

UNIVERSITY - NATIONAL OCEANOGRAPHIC LABORATORY SYSTEM



ADVISORY COUNCIL MEETING
May 20, 1985
Joseph Henry Building
National Academy of Sciences
2100 Pennsylvania Avenue NW
Washington, DC

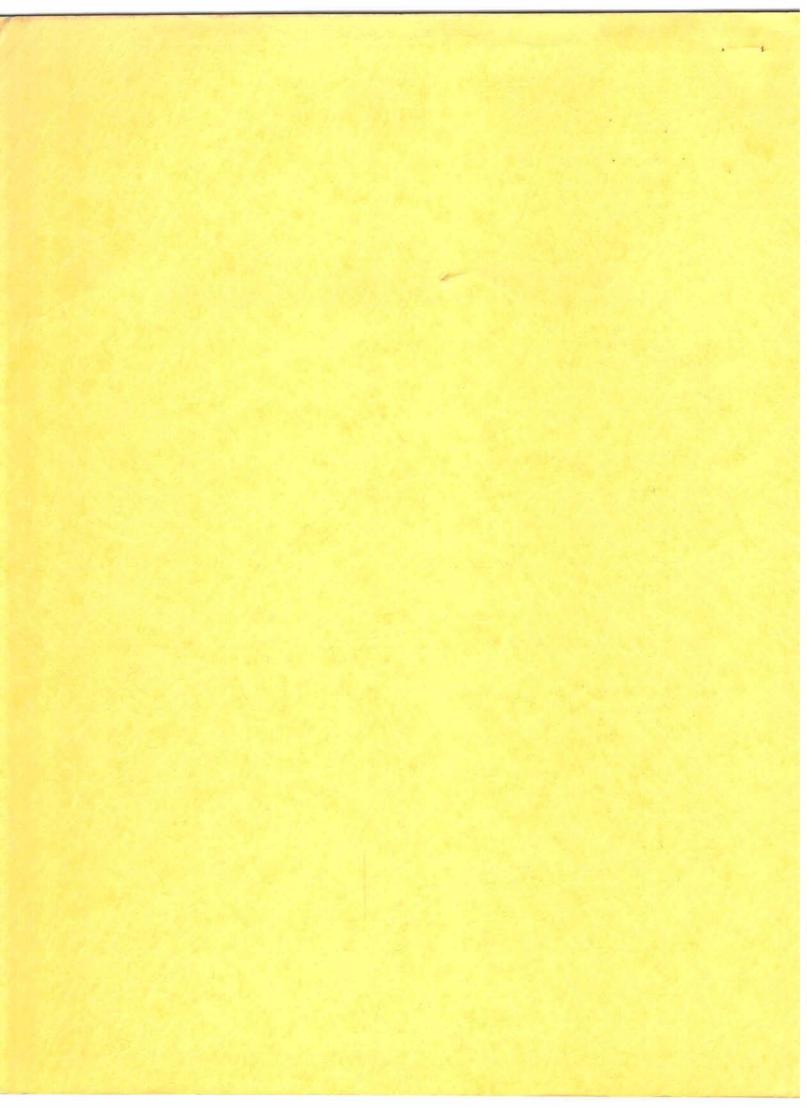
Advisory Council members together with representatives of the National Science Foundation, Office of Naval Research, Minerals Management Service, U.S. Geological Survey and UNOLS institutions met in room 353, Joseph Henry Building. The meeting was called to order at 8:30 a.m. by Chairman Charles B. Miller. The Chairman presented the agenda (Appendix I).

Attendees

Advisory Council
Charles B. Miller, Chairman
Harris B. Stewart, Jr., Vice Chairman
Robertson P. Dinsmore
Donn S. Gorsline
Carl Lorenzen
Thomas C. Malone
Arthur E. Maxwell
Bruce Robison
Ferris Webster, ex-officio

UNOLS Office William D. Barbee Mitchell Stebens Observers
Grant Gross, NSF
Larry Clark, NSF
Thomas Cooley, NSF
John McMillan, NSF
Sandra Toye, NSF
Richard West, NSF
Keith Kaulum, ONR
Wesley Lovaas, ONR
Hawley Thomas, MMS
Robert Rowland, USGS
William Erb, DOS





Minutes of January 21-23, 1985 meeting. The minutes of the January meeting were not available for review.

