UNIVERSITY - NATIONAL OCEANOGRAPHIC LABORATORY SYSTEM

SUMMARY REPORT OF THE MAY 1979

NINTH ANNUAL MEETING

CONTENTS

JUNE 1979

SUMMARY REPORT OF NINTH ANNUAL MEETING
May 17-18, 1979, National Academy of Sciences
Washington, D.C.

First Day, May 17, 1979
Lecture Room

1. GENERAL

The sequence below follows the order in which Agenda items were considered. The italicized figures following each item represents the date/item number as originally scheduled.

Chairman for the two-day Annual Meeting was Captain T. K. Treadwell, Marine Operations Officer, Texas A&M University. He welcomed those present (see App. I) and briefly reviewed the Agenda (App. II) (*17/1*).

2. SECRETARY'S REPORT

The Secretary reviewed the past year's activities, including the development of the Oceanographic Equipment Workshop which was held February 26-28 at TAMU. A preliminary report was immediately circulated requesting comment from all attendees as well as an institutional response. The co-chairmen will meet June 7-8 to review the comments and edit a final report, incorporating responses.

His complete remarks can be found in App. III. *(17/4)*

3. RVOC CHAIRMAN'S REPORT

Mr. D. Letzring was elected chairman last Fall at the RVOC annual meeting in Longbeach, California. He reported on the past year's activities and noted RVOC's equipment committee had been active gathering wire/winch and other data for input to the TAMU Oceanographic Equipment Workshop. He intends to send a letter to members requesting agenda items for this Fall's annual meeting. He also gave thanks to Mr. J. Leiby, past chairman for many years, for his service. *(17/5)*

4. ADVISORY COUNCIL CHAIRMAN'S REPORT

Dr. G. Keller reviewed the progress on the upcoming Research Submersible Facility Requirements Study and noted that the Science Assessment and Task Force panels had been appointed. For a list of appointees, see App. IV.

Dr. Keller called on Capt. R. Dinsmore who reported on DSRV ALVIN operations for the past year. He noted the boat was diving with a new frame and that LULU has had extensive renovations creating new two-man staterooms and that she had been equipped with new engines which increase her speed to 6.5-7kts. ALVIN is now certified to 4000m in depth. Capt. Dinsmore showed various viewgraphs depicting the 1978 dive season which is shown in App. V. He recounted the highlights of the present season through April 15 on the East Pacific Rise and mentioned the engineering problems presented by encountering 300^{o}C water at thermal vents. At this time ALVIN is projected to return to the Pacific in 1981.

Dr. Keller then introduced Dr. E. Chin, Chairman of the ALPHA HELIX Review Committee, who recounted the difficulties his Committee has had in dealing with "proposals" for HELIX time which ranged from letters of intent to fully developed proposals. Conducting a proper review of each proposed project has been exceedingly difficult because of the mostly incomplete material submitted in recent years.

This situation led to the Committee's passing a motion at its 27-28 March meeting which led to the formation of an *ad hoc* committee made up of past users and other interested persons appointed by the Advisory Council. The committee, chaired by Dr. Barber, was charged with investigating the continuance of ALPHA HELIX as a National Oceanographic Facility (NOF). It met at Scripps 30 April 1979 and in essence its report, available from the UNOLS' Office, recommends its discontinuance as an NOF.

There were questions from the floor as to what elements went into the identification of research facility as a NOF. Miss M. Johrde pointed out there were and are three parties to NOF-type agreements: UNOLS, the operating institution and the funding agency(s). There must be concurrence among all three parties that such a designation will be useful to the community. She also mentioned that NSF had an internal review of expeditionary biology underway.

At the present time it appears as though the current operating season of ALPHA HELIX as a NOF will end in January 1980. *(17/6)*

5. GUEST SPEAKER

Dr. D. Frankenberg, Director, Division of Ocean Sciences, NSF discussed NSF's budget for FY1980 and in particular that of his division. He mentioned NSF's budget had gone forth to Congress with an overall increase of 9% over last year. In his division a $5.7M increase translates to 9.1% increase over last year and is distributed as follows among three sections:

Oceanography Section	$22M ($1.6M increase over '79)
Office for IDOE	$21.6M
Office for Oceanographic Fac. & Support	$25.6M

Dr. Frankenberg noted the cost of ocean science was rising at a greater rate than that of inflation. Also noted was the phase-out of IDOE in 1980 and that the National Science Board had recommended continued support by NSF of large programs. These would be managed by a new office to be known as Coordinated Ocean Research and Exploration Section (CORES). He noted that an NSF study on "Ocean Science Research Facility Requirements: 1980-1985" was currently underway and that so far very little new money was in sight for support of oceanography or the academic fleet. The Division of Polar Programs' sponsorship with Argentina of the operation of ISLAS ORCADAS was drawing to a close and that approximately $1M would become available for support of other vessels for Antarctic work. Most other agencies (other than NSF) do not anticipate any material increase in their current support levels.

Some of the speaker's viewgraphs on fleet funding appear in App. VI *(17/3)*

6. OUTLOOK FOR FY1980-81 SHIP SUPPORT

Forecasts by representatives from NSF, ONR, DOE, Sea Grant, NASA, USGS and BLM were presented.

NSF: Miss M. Johrde commented on two viewgraphs: academic fleet support assumptions in history and a projection of fleet support 1979-1983. She projects a deficit of $3-6M in fleet operations for 1980 and projected deficits for ensuing years follow:

Estimated Deficit ($M)

For	'80	'81	'82	'83
Low	3.0	3.8	4.7	5.8
High	6.1	7.1	8.4	9.7

Her viewgraphs may be found in App. VI.

ONR: Mr. K. Kaulum presented the following figures, reviewing Code 480 1979 support.

Direct R/V Support	$1.9-2M
NAVELEX	$300k
DSRV ALVIN	$350k
	$2.5-6M

He mentioned an additional $500k was being distributed for special facilities as well as $125k by NORDA in support of oceanographic cruises. The Navy also arranged for XBTs, sonobuoys, aircraft and satellite navigation receivers for use on Navy projects. In summation he projected approximately $2.9M for 1980.

DOE: Dr. A. Joseph stated DOE had spent $1.5M on R/V support, not necessarily UNOLS' vessels. Their interests center on the feasibility of deep disposal of radioactive wastes. He forecast a requirement of about one month ship time in fiscal year 1980 and somewhat more in 1981 on the Transient Tracers project, shared with NSF.

Sea Grant: Mr. H. McLellan stated their budget for FY80 was in Congressional process but that it projects no greater support in 1980 than in 1979.

NASA: Dr. M. Swetnick from the new Oceanic Processes Branch, headed by Dr. S. Wilson, stated that their support of academic oceanography breaks out in two modes: 1) support of science on the basis of unsolicited proposals and 2) joint support with other groups within NASA. He estimated about $100k for vessels coupled with a strong aircraft program in 1980.

USGS: Dr. R. Rowland indicated that about $1M was earmarked for 1979 ship operations off the Atlantic and Gulf Coast and that for 1980, funding would be about the same level. He said their requirements were roughly 20-40 days per year for vessels less than 100', 40-60 d/y for vessels of the OCEANUS class and 80-100 d/y for AGOR-sized vessels.

BLM: Dr. D. Allen briefly reiterated that their dollars in support of the fleet go via the USGS. *(17/7)*

7. OCEANOGRAPHIC EQUIPMENT WORKSHOP

A progress report illustrated by viewgraphs was presented by Dr. D. Spencer, one of three co-chairmen of the Oceanographic Equipment Workshop held last February at TAMU. He mentioned that the co-chairmen would meet in June to incorporate the institutional responses and individual comments on the workshop report. The workshop report entitled: "Basic Minimum Scientific Support Capabilities for UNOLS Vessels: Supply, Operation and Maintenance" will be available from the UNOLS Office. *(17/6)*

8. UNOLS' FLEET ASSESSMENT

Captain T. Treadwell led the discussion on this item referring to the April Advisory Council document edited by Dr. Keller which addresses this problem. This document did not purport to represent the views of the UNOLS' community but did offer a number of options such as reassignment of vessels, fleet size assessment, etc. He mentioned that JOI, Inc. was anxious that UNOLS tackle the problem of continuing deficit as it related to fleet support. Capt. Treadwell suggested that a study jointly sponsored by OSB, JOI, Inc., UNOLS and NACOA with input from fleet operators, scientists, agency representatives, etc. be held this summer and be complete by Fall. (Subsequently it came about that this workshop was not held, and re-examination of the fleet was carried out in a series of meetings by The Advisory Council and operators.)

Professor E. Allmendinger, NECCRF Association Chairman, read a statement to the meeting concerning the association's concern with the April 1979 document mentioned above which was concerned largely with the nature of coastal research programs and which types of vessels were best to carry them out. *(17/8)*

9. FUEL CONSIDERATIONS

Capt. R. Dinsmore led this discussion where the primary problems centered on fuel cost and availability. He called for suggestions as to how to cope with the inflationary characteristics of the problem in budgets. One proposal was that the fuel cost could be tied to the part of the world the investigator chose to work in and might be identified and billed directly to the user.

