UNIVERSITY - NATIONAL OCEANOGRAPHIC LABORATORY SYSTEM

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

UNOLS Office
Woods Hole Oceanographic Institution
Woods Hole, Massachusetts 02543

22 May 1972

TO: Advisory Council

Attached is the annotated agenda for the May 31 - June 1 meeting along with some background material.

Additional background information and expanded agenda materials will be available at the meeting.

Bob Dinsmore

R. P. Dinsmore
Executive - Secretary, UNOLS

RPD/mh
Enclosure

Copy to Dr. Maxwell
Dr. Savage
Dr. Ostenso
Mary Johrde

UNOLS ADVISORY COUNCIL
Meeting
May 31 - June 1, 1972
Room 114 Scripps Building
Scripps Institution of Oceanography

AGENDA

9:00 a.m. May 31 -- Convene

1. Adoption of agenda
2. Minutes of previous meeting
3. Role of Advisory Council
4. Annual Report - Goal and Contents
5. Review and evaluation of ship scheduling - 1972
6. Review and evaluation of access to ship use
7. Review and evaluation of ship operations
8. Review of Federal funding for ship operations
9. Review of Federal funding for ship construction
10. Support of small vessels and boats
11. Research aircraft
12. Other specialized facilities
13. National Oceanographic Facilities
14. Coastal Zone Report
15. Other business
16. Next meeting

ANNOTATED AGENDA

1. Adoption of Agenda

   This Agenda includes a great many topics which may not be able to be covered thoroughly in the time available. However, as agreed to at the May 4 session, Items 3-10 dealing with the Annual Report and its contents will have priority.

2. Minutes of Previous Meeting

   The minutes of the Advisory Council meeting of January 27-28 were transmitted on February 11th. To date no corrections or additions have been received.

3. Role of Advisory Council

   There has been concern expressed over the precise role of the Advisory Council as an initiating body vis-a-vis a reviewing body as well as in other regards. It might be well for the Advisory Council to review its own role to insure that its activities remain within the proper context. Sections from the Charter which deal with the Advisory Council are extracted as follows:

   > "The purpose of the Advisory Council will be 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.

Sub-bodies, usually ad hoc in nature, may be established or added by the membership or the Advisory Council in order to achieve particular purposes pursuant to the goals of the organization.

....Requirements for specialized facilities are often identified by scientists themselves. It is likely that in the course of coordinating meetings or meetings of the UNOLS Advisory Council, these specialized requirements and ideas for new facilities will be aired and catalyzed. Recommendations so generated by the scientific community can then be made to the funding agencies via the Advisory Council."

(See section below entitled "Annual Report")

4. Annual Report - Goals and Contents

It was agreed at the meeting of December 6th that the target date for the Annual Report will be July 1st and would address principally the topics of Agenda items 5-12. Those goals should be again reviewed and a schedule developed so that priority attention can be directed at this meeting.

The UNOLS Charter, in regard to the Annual Report states

"The Advisory Council shall make an annual report to the funding agencies via UNOLS and shall include such matters pursuant to its Charter as:

(1) Review and evaluation of the effectiveness of utilization and operation of Federally supported oceanographic facilities including the providing of access to facilities to all qualified scientists.

(2) The need for replacement and additional facilities and their assignment, and an assessment of outmoded or excess facilities and their disposition.

(3) The consideration of specialized facilities or new concepts in facilities.

(4) Recommendations as to the balance between facilities and funded research programs."

5. Review and Evaluation of Ship Scheduling - 1972

This and Agenda items 6 and 7 are related items. Summaries of ship scheduling procedures by the various institutions were distributed at the January meeting. At the May UNOLS meeting each institution representative further described his schedule and the procedures leading up to it. Members should discuss their impressions of this years activities. Most institutions are looking for guidance of how to improve and further adapt their procedures to UNOLS.

Except as a public airing and to exchange information between members and Federal observers, the May 4th UNOLS schedule session did not achieve its intended purpose. Discussions with various users indicates other methods might be employed such and regional and inter-institutional meetings at an earlier stage before schedules are, in appearance, "set in concrete". More UNOLS visibility during the December-February time frame might be implemented in such ways as UNOLS ship request forms, attending local and regional meetings, more advertising, catalogs, etc.

6. Review and Evaluation of Access to Ship Use

It is probably too early in the first year's cycle to give any conclusions in this area other than at the scheduling level. It is generally agreed that there are two kinds of access; one at the scheduling level for primary time allotment, and the other at the "hitchhiking" stage when schedules have become more generally known.

Most UNOLS institutions report that between 15 and 20% of the total scientific personnel on their cruises are from outside their laboratory. An interesting comparison might be against the national distribution. The 1969 Directory of Oceanographers shows:

- 1,357 total
- 855 from academic institutions
- 227 from non-UNOLS institutions - 26% of academic

Primary ship time allotted to outside does appear to be greater in projected schedules than in previous years. Some of this is due to the advent of UNOLS and a willingness of members to cooperate. In other cases it is probably due to multi-institutional "big science".

Most UNOLS institutions report that ship requirements for their own federally funded (or likely so) programs amounted to about 130% even after the "first cut". Variations ran from about even to 150%.

The EASTWARD program reports an applicant increase of 30% over last year and total requests for time exceeding twice the available days.