Composition, Distribution and Management of the UNOLS Fleet-1985 Review. The Chairman led discussion of the draft review (as had been circulated April 8 to UNOLS Members and the Council). Discussion also covered comments received from both Council and UNOLS Members. Comments generally were to ask for more careful summaries of recommendations etc., to seek clarification of points raised on the condition of individual ships and their operational performance and to question the Council's assessment of some fleet replacement actions by UNOLS Members.

NSF had supplied new information (a letter dated May 2, 1985 from Sandra Toye to UNOLS Ship Scheduling Committee, Appendix II) on the expected levels of funded science ship requirements and facilities (ship) funding support for 1986. This information more clearly defined the need for ship lay-ups in 1986, and caused concern over the UNOLS scheduling process and how individual ships might be picked for lay-up. The Council reached the following recommendation, which is to be included in the 1985 review.

The Advisory Council recommends that UNOLS take a direct part in selecting ships for lay-ups to save money. Because lay-up recommendations will arise from the scheduling process, the East, West and Joint Scheduling Committees of UNOLS should produce recommendations for lay-ups as early as possible each year.

(The scheduling groups had already began this process by holding an ad hoc meeting to address Western Pacific scheduling, and agreed to address the 1986 lay-up problem.)

re-iterated their theme in the 1982 Composition, Council The Distribution and Management of the UNOLS Fleet and in subsequent reviews that constraint to funding for ocean science is the basic problem facing the community. Funded science drives the UNOLS fleet, and ships will not be funded beyond the requirements of funded science. The Advisory Council noted that they and others have identified the problem repeatedly, but have done little toward effective solutions. Certainly under the current climate, it is futile to simply recommend bigger budgets for NSF and ONR ocean science. Perhaps solutions should be sought through other means: recommendations to stretch ocean science funding by seeking high leverage cost effective situations; close examination of the internal distribution of funds; and exploration for new funding sources. Council agree that these thoughts should be reflected in their 1985 review.

The Chairman identified and made assignments to complete accepted changes to the April 8, 1985 draft review.

The Advisory Council decided that their report Composition, Distribution and Management of the UNOLS Fleet, A Review 1985 would be delivered orally by Chairman Miller to the UNOLS assembled membership and to representatives of the Federal sponsoring agencies at the May 22, 1985 meeting. That final report (review) will be published and distributed to UNOLS Members, Associate Members, Federal sponsoring agencies and others

among the oceanography community without delay. (The report has been distributed separate from these minutes.)

UNOLS review of facilities aspects of NSF's long range planning document Emergence of a Unified Ocean Science, and potential UNOLS roles in the management of facilities in addition to ships and seagoing facilities. These related issues had been introduced at the January, 1985 Advisory Council meeting, and correspondence since then has helped clarify the issues.

Discussion centered on the questions: Should UNOLS have such roles? If so, what should be their modes and mechanisms? What should be recommendations to UNOLS?

Management of facilities was addressed first. Various Council members urged strongly that the facilities management issues should be put before the UNOLS membership and that the Council's recommendations should be proactive. Two principal kinds of facilities are identified in the Advisory Committee on Ocean Sciences long range plan: multichannel seismic facilities and satellite imaging facilities. There are, in addition, a broad range of other facilities, less well defined and supported, perhaps now best considered as potential. Supercomputer capabilities for the ocean community remain of interest. Thus it was urged, the Council and UNOLS should consider a broader scope of facilities than satellites and supercomputers.

In addition to NSF's Advisory Committee on Ocean Sciences, JOI, Inc. is addressing some or all of these issues.