Cdr. J. Wright stated the Navy's oceanographic research programs were suffering a 15% cutback fuel allocation. He said his office would continue to be of whatever aid they could in obtaining fuel for Navy owned vessels and/or Navy funded projects but that no promises could be made. Capt. Treadwell mentioned that GYRE saved 10-15% of her fuel consumption by reducing speed 5%. Miss Johrde stated NSF was working with the Navy to see what could be done to mitigate the situation. *(17/9)*

10. FLEET MANNING CONSIDERATIONS

Mr. J. Gibbons reported on the results of his questionnaire relating to manning of the AGORs. This survey turned up nothing new but pointed out the fact that UNOLS' operators are unable to offer a competitive package of salary, time off with pay, career opportunities and general working conditions competitive with industry. He felt that there were only two alternatives;namely, to amend the charter party agreements regarding public vessel status or to offer a more competitive package. Before the latter alternative is adopted a study of the impact on the remaining vessels in the fleet should be undertaken. Prof. Allmendinger suggested attracting marine personnel via a school/work program leading to a master's degree. Some felt it would prove once again non-productive to approach the Coast Guard on the question of reducing manning requirements. Further study as to how to proceed seems to be indicated. *(17/10)*

11. R/V CLEARANCE PROCEDURES

Mr. Wm. Erb reported that his superior, Mr. Wm. Sullivan, in the Office of Marine Science and Technology Affairs, was leaving the Department of State and joining NOAA in Internal Marine Science Affairs. The remainder of his remarks touched upon law of the sea negotiations and concluded with a plea that more and timely data be included on future foreign clearance requests. The full text of his remarks appear in App. VII. *(17/11)*

12. FUTURE UNOLS' EFFORTS

Captain Treadwell mentioned three possible areas where UNOLS might focus its attention in the coming year: 1) a continuing update on fleet assessment, 2) the appointment of the UNOLS Technology Review Committee which would be composed of a broad spectrum of persons to carry on the impetus of the recent equipment workshop, 3) a marine technician workshop. There was very little further discussion on these three topics.

Dr. Frankenberg reiterated that the community does not have the same ship demands as it did in 1973 and that the Foundation cannot justify funding unused facilities. Any increases in funding that have come along,and there have been some, have been "eaten up" by inflation. *(17/12)*

13. OTHER TOPICS

Cdr. J. Wright gave a rundown on recent Navy reorganization which listed its oceanographic fleet under the appropriate commands. *(17/13)*

14. SHIP SCHEDULING SESSION

A ship scheduling session was conducted by the Executive Secretary pursuant to Amendment I of the UNOLS' Charter. The objective of the session was to compare schedules, which had been delineated on wall charts, with the end to achieving more effective use and to incorporate other outstanding requests not already considered. Note was made of the fact that an earlier session had been held 23 March 1979 at NSF, Washington, D.C. *(17/14)*

Second Day, May 18, 1979
Room 150

GENERAL

A list of Member & Associate Member Institution delegates is appended as App. VIII. A roll call showed all 17 Member Institutions and 7 out of 40 Associate Members represented.

1. AMENDMENT OF CHARTER

Certain changes to the wording of the Charter were recommended by the Advisory Council and had been circulated to the membership at least one month prior to this meeting as the Charter requires.

Dr. J. Schubel introduced the subject. The changes related to the definition of Member and Associate Member Institution, a modification to the makeup of the Nominating Committee, as well as an adjustment which allows widening the field of choice for Advisory Council candidates. Details may be found in App. IX.

The amendments passed on a vote of 15 in favor, 2 against. *(18/1)*

2. ELECTION OF OFFICERS

Those serving on the Nominating Committee this year were Drs. R. Barber, J. Martin, and W. Wooster. A slate was prepared from written nominations and presented to the membership. The Charter requires election or re-election of the chairman and vice-chairman annually. It was voted to waive the requirement that two candidates be put forth for the position of chairman. Capt. T. K. Treadwell and J. H. Martin were elected respectively to these positions. *(18/2)*

3. ELECTION OF THE ADVISORY COUNCIL

Drs. H. T. Rossby (URI) and B. H. Robison (USCB) were elected to replace Drs. R. Barber and J. Martin whose terms were expiring, thus maintaining the 5:3 ratio of Members to Associate Members on the Council. *(18/3)*

4. ALVIN REVIEW COMMITTEE APPOINTMENTS

Dr. R. W. Corell (UNH) had previously agreed to continue as Chairman if reappointed to the Committee. He was reappointed and Drs. M. Wimbush and R. N. Anderson (L-DGO) were appointed, replacing Drs. M. G. Gregg and D. E. Hayes respectively. *(18/4)*

4a. ALPHA HELIX

No appointments were made to this Review Committee as the vessel is no longer designated as a National Oceanographic Facility.

5. GUEST SPEAKER

Capt. Charles G. Darrell, Commanding Officer of NORDA, was scheduled to address the group on Thursday but was unable to do so until this time. He

gave an illustrated lecture on NORDA's activities in pursuit of its mission which involves applied research in the ocean environment. He mentioned the move to Bay St. Louis, where they are co-located with OCEANAV and NAVOCEANO. Other tenants are EPA, NMFS and USGS.

Their staff strength derives from both civilian and naval personnel. He mentioned NORDA is divided into five laboratory divisions: Oceanography, Under Water Acoustics, Numerical Models, Ocean Technology and Seafloor Studies. *(17/2)*

6. OTHER

Near the close of the meeting brief discussions were held on a number of topics such as whether it would be desireable to meet more often, the publishing of a newsletter, the date for a vessel schedule review session, the timing of NSF review panel meetings and a review of progress on the coastal research vessel (CRV). No definite action was taken.

Re the CRV, it was noted $3.1M was in the FY80 budget now in process. Four institutions, in association with others, had submitted excellent proposals and that a decision was possible by July, 1979.

Capt. Treadwell called for any other business or discussion. There being none he concluded the Ninth Annual Meeting with a strong plea for more participation on the part of the community in UNOLS' affairs, mentioning that a critical year was ahead and that he would be calling from time to time for assistance as required. *(18/5)*

The meeting was adjourned at 1120, 18 May 1979.

Thomas Stetson
Executive Secretary, UNOLS
July

REGISTERED ATTENDEES
UNOLS ANNUAL MEETING
MAY 17-18, 1979

Mr. Frank Alexander, OFS
Dr. David Allen, BLM
Prof. E. Eugene Allmendinger, UNH
Dr. George Anderson, U of WA

Dr. Donald C. Beaumariage, NOAA
Mr. William C. Boicourt, JHU

Mr. Frisbee J. Campbell, HIG
Dr. Edward Chin, U of GA
Mr. H. Lawrence Clark, NSF
Dr. John Costlow, Duke U

Captain Robertson P. Dinsmore, WHOI
Commander Joe Dropp, NOAA
Dr. Elgin A. Dunnington, U of MD

Mr. Richard Edwards, WHOI
Mr. William A. Erb, State Dept.
Mr. Richard G. Evans,
Mr. Robert Elder, NSF/OFS

Dr. Robert L. Fisher, SIO
Mr. Thomas F. Forhan, NSF
Dr. Dirk Frankenberg, NSF
Mr. James Gibbons, U. of Miami
Mr. Langston J. Goree, TAMU
Dr. M. Grant Gross, Johns Hopkins

Captain R. B. Haines, SIO
Mr. Wentworth V. Harned, NORDA/NSTL
Prof. Dennis E. Hayes, L-DGO
Mr. D. Heinrichs

Captain Karl William Jeffers, NOAA
Dr. David A. Johnson, NSF
Miss Mary K. Johrde, NSF
Dr. Robert S. Jones, Harbor Br. Found.
Mr. Arnold B. Joseph, US/DOE

Dr. Jay T. Katz, U of MI
Mr. Keith Kaulum, ONR/NSTL
Mr. Robert M. Kidd, Bigelow Lab.
Dr. G. Keller, OSU

Mr. Dean E. Letzring, TAMU

Mr. John H. Martin, MLML
Mr. Scott M. McKellar, NOAA
Mr. David W. Menzel, Skidaway
Mr. Dean M. Milliken, FIO
Prof. J. Robert Moore, U of TX
Mr. Hugh J. McLellan, NOAA, Sea Grant

Captain Eric B. Nelson, Duke U

Dr. Mark E. Odegard, ONR
Mr. Wadsworth Owen, U of De
Dr. Ned Ostenso, Nat'l Sea Grant Prog.

Dr. Daniel Panshin, U. S. Congres
Dr. Orrin H. Pilkey, Duke U

Dr. Adrian F. Richards, Lehigh U
Mr. Robert W. Rowland, USGS
Dr. Thomas C. Royer, U of AK

Dr. Jerry R. Schubel, SUNY
Mr. Robert W. Seaton,
Dr. Robert K. Sexton, URI
Dr. Bennett Lyons Silverstein,
Dr. Derek W. Spencer, WHOI
Dr. Martin J. Swetnick, NASA
Mrs. Sandra D. Toye, NSF
Capt. T. K. Treadwell, TX A&M U.

Mr. Eugene Bradford Veek, USC
Mr. Karl T. VonBock, Brookhaven Nat'l Lab.