7. Review and Evaluation of Ship Operations

The matter of evaluation of effective ship utilization continues to await the development of pilot criteria for a yardstick. This is nowhere near completion and probably should be the subject of a working group meeting in late summer or early fall. The makeup of such a group might be discussed.

An evaluation of ship operations includes, among others, the matters of effective use (good science, published reports, maximum use, cost, etc); and use for the purpose intended or funded. The latter includes the elements of cost allocations and the proportion of time for big science (IDOE) and categories of SEA GRANT and training. Of these IDOE may be the most apparent and subject to evaluation. A cursory and perhaps non-inclusive examination of the 1973 schedule shows that about 10% of the total ship time is given to IDOE programs*. This 10% represents, however, $3.2M of $17.6M or 18% of the total ship operations funding for which IDOE has contributed $2.8M (IDOE's ship budget is 11% of its total. UNOLS Institutions ship costs average 22% of their total budgets.)

Several Federal Program managers have expressed private opinions that some ship use programs are not good and may be funded more for "old times sake" than anything else.

Average days at sea for categories of UNOLS ships is

- over 150 ft - 286
- 100 - 150 ft - 222
- less than 100 ft - 197

---

* based on analysis that following fractions of ship years are given over to IDOE:

TRIDENT	15%	YAQUINA	14%
ATLANTIS II	60%	CAYUSE	10%
CHAIN	37%	MELVILLE	72%
KNORR	57%	KANA KEOKI	35%

8. Review of Federal Funding for Ship Operations

It is anticipated that this item would be an important part of the Annual Report. NSF in particular is looking for some sage comments dealing with this matter. A related issue is Item 10 concerning boats and small vessels.

Current profiles for ship funding are given in the attached background material along with projections through 1978. These projections show the usual trend - small increases in the immediate future where the budget process has started, followed by a period of rise then tapering off.

Beginning in 1972 NSF divided its budget into several categories such as "other facilities", shipboard equipment, etc., much which would earlier have come from a general operations budget. NSF is desirous of receiving comments on funding allotted to various categories at various levels of increases.

It is inconclusive at this time to give an analysis of recent questionnaires to members regarding funding. It is anticipated results will be ready for the meeting. However, checking with individual members shows that current operating funds are reasonably adequate although it was necessary that at least two ships (GOSNOLD in 1972 and PROTEUS in 1973) be laid up during part of the year due to insufficient funds. The major problem according to most institutions is funding for equipment that is generally considered to more ship than scientific (winches, wire, navigation, etc.), and in special categories such as technicians. Present deficiencies would appear to lie in these areas.

Ship operations funding appears to represent an average of about 22% of the budgets of institutions with ranges of from 12% to 31%. (See breakdown attached) IDOE allots 11% of its budget to ship operations. NSF as a whole allots about 21% of its marine science research budget to university ships. (When ELTANIN, GLOMAR CHALLENGER and other ships are included the figure becomes considerably higher.)

Boats and small vessels are a very important part of the consideration for operations funding, but they are separately under Agenda Item 10.

9. Review of Federal Funding for Ship Construction

Beginning in 1972 the NSF budget will have funds annually for ship construction (or conversion). NSF's principal planning factor is to replace appropriate ships of the existing fleet but this is not completely sacred and NSF is looking to UNOLS for recommendations on the areas and categories where ship construction funds should be placed.

The 1973 ship construction budget (now in Congress) calls for $2.8 M (all NSF). A proposed legislation (S3511) increases this to as much as $6.0M, but an actual increase, if any, would probably be less. Present planning would best say at the $2.8M level. Projections for FY-74 are about $4.0M with annual figures over the next five years remaining at about that level.

An attached working paper gives a summary of the present fleet of university ships both block funded and otherwise.

Recent additions to the fleet (other than smaller vessels under 100') are:

Univ. of Miami	-	ISELIN	-	NSF Funded
Texas A&M	-	AGOR-U	-	ONR Funded
Univ. Hawaii	-	AGOR-U	-	ONR Funded
(W.H.O.I.?)			-	NSF Funded

All of these ships are about 300 gross tons and 175-ft LOA and are considered, at least by NSF, to be in the category of replacements.

UNOLS (Advisory Council) has planned that a comprehensive long range plan for university ships be available by July 1973. However an interim summary might be developed against which FY-73-74 recommendations could be formulated.

The Advisory Council probably should recommend <u>areas</u> of funding rather than any particular ship or institution, thereby retaining for the usual NSF review process the specific final decision based on merits of an institution or other proposal. Alternative areas might include:

1. replace existing fleet
   - on the basis of material condition only
   - on the basis of program merit only
   - a combination of above

2. add to existing fleet

3. areas of emphasis
   - Coastal Zone (See agenda Item 14)
   - Open ocean
   - National Oceanographic Facilities (cooperative)
   - Arctic

4. specialized ship concepts and new technology
   - GEOSECS
   - Buoy Tender
   - stable platforms
   - polar working

Based on current schedules most UNOLS report the valid need for more ship time. Specific information has been requested and may be available for the meeting.

