
University of Miami, R.S.M.A.S. 4600 Rickenbacker Causeway Miami, Florida 33149	ISELIN CAPE FLORIDA CALANUS	170/52 135/41 64/20	1972 1981 1971	16 12 6	U.M. NSF U.M.	Mr. James Gibbons Operations Manager (305) 361-4121
University System of Georgia Skidaway Institute of Oceanography P.O. Box 13687 Savannah, Georgia 31416-0687	BLUE FIN	72/22	1972/1975	8	U.G.	Dr. David W. Menzel Director (912) 356-2480
Duke/UNC Oceanographic Consortium Duke University Marine Laboratory Beaufort, North Carolina 28516	CAPE HATTERAS	135/41	1981	12	NSF	Captain Eric B. Nelson Marine Superintendent (919) 728-3372
The Johns Hopkins University Chesapeake Bay Institute Shady Side, Maryland 20764	R. WARFIELD	106/32	1967	10	J.H.U.	Mr. Bruce Cornwall Marine Superintendent (301) 867-7550, Ext. 246
University of Delaware College of Marine Studies Lewes, Delaware 19958	CAPE HENLOPEN	120/37	1975	12	U.D.	Mr. Wadsworth Owen Dir. of Marine Operation (302) 645-4320
Columbia University Lamont-Doherty Geological Observatory Palisades, New York 10964	CONRAD	209/64	1962	23	NAVY	Mr. Henry (Chip) Kennedy Ship Scheduler (914) 359-2900, Ext. 245
University of Rhode Island Graduate School of Oceanography Narragansett, Rhode Island 02881	ENDEAVOR	177/54	1976	16	NSF	Mr. John F. Bash Ship Scheduler (401) 792-6203
Woods Hole Oceanographic Institution Woods Hole, Massachusetts 02543	KNORR ATLANTIS II OCEANUS DSRV ALVIN	245/75 210/64 177/54 25.8	1969 1963 1975 1964	25 25 12 2	NAVY WHOI NSF NAVY	Mr. John D. Donnelly Manager of Marine Ops. (617) 548-1400, Ext. 273



Stern Stratt

University of Hawaii at Manoa

Hawaii Institute of Geophysics 2525 Correa Road • Honolulu, Hawaii 96822 Cable Address: UNIHAW

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Mr. Ronald R. La Count Section Head, Oceanographic Facilities Support Division of Ocean Science National Science Foundation Washington, D. C. 20550

Dear Ron:

As you aware from my letter of January 24 to UNOLS and our previous commitments to NSF and ONR, we are planning to remove the KANA KEOKI from regular UNOLS service once the conversion of the MOANA WAVE is completed. We currently expect this to be early in the fall of 1984. At that time it has been our intention to find other work for the KK outside of normal UNOLS funding sources. At present we have not identified such work for the vessel and believe that we will not be able to identify such work until the commercial market for such a vessel (an offshore supply vessel) becomes more firm.

Selling the vessel at this time is also precluded for the same reason. Even though the vessel is in very good to excellent condition, the only conceivable value at this time is as scrap. Moreover, since the vessel is under the State of Hawaii ownership and the proceeds of the sale would not necessarily return to the University of Hawaii, it is of little advantage to either the University of Hawaii or the UNOLS community to scrap the vessel at this time, particularly since the vessel may have either a use to the community or at least greater value in the near future. Finally, the State of Hawaii perceives a need for such a vessel in Hawaiian waters. Thus, it is our decision to keep the vessel in Hawaii in a ready reserve status for the foreseeable future.

The costs of such preservation are minimal for we have the dock space available, and our shore support personnel can do the necessary preventative maintenance when the MW and R/V LEE are away and other UNOLS vessels are not in need of service. Should other State agencies need to use the KK during this period, the vessel will be available and will be crewed by our shore support personnel, reserve crew for MW and LEE, and/or temporary personnel.

During the past two months we have had requests for ship time from several users for synoptic programs in Hawaiian waters. Two of these

APPENDIX · IV-2

Mr. Ronald R. La Count - 2

May 24, 1984

potential users are at the University of Hawaii but are not previous users of our vessels. One request has come from a scientist at another UNOLS institution in Southern California. At present, we do not know the funding status of any of this work nor can we support the work on the MW since she will be away from the Hawaii area for much of the next two years. We have examined the provisional schedules of all of the other UNOLS vessels that plan to be in the Hawaii area for the next year and do not believe that it is practical to mount "synoptic" 2 to 5 days per month programs using these visiting platforms.

To solve this problem, we would like to make the following suggestion. We will make the KK available to any UNOLS user that has funding at \$5,000 per use day provided that the program requires a 155' platform in Hawaiian waters and that the vessel is generally not at sea for more than 5 days at a time. For programs requiring a smaller platform on our "coastal" vessel, the R/V KILA, a 103' vessel, will continue to be available at approximately \$2,600/day. We believe that this day rate procedure is most suitable for these synoptic programs and other occasional ship users. Moreover, it will provide maximal utilization of the investment in the KK made by NSF and the State of Hawaii.