Dr. Robert E. Wall, NSF
Captain John B. Watkins, U of WA
Mr. Edwin M. Williams, URI
Mr. Norm Wolf
CDR Julian M. Wright, Jr., USN
CDR Theodore Wyzewski, NODC

Dr. John M. Zeigler, VIMS

UNIVERSITY-NATIONAL OCEANOGRAPHIC LABORATORY SYSTEM

NINTH ANNUAL MEETING

AGENDA

0900 THURSDAY MAY 17, 1979, LECTURE ROOM
NATIONAL ACADEMY OF SCIENCES
2101 CONSTITUTION AVENUE, WASHINGTON, D.C.

1. INTRODUCTION & WELCOME BY CAPTAIN T. K. TREADWELL, CHAIRMAN, UNOLS
2. GUEST SPEAKER: CAPTAIN CHARLES G. DARRELL, CO, NORDA
   Oceanographic Platform Support at NORDA
3. GUEST SPEAKER: DR. DIRK FRANKENBERG, DIRECTOR, DIVISION OF OCEAN SCIENCES, NSF
   Developments in NSF's Ocean Sciences Division
4. REPORT BY THOMAS R. STETSON, EXECUTIVE SECRETARY, UNOLS
5. REPORT BY DEAN LETZRING, CHAIRMAN, RVOC
6. REPORT BY GEORGE H. KELLER, CHAIRMAN, UNOLS ADVISORY COUNCIL
   National Oceanographic Facilities: ALVIN - Dr. R. Corell
   ALPHA HELIX - Dr. E. Chin
   Oceanographic Equipment Workshop Update - Dr. D. Spencer
7. OUTLOOK FOR FY1980/1981 SHIP SUPPORT
   Forecasts by Representatives from NSF, ONR, DOE, SEA GRANT, USGS, NASA, Others

1130-1330 LUNCH BREAK N.A.S. CAFETERIA

8. UNOLS FLEET ASSESSMENT - CAPTAIN TREADWELL
9. FUEL AVAILABILITY & COST, A GENERAL DISCUSSION
10. FLEET MANNING CONSIDERATIONS - J. GIBBONS
11. R/V CLEARANCE PROCEDURES - WILLIAM ERB
12. FUTURE UNOLS EFFORTS - CAPTAIN TREADWELL
13. OTHER TOPICS
    This is an opportunity for representatives of research institutions as well as individual scientists and Federal officials to raise and discuss issues concerning matters of interest to the Meeting
14. SHIP SCHEDULING SESSION
    - *The ship scheduling session is an informal meeting for UNOLS members to meet, compare and discuss problems associated with 1980 ship schedules*
    - *The session is open to all persons interested and especially to scientists who have ship time needs in 1980 or 1981 and wish to present their needs to ship operators*
    - *Preliminary ship schedules have been developed by UNOLS members and collated sets will be available*

UNOLS BUSINESS MEETING

0830 FRIDAY MAY 18, 1979, ROOM 150, NATIONAL ACADEMY OF SCIENCES

1. AMENDMENT OF CHARTER
   Certain changes to wording previously circulated will be voted on
2. ELECTION OF OFFICERS
   The Charter requires election or re-election of the chairman and vice-chairman of UNOLS annually
3. ELECTION OF THE ADVISORY COUNCIL
   Expiring terms require the election of two members
4. APPOINTMENTS TO ALVIN REVIEW COMMITTEE
   Expiring terms require the appointment of three members to the ALVIN Review Committee
5. OTHER BUSINESS THAT MAY PROPERLY COME BEFORE THE MEETING

Executive Secretary's Report

After reporting on the recent oceanographic equipment workshop the Secretary continued as below.

Much time has been taken by concern with the fleet funding shortfall; this will be discussed further today and tomorrow.

At last fall's RVOC meeting, the Secretary initiated an updating of the 1973 R/V Safety Standards to comply with recent changes in the Code of Federal Regulations.

He noted the ALPHA HELIX Review Committee had met in March with the intent of filling in the 1979 season, laying out a reasonable schedule of programs for 1980 and to project 1981 operational areas.

For a number of years the review committee had considered annually a decreasing number of viable programs. This year was no exception and many "proposals" were simply restatements of intent from the prior year. This was unfortunate especially in light of this office's effort and that of others to rouse the community of possible users.

In August 1978 the Executive Secretary gave a presentation to a group of potential users assembled on the occasion of the Marine Biological Laboratory's 90th birthday at Woods Hole. Several ALPHA HELIX alumni were present and helped answer questions as to the actual mode of operation aboard.

Last September an updated flyer announcing the 1980-1981 program was mailed to 1200 members of the American Physiological Society, Division of Comparative Physiology, and about 900 flyers were mailed to previous users, applicants, and laboratory directors. An article describing the ALPHA HELIX program was also prepared for the October issue of The Physiologist.

In January, a letter was sent to all persons thought to have material for committee consideration. By meeting time, however, the showing was still so poor that the Review Committee passed a motion requesting the Advisory Council to consider whether ALPHA HELIX should continue as a National Oceanographic Facility. A panel was set up and has studied the question. Dr. Chin will have more to say on this today.

The ALVIN Review Committee met in Washington, D.C. in April 1979 to consider proposals and recommend a 1980 season of basically Atlantic operation. Data archiving, sample, film and tape policies continue under development.

Nominations for the Submersible Science Task Force have gone forth as called for by the Submersible Science Study. Florida Institute for Oceanography, Lamont-Doherty Geological Observatory, and Texas A&M have submitted proposals to house and staff the study's project office. These are pending with NSF.

More than 200 flyers were distributed to previous ALVIN users and others on the continuously evolving mailing list.

Other Briefly Noted

Some of you may recall Congressman John Breaux addressed this meeting last year on U. S. Fleet Efficiency. Subsequent to that he invited UNOLS to testify before his Subcommittee on Oceanography of the House Merchant Marine & Fisheries Committee, in July 1978.

Testimony was prepared and presented by Captain Treadwell, UNOLS Chairman, and Dr. Wooster, then Advisory Council Chairman. The former testified on the impact of the recent GAO report entitled "Need for Improving Management of U. S. Oceanographic Assets", and the latter on the recent UNOLS' report "On the Orderly Replacement of the Academic Fleet".

The Executive Secretary was invited to serve as a member of a select committee to study the "Defense Utillity of Commercial Maritime Assets", under the auspieces of the Maritime Transportation Research Board, National Academy of Sciences.

Present national emergency contingency plans do not take into account the existence of the offshore oil industry, towboat/barge, and commercial fishing and research fleets. Therefore, this panel examined aspects of mobilization and suitability for military missions of those fleets. This panel has now concluded its work and a report is in press.

Efforts continue to accommodate scientists as well as federal agency personnel desiring ship time on UNOLS' vessels, by dissemination of schedules and contact personnel information.

Tentative 1979 ship schedules were compiled and forwarded to the Commander, Naval Oceanography Command for publication with schedules of Navy and NOAA vessels last fall. They have been updated again for use here this afternoon.

Copies of the cruise reports forwarded to the office were encoded for computer compilation of ship-use statistics for 1978. These are available from the office.

This form has been slightly modified to provide information on work done in foreign waters, so that as of last January we are gathering data. The Secretary emphasized how important completed ship utilization forms are to the office. The majority of operators are very good at getting them in in a timely fashion.

The Federal Register continues to be monitored for notices of interest to vessel operators. All such notices are immediately dispatched, as well as notices by the Department of State affecting foreign clearance procedures.

The Executive Assistant attended the ad hoc committee on ship operations and equipment at NSF in September, as well as the ship forecast meeting held in Washington, D.C. in March 1979. At the latter was discussed scheduling and funding for 1980 and beyond. More of this will be done here this afternoon.

The UNOLS' Sponsored Second Working Conference on Oceanographic Data Systems was held 26-28 September at W.H.O.I. The PROCEEDINGS are now available.

The Executive Secretary also participates in SOCC reviews of Research Vessels: VELERO IV, OCEANUS, CONRAD, ENDEAVOR, WECOMA, CAYUSE, and CAPE HENLOPEN which were reviewed in the past year. WARFIELD and MAURY will be done next week.

A Bibliography of UNOLS' reports is available.

The Executive Assistant, Larry Clark, has taken leave for a year and is now with NSF's Division of Ocean Sciences.

Recently, we have heard Mrs. Toye of Miss Johrde's Office will be leaving June First. I want to say publically that her efforts on behalf of the UNOLS' community will be surely missed, but we wish her well in her next post.