10. Support for Small Vessels and Boats

One of the greatest of the current problem areas are the requests by many new boat operators (or potential boat operators) for funding support. Of small vessels 80-110 ft there are surprisingly few (9 or fewer). Of the 65-ft ($\pm$ 10) class which numbers about 31, seven are currently block funded. This (65-ft) is a surprisingly uniform size owing to the Fed. motorboat law and the surplus Army T-Boat. The next smaller class range between 26-45 feet and are clearly institutional funded with no special issues being raised. Inventories of the first two categories are attached.

In the 65-ft class it is interesting to note that the costs of the block funded boats are about twice the project funded boats for which data are available. This is probably explained by the latter operating less and the former including equipment costs. This issue, as with the larger ships, may be a key one. Although most boat operators report limitations due to funding, equipment costs are the most serious problem. The majority of operators interviewed feel that they would prefer to keep this size boat institution or project funded, but would like to have a source of funds to upgrade it and acquire equipment.

Most operators also consider that their 65-ft (or smaller) boat is not entirely adequate and they require a larger (80-120 ft) either total use (about 1/3) or cooperative access (about 2/3). It would be imperative for such ships then to be block funded.

11. Research Aircraft

Recommendations from the Working Group on aircraft are not yet available and the Advisory Council will not be able to address any long range views in this area. Presently out of FY-72 funds, NSF is interimly funding about 1/2 the Scripps Aircraft operating costs for which Scripps is making flight time available to general university research. The Advisory Council may wish to recommend that NSF continue this interim support for another year. A report on the use of the aircraft by Scripps representatives can be available at the meeting.

12. Other Specialized Facilities

Working groups are presently scheduled to meet on Research Aircraft. All others (Submersibles, BT Facilities, Coastal Vessels) have completed their assignment. The Advisory Council may wish to single out other areas from the standing list (first UNOLS Meeting) for attention. Those remaining are:

- Radio Stations
- Technicians Pools
- Standardized Depots and Bases
- Stable Platforms

Of these, Technicians might be especially important because of the new NSF ship proposal guidelines excluding technicians. Several institutions have reported this area as one of their most important problems.

13. National Oceanographic Facilities

The Advisory Council may wish to review this subject on the standpoint of how this evolved and what is the future, and what is the Advisory Council's precise role. Should there be any planning for future NOF's? In what way? Assuming the presently recommended Facilities become so (EASTWARD and ALVIN), when should Review Committees be implemented? How?

14. Coastal Zone Report

The Report of the Working Group for a Coastal Zone Vessel now rests in the Advisory Council. This report has two main thrusts.

1. That institutions within a coastal region act together and develop a joint plan for the justification, acquisition funding and operation of a cooperative ship and/or facility.

2. That FY-73 ship construction funds go into coastal ships based upon the needs and scientific merit demonstrated by the above plan/proposal.

It would appear that the Advisory Council should approve in-toto, in part, as amended or otherwise comment on this report.

Tab

PROJECTED 1973 UNOLS FUNDING

(millions of dollars)

Operations	NSF	ONR	Other	Total
SHIP OPERATIONS SUPPORT	11.4*	4.7	1.5	17.6
OTHER OPERATIONS	0.9	1.5**	--	2.4
Acquisitions				
SHIP ACQUISITION	2.8	--	--	2.8
SHIP EQUIPMENT	1.2	--	--	1.2
OTHER FACILITIES	--	--	--	--
Total	16.3	6.2	1.5	24.0

*Includes 2.8 IDOE Support

**Includes Code 466 Special Platform Support

PROFILE OF OCEANOGRAPHIC FACILITIES SUPPORT - 1972

INSTITUTION	SHIP OPERATIONS SUPPORT NSF	ONR	OTHER	TOTALS	OTHER FACILITIES AND SUPPORT OPERATIONS* NSF	ONR	OTHER	TOTALS	SPECIALIZED FACILITIES AND EQUIPMENT (ACQUISITIONS)* NSF.	GRAND TOTALS
ALASKA	$ 132,900	$ 60,900	$ 78,600	$ 272,400	$	$	$	$	$ 15,200	$ 287,600
SCRIPPS	2,175,000	1,000,000	695,700	3,870,700	320,400 Technicians support, BT processing, aircraft, etc.			320,400	170,000	4,361,100
LAMONT	787,400	740,200		1,527,600					258,100	1,785,700
DUKE	434,900			434,900					100,200	535,100
FLORIDA STATE	68,200		23,500	91,700					12,600	104,300
GEORGIA	102,900		17,400	120,300					41,100	161,400
HAWAII	639,700	258,100	266,300	1,184,100					145,900	1,330,000
JOHNS HOPKINS	124,400	45,800	139,600	309,800						309,600
MIAMI	1,220,800	194,900	4,500	1,420,200					158,500	1,578,700
MICHIGAN	250,000		30,200	280,200					19,700	299,900
NOVA	18,200	28,600		46,800						46,800
OREGON STATE	510,700	252,500	141,000	904,200					81,500	985,700
RHODE ISLAND	453,800	189,400		643,200						643,200
SOUTHERN CALIF.	315,700			315,700					131,200	446,900
STANFORD	176,300			176,300						176,300
TEXAS A&M	488,200	79,000	78,900	646,100					3,500	649,600
WASHINGTON	731,000	279,700	33,300	1,044,000					126,400	1,170,400
WOODS HOLE	2,345,700	1,175,100	20,000	3,540,800	469,600 UNOLS staff office, submersible, BT processing, technicians, etc.	168,700	267,500	905,800	236,400	4,683,000
TOTALS	$10,975,800	$4,304,200	$1,549,000	$16,829,000	$ 790,000	$168,700	$267,500	$1,226,200	$1,500,300	$19,555,500