The Advisory Council established a subcommittee on advanced technical oceanographic facilities, with the following terms of reference:

To advise UNOLS on its possible future role in the coordination of non-traditional oceanographic facilities. Such facilities go beyond the traditional concept of ships and other seagoing platforms and might include satellite facilities, data, and products, large-scale computers, and multichannel seismic systems.

The subcommittee should:

- 1. Review existing systems and future needs for satellite facilities, supercomputers, and multichannel seismic systems.
- 2. Consider problems of access to such facilities, if any, and procedures whereby access might be improved.
- 3. Consider possible UNOLS roles that might improve the coordination, management and use of the facilities.
- 4. Examine how the UNOLS role might interact with other groups, such as JOI, Inc. and the NSF Advisory Committee on Ocean Sciences.
- 5. Consider the financial implications of implementation.
- 6. Prepare a report to the UNOLS Advisory Council in time for it to be

considered by UNOLS at the Semiannual meeting in October, 1985.

Possible subcommittee members include:

Otis Brown University of Miami
Robert Corell University of New Hampshire

Catherine Grutier CALSPACE/Scripps

Dave Haidvogel NCAR
Brian Lewis University of Washington Greg Moore University of Tulsa
James O'Brien Florida State University

Harvard University Allan Robinson

Bruce Robison University of California, Santa Barbara

Examine Agenda for May 22, 1985 Semiannual meeting. UNOLS Chairman's Report. Ferris Webster outlined for the Council his report. The outline included his UNOLS Chairman's testimony to the House Merchant Marine and Fisheries Committee, Subcommittee on Oceanography, and subsequent exchanges with Committee staff on Federal funding for oceanographic research. (This information has been published in UNOLS NEWS and in earlier meeting reports.)

The Chairman declined to provide UNOLS comments on NOAA's 1985 budget for ship operations.

He has represented UNOLS at meetings of the Federal Oceanographic Fleet Coordination Council, (FOFCC) most recently in January. FOFCC is developing procedures for advanced planning for research ship operations and is interested in our UNEPC experience.

The Chairman has worked with NSF, USGS and the State Department to develop means to assure that post-cruise obligations are met for foreign cruises. A policy that doesn't unjustly penalize the ship operating institution is indicated in NTRVO 66.

Dr. Webster also attended a meeting of ocean principals called by Dr. John Knauss, Chairman, Marine Division, NASULGC. Issues were to achieve a more effective ocean research voice on the national scene, concern about the NAS/NRC advisory system for oceanography and concern about NOAA. No surprise agreements were reached, but participants felt that such meetings might be of value, and will meet again.

The Chairman (together with other UNOLS officials) has addressed recent efforts to control or classify oceanographic data. These efforts are specific concerning swath system bathymetric data collected (or to be collected) in the EEZ. So far only data from NOAA EEZ programs are cited, but data for academic oceanography programs may also be affected. There is concern that actions by the U.S. in their EEZ may lead to reciprocal controls that would restrict U.S. investigators' work in foreign investigations.

The Chairman has also participated in discussions with Federal officials concerning non-traditional oceanographic facilities (the lead in UNOLS is now with the Advisory Council) and concerning a center for

international marine science coordination (being addressed both by Advisory Council and IROSC).

Advisory Council Report. Advisory Council Chairman Miller reviewed his report to be delivered to UNOLS and sponsoring agencies on May 22, 1985. The report emphasizes the Council's review of Composition, Distribution and Management of the UNOLS Fleet, especially recommendations and comments on actions by individual institutions. Beyond that review, the Chairman's report will deal with 1984-1985 Council actions on specialized facilities, on international restrictions and the clearance process, on the fleet replacement process and on scheduling problems and the Council's recommendations.

ALVIN Review Committee Report. The ALVIN Review Committee held their annual review of ALVIN dive requests in Woods Hole on May 6, 7, 1985. The ARC reviewed 37 dive requests for 578 dives in 1986/1987 and made schedule recommendations to include 17 requests for about 200 dives. A provisional schedule was developed for 1986 (from the 1985 recommendations together with recommendations remaining from the 1984 review) that would have ATLANTIS II/ALVIN take up work in the North Atlantic in about March, 1986, support investigations in the Gulf of Mexico along transit to the Canal, and, in the Pacific, work in the Panama Basin and California Basins, ending the year in San Diego.