Finally, he announded that Dr. Donald L. McKernan died May 9 while representing the State of Washington on an international trade mission in China. A memorial service will be held at the National Cathedral's Bethelehem Chapel on May 18 at 1 p.m. (*17/4*)

Research Submersible Facility Requirements Study

Panel Listing

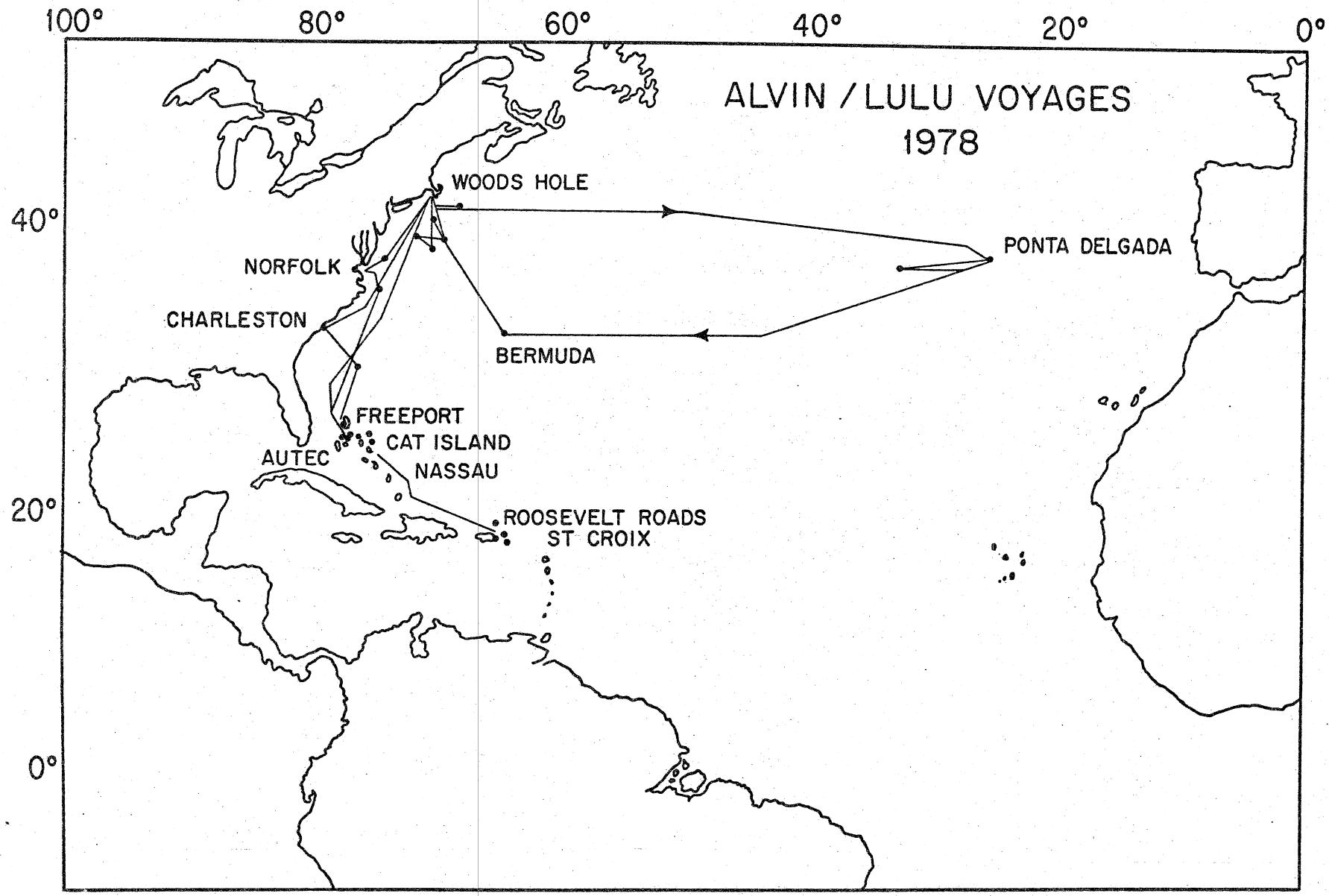
Science Assessment Panel

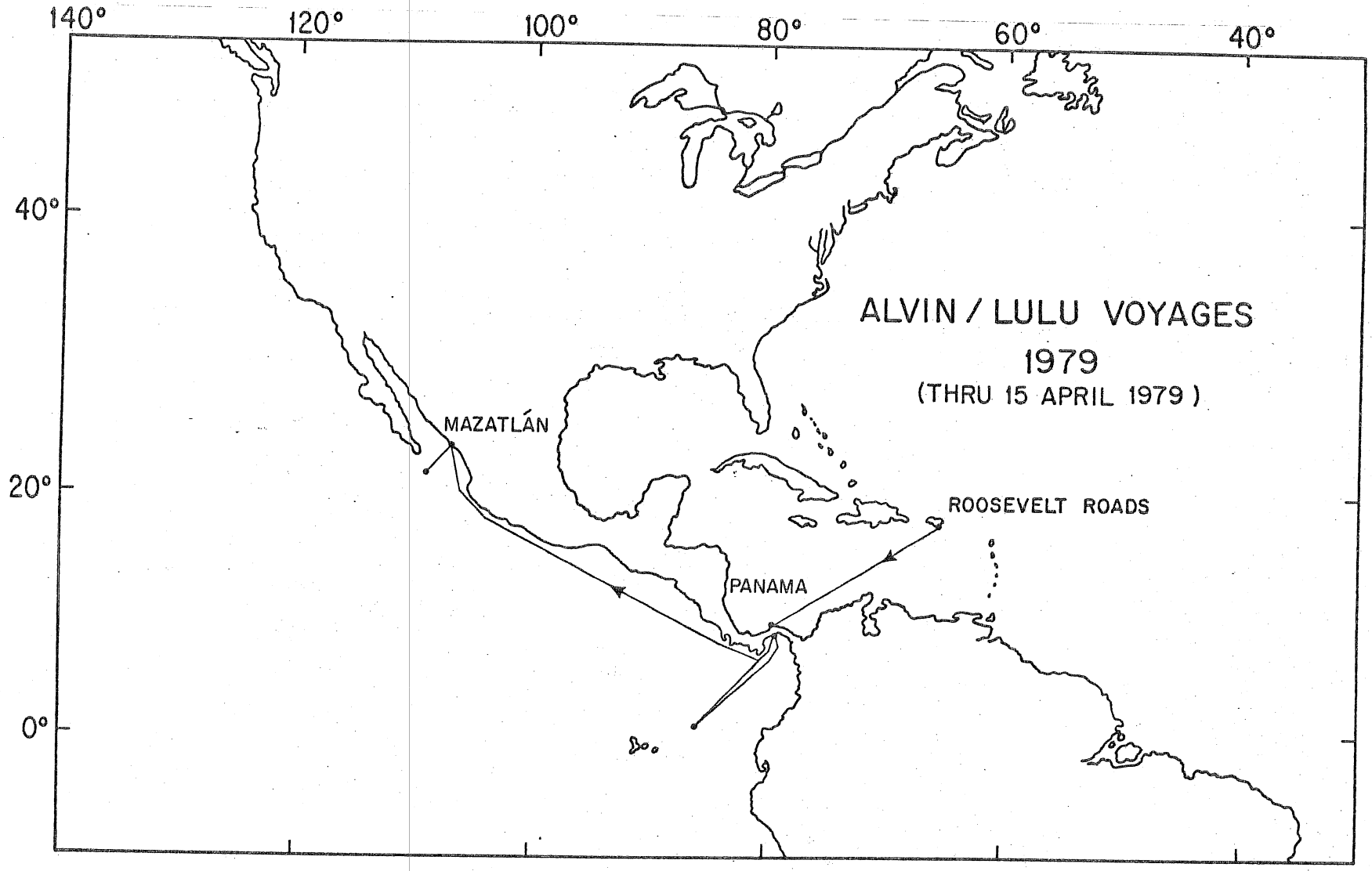
Dr. John B. Corliss, Ch., Oregon State U., Corvallis, OR
Dr. J. Frederick Grassle, Liaison, W.H.O.I., Woods Hole, MA
Dr. Richard A. Cooper, NOAA/NMFS, Woods Hole, MA
Dr. Joseph R. Curray, Scripps, La Jolla, CA
Dr. George H. Keller, Oregon State U., Corvallis, OR
Dr. Taro Takahashi, L-DGO, Palisades, NY
Dr. Mark Wimbush, U. of Rhode Island, Narrangansett, RI

Science Facility Planning Task Force*

Prof. E. Eugene Allmendinger, U. of New Hampshire
Dr. David Cacchione, U.S.G.S., Menlo Park, CA
Mr. Roger W. Cook, Harbor Branch Foundation, Ft. Pierce, FL
Mr. Norman B. Estabrook, SUBDEVGRU ONE, San Diego, CA
Mr. James F. Saunders, Perry Ocean Engineering, Riviera Beach, FL
Plus one representative from each sponsoring agency

*At this time a chairman has not been appointed.