* Information for other support sources incomplete

** An additional $3.58 Million in FY 72 funds remains to be obligated

** NSF - $13,266,100 67.8%
ONR - 4,472,900 22.9%
Other - 1,816,500 9.3%

SHIP OPERATIONS PORTION OF TOTAL BUDGETS

		Total Budget	Ship Costs	%
1971	Alaska	1,960,759	241,700	12.4%
1972	Scripps	22,845,335	3,988,013	17.5%
1971	Hawaii	7,935,612	1,620,043	20.4%
1971	Oregon State	3,573,400	814,900	22.8%
1971	USC	1,817,230	298,800	16.5%
1971	Univ. Washington	3,700,408	1,002,600	27.8%
1970	Lamont	4,222,042	1,316,176	31.0%
1971	Florida State	(674,000)	106,040	15.8%
1971	Georgia	973,171	130,158	13.4%
1971	Johns Hopkins	1,383,723	303,511	22.0%
1971	Miami	7,107,609	1,050,000	14.8%
1971	Nova	--		
1971	URI	4,025,166	633,082	15.7%
1971	Texas A&M	2,408,000	563,170	23.4%
1971	Woods Hole	12,950,000	3,471,400	26.3%
		69,187,455	15,539,593	22.2%

(Information from NSF Ship Operating Proposals)
(Conventional Ships only -- does not include subs. aircraft or spec. platforms)

Summary of Institutional Funding for Research Ships Ops.

	1971	1972 Proposal				1972 Actual					1973 est.	1974 est.
	TOTAL FUND	NSF	ONR	OTHER	TOT	NSF	ONR	OTHER	TOT	NSF EQUIP. TOT PLUS EQ.	Ops.	Ops.
ALASKA	241,700	136,726	60,905	78,583	276,214	132,900	60,900	78,600	272400	15,200 / 287,600	254,474	287,6
SCRIPPS	2,774500	1,762875	1,450,462	597,240	3,810,577	2,175,000	1,000,000	695,700	3,870,700	170,000 / 2,040,700	3,469,937	3,850,3
HAWAII	1,215,300	639,744	258,100	286400	1,184,236	639,700	258100	286300	1,184,100	145,900 / 1,330,000	1,236,000	—
REGON STATE	514,900	536013	252500	141,000	929.513	510,700	252,500	141,000	904,200	31500 / 985,700	906,939	1,011,6
o. CALIFORNIA	298,800	389890	0	0	389,890	315,700	0	0	315,700	131,200 / 446,900	375,345	362,6
ASHINGTON	1,002,600	802,103	279,682	33,346	1,115,131	731,000	279,700	33,300	1,044,000	126400 / 1,170,400	1,110,746	1,140,0
TANFORD	218,600	(234,000)	-	-	(234,000)	176300	0	0	176300	0 / 176300	0	—
AMONT	1,296,200	740,150	740,150	0	1480300	787,400	740,200	0	1,527,600	258,100 / 1,785,700	1,558,400	—
UKE	440,000	577,953	0	0	577953	434,900	0	0	434900	100,200 / 535,100	595,932	639,95
ORIDA STATE	106,040	64,000	0	18,900	82,900	68,200		23500	91,700	12,600 / 104,300	105,291	—
ORGIA	130,158	110256	0	17,396	127,652	102,900	0	17,400	120,300	41,100 / 161,400	148,597	—
NS HOPKINS	303,511	119056	81631	145094	345781	124,400	45800	139600	309800	- / 309800	375225	374771
AMI	1,050,000	1215567	194,920	4536	1,415,023	1,220,800	194900	4500	1,420,200	158,500 / 1,578,700	1,507,837	1,550,72
NA	42,150	22000	28590	4000	54590	18200	28600	(4000)	50800	0 / 50800	56000	56000
DE ISLAND	633082	584,700	189,360	0	774,069	453800	189400	643200	643,200	0 / 643200	828160	—
AS A&M	563,170	321,013	244776	78,960	644749	488,200	79000	78900	646100	3500 / 649,600	681917	714300
DS HOLE	3,471,400	2,231,455	1,435,179	20,000	3,686,634	2,345,700	1,175,100	20,000	3,540,800	236400 / 4683000	3856000	—
HIGAN	309061	250,000	0	30,162	280162	250000	0	30,200	280200	19,700 / 299,900	302906	326359
	14,911,172				17409374	10,975,800	4,304,200	1,553,000	16829000	1,500,300 / 18,329,300	17369706	

