

UNIVERSITY - NATIONAL OCEANOGRAPHIC LABORATORY SYSTEM

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

April 24, 1972

REPORT OF THE UNOLS ADVISORY COUNCIL to the SECOND ANNUAL UNOLS MEETING - MAY 3-4, 1972

This report is intended to provide UNOLS Members and participants with information on the current activities of the UNOLS Advisory Council. It includes proposals and recommendations for action by UNOLS at its May 1972 Meeting. This is not the Annual Report as set forth in the UNOLS Charter. That Report will be directed to the Federal Funding Agencies, via UNOLS, and will be issued in July 1972.

The Advisory Council was established at the November 1971 UNOLS Meeting in LaJolla, California and presently comprises the following members:

Dr. J. V. Byrne, Oregon State University, Chairman

Dr. J. P. Craven, Univ. of Hawaii

Dr. C. L. Drake, Dartmouth

Dr. D. W. Menzel, Skidaway Inst.

Dr. R. A. Ragotzkie, Univ. of Wisconsin

Dr. H. M. Stommel, M.I.T.

Dr. W. S. Wooster, Scripps Inst.

Its purpose as set forth in the UNOLS Charter is:

" . . . to monitor the activities of the System giving attention to the effective use of existing oceanographic facilities and to the performance of the member institutions in providing access to Federally supported University facilities for scientists from other institutions, especially from non-ship operating institutions. It will evaluate the need for replacement and additional facilities and assess whether some facilities are outmoded or in excess of current needs. In consideration of research needs recognized by the National Academy of Sciences, Federal agency advisory bodies, other groups of scientists and the UNOLS organization itself, the UNOLS Advisory Council will recommend to the funding agency and UNOLS the consideration of specialized facilities or new concepts in facilities. It will also make recommendations as to the balance between facilities and funded research programs. It will assist the funding agencies in efforts to obtain adequate and uniform financial and cruise reporting of ship operations. "

To date the Advisory Council has held two meetings:

December 6, 1971 at San Francisco, California
January 27-28, 1972 at Skidaway Institute, Savannah, Georgia

At its first meeting the Advisory Council examined the charges conveyed to it at the November 1971 UNOLS Meeting. These included a focus on access to research ships and facilities by qualified investigators, and early attention to certain specialized facilities. These along with the charter role of the Advisory Council were developed into the following matrix for a task schedule.

Table 1 UNOLS Advisory Council
TASK SCHEDULE

Role of Advisory Council		Now	July 1972	July 1973	Long Term
Evaluate Effectiveness: Scheduling Utilization Access		Obtain Data ATLANTIS II AGASSIZ CAYUSE CONRAD EASTWARD THOMPSON TRIDENT DISCOVERER	Develop Criteria! Pilot Evaluations	Refine Criteria Complete Evaluations	
Facility Support ---					
Need for Replacement and Additional Facilities	Ships	Inventory	FY-73 Specifics FY-74 Totals	FY-74 Specifics FY-75 Totals Develop Long Range Needs	
	Boats	Sample Regional Inventory	Develop Recom- mendations on boats	Update Recommendations	Establish and update long range needs
Specialized Facilities		Broad inven- tory of Facilities --- Identify Criti- cal areas --- Establish Ad Hoc Groups: Submersibles Aircraft BT Facilities Cooperative facilities	FY-73 Recom- mendations: Submersibles Aircraft BT Facilities Establish further Groups contingent on identification of critical areas & success of pilot efforts	FY-74 Recom- mendations. Begin to develop new concepts for specialized facilities	

Pursuit of the first task -- the evaluation of research ship effectiveness -- is a particularly sensitive one and requires the development of criteria which do not now exist. It appears that this includes more than costs and operating statistics but also the elements of scientific work accomplished and made available to the scientific community. It was decided that this would be attempted on a pilot basis using data from several ships selected as a representative cross section of the fleet and in addition at least one non-university ship for a comparative input. These are listed in Table 1. From these pilot efforts a comprehensive set of criteria and evaluations may emerge. This is a task which requires the cooperation and understanding of all members. Information gathering is underway but it is far too early to report any results. The comments and suggestions here by UNOLS members are most welcome.

Threading across the entire fabric of the university system is the subject of facility support and the associated projections for replacement and additional facilities. With the exception of certain specialized facilities discussed later, the initial emphasis has been on floating units. The Advisory Council considers that research ships and research boats are differing elements and that future acquisition and support for each should be separately treated so that one category will not tend to exclude the other.