ALVIN / LULU VOYAGES
1978
100°
80°
60°
40°
20°
0°
40°
20°
0°
WOODS HOLE
PONTA DELGADA
NORFOLK
CHARLESTON
BERMUDA
FREEPORT
CAT ISLAND
AUTEC
NASSAU
ROOSEVELT ROADS
ST CROIX


140°
120°
100°
80°
60°
40°
40°
20°
0°
ALVIN / LULU VOYAGES
1979
(THRU 15 APRIL 1979)
MAZATLÁN
ROOSEVELT ROADS
PANAMA

Appendix VI
D. Frankenberg
NSF May 1979

TABLE I
FLEET FUNDING 1973 - 1979
($M)

	1973	1974	1975	1976	1977	1978	1979
Funds expended on UNOLS shiptime for research projects							
NSF	11.6	12.5	13.4	13.6	15.0	15.8	16.4
ONR	3.8	3.6	3.5	3.2	2.6	2.4	1.6
OTHER	1.5	2.1	2.8	3.0	4.3	4.6	4.2
	16.9	18.2	19.7	19.8	21.9	22.8	22.2
B. Funds needed to support full operation of the UNOLS fleet							
TOTAL	16.9	18.5	20.4	22.3	23.8	24.5	26.4
Shortfall (B-A)	0	.3	.7	2.5	1.9	1.7	4.2
	34 Ships	30 Ships	28½ Ships	27½ Ships	28 Ships	28 Ships	29 Ships
Full layups			Chain out ½	Trident out Yaquina ½	Agassiz out	Agassiz out	
Partial layups			Melville Washington	Thompson Melville	Thompson Washington Gilliss	Vema Washington Alpha Helix Atlantis II Gilliss	Melville Vema Knorr Washington Atlantis II Cayuse

TABLE 2

Appendix VI
D. Frankenberg
NSF May 1979

OCEAN SCIENCES DIVISION

Budget Summary - 1974 - 1979 -- Actual $ (a) and Constant 1974 $ (b)

	1974	1975		1976		1977		1978		1979	
IDOE	a	a	b	a	b	a	b	a	b	a	b
Environmental Forecasting	3.1	5.1	4.6	6.0	4.9	4.8	3.7	6.0	4.4	6.2	4.2
Environmental Quality	4.5	4.4	4.0	3.9	3.2	5.1	4.0	5.2	3.8	5.4	3.7
Seabed Assessment	3.3	3.0	2.7	3.0	2.5	3.3	2.6	3.8	2.8	4.3	2.9
Living Resources	2.4	2.0	1.8	2.1	1.7	3.2	2.5	2.5	1.8	2.6	1.8
General Support	.5	.4	.4	.5	.4	.6	.5	.8	.6	.9	.6
	13.8	14.9	13.5	15.5	12.7	17.0	13.3	18.3	13.4	19.4	13.2
OCEANOGRAPHY											
Physical Oc.	3.0	3.3	3.0	3.1	2.5	3.3	2.6	3.7	2.7	3.9	2.6
Marine Chemistry	1.6	3.1	2.8	2.4	2.0	2.6	2.0	3.2	2.3	3.5	2.4
Submarine G+G	4.4	5.3	4.8	5.7	4.7	7.1	5.5	6.9	5.1	7.2	4.9
Biological Oc.	4.1	4.6	4.2	4.5	3.7	4.7	3.7	5.2	3.8	5.3	3.6
Instrumentation*	.3										
	13.8	16.3	14.8	15.7	12.9	17.7	13.8	19.0	13.9	19.9	13.5
TOTAL (Research)	27.6	31.2	28.3	31.2	25.6	34.7	27.1	37.3	27.3	39.3	26.7
OCEANOGRAPHIC FACILITIES + Support (OFS)											
Ship Operations	12.5	13.4	12.1	13.6	11.2	15.0	11.7	15.8	11.6	16.4	11.1
Ship Construction	3.6	4.0	3.6	.3	.2	.0	.0	1.7	1.2	3.1	2.1
Equipment/Facilities	.9	1.0	.9	1.2	1.0	1.2	.9	1.1	.8	2.5	1.7
Other Support (ALVIN,	1.3	2.2	2.0	1.2	1.0	2.1	1.6	2.1	1.5	1.1	.8
TOTAL OFS	18.3	20.6	18.6	16.3	13.4	18.3	14.2	20.7	15.1	23.1	15.7

* Instrumentation incorporated into program budgets after 1974

(b) Calculated by use of Department of Commerce Implicit GNP Deflator

A. Joseph
DOE May 1979

ESTIMATED SHIP SUPPORT BY DOE

Institution	FY 79	
U. Alaska	$ 7,000	
UCSD (SIO)	67,648	
L-DGO	83,790	to drop back
DOC-NMFS	2,500	
JHU(2)	54,325	
U. Mich.	10,500	
OSU	23,100	
Skidaway (Miami, NCSU)	200,000	
UW	82,083	
WHOI (3)	87,800	
TAMU	11,700	
		$630,446
BNL	$225,000	
LLL (Moss Landing)	15,000	
PNL	30,000	
CEER	40,000	
		$940,446
New	-	poss.
Marshall Is. Charter	$600,000	
CO_2 Pgm.	--	<1.5 (shared w/NSF-IDOE)
Deep Sea Disp.-Pgm.	300,000	1.5 2.5 2.5
OTEC-Hawaii	16,000	increase
UPR	?	LCU
SPRO	NOAA	
		$1,856,446

ACADEMIC FLEET
SUPPORT ASSUMPTIONS AND HISTORY
($M)

	FY 1977	1978	1979	1980
NSF (Ops)	15.0	15.8	16.4	17.4
(DPP)				0-1.5
ONR	2.6	2.4	1.6	2.1
Other Fed.	3.7	3.4	3.2	3.0-3.5
NAVELEX	(.8)	(.8)	(1.15)	
BLM/USGS	(2.1)	(1.3)	(.9)	
DOE	(.6)	(1.0)	(.85)	
NOAA, Others	(.2)	(.3)	(.3)	
State & Private	.6	1.2	1.0	1.0-1.5
Total	$21.9M	$22.8M	$22.2M	$23.5-26.0M

FLEET SUPPORT PROJECTIONS

1979-1983

	Est. 1979	1980	1981	1982	1983
Fleet Costs	$26.4M				
(low)		29.0	31.9	35.1	38.6
(high)		29.6	32.5	35.8	39.3
Support Est.	$22.2M				
(low)		23.5	25.4	27.4	29.6
(high)		26.0	28.1	30.4	32.8
Deficit	$ 4.2M				
(low)		3.0	3.8	4.7	5.8
(high)		6.1	7.1	8.4	9.7

NATIONAL SCIENCE FOUNDATION
1800 G Street, N. W.
Washington, D. C. 20550

CURRENT UNOLS FUNDING PROFILE

$ M

	1973	1974	1975	1976	1977	1978	Est. 1979	Proj. 1980
SF SHIP OPERATIONS	11.6	12.5	13.4	13.6	15.0	15.8	16.4	17.45
NR SHIP OPS & TECHS	3.8	3.6	3.5	3.2	2.6	2.4	1.6	2.5
OTHER" SHIP OPS**	1.5	2.1	2.8	3.0	4.3	4.6**	4.6**	4.9**
TOTAL FUNDS AVAILABLE	16.9	18.2	19.7	19.8	21.9	22.8	22.2	24.85
ACUTAL OR PROJECTED COSTS FOR FULL FLEET OPERATION	*16.9*	*18.5*	*20.4*	*22.3*	*23.8*	*24.5*	*26.4*	*27.9*
SF TECHNICIAN FUND	0.8	1.0	1.1	1.1	1.1	1.3	1.3	1.4
SF SHIP EQPT. FUND	1.2	1.0	1.0	1.0	1.2	1.1	1.2	1.6
SF SHIP CONSTRUCTION	0	3.5	4.0	0.3	0	1.9*	3.0	3.1

* 1.2 for Re-engining of ATLANTIS II
.7 for Polar and Coastal Design Studies

** "Other" Ship Operations

	1978	EST. 1979	PROJ. 1980
Other Navy (NAVALEX)	.8	1.15	1.2
ERDA (DOE)	1.0	.8	1.0
BLM	.3	.3	.3
USGS	1.0	1.0	1.0
NOAA & EPA	.3	.3	.2
Other/private	1.2	1.0±	1.2±
Total	4.6	4.6	4.9

SUMMARY OF UNOLS VESSELS' OPERATIONAL AND SUPPORT STATISTICS

1978

	OVER 200 FT.	150 FT. TO 200 FT.	100 FT. TO 149 FT.	60 FT. TO 99 FT.	ALL VESSELS
NUMBER OF VESSELS SUPPLYING DATA	7	8	5	8	28
AVERAGE OPS DAYS	277	248	199	147	217
AVERAGE ACTUAL DAYS AT SEA	244	203	179	143	187
AVERAGE COST (EST. 1978)	$1,500K	$921K	$626K	$219K	$804K
AVERAGE DAILY RATE (EST. 1978)	$5,533	$3,868	$2,881	$1,330	$3,756
AVERAGE MAN-DAYS AT SEA	4,487	2,515	1,751	716	2,357
PARTICIPATION BY UNOLS ASSOCIATE MEMBERS	6%	7%	20%	5%	8%
PARTICIPATION BY NON-UNOLS	6%	8%	30%	4%	11%
FOREIGN PARTICIPATION	5%	1%	4%	<1%	2%
SHIP SUPPORT FUNDING					
NSF	74%	59%	75%	60%	67%
ONR	18%	6%	0%	4%	8%
ALL OTHER FEDERAL	6%	33%	23%	26%	21%
NON-FEDERAL	2%	2%	2%	10%	4%