No schedule was developed for 1987. The most likely schedule would support work in the vicinity of Hawaii and the mid Pacific enroute to the Mariana region. After completing recommended work there (late winter/spring 1987) the ATLANTIS II/ALVIN would return to the eastern Pacific, most likely the Gorda-Juan de Fuca - Oregon margin area. Work there and perhaps in the California Basins and farther south would finish operational availability prior to return to Woods Hole.

The Deep Submergence Group, W.H.O.I., ALVIN operators, reported on the 1984 ALVIN season and projected 1985 operations (complete report in ALVIN REVIEW COMMITTEE, Summary Report, May 6, 7, 1985 Meeting). In 1984, 174 dives were completed in 194 days on station, 266 days at sea. Projections for 1985 are: 150 dives, 157 days in station, 207 days at sea. By May, only one dive scheduled for 1985 had not been made.

At the request of the sponsoring agencies, ARC will make a review and report of the ALVIN supported science program: An Overview Review of Submersible Supported Science: An ALVIN Review Committee Perspective. Target date for the report is October, 1985.

The Advisory Council requested a summary of ALVIN, LULU, ATLANTIS II (in support of ALVIN) and escort ship costs. These were provided from NSF/OCFS (Appendix III).

International Restrictions to Ocean Science Research Committee (IROSC). Harris B. Stewart, Jr., Committee Chairman, noted that he would report to UNOLS on a variety of activities that had been undertaken through IROSC.

IROSC and the UNOLS Executive Committee had commented to the State Department and to NASULGC on policing post-cruise obligations for research

investigations in foreign jurisdictions. The UNOLS position is that they will cooperate in assuring fullfillment, but that it is a State Department function to monitor and police post-cruise obligations. The new State Department NTRVO 66 (distributed to UNOLS institutions May 9, 1985) reflects the UNOLS position.

UNOLS received an inquiry from John Knauss, Chairman, Marine Division, NASULGC concerning an office or center for international marine cooperation. (This issue had earlier been presented to the Advisory Council and to UNOLS, and reported in various Council and UNOLS meeting reports. Dr. Knauss' letter is Appendix IV.) After review by the UNOLS Executive Committee and IROSC, the UNOLS Chairman will respond:

- 1. The functions, as outlined in Dr. Knauss' letter and as amplified in Dave Ross' testimony to the House Merchant Marine and Fisheries Committee are important, and should be carried out.
- 2. A center to carry out such functions would be better established at a university or marine institution rather than within the UNOLS structure. UNOLS does not have the means to do such work, and there is concern that UNOLS should continue in a coordinating, rather than operational role.
 - If a center is established, UNOLS will cooperate, especially in furnishing information via the UNOLS Office.

In endorsing the IROSC/UNOLS position the Advisory Council suggested that a proposal be developed and funding be sought, without suggesting a specific source.

Harris Stewart also provided IROSC comments to DOS on draft revisions to the scientific research part of regulations for foreign fishing in the Fisheries Conservation Zone.

Committee on Fleet Replacement. Robertson Dinsmore, FRC Chairman, reported briefly on recent Committee actions and the status of FRC's proposal for a ship replacement plan, along with other activities. His report was to be included in the meeting report for the May 22, 1985 UNOLS Semiannual meeting.

At the end of the Advisory Council meeting, he reported on the KAIMOLINO - scientific use project, on the FRC's visit to Japan for inspection of the Japanese SWATH ship KAIYO and other ships. The Lang SWATH design was also noted.

Report on East-West Scheduling Groups. Robertson Dinsmore, Bruce Robison and Harris Stewart reported on the March 11 West Coast and March 15 East Coast Ship Scheduling meetings. Tentative schedules indicated heavy ship use in 1986 (about 5700 days). However, funding information provided by NSF/OCFS (Appendix II) indicates that science program requirements as well as ship support funding would allow only about 5000 days operation. A

significant amount of schedule re-adjustment and some layups seem likely for 1986. The Advisory Council recommendation on early identification of layups to UNOLS and the Ship Scheduling Groups is shown earlier in these minutes.