Sincerely,

Charles E. Helsley Director

cc: UNOLS Office V

AGENDA

THE PRESENT AND POTENTIAL ROLES OF MICROCOMPUTER AND MICROELECTRONIC SYSTEMS IN THE OCEAN SCIENCES AND TECHNOLOGIES (A Tutorial Conference) June 24-27, 1984 Alumni Center University of New Hampshire SUNDAY, JUNE 24, 1984

4:00 p.m. - 10:00 p.m.

<u>REGISTRATION</u> Lobby of the New England Center Strafford Avenue

MONDAY, JUNE 25, 1984

Beginning at 7:00 a.m. <u>BREAKFAST</u> - New England Center

8:00 a.m. - 8:30 a.m. <u>REGISTRATION</u> Alumni Center Strafford Avenue

8:30 a.m. - 9:30 a.m. INTRODUCTION

Tatao2 bables

Robert W. Corell University of New Hampshire

9:30 a.m. - 12:30 noon

PERSONAL COMPUTERS

Carl Bowin Woods Hole Oceanographic Institution and Zarak Corporation, Falmouth, MA

Stefan Shrier George Washington University and Grumman-CTEC Inc.

12:30 p.m. - 2:00 p.m.

LUNCH - New England Center

2:00 p.m. - 5:00 p.m.

APPLICATIONS (INSTRUMENTS)

Peter Wiebe Woods Hole Oceanographic Institution

Al Bradley Woods Hole Oceanographic Institution

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8:00 p.m. - 10:00 p.m.

- DEMONSTRATION OF APPLICATIONS
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TUESDAY. JUNE 26. 1984

Beginning at 7:00 a.m. <u>BREAKEASI</u> - New England Center

SOFTWA	RE	j
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9:00 a.m 9:30 a.m.	Daniel Bergeron Computer Science Department University of New Hampshire
9:30 a.m 10:30 a.m.	Mark Klein Computer Consultant
11:00 a.m 12:00 a.m.	Ferren MacIntyre University of Rhode Island
12:00 noon - 1:30 p.m.	LUNCH - New England Center
1:30 p.m 2:00 p.m.	Derek Spencer Woods Hole Oceanographic Institution
2:00 p.m 3:30 p.m.	Rod Mesecar Oregon State University
4:00 p.m ??	Attitude Readjustment & Mental Reprogramming
8:00 p.m 10:00 p.m.	DEMONSTRATION OF APPLICATIONS
WEDNESDAY, JUNE 27, 1984	
Beginning at 7:00 a.m.	<u>BREAKFASI - New England Center</u>
NETWORKING/COMMUNICATION	S - SHIPBOARD APPLICATIONS
9:00 a.m - 10:30 a.m.	Mark Klein Computer Consultant and Columnist for Byte Magazine
11:00 a.m 12:00 noon	Texas A & M University Ocean Drilling Program
12:00 noon - 1:00 p.m.	SUMMARY
$\pi x^{(1)} \stackrel{_{\mathrm{def}}}{=} \frac{1}{2} \left(1 + x \mathbf{n} + \frac{1}{2} e^{-\frac{1}{2} (1 + x)} \right)$	Robert W. Corell University of New Hampshire

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Norkshop

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OCEAN MICRO

- Random Access Bulletin Bd.
 - Not Prompted You must call and ask for board

- Auto Purge 30 days? 60 days?

- No Message Restriction Share Ideas Ask Questions Announce Things

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Overall Impressions

Tutorial

Forum

Workshop

Enhanced Understanding Shared Experience Details "Nitty-Gritty"

Trends & Patterns

Hardware is ahead of software (1)(2) Transition from 8 to 16 to 32 bits "maybe hold off" (3) Possibility of STD - Data Format Transportable Media (4) Pockets of Expertise - It is an art, not science, Info not too available Must do it in our comm. No one else will do it for us. (5)(6) Need for summary of S. of A. Maybe a publication from time to time. (7) Need for structure to share info, ideas, connect the comm. of interested Computing needs moving for DPCs - need to continue to support/can't (8)forget mainframes (9) New class of problem being addressed by PCs (10) Cost conflict between PCs and mainframes - maybe more critical with 32 bit machines (11) Appears we are trying to connect need for mechanism, tools, data, machines ideas, etc. Generating lots of data - what do we then do with it -(12)Data sets = big Can't see forest from trees Science! (13) Human bond rate for µc to human ² 110 to 300 Compress data into knowledge info Technology is in floodstage right now - can get our "arms" around it now -(14)can't be too evaluative yet, can't absorb it all. "Culture Shock" - "Computer Technology Shock" (Accommodate rapid change) (15)- Need to step back and be reflective (16) Need to get together, informally to cross - couple ideas! (17) Can µ computer really do something needed, for me, for my science. Worry about this! Go into uc with your eyes open (jump in, swim, do it!) (18)(19) Is there a net gain given the price/investment of time

PARTICIPANT LIST

THE PRESENT AND POTENTIAL ROLES OF MICROCOMPUTERS AND MICROELECTRONICS IN OCEAN SCIENCES AND TECHNOLOGIES

(A Tutorial Conference)

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