1979 SUMMARY OF OPERATIONAL COSTS

	$K AVERAGE COSTS				FLEET	
	Over 200 ft.	150-200 ft.	100-149 ft.	60-99 ft.	Total	
Crew Salaries	656	364	240	115	10,097	39%
Marine Staff	84	73	57	21	1,719	7%
Maintenance	63	58	46	16	1,335	5%
Fuel	206	175	61	16	3,468	13%
Food	94	61	37	11	1,493	6%
Insurance	39	33	28	8	773	3%
Travel	34	17	14	3	487	2%
Other*	272	177	133	72	4,356	17%
Indirect	142	89	44	19	2,184	8%
Total Expenses	11,127	9,413	3,297	2,075	25,914	

*Includes overhaul, stores, shore facilities & miscellaneous

UNOLS SHIPS/ AVERAGE OPERATING DAYS

	1972	1973	1974	1975	1976	1977	1978
VER 200 FT.	8/264	8/280	8/277	8/243	7/266	7/253	7/277
50 FT. - 200 FT.	7/253	7/259	8/252	8/243	8/233	8/278	8/248
00 FT. - 149 FT.	6/193	6/219	4/211	4/227	4/230	5/201	5/199
60 FT. - 99 FT.	13/180	11/187	10/174	9/152	9/149	8/170	8/147
OTAL NUMBER OF SHIPS	34	32	30	29	28	28	28

AVERAGE DAILY RATES

1973-1979

	1973	1974	1975	1976	1977	1978	EST. 1979
OVER 200 FT.	$3,749	$4,363	$5,144	$4,656	$6,104	$5,533	$5,581
150 FT. - 200 FT.	2,453	2,807	2,969	3,011	3,353	3,868	3,688
100 FT. - 149 FT.	1,388	1,715	2,079	2,645	2,444	2,881	2,689
60 FT. - 99 FT.	974	1,046	1,024	1,257	1,299	1,330	1,352

1979

PROFILE OF UNOLS FLEET

BY AGE & SIZE

	10 YRS. & UNDER	11-20	21-30	30 YEARS	TOTAL
OVER 200 FT.	KNORR MELVILLE	ATLANTIS II CONRAD GILLISS THOMPSON WASHINGTON	0	0	7
150 - 200 FT	ENDEAVOR OCEANUS NEW HORIZON MOANA WAVE WECOMA GYRE ISELIN	KANA KEOKI	0	VEMA	9
100 - 149 FT.	CAPE HENLOPEN	WARFIELD ALPHA HELIX EASTWARD	0	VELERO IV	5
65 - 99 FT.	CALANUS BLUE FIN CAYUSE LONGHORN	ACONA E. B. SCRIPPS	ONAR	HOH	8
ALL SHIPS	14	11	1	3	29

UNOLS RESEARCH VESSELS FLEET OPERATION - 1978

CRUISE DAYS PROFILE

RESEARCH VESSEL	PHYS OCEAN	ACCOU STICS	CHEM OCEAN	BIOL OCEAN	ENVIR &ECOL	FISH. INVST	CLIM/ METEO	GEOLE GEOPH	MAP & CHRTG	OCEAN ENGRG	TRAIN ING	TRANS NONSI	TOTAL
MELVILLE	49	0	48	0	0	0	0	256	0	0	0	0	353
KNORR	120	0	103	16	12	0	0	69	0	0	0	0	320
ATLANTIS II	105	0	0	33	44	0	5	57	0	0	0	0	244
CONRAD	0	0	0	0	0	0	0	341	0	0	0	20	361
J. GILLISS	45	0	0	0	0	0	0	112	0	0	0	0	157
T.G. THOMPSON	16	0	59	29	100	0	0	39	0	0	0	6	249
T. WASHINGTON	17	20	0	61	0	0	0	156	0	0	0	0	254
VEMA	0	0	0	0	0	0	0	161	0	0	0	0	161
ENDEAVOR	78	0	0	40	0	0	0	110	0	8	0	0	236
OCEANUS	57	22	30	83	20	0	0	37	0	0	0	0	249
WECOMA	53	22	72	0	31	0	0	38	0	0	0	4	220
GYRE	171	0	17	0	53	0	0	21	0	0	8	15	285
MOANNA WAVE	0	365	0	0	0	0	0	0	0	0	0	0	365
C. ISELIN	94	0	17	31	55	0	0	25	0	0	0	0	222
NEW HORIZON	0	0	0	0	0	0	0	2	0	0	0	0	2
KANA KEOKI	45	0	27	3	57	0	0	88	0	11	0	11	242
ALPHA HELIX	0	0	0	245	0	0	0	0	0	0	0	6	251
CAPE HENLOPEN	0	0	0	0	14	0	0	144	0	0	6	8	172
EASTWARD	20	0	0	38	15	0	0	151	0	0	0	48	272
VELERO IV	0	13	4	35	47	0	0	59	0	0	6	0	164
R. WARFIELD	7	0	23	46	39	0	0	21	0	0	0	0	136
E.B. SCRIPPS	3	19	0	14	34	0	0	71	0	16	4	1	162
ACONA	53	0	4	0	126	10	0	0	0	0	0	0	193
CAYUSE	23	0	7	25	11	34	22	7	0	0	0	0	129
LONGHORN	0	0	1	17	85	0	0	0	0	0	9	0	112
BLUEFIN	15	0	26	34	35	0	0	25	0	0	1	2	138
HOH	4	0	13	49	4	34	0	15	0	4	9	2	134
ONAR	41	3	64	25	0	0	0	2	0	2	15	2	154
CALANUS	0	0	26	62	4	0	0	61	0	0	1	0	154
TOTALS	1016	464	541	886	786	78	27	2068	0	41	59	125	6091
PERCENT	16.7	7.6	8.9	14.5	12.9	1.3	.4	34.0	.0	.7	1.0	2.1	

UNOLS RESEARCH VESSELS FLEET OPERATIONS - 1978

CRUISE DAYS PROFILE

NUMBER OF OPERATIONAL DAYS BY DISCIPLINE

	PHYS OCEAN	ACCOU STICS	CHEM OCEAN	BIOL OCEAN	ENVIR &ECOL	FISH. INVST	CLIM/ METEO	GEOLE GEOPH	MAP & CHRTG	OCEAN ENGRG	TRAIN ING	TRANS NOSCI	TOTAL
NAT'L SCIENCE FNDTN	807	16	446	793	440	44	20	1393	0	15	1	91	4066
OFF. NAVAL RESEARCH	106	83	17	0	0	0	7	283	0	6	0	13	515
US GEOL. SURVEY	0	0	0	0	42	0	0	316	0	0	0	0	358
BUR. LAND MNGMT.	15	0	0	0	70	0	0	0	0	0	0	0	85
NAT'L OCEAN/ATMOSPH	54	0	1	1	52	34	0	12	0	0	2	0	156
DEPT OF ENERGY	32	0	65	86	77	0	0	25	0	1	0	0	286
OTHER FEDERAL	0	365	0	0	19	0	0	0	0	1	0	8	393
STATE/MUNICIPAL	2	0	0	6	19	0	0	6	0	7	46	11	97
OTHER / PRIVATE	0	0	12	0	67	0	0	33	0	11	10	2	135
TOTALS	1016	464	541	886	786	78	27	2068	0	41	59	125	6091
PERCENT	16.7	7.6	8.9	14.5	12.9	1.3	.4	34.0	.0	.7	1.0	2.1	

UNOLS RESEARCH VESSELS FLEET OPERATION – 1978

CRUISE DAYS PROFILE

RESEARCH VESSEL	PHYS OCEAN	ACCOU STICS	CHEM OCEAN	BIOL OCEAN	ENVIR &ECOL	FISH. INVST	CLIM/ METEO	GEOLE GEOPH	MAP & CHRTG	OCEAN ENGRG	TRAIN ING	TRANS NONSI	TOTAL
UNIV. HAWAII	45	365	27	3	57	0	0	88	0	11	0	11	607
UNIV. ALASKA	53	0	4	0	126	10	0	0	0	0	0	0	193
UNIV. WASHINGTON	61	3	136	103	104	34	0	56	0	6	24	10	537
OREGON STATE UNIV.	76	22	79	25	42	34	22	45	0	0	0	4	349
SCRIPPS INST. OCEAN	69	39	48	320	34	0	0	485	0	16	4	7	1022
UNIV. SO. CALIF.	0	13	4	35	47	0	0	59	0	0	6	0	164
TEXAS A&M UNIV.	171	0	17	0	53	0	0	21	0	0	8	15	285
UNIV. TEXAS	0	0	1	17	85	0	0	0	0	0	9	0	112
UNIV. MIAMI. RSMAS	139	0	43	93	59	0	0	198	0	0	1	0	533
UNIV GA.. SKIDAWAY	15	0	26	34	35	0	0	25	0	0	1	2	138
DUKE UNIV.	20	0	0	38	15	0	0	151	0	0	0	48	272
JOHNS HOPKINS UNIV.	7	0	23	46	39	0	0	21	0	0	0	0	136
UNIV. DELAWARE	0	0	0	0	14	0	0	144	0	0	6	8	172
LAMONT-DOHERTY GEOL	0	0	0	0	0	0	0	502	0	0	0	20	522
UNIV. RHODE ISLAND	78	0	0	40	0	0	0	110	0	8	0	0	236
WOODS HOLE OCEAN. I	282	22	133	132	76	0	5	163	0	0	0	0	813
UNOLS ASSOC. MEM.	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	1016	464	541	886	786	78	27	2068	0	41	59	125	6091
PERCENT	16.7	7.6	8.9	14.5	12.9	1.3	.4	34.0	.0	.7	1.0	2.1	