Report on UNEPC. Since there had been no UNEPC meeting since the Council's last meeting, no report was made. A question was raised regarding UNEPC's position on tentative proposals for work in the Black Sea in the near future.

Draft Safety Standards. The Council noted that Draft UNOLS Safety Standards had been distributed to UNOLS Member Institutions so that they could be reviewed and advanced for adoption at the UNOLS Semiannual meeting on May 22, 1985. They were to be introduced with minor (pen and ink) changes. It was the sense of the Council that these Safety Standards had been well prepared by Captain Tex Treadwell and his group, that UNOLS institutions had had ample opportunity for review and comment, that Member input had been appropriately accommodated and that the Safety Standards should be adopted.

Election of UNOLS Officers - The Slate. Art Maxwell, Chairman of the Nominating Committee discussed the slate of candidates for UNOLS Chairman, Vice Chairman and two members to the Advisory Council. He characterized the slate as a strong one that should provide good officers for UNOLS.

Status of Other Standing Roles.

Fleet Efficiency and Effectivenesss. Carl Lorenzen, noting that a summary of UNOLS Cruise Assessments for the fourth quarter, 1984 had already been distributed to the Council, reported that UNOLS ships were working well and that users seem happy. Ship operations look good to users.

Communications. Volume 2, Number 2 was Donn Gorsline's last as UNOLS NEWS editor. Tom Malone will be editor for Volume 2, Number 3 (June or July, 1985).

Sponsoring Agency information

Sandra Toye, NSF/OCFS provided information on funding for 1986 ship operations (Appendix V). She emphasized that NSF estimates for 1986 were still tentative, but nevertheless, re-iterated projections that two or more ship layups might be necessary. Timely recommendations from Ship Scheduling Groups or UNOLS would be welcomed.

The overall 1986 budget projection for the Ocean Sciences Division (as well as for NSF) is for a freeze at 1985 levels.

Ms. Toye expressed her gratification for the ALVIN Review Committee's contribution to deep submersible science and, generally, to OCE supported science and facilities programs. She noted concern over the development of sample and archiving policies for the ALVIN program.

Larry Clark expressed satisfaction with development of the May 21 meeting on marine technicians and shared use equipment. "At the end, we will know whether or not a full blown workshop is needed."

Keith Kaulum, ONR, noted that a major re-organization in the Navy may have significant effect in ONR. Establishment of the Office of Naval Technology may change the flow of research funds to Navy laboratories and through ONR.

Three of the Secretary of the Navy's initiatives remain of interest to UNOLS: one for the construction of one or more research vessels for academic use, one for the Navy's research fleet of the future and one to enhance utilization of Navy operated deep submersibles.

There remains \$35M in the POM 87 budget for one Navy research vessel. NAVSEA Systems staff believes the ship will cost more. They are pursuing three concept studies: a SWATH, a monohull and conversion of NOAA's OCEANOGRAPHER. The Navy is also supporting the Lamont study on a G and G friendly ship and concept studies on intermediate large ships at URI and at Scripps. (These efforts are included in Fleet Replacement Committee planning.) The Navy is also examining possibilities for saving money by acquisition through conversion rather than new construction (e.g., of tuna boats, oil field supply boats). In planning for their future research fleet, the Navy wants more capable ships but not more expensive ones. UNOLS needs are of interest to the Navy, concerning size, capabilities and characteristics of individual units.

The Navy (OP23) is pursuing acquisition of a support ship (comparable capability to ATLANTIS II) for SEA CLIFF and TURTLE. TURTLE should return to operations in about December, 1985.

Robert Rowland, USGS, noted that information on the budget status, operational details and cooperative arrangements USGS marine programs will be included in Director Dallas Peck's address to UNOLS at the May 22 meeting. Dr. Rowland noted that potential USGS funding to support OSPREY would come from the Marine Division's core programs, rather than from EEZ funds.