NSF Block Funded Ships

		LENGTH FT	OWNER	BUILT / CONV.	1970 COST	1970 DAYS @ SEA	1971 COST	1971 DAYS @ SEA	1972 COST	1972 DAYS @ SEA	1973 COST	1973 DAYS @ SEA
Alaska	ACONA	55	Navy	1961					635,864	200	644,459	210
	AGASSIZ	150	—	1944 / 1961	490,517	219	470,895	209	658,130	214	598,555	258
Scripps	MELVILLE	245	Navy	1969	355,648	43	1,124,434	365	1,303,702	238	1,287,928	322
	ACOLOSTETA	100	Navy	1944 / 1962	149,701	92	87,378	52	153,088	101	243,702	150
	SCRIPPS	95	—	1965	129,803	139	198,134	176	213,075	227	222,918	189
	WASHINGTON	209	Navy	1965	802,887	282	1,032,511	316	1,060,005	308	1,116,825	331
Hawaii	KANA KECKI	156	Charter				1,351,399	299	895,787	303	931,237	320
	TERITU	90	—	1953 / 1964			246,747	192	268,644	200	288,450	250
Oregon	YAQUINA	180	—	1944 / 1964	481,595	242	566,500	265	681,699	284	638,418	250
	CAYUSE	80	—	1968	192,639	205	248,400	180	247,814	180	268,521	190
U.S.C.	VELERO IV	110	—	1948	285,000	226	298,835	244	389,890	220	375,345	220
	J G THOMPSON	209	Navy	1965	861,056	269	801,289	244	952,205	281	950,171	270
Wash.	HOH	65	Navy	1943 / 1962	139,022	288	141,450	407	151,946	439	160,575	440
	ONAR	65	Navy	1954 / 1963								
Stanford	PRCIEUS	100	—	1946 / 1969								
Scripps	ALPHA HELIX	133	—	1966					600,000			
Lamont	CONRAD	209	Navy	1962	749,501	330	831,100	355	869,400	333	938,700	365
	VEMA	202	—	1923 / 1953	605,675	321	565,100	365	610,900	340	619,700	365
Duke	EASTWARD	118	—	1964	420,000	219	475,231	220	577,953	220	595,932	225
Florida	TURSIOPS	65	Navy	1953 / 1955					95,118			
Skidaway	KIT JONES	64	—	1938 / 1958	84,621	142	98,681	139	100,322	200	118,479	200
	GOLDEN ISLE	47			19,115	98	31,477	100	27,330	121	30,118	150
	WARFIELD	106	—	1967	181,315	171	220,304	205	249,500	210	275,288	225
Johns Hopkins	MAURY	65	—	1950	53,355	101	60,525	120	69,754	120	72,464	150
	LYDIA LOUISE	39	—	1958	18,987	92	22,682	100	26,527	100	27,473	130
	GILLISS	209	—	1962			191,415	54	851,573	318	860,149	300
Miami	ISELIN	170	—	1972					388,412	172	547,143	260
	CALANUS	64	—	1970	29,099	19	80,286	188	91,840	223	100,545	230
Nova	GULF STREAM	55	—	1963	47,520		42,150		54,590		56,000	
URI	TRIDENT	180	—	1944 / 1962	577,673	270	633,082	265	774,069	301	828,160	
Tex A&M	ALAMINOS	180	—	1945 / 1963	484,617	247.5	563,170	245	644,749	245	681,917	245
	ATLANTIS II	210	—	1963	1,023,300	292	1,105,000	317	1,167,000	269	1,266,000	—
WHOI	CHAIN	213	Navy	1944 / 1958	1,070,600	236	1,173,000	286	1,182,000	291	1,275,000	—
	GOSNOLD	99	—	1944 / 1961	209,600	213	269,000	231	301,000	—	293,000	—
	KNORR	245	Navy	1970	370,900	96	865,000	268	1,040,000	271	1,022,000	—
Michigan	INLAND SEAS	114	—	1943 / 1962	244,041	137	254,271	123	214,941	158	231,259	160
	NIGLS	50	—	1963	51,340	155	54,790	171	65,221	166	71,647	160

UNIVERSITY RESEARCH VESSELS (over 65-ft)

(Non-Block Funded)

Operator	Name	LOA	Year Built	Type
CCNY	Atlantic Twin	90		Catamaran
Lamont	Sir Horace Lamb	136	1942	Ex-YMS
	Erline	100	1965	Ex-Crew Boat
Texas A&M	Kasidah II	110	1924	Ex-Yacht
	Orca	98	1925	Ex-CG Cutter
	Leprechaun	77		Ex-PT Boat
Univ. of Texas	Longhorn	80	1972	R/V
Humboldt State	Catalyst	100	1922	Ex-Buoy Tender
Virginia Inst. of Marine Science	Langley	80	(old)	Ex-Ferryboat

(Funded from Navy Appropriations)

University R/V Inventory — 65-ft Class (±10ft)