UNOLS RESEARCH VESSELS FLEET OPERATIONS • 1978 •

OPERATIONAL DAYS CHARGED BY SPONSOR

	LOA	NATL SCI. FNDTN	OFF. NAVAL RES.	U.S. GEOL. SURV.	BUR. LAND MNGMT	NATL OCEAN ATMOS	DEPT. OF ENRGY	OTHER FEDER FUNDS	STATE OR MUNIC	PRIV/ FORGN FUNDS	TOTALS
MELVILLE	245FT	260	93	0	0	0	0	0	0	0	353
KNORR	245FT	271	7	0	0	12	30	0	0	0	320
ATLANTIS II	210FT	155	56	8	0	0	25	0	0	0	244
CONRAD	209FT	192	129	0	0	0	0	0	0	40	361
J. GILLISS	209FT	127	30	0	0	0	0	0	0	0	157
T.G. THOMPSON	209FT	240	8	0	0	0	1	0	0	0	249
T. WASHINGTON	209FT	198	20	0	0	0	34	0	2	0	254
VEMA	197FT	124	37	0	0	0	0	0	0	0	161
ENDEAVOR	177FT	197	18	0	0	0	21	0	0	0	236
OCEANUS	177FT	182	25	33	0	0	9	0	0	0	249
WECOMA	177FT	164	25	0	0	31	0	0	0	0	220
GYRE	174FT	186	5	21	30	0	5	13	0	25	285
MOANNA WAVE	174FT	0	0	0	0	0	0	365	0	0	365
C. ISELIN	170FT	106	0	67	28	0	21	0	0	0	222
NEW HORIZON	170FT	0	0	0	0	0	0	0	2	0	2
KANA KEOKI	156FT	207	16	0	0	0	0	0	8	11	242
ALPHA HELIX	133FT	251	0	0	0	0	0	0	0	0	251
CAPE HENLOPEN	120FT	0	0	121	0	0	0	8	6	37	172
EASTWARD	118FT	241	0	12	0	12	0	0	0	7	272
VELERO IV	110FT	143	0	0	13	0	0	0	8	0	164
R. WARFIELD	106FT	111	0	20	0	0	5	0	0	0	136
E.B. SCRIPPS	95FT	65	36	14	0	0	31	0	16	0	162
ACONA	85FT	96	0	0	0	53	2	2	0	40	193
CAYUSE	80FT	64	2	0	0	35	28	0	0	0	129
LONGHORN	80FT	48	0	0	14	10	0	0	32	8	112
BLUEFIN	72FT	47	0	25	0	0	63	0	0	3	138
HOH	65FT	116	6	0	0	1	0	1	10	0	134
ONAR	65FT	126	2	0	0	2	11	0	13	0	154
CALANUS	64FT	149	0	0	0	0	0	4	0	1	154
TOTALS		4066	515	321	85	156	286	393	97	172	6091
PERCENT		66.8	8.5	5.3	1.4	2.6	4.7	6.5	1.6	2.8	

UNOLS RESEARCH VESSELS FLEET OPERATIONS - 1978

PROJECT MAN-DAYS AT SEA BY SPONSOR

	TOTAL DAYS CHRGD	NATL SCI. FNDTN	OFF. NAVAL RES.	U.S. GEOL. SURV.	BUR. LAND MNGMT	NATL OCEAN ATMOS	ENER. R & D ADMIN	OTHER FEDER FUNDS	STATE OR MUNIC	PRIV/ FORGN FUNDS	TOTALS
MELVILLE	353	5026	1102	0	0	0	52	0	203	43	6426
KNORR	320	4975	341	0	0	363	515	0	0	48	6242
ATLANTIS II	244	3479	1080	112	0	32	679	0	31	131	5544
CONRAD	361	1756	1373	0	0	0	0	0	0	500	3629
J. GILLISS	157	2176	0	0	0	0	0	0	0	0	2176
T.G. THOMPSON	249	3101	309	0	0	0	70	0	0	0	3480
T. WASHINGTON	254	2651	478	0	0	0	781	0	0	0	3910
VEMA	161	1043	270	0	0	0	0	0	0	0	1313
ENDEAVOR	236	2554	517	0	0	24	247	0	10	0	3382
OCEANUS	249	1525	348	342	0	0	119	45	0	100	2479
WECOMA	220	1734	311	0	0	208	0	0	0	0	2253
GYRE	285	1894	15	285	450	10	72	195	0	379	3300
MOANNA WAVE	365	0	0	0	0	0	0	2184	0	0	2184
C. ISELIN	222	1014	0	763	252	0	284	0	0	0	2313
NEW HORIZON	2	18	0	0	0	0	0	0	4	0	22
KANA KEOKI	242	2622	45	0	0	24	0	0	104	129	2924
ALPHA HELIX	251	2048	0	0	0	0	0	142	0	29	2219
CAPE HENLOPEN	172	0	0	202	0	0	0	16	88	127	433
EASTWARD	272	2693	0	180	0	0	0	0	0	431	3304
VELERO IV	164	1332	17	0	143	0	32	0	204	0	1728
R. WARFIELD	136	786	0	239	0	0	45	0	0	0	1070
E.B. SCRIPPS	162	443	258	98	0	87	258	0	90	0	1234
ACONA	193	543	0	0	0	276	23	18	0	349	1209
CAYUSE	129	462	10	0	0	282	123	0	0	0	877
LONGHORN	112	245	0	0	94	49	0	0	317	58	763
BLUEFIN	138	139	0	156	0	0	303	0	32	19	649
HOH	134	463	44	0	0	10	0	3	84	0	604
ONAR	154	539	12	0	0	17	95	0	159	0	822
CALANUS	154	749	0	0	0	0	0	16	0	15	780
TOTALS	6091	46010	6530	2377	939	1382	3698	2619	1326	2358	67239
PERCENT		68.4	9.7	3.5	1.4	2.1	5.5	3.9	2.0	3.5	

UNOLS RESEARCH VESSELS FLEET OPERATIONS • 1978 •

OPERATIONAL DAYS CHARGED BY SPONSOR

LOA	NATL SCI. FNDTN	OFF. NAVAL RES.	U.S. GEOL. SURV.	BUR. LAND MNGMT	NATL OCEAN ATMOS	DEPT. OF ENRGY	OTHER FEDER FUNDS	STATE OR MUNIC	PRIV/ FORGN FUNDS	TOTALS ••••••
UNIV. HAWAII	207	16	0	0	0	0	365	8	11	607
UNIV. ALASKA	96	0	0	0	53	2	2	0	40	193
UNIV. WASHINGTON	482	16	0	0	3	12	1	23	0	537
OREGON STATE UNIV.	228	27	0	0	66	28	0	0	0	349
SCRIPPS INST. OCEAN	774	149	14	0	0	65	0	20	0	1022
UNIV. SO. CALIF.	143	0	0	13	0	0	0	8	0	164
TEXAS A&M UNIV.	186	5	21	30	0	5	13	0	25	285
UNIV. TEXAS	48	0	0	14	10	0	0	32	8	112
UNIV. MIAMI, RSMAS	382	30	67	28	0	21	4	0	1	533
UNIV GA., SKIDAWAY	47	0	25	0	0	63	0	0	3	138
DUKE UNIV.	241	0	12	0	12	0	0	0	7	272
JOHNS HOPKINS UNIV.	111	0	20	0	0	5	0	0	0	136
UNIV. DELAWARE	0	0	121	0	0	0	8	6	37	172
LAMONT-DOHERTY GEOL	316	166	0	0	0	0	0	0	40	522
UNIV. RHODE ISLAND	197	18	0	0	0	21	0	0	0	236
WOODS HOLE OCEAN. I	608	88	41	0	12	64	0	0	0	813
UNOLS ASSOC. MEM.	0	0	0	0	0	0	0	0	0	0
TOTALS	4066	515	321	85	156	286	393	97	172	6091
PERCENT	66.8	8.5	5.3	1.4	2.6	4.7	6.5	1.6	2.8	

Research Vessel Clearance Officer's Remarks
Mr. William Erb, Dept. of State

Once again it's a pleasure to see you all in Washington. It might be more appropriate if we all held telephones in our hands as that seems to be the way we usually communicate. However, this way nobody can hang-up!

As many of you are probably aware, Bill Sullivan has left the Department of State to work with Dave Wallace at NOAA on International Marine Science Affairs. Bill has worked long and hard in helping to solve the international problems of research vessels and I'm sure he'll continue this effort at NOAA.

Norm Wulf, previously on the staff of the General Counsel at NSF, has been named the new Director of the Marine Science and Technology Affairs Office at State. Norm acquired his sea legs as a naval officer but has spent most of his time negotiating in the Law of the Sea Conferences as Chairman of the Committee on marine science. Norm is here today and might like to say a few words.