Mr. Hawley Thomas represented the Minerals Management Service. He is from the Environmental Studies Branch under Dr. Don Aurand. MMS will continue to contract for marine work, using UNOLS ships as well as others.

UNOLS and the Ocean Community. Several interactions between UNOLS officers and other ocean groups were discussed within earlier agenda items (e.g., in Chairman's Report, Report on International Restrictions).

William Erb, State Department, reported further on the issue of classification of survey data within the EEZ. The National Security Council has set up a group to examine the issue. DOS sees, as one problem, the issue of reciprocity, and is concerned that effective arguments might not be made to the NSC group. It was decided that Ferris Webster and Harris Stewart would follow this issue.

Art Maxwell reported on recent activities by the Board of Governors, JOI, Inc. and related groups. James Baker is reporting for the JOIDES Space Committee to the Heads of NAS/NRC, NSF and OSTP on a national satellite oceanography program. Other Committees, NORPO and Ocean Fluxes and Chemistry, are active in formulating programs, defining facilities

Other business. The Council discussed schedules for summer and fall UNOLS meetings. Final schedules for these meetings were reached after the meeting:

Meeting	Where	When
Advisory Council	Lewes, Delaware	August 22, 23, 1985
Fall UNOLS MEETINGS		
Advisory Council Joint Ship Scheduling (UNEPC) Semiannual	Washington, D.C. Washington, D.C. Washington, D.C. Washington, D.C.	October 21, 1985 October 22, 1985 October 22, 1985 October 23, 1985

Robertson Dinsmore gave a brief report on the conceptual design of a 2500 ton SWATH oceanography research ship by Semi-submerged Ship Corp. This concept is pursuant to the research ship requirements of NECOR and UNOLS' Fleet Replacement Committee.

Captain Dinsmore noted that there will be at least two more SWATH research ship designs: the NAVSEA design and one by Blue-Sea McClure.

The meeting was adjourned at 6:45 p.m.

UNOLS ADVISORY COUNCIL
AGENDA FOR MEETING
8:30 a.m., Monday, May 20, 1985
Room 353

Joseph Henry Building - National Academy of Sciences 2100 Pennsylvania Avenue NW Washington, D.C.

Accept Minutes of January 21-23, 1985 Meeting

Composition, Distribution and Management of the UNOLS Fleet - 1985 Review - C. Miller - Discussion of the Draft circulated April 8, 1985, incorporation as appropriate of AC member comments and consideration of responses from UNOLS institutions (if there are any), and discussion of the report's presentation to UNOLS (May 22) and to the funding agencies.

UNOLS Review of Facilities Aspects of the Long Range Planning Document "Emergence of a Unified Ocean Sciences", and Potential UNOLS Role(s) in the Management of Facilities in Addition to Ships and Seagoing Platforms: These somewhat related issues were introduced briefly at the January, 1985 AC meeting. Since, there has been correspondence among F. Webster, C. Miller, G. Gross and S. Toye (circulated to AC). The AC should consider whether UNOLS should have a role, if so, mode and mechanism for execution, and make recommendations for UNOLS.

Examine Agenda for May 22, 1985 Semi-Annual Meeting:

State of UNOLS - F. Webster
Advisory Council Report - C. Miller
ALVIN Review Committee Report - W. Barbee
Committee on International Restrictions - H. Stewart
Committee on Fleet Replacement - R. Dinsmore
Report on E-W Scheduling Groups - B. Robison and H. Stewart
Report on UNEPC - W. Barbee
Draft Safety Standards - W. Barbee
Elections - the Slate - A. Maxwell

Status of Standing Roles - Most standing roles will be covered by items above. Those not:

Fleet Efficiency and Effectiveness - C. Lorenzen Communications - D. Gorsline, T. Malone. Include change of editors from Gorsline to Malone.