Operator	Name	LOA	Type	Current Op Cost	
Mar. Bio Lab, Woods Hole	VERRILL	65	R/V	$355/day	
SE. Mass. Univ.	CORSAIR	65	?		
Univ. Conn.	T-441	65	T-Boat	10,000 (less crew)	
Univ. Conn	UCONN	65	T Boat	6,000 (")	
New York Univ.	KYMA	65	T Boat	50 000	
Columbia Univ.	MANNING	65	T-Boat		
Adelphi Univ.	ZOSTERA II	54	Yacht	$150/day	
Long Island Univ.	LUCAYO	56	Yacht		
Bermuda Bio Sta.	PANULIRUS	64	R/V	2,942	
Johns Hopkins Univ.	MAURY	65	R/V	65,700	*
Univ. Maryland	(New)	65?	Crew boat		
Virginia Inst.	PATHFINDER	55	R/V		
Old Dominion	LINWOOD HOLTON	65	T-Boat		
Duke Univ.	?	55	Trawler		
Skidaway Inst.	KIT JONES	64	Tug	100,300	*
Florida Inst Tech.	SEA HUNTER	65	Shrimper/Yacht		
Nova Univ.	GULF STREAM	55	Yacht	54,600	*
Miami Univ.	CALANUS	63	R/V	91,840	*
Fla. State. Univ. Sys.	SUSIO	65	Houseboat		
Florida State Univ.	TURSIOPS	65	T-Boat	95,100	*
LERNER LABS.	DAN BRAMAN	73	(?)		
Gulf Coast Res. Lab.	GULF RESEARCHER	65	T-Boat (?)		
Texas A&M	LEPRACHAUN	77	P.T Boat		
Texas A&M	EXCELLENCE	56	Yacht		
Texas A&M	DUET	62	Yacht		
Univ. Wisconsin (Mil)	NEESKAY	65	T-Boat	41,000	
Univ. Buffalo	DAMBACH	65	T-Boat	31,000	
Univ. Michigan	MYSIS	50	R/V	65,200	*
Univ. Washington	HOH	65	Tug	151,946	*
Univ. Washington	ONAR	65	T-Boat		
Univ. Washington	KESTRAL	55	Trawler/Yacht		

UNOLS Office
5/9/72

Summary Report

SECOND ANNUAL UNOLS MEETING, MAY 3-5, 1972
College Station, Texas

1. The open meeting was attended by about 70 persons representing operating and research institutions and Federal agencies.

2. Reports on activities of the UNOLS Advisory Council, Working Group on Submersibles, Federal Funding Support, Foreign Clearances, Freedom of Academic Research, Coastal Zone Research Vessels and research ship construction were presented and discussed.

3. Research ship operating schedules were reviewed along with scheduling procedures and time availability by operating institutions.

4. UNOLS established a category of research facility to be designated "National Oceanographic Facility" and defined as a facility, specialized and otherwise which shall be made available for the use of qualified scientists who do not operate or have available the required facilities. A new Annex II to the UNOLS Charter was adopted which establishes the framework for National Oceanographic Facilities. A copy of the new Annex II is attached. The principal difference between the new Annex and the earlier proposed version is that a separate Review Committee is to serve for each facility.

5. To implement the new concept of National Oceanographic Facilities, UNOLS proposed that the R/V EASTWARD and the Research Submersible ALVIN be so designated. In the case of ALVIN a significant fraction (up to 50%) of operating use would be so assigned. UNOLS considered the case for R/V ALPHA HELIX as a National Oceanographic Facility and deferred action pending further examination of the role of ALPHA HELIX as an oceanographic facility.

6. UNOLS will explore the possibility of setting up a small working group to assist the State Department Coordinator for Ocean Affairs in developing uniform procedures and in expediting clearances for conducting research in foreign waters.

ANNEX II TO UNOLS CHARTER

National Oceanographic Facilities

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

2. A research vessel or other research facility may be designated as a National Oceanographic 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 Oceanographic Facilities may be multi-or special purpose facilities and may be designated for the entire annual operating period or any significant period thereof.

3. The purpose of National Oceanographic Facilities is:

   - To provide oceanographic vessel and other facility support to scientists who do not operate or have available the required facilities.

   - To provide for the support and use in academic research of specialized and unique facilities.

4. A Review Committee for each facility shall be established for the purpose of considering proposals for facility use and for recommending programs to be scheduled. Members of the Committee shall be nominated by the UNOLS Advisory Council and shall be appointed by UNOLS. Members shall serve for terms of three years on a rotating basis. Each institution operating a National Oceanographic Facility may designate an ex-officio member in addition to those members appointed by UNOLS. The Review Committee shall elect its own Chairman from among the members appointed by UNOLS.

5. In recommending the allocation of facility time the Review Committee shall act primarily on the scientific merit of the proposed research and its compatibility with the individual facility.

6. Operational scheduling of the facility will be the function of the operating institution. The time frame for scheduling generally shall be in accordance with Annex I of the UNOLS Charter.

7. Information and announcements advertising the availability of a National Oceanographic Facility will be a joint function of the operating institution and the UNOLS Office.

8. Receipt, acknowledgement, collating and structuring of requests for facility use will be the function of the operating institution in consultation with the UNOLS Office.

9. An annual report to UNOLS on the use of each National Oceanographic Facility will be prepared by the appropriate operating institution in cooperation with the Review Committee and UNOLS Office.

10. Requests for funding the operation of the facility will be the responsiblity of the operating institution.

Approved and adopted at the UNOLS Meeting at College Station, Texas, on May 5, 1972.

UNIVERSITY - NATIONAL OCEANOGRAPHIC LABORATORY SYSTEM

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

UNOLS Office
Woods Hole Oceanographic Institution
Woods Hole, Massachusetts 02543

27 July 1972

TO: Members of the Advisory Council

SUBJECT: Minutes of May 31 - June 1 Meeting

Herewith are transmitted the draft minutes of the last meeting of the Advisory Council. Please return to me any corrections or comments and be prepared to approve them or otherwise amend them at the next meeting.