The Law of the Sea Negotiations are continuing with a session scheduled for New York this summer. The affect on research vessel operations has been a slow but continuous implementation of conditions similar

to those appearing in the draft LOS texts. There have been requests for data samples, suggested but not implemented data restrictions (except for Trinidad and Tobago), participation on cruises, requests for research at sites suggested by the coastal state, and others. Most of the requests are acceptable but they add to the cost of the research and complicate the processing of requests. If an LOS treaty is concluded, or not, coastal states will continue to develop regulations to protect their interests and to ensure benefits related to the conduct of research.

Another direct result of the negotiations has been coastal state extensions of their jurisdictions. According to the Geographer's Office at the State Department, as of March 12, 1979, the following numbers are worth noting:

Territorial Seas

Total independent coastal states - 132	Breadth (NM)	No. of States
	3	31
	12	75
	200	14

Fishing Limit Claims

Breadth (NM)	Number of States
12	35
200	78

200 Mile Economic Zones - 44

It is very apparent that the boundaries will continue to move seaward and we will continue to not recognize extensions of jurisdiction, particularly over marine science. However, it has been possible to work around the problem of conflicting jurisdictions by careful planning of research cruises.

Most of our problems seem to stem from regulations and processing procedures utilized by foreign governments. By far our major problem this year has been in dealing with Mexico. Some of the problems were brought upon by ourselves and others by the Mexicans. Of those that we can probably solve ourselves are:

1. timely submission of clearance requests,
2. better coordination of major research projects that involve several institutions and ships,
3. scientific communications between US and Mexican scientists are encouraged but they should not seek approval or contain information conflicting with officially submitted clearance requests.

The problems requiring Mexican cooperation to solve are:

1. timely processing of clearance requests
2. greater flexibility in their processing procedures, (for example - a simple change of dates should not require processing a diplomatic note but rather it could be done by telephone).

3. a definite response to the clearance request should be given, either a yes or no

4. the GOM should identify problems early, so that additional info can be provided

5. the requirement that transit visas can only be issued after a clearance is approved is not workable; insufficient time remains following the clearance approval to acquire the visa.

As a result of the problems with Project ROSE and several other clearance requests, pressure was put on the Mexicans to improve their processing of clearances. Rosensweig Diaz, an Undersecretary in the Mexican Foreign Ministry, was given full responsibility for processing clearances. Under him Victor Solano carries out the day to day responsibilities.

John Negroponte, Director of Oceans and Fisheries Affairs at State and Bob Fisher travelled to Mexico to meet with Rosensweig on marine sciences. Their meeting was productive and the Mexicans appear ready to improve the procedures. As a result of their meeting, I will meet with Victor Solano during the week of 28 May to begin this work.

A handout has been prepared which is available on the back table. It summarizes the clearance events for 1978 and identifies some of the clearance problems.

Mexico once again heads the list with 30 clearance requests submitted to Mexico.

The situation involving cruise reports has improved. The cruise reports are being forwarded to host countries a few months after completion of research cruises. Reminders are almost always needed and usually at least three months passes before the report is received by the host country. Our objective is to get the report to the host country within one month after the cruise, without sending reminders. On a positive note, we have not been pinged on this year by any foreign ministries to provide overdue cruise reports.

The UNOLS forms, the Clearance Prospectus and Clearance Request forms, have worked fairly well. Researchers need to beef up the section on objectives and purpose of the research. Coastal states want to know the reasons why a certain type of research is planned. It is not enough to say for example that a seismic research program is planned to study the ocean substructure. Many want to know why the research is important or what theories are being proven. When the reasons are not given it automatically opens up speculation that our real motive is to locate resources or military objectives are involved.

Charts depicting the research area become more important as coastal states extend their jurisdictions. Charts should show the planned track of the vessel, station locations, and survey lines. If numbers or symbols are used on the charts it is important that a legend be included because it invariably raises questions that can result in processing delays.

One aspect of the Clearance Officer - research vessel community relationship I would like to mention is that of cooperation. The U.S. approach to conducting research is unique in the sense that government and private vessels conduct extensive research in foreign waters. The operation and control of research vessels is fairly informal and independent. However, the system works well. There are problems but we still seem to get the job done and I think this can be attributed to the excellent ability of the people in the research community to cooperate in solving the problems.

This past year there was a case involving the Melville and Hero. The ships were enroute to Chile and Argentina when the Department received information that a war was imminent between Chile and Argentina. Contact was made with the vessel operators and they were advised not to make their port calls as planned.

The operators realized the potential dangers and diverted their ships to other ports, which resulted in inconvenience to personnel and additional expense. As it turned out, war was averted by actions of the Oope.

The Washington Newsletter of Oceanography and Sea Technology Magazine reported this incident as State Department intervention without bothering to report that there was good cooperation and the critical issue was safety of the vessels and those aboard. The Department does not have the authority to order research vessels in or out of geographical areas. The Department will in the future continue to advise when research vessels may be endangered by local conflicts and we are confident that the good judgment of the operators will prevail.

17 May 1979

DELEGATES TO UNOLS' BUSINESS MEETING
18 MAY 1979, ROOM 150, NATIONAL ACADEMY OF SCIENCE
WASHINGTON, D.C.

UNIVERSITY OF ALASKA
Prof. Thomas C. Royer

UNIVERSITY OF DELAWARE
Mr. Wadsworth Owen

DUKE UNIVERSITY
Capt. Eric B. Nelson

UNIVERSITY OF HAWAII
Mr. J. Frisbee Campbell

JOHNS HOPKINS UNIVERSITY
Mr. William C. Boicourt

COLUMBIA UNIVERSITY
LAMONT-DOHERTY GEOLOGICAL OBSERVATORY
Dr. Dennis E. Hayes

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

UNIVERSITY OF MICHIGAN
GREAT LAKES AND MARINE WATERS CENTER
Dr. Jay T. Katz

OREGON STATE UNIVERSITY
Dr. George H. Keller

UNIVERSITY OF RHODE ISLAND
Mr. Robert K. Sexton

UNIVERSITY OF CALIFORNIA, SAN DIEGO
SCRIPPS INSTITUTION OF OCEANOGRAPHY
Dr. Robert L. Fisher (by proxy)

UNIVERSITY OF GEORGIA
SKIDAWAY INSTITUTE OF OCEANOGRAPHY
Dr. David Menzel

UNIVERSITY OF SOUTHERN CALIFORNIA
Mr. Eugene B. Veek

UNIVERSITY OF TEXAS
Prof. J. Robert Moore (by proxy)

TEXAS A & M UNIVERSITY
Captain T.K. Treadwell

UNIVERSITY OF WASHINGTON
Dr. George C. Anderson

WOODS HOLE OCEANOGRAPHIC INSTITUTION
Capt. Robertson P. Dinsmore

FLORIDA INSTITUTE FOR OCEANOGRAPHY
Mr. Dean Milliken

HARBOR BRANCH FOUNDATION
Dr. Robert S. Jonew

LEHIGH UNIVERSITY
Dr. Adrian F. Richards

MOSS LANDING MARINE LABORATORY
Dr. John H. Martin

UNIVERSITY OF NEW HAMPSHIRE
Prof. E. Eugene Allmendinger

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

VIRGINIA INSTITUTE OF MARINE SCIENCE
Dr. John M. Zeigler

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6/79

(with designated representatives)

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UNIVERSITY OF WISCONSIN AT MILWAUKEE
Dr. David N. Edgington

UNIVERSITY - NATIONAL OCEANOGRAPHIC LABORATORY SYSTEM

CHARTER AMENDMENTS

Changes Proposed by
Advisory Council to UNOLS' Charter

I. A motion was passed recommending the following change to 2.(e) para. (1) p. 2 of current Charter:

(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... [continue as in current Charter].

A motion was passed recommending the following change to 2.(e) para. (2) p. 2 of current Charter:

(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... [continue as in current Charter].

A motion was passed recommending the following change to 3.(c), p. 3 of current Charter:

II. 3. Elections

(c) A Nominating Committee *consisting of three individuals, two from UNOLS Member Institutions and one from an Associate Institution* will be appointed by the UNOLS Chairman to consider the nominations... [continue as in current Charter].

Circulated to entire
Membership 20 March 1979
with current Charter.

III. A motion was passed recommending the following change to 4.(b), p. 3 of current Charter:

4. UNOLS Advisory Council

(b) The Advisory Council shall be comprised of eight members, five of whom will be from Member Institutions and three from Associate Institutions *or other non-Member Institutions*. No more than one member will serve from any one institution. Members will be elected for three-year terms with no limitation on the number of terms. Vacancies occurring during the year shall be filled at the next Annual Meeting.

Election of representatives of Member Institutions to the Advisory Council shall be by a simple majority vote of UNOLS Members present or by proxy, if absent. Representatives of Associate Member Institutions or other non-Member Institutions shall be elected by a simple majority vote of UNOLS Member and Associate Member Institutions present or by proxy, if absent.

If the above is approved, then it follows paragraph 10.(a), p. 6 of current Charter shall be made to read:

10. Voting

(a) *Except in elections to the Advisory Council,* voting at all UNOLS meetings and on matters submitted by the Chairman through correspondence shall be on the basis of UNOLS Member Institutions, each being entitled to one vote.

Circulated to entire
Membership 20 March 1979
with current Charter.