Sponsoring Agency Information - Reports, Sandra Toye, NSF, Keith Kaulum, ONR, NOAA, USGS or others, if they wish to augment their reports to UNOLS (to be made May 22).

UNOLS and the Ocean World - Several UNOLS and AC people have been asked, recently, to testify or participate, for UNOLS or as individuals in various ocean-political arenas. It may be of interest to the Council to note or discuss:

Testimony to NACOA on EEZ programs and the Classification Issue - H. B. Stewart

The Ocean Super Group convened by John Knauss - F. Webster, A. Maxwell

JOIDES - A. Maxwell

Note that R. Corell will not be at the meeting - or he'd be on this list, too.

Other Business: Hopefully, none.

NATIONAL SCIENCE FOUNDATION WASHINGTON D.C. 20550

DIVISION OF OCEAN SCIENCES OCEANOGRAPHIC CENTERS AND FACILITIES SECTION

May 2, 1985

MEMORANDUM

Brian Lewis, Chairman, West Coast Scheduling Committee
Bob Dinsmore, Chairman, East Coast Scheduling Committee Bob Dinsmore, Chairman, East Coast Scheduling Committee George Shor, Chairman, Expeditionary Planning Committee Charles Miller, Chairman, Advisory Council Ferris Webster, Chairman, UNCLS Membership

Head, Oceanographic Centers and Facilities Section

SUBJECT: 1986 UNOLS Fleet Support Outlook

As we complete our preparations for the UNOLS Semi-Annual Meetings on May 20-22, we see difficulties ahead for the fleet. These difficulties probably cannot be completely avoided, since they result from larger national budget problems; but their impact can be lessened by concerted effort in the community. We would like you to know our concerns now so that you can work them into your thinking about the UNOLS agenda.

The outlook for fleet support for Fiscal Year 1985 is not encouraging. That is our annual prediction, and it is understandably tempting to shrug it off. But as everyone is aware, concern about the Federal deficit makes FY 1986 an uncommon year: budget reductions are in store for much of the Federal establishment. Furthermore, the political sensitivities surrounding budget and appropriations may result in continuing resolutions, vetces, or other tactics which can compound the problem by adding months of uncertainty to the equation.

We do not want to presume on the agency reports that will be made to the UNOLS membership at the upcoming meeting, but our discussions with the other Federal agencies and our assessment of our own prospects point to a difficult year. At best, we expect level funding for the fleet in absolute dollars. When this is racked up alongside the expectations of the operators as recently as the March scheduling meetings, the discrepancies become self-evident. [See Attachment]

It's true, of course, that estimates in the early scheduling rounds are always based on extremely hopeful forecasts of success in project funding. Since the March round, the NSF Ocean Sciences Research Section panels have met, and many PI's and ship operators should now have more solid indications of the likelihood of support for proposed field programs. After all allowances are made, however, it still appears to us that no more than 20 or 21 ship years can be supported in 1986. We call on UNOLS to help find the most rational way to deal with that reality if it does come to pass.

Part of the "cure" lies in scheduling. Fully utilized ships get more science done for each operations dollar, especially in distant water operations. If layups are inevitable, it is better to plan for them than to be forced into a patchwork of last-minute partial layups which save little money and disrupt schedules for scientists and operators alike.

We see one particular area where schedules must be rationalized if the right mix of facilities is to be available — the Western Pacific, Indian Ocean and adjacent regions in 1936-87. Following on the Indian Ocean, there are bodies of work emerging for the Red Sea and Gulf of Aden; another group of proposals in the far southern oceans; and yet others, in the equatorial and northwest Pacific. This is the kind of situation UNEP was created to handle, yet the March schedules show little evidence of integration in the thinking of the operators with an obvious stake in these plans. CONRAD, WASHINGTON, MOANA WAVE and THOMPSON schedulers need to sit down together and look hard at the real requirements. Any schedule which is still relying on new proposals, not yet submitted, for a major portion of next year's operation is unrealistic.