Please be reminded that the next meeting will be Friday-Saturday, September 8-9, 1972 at the Center for Great Lakes Studies, University of Wisconsin-Milwaukee. If you have any agenda items you wish included please forward them to me.

RPD Dinsmore

R. P. Dinsmore
Executive Secretary, UNOLS

RPD/mh
Enclosure

cc; Miss Mary Johrde
Dr. Ned Ostenso
Dr. Jay Savage
Dr. Arthur Maxwell

Draft
7/26/72

MINUTES OF UNOLS ADVISORY COUNCIL MEETING
MAY 31 - JUNE 1, 1972

1. A regular meeting of the UNOLS Advisory Council was convened at 9:00 a.m. May 31, 1972 at Scripps Institution of Oceanography, La Jolla, California.

Present were:

Members

Dr. J.V. Byrne, Chairman, Oregon State University
Dr. J.P. Craven, University of Hawaii
Dr. D.W. Menzel, Skidaway Institute
Dr. W.S. Wooster, Scripps Institution

UNOLS

Dr. A.E. Maxwell, W.H.O.I. - UNOLS Chairman
Dr. J.M. Savage, University of Southern California, UNOLS Vice-Chairman
R.P. Dinsmore, Executive Secretary, UNOLS

Observer

Mary K. Johrde, National Science Foundation

2. The Draft Agenda was adopted as submitted.

3. The minutes of the previous meeting of January 27-28 were reviewed and approved. It was agreed that in the future action by consensus would be so indicated by the minutes and if otherwise, those members dissenting would be so noted. In addition, members would be given the opportunity to initial their approval or dissent of the minutes noting thereon their comments or corrections thereto.

3. The Role of the Advisory Council was discussed at some length based on the written comments by Prof. Stommel to the Chairman that the Advisory Council has been asked to initiate policy and thereupon loses its credibility as a reviewing body. Dr. Craven stated that there is a little of the executive role in the Advisory Council Charter and by this it cannot excape from setting certain policy. Prof. Wooster noted that the Advisory Council recommends and therefore cannot be an advocate. Dr. Savage submitted that the Advisory Council cannot escape becoming an advocate if it recommends. Dr. Byrne felt that the Advisory Council has been compelled to act as a UNOLS Executive Committee in the absence of such a body and that if an Executive Committee were established it would make the role of the Advisory Council more feasible.

Dr. Maxwell agreed with the need for a UNOLS Executive Committee and that under the authority of the UNOLS Charter and action of the May UNOLS Meeting he would propose that an Executive Committee comprising tentatively the Chairman, Vice-Chairman, and Executive Secretary of UNOLS, and the Chairman of the Advisory Council be established. This proposal was welcomed by all members present.

4. The Annual Report was taken up and comprised this Agenda Item as well as the substance of Agenda Items 5 thru 10.

A draft format for the report was submitted by the Secretary and after discussion of the goals and contents it was agreed that the substance of the report would include the following subjects:

- Development and work of UNOLS
- Ship scheduling and access
- Federal support for ship operations
- Federal support for other facilities
- Small vessels and boats
- Ship construction and replacement
- Summary of conclusions and recommendations

5&6 Ship Scheduling and Access were discussed together as being related agenda items.

A review of scheduling procedures leading up to the ship schedule was made. These included the reality of the ship schedules which were produced, the effectiveness of the ship schedule coordinating meetings, the effect of "big science" in carving out blocks of precommitted time.

Dr. Menzel felt that many ship schedules were hastily put together to show a fully employed ship rather than provide for cooperative use. Dr. Craven stated the need for a mechanism by which a ship can offer time without being penalized for inadequate programs. Prof Wooster felt that the needs of both operating institutions and outside scientists, especially the later, must yet be ascertained in order to determine a match between people and facilities. Dr. Craven stated that first there should be determined the substance of the total scientific program at sea.

Dr. Byrne considered that the recent ship schedule coordinating meeting at Houston did not achieve its intended purpose. Dr. Savage thought that meetings should be regional by scientists and in areas of interest. Prof. Wooster reiterated the importance to determine outside scientists ship requirements and that it might reveal no significant demand exists. Dr. Craven could not conclude this but thought that it was a function of stimulating interest.

Dr. Maxwell suggested a standardized format for schedules together with more specific information on programs. Dr. Byrne agreed and further suggested a track chart to show better geographic coverage.

The Chairman proposed with all members agreeing that in 1973 there should be two schedule coordination meetings; one East Coast and one West Coast and that the UNOLS Office should attempt to make a maximum impact to draw out all possible requirements.

7. Ship operations were reviewed largely through statistics provided by the Executive Secretary. Dr. Savage pointed out that the West Coast has many duplicative efforts and it should be UNOLS task to prevent this but that this could be done only if scientific programs were presented in conjunction with scheduling.

Most members agreed that the sum and substance of scientific programs must be in full view if there is to be coherence and effectiveness in ship operations. Dr. Maxwell agreed but felt this must be done in cooperation with other bodies such as OSC/NAS.

The Executive Secretary reported that little progress has been accomplished in developing the pilot effort for ship utilization criteria other than compiling the usual statistical data. The next step is the determination which and application of other factors in a subjective analysis. He suggested that a small working group might be given this task. Discussion resulted in agreement that available data be examined by the Advisory Council at its next meeting and that the need, if any, for a Working Group be deferred until that occasion.