University research ships, defined roughly as those over 65-ft, are about 30 in number and represent the major share of federal funding for oceanographic facilities. Commencing in July 1973, the Advisory Council will recommend to Federal Funding Agencies its assessment of ship support requirements, both short term and long term. Additionally, there will be attempted recommendations regarding boat support which, judging from the prodigious numbers generating in regional inventory samplings, is approaching crisis proportions in competing for Federal funds. Perhaps the most ambitious undertaking envisioned by the Advisory Council (with the possible exception of evaluating the effectiveness of ship operations) will be to determine the long range needs for university research facilities.

The first UNOLS meeting in November, 1971 identified certain priority areas and specialized facilities for early attention by the Advisory Council. These included:

- | | |
|---------------------------------|-------------------------------|
| . Cooperative use of facilities | . Technical Pools |
| . Coastal research vessels | . Stable Platforms |
| . Submersibles | . Standardized Depots & Bases |
| . Aircraft | . Radio Stations |
| . Bathythermograph Facilities | |

At its first meeting the Advisory Council reviewed these categories and singled out the first five listed above for immediate action. These were selected either through community wide direction or by exigencies in current funding. The approach tentatively adopted by the Advisory Council has been to establish ad hoc Working Groups from among the entire UNOLS community with the request that each Working Group conduct its business promptly and produce a succinct set of recommendations. To date Working Groups have met and acted on

- . Cooperative Facility Utilization
- . Submersibles
- . Coastal Research Vessels

Reports by the first two of these have been received by the Advisory Council and have been incorporated, at least in part, into the proposals which the Advisory Council is making at this meeting and will be discussed later.

The Report by the Working Group on Coastal Research Vessels has not been reviewed by the Advisory Council. However, in order to gain the advantage of early and open discussion, that report and its recommendations have been distributed.

The Working Group on Aircraft has not yet met and no recommendations are available at this time.

In regard to Bathythermograph Facilities, the Advisory Council itself acted as the Working Group in a fashion of a committee of the whole. Information was obtained through means of a general questionnaire and statements provided from existing bathythermograph facilities at the Scripps and Woods Hole Institutions and from the Environmental Data Service of NOAA. Here the problem was that the usual funding of long standing for existing facilities was being terminated, and should such facilities be continued and if so, what role should they serve and how should they be supported? The general agreement derived from the questionnaires and statements was that there is little utilization today for a general B/T Facility but that such facilities become part of the larger national data problem. The Advisory Council has therefore recommended that:

University bathythermograph facilities not be designated as national specialized facilities; but considered however, that the data and services of the existing facilities at Scripps Institution and Woods Hole Oceanographic Institution are national resources and that specific support should be continued for those facilities for about two years beyond the current year, and during which period bathythermograph data along with other data depositories should be integrated as a fundamental part of the institution. In the specific case of Scripps Institution, this support also is to accomplish the reduction of the current backlog of unprocessed bathythermograph data.

The Working Group for Submersibles in University Research has recommended that there be made available for university research one deep and one shallow submersible on each coast which use shall be allocated by an interdisciplinary review committee based on scientific merit of proposed use. With certain reservations the Advisory Council concurs with and supports this report in principle. The Advisory Council proposes to include an implementation scheme in future recommendations and for the time being recommends that the only operational university submersible be operated, in part, as a national cooperative facility.

The Working Group for Facility Utilization reviewed the problems of access to major facilities by investigators and concluded that in addition to the regular cooperative roles of UNOLS Member Institutions, national facilities such as the Research Ships EASTWARD and ALPHA HELIX be brought together under UNOLS with a common purpose and overview.

The Advisory Council has generally concurred with these recommendations and proposes through the medium of a new Annex to the UNOLS Charter there be established a category of university oceanographic facility to be termed "National Cooperative Facility". Such facilities are envisioned as a supplementary and methodical way of providing ship time to investigators who do not have available the required ships, and to support specialized facilities for joint use in university research. They would be operated much the same as the Research Vessels EASTWARD and ALPHA HELIX presently are; the principal difference being that a single review committee would govern the use policy and awards of facility time. Indeed, those ships have served as a pattern for this concept and the Advisory Council would propose that they would be designated as the first of the National Cooperative Facilities along with the Research Submersible ALVIN. In the latter case another innovation is proposed; that of designating a fraction of its total operating time as a National Cooperative Facility. Such a split would then permit a facility to be otherwise assigned to mission oriented and applied efforts.