There are also larger questions about fleet management under the likely funding constraints -- questions which the Advisory Council and/or the membership should address. What should be our position on fleet expansion and fleet distribution under these circumstances? How can the community identify and protect those capabilities essential to the long-range health of the field? Do we need special deadlines or other administrative devices to handle the short term FY 1986 schedule and support decisions?

We look forward to working with UNOLS in the coming months to manage this situation equitably and effectively.

Sandra D. Toye

Attachment

Copy to: Capt. Barbee, UNGLS Mr. Kaulum, ONR

Dr. Rowland, USGS

Attachment

UNOLS Fleet Funding Estimates

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31	1985 Est.				1986 NSF Est.	
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	\$35.3M		\$41.2		\$34.6	
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^{*}Source: UNOLS East and West Coast Scheduling Meetings: March 1985

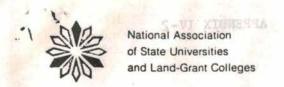
TABLE 1

Sources of ALVIN SUPPORT 1975-1985 (\$K)

(1975-1983 LULU Costs included in TOTAL)

1985	1,200 150 150	30 \$1,530	-0- 156 \$3,235
1984	1,134 67 117	\$1,436	-0- 174 \$3,105
1983	1,365 225 562	457 \$2,609	-0- 28 \$2,004 (conversion)
1982	1,311 296 228	\$2,055	1,314
1981	942 368 349	\$1,918	1,068
1980	816 367 433	\$1,935	645
1979	1,028 313 352	116	* 117
1978	895 277 231	\$1,489	* 15 1
1977	300	158	* 101
1976	475 305 310	\$1,176	* 06 1
1975	300	165 \$1,065	* 83 1
	NSF Navy (ONR) NOAA	Other (USGS, DOE, etc.) TOTAL	Escort Ship Costs # Dives/Yr. AII Costs

* Unavailable at this time. ** Conversion: NSF - 936,379; ONR - 637,034; NOAA - 430,850



April 19, 1985

Dr. Charlie Miller of the statement of branch and the among all the adda the partition of branching of branch

The Board of Directors of the NASULGC Marine Division has discussed a set of functions concerned with international marine science and technology (as presented by Dr. David Ross). These were:

- To improve opportunities and efficiencies for those in the U.S. marine community wishing to work with foreign countries (and in foreign waters).
- To improve access for foreign countries and institutions to marine scientific research and training opportunities with U.S. organizations.
- . To collect and circulate information to the U.S. marine scientific community concerning opportunities, mechanisms and funding sources for foreign programs.
- To identify countries or areas for the U.S. marine community with particular problems or requirements and advise on mechanisms for dealing with such problems (in particular, from scientists who have had experience in such countries).
- To identify U.S. scientists interested in working in specific fields in specific foreign countries.
- To assist in the development of multidisciplinary (and perhaps multinational) teams.

The Board strongly believes that these functions are important and should be fulfilled. We are also concerned that this be done with minimal establishment of new layers of bureaucracy.

Since UNOLS has the mechanisms for gathering and disseminating much of the necessary information, the Marine Division Board urges UNOLS to give serious consideration to the role it should play in the facilitation of international marine research within the functions listed above. April 19, 1985 Page Two



If UNOLS concurs with the need for these functions, we would appreciate learning whether UNOLS would be prepared to undertake at least some of the functions and what resources would be required to do so.

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If UNOLS does not believe it should take the lead in this, we would appreciate having you consider how the community should proceed, including your comments on the draft legislation of Congressman Studds addressing the problem, and recommending changes which would assure adequate procedures for collaboration between UNOLS and the proposed organization to ensure minimum duplication and paperwork.

Your sincerely, as chold man in set

John A. Knauss Chairman, Marine Division

cc: Dr. Ferris Webster

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1986* UNOLS EST	32.0 5.4 3.8	25
1985 EST.	24.3 2.2 4.0 4.8	г. Г.
	NSF-OFS NSF-OTHER ONR	NO. SHIPS

1 24 S 22 POTENTIAL ACTUAL

MEET INGS 1985 * SOURCE: UNOLS MARCH