Under UNOLS a National Cooperative Facility would be so designated subject to the following actions:

- . with the concurrence of the owner and operator, and
- . upon reasonable assurance of support, and
- . after review by the Advisory Council, and
- . on approval by UNOLS.

Both the Facilities Utilization and Submersible Working Groups recommended that a single review committee administer the review of proposals and award of facility use time. After careful consideration the Advisory Council concurred with this approach as being the more far sighted of two views. A Review Committee envisioned by the Advisory Council would be a multi-disciplinary group of individuals with sufficient flexibility to group into sub-panels. The Review Committee would be authorized to engage outside consultants. Overlap in membership of the sub-panels and in duration of appointment would assure continuity of the total effort. The principal criteria for facility use would be scientific merit and compatibility of the intended use with the facility concerned. The Facility would be operated by a member institution much the same as ALPHA HELIX and EASTWARD are now.

In order to implement this concept the Advisory Council has drafted a proposed new Annex II to the UNOLS Charter. A copy of this draft is attached to this report. By separate correspondence to the Chairman of UNOLS, the Advisory Council has recommended the adoption of this framework. The Advisory Council has further recommended that, if the concept of National Cooperative Facilities is adopted and in accordance with its terms, the Research Vessels ALPHA HELIX and EASTWARD and the Research Submersible ALVIN (to an extent of 40% of its operating use) be so designated.

Further activities of the Advisory Council this year will include reviews of the reports of the Working Groups for Coastal Research Vessels and for Aircraft as well as continued efforts on ship operation effectiveness and the support of research boats. The Annual Report to Federal Funding Agencies will be submitted to UNOLS Members prior to July 1st.

2/25/72

PROPOSED

ANNEX II TO UNOLS CHARTER

National Cooperative Facilities

1. In addition to regular institutional UNOLS facilities there may be identified National Cooperative Facilities, defined as those facilities, specialized, and otherwise, that are made available for the use of qualified scientists from any institution and the use of which shall be determined by a UNOLS Review Committee.
2. A research vessel or other research facility may be designated as a National Cooperative Facility upon the approval of the UNOLS Membership after review by the UNOLS Advisory Council, with the concurrence of the owner and operator of the facility and with reasonable assurance of support. National Cooperative Facilities may be multi-or special purpose facilities and may be designated for the entire annual operating period or any period thereof.
3. The purpose of National Cooperative Facilities are:
 - To provide oceanographic vessel and other facility support to scientists who do not operate or have available the required facilities.
 - To provide for the support and use in academic research of specialized and unique facilities.
4. A Review Committee shall be established for the purpose of considering proposals for facility use and for recommending programs to be scheduled. The Review Committee shall have nine members representing appropriate disciplines relevant to the facilities concerned. Members of the Committee shall be nominated by the Chairman and Vice-Chairman of UNOLS and the Chairman of the Advisory Council and shall be appointed by UNOLS giving due consideration to broad geographic distribution. Members shall serve for terms of three years on a rotating basis. Each institution operating a National Cooperative Facility may designate an ex-officio member in addition to the nine members appointed by UNOLS. The Review Committee shall elect its own Chairman from among the nine members appointed by UNOLS.

5. In its proceedings the Review Committee may establish ad hoc panels from within its members and utilize outside expert consultants as it sees appropriate.
6. In recommending the allocation of facility time the Review Committee shall act primarily on the scientific merit of the proposed research and its compatibility with the individual facility. Other guidelines may be established by UNOLS.
7. Operational scheduling of the facility will be the function of the operating institution. The time frame for scheduling generally shall be in accordance with Annex I of the UNOLS Charter.
8. Information and announcements advertising the availability of a facility will be a joint function of the operating institution and the UNOLS Office.
9. Receipt, acknowledgement, collating and structuring of requests for facility use will be the function of the UNOLS office in consultation with the operating institution.
10. An annual report to UNOLS on the use of each National Cooperative Facility will be prepared by the appropriate operating institution in cooperation with the Review Committee and UNOLS Office.
11. Requests for funding the operation of the facility will be the responsibility of the operating institution.