Dr. Maxwell briefed the members on a forthcoming meeting between a UNOLS Group and representatives of appropriate Federal Agencies on matters dealing with research ship clearances and a growing number of reports concerning ships operations at sea.

8. Federal Funding of Research Ships was taken up for purposes of the Annual Report. The Executive Secretary reviewed the various tables provided in the background material and the current status of Federal FY-73 funds. UNOLS Members report that estimated 1973 requirements amount to about $17.3M which is within the projected figure by NSF and ONR provided ONR does

not reduce its current level. 1974 and 1975 outlooks are low by about $1.0M and 76 et seq. coming again in agreement.

In addition to direct operations of ships, shipboard equipment and marine technicians were singled out as related items of ship support for emphasis. For ship equipment 10% of ship costs was agreed as a tentative recommendation. On the matter of Marine Technicians, Dr. Craven proposed that a Working Group over the next year explore this with the goal of developing the role of marine technicians as a career category. This was agreed to with tentative funding recommended at about 5% of ship operations.

The impact of IDOE programs was reviewed noting the general agreement between the $3.2M of ship time given over to IDOE in 1973 and $2.8M funding provided by the IDOE program office.

The role of other agencies than NSF and ONR in funding ship operations support was discussed. It was agreed that NOAA and EPA both have responsibilities for supporting academic research programs and may already derive ship time benefits which ought to be more visible and appropriately funded. It was decided that these agencies would be addressed in the report and it be recommended that they participate in direct funding support amounting at the outset to about 5% of the ship operations costs.

9. Ship Construction and Replacement records and projections were reviewed. The material condition of the academic fleet was reported on by the Executive Secretary based on members submissions and the records of the NSF/Navy Panel for Ship Operations Construction and Conversion. Federal projections for ship construction calls for $2.8M in FY-72 and FY-73 and about $4.0M annually thereafter. This is all NSF funding. There are no present Navy plans for academic research ship construction. At today's dollars, the projected NSF funding would provide a fleet replacement cycle of about 30 years.

Dr. Craven submitted that a 30 year life for modern research vessels is too long and that 15 years is more realistic. Dr. Maxwell estimated that based on a 15 year useful life, replacement of the existing fleet would require an average annual funding of about $8.0M.

Concerning ship construction the following points were agreed upon:

- July 1973 remains the target date for the UNOLS long range plan for requirements for academic research vessels.
- Pending the foregoing the following priorities should apply with replacement construction in preference to "new" construction:
    1. National Needs
    2. Merit of Institutional Programs
    3. Material Condition
- Beginning in FY-1974, $8.0M should be programmed annually for ship construction.

The Executive Secretary briefed the members on the ship needs and plans developed by the University of Rhode Island. Dr. Wooster proposed that if new construction funds were not available to replace URI's R/V TRIDENT, the possibility of converting a surplus Navy AGOR be explored if and when one became available based on the apparent success of the R/V GILLIS conversion at University of Miami. The Executive Secretary will explore this possibility with the Oceanographer of the Navy.

Concerning specific recommendations for the assignment of FY-73 and 74 ship funds, it was agreed to review the recommendations by the Working Group for a Coastal Zone Research Vessel (Agenda Item 14) dealing with ship construction. The pertinent portions of the Coastal Zone Report were then discussed in the context of total national and institutional needs and responses. Dr. Byrne expressed concern that a total allocation of funds to regional and coastal ships was an imbalance; furthermore he felt that the majority of existing academic research vessels were, in effect, coastal ships having strong, regional and cooperative aspects. In this view Dr. Byrne was supported by Dr. Maxwell.

Professor Wooster expressed the view that the Coastal Zone together with its research needs constituted the nation's highest priorities and should be so recognized and supported by the Advisory Council. Dr. Craven concurred in this view.

Mary Johrde presented a summary of those institutions or consortia which appeared so far to be responding in some manner to recommendations in the Coastal Zone Report. These represented almost six proposals totalling an estimated $3.25M. Four of the six indicated were apparent replacements for existing UNOLS vessels.

After lengthy disucssion, it was agreed (Dr. Byrne dissenting) that the Advisory Council recommendation for 1973 ship construction program be in the direction of small coastal ships in the following priorities:

1. replace existing regional vessels
2. replace existing institutional vessels
3. new construction of regional vessels
4. new construction of institutional vessels

There was consensus that the recommendation at this time for the 1974 construction would be the replacement of a large ship based on national needs and merit of institutional programs.

10. Support of small vessels and boats was identified by the Executive Secretary as an urgent issue. A profile of craft under 100-ft showed about ten between 65-100 ft. of which five were now block funded. 65-footers are a reasonably uniform class numbering about 32 total of which 8 are block funded. Below 65-ft there are about 75 boats over 26-ft of which only about four receive direct support. The Executive Secretary estimated that about

suggested that a biologist such as Prof. Pearcy of OSU might make the group more multi-disclipinary.

Pending the results of the above Working Group it was agreed that the Scripps aircraft now being supported as an "interim" National Oceanographic Facility be continued in 1973 with support of about half its operations in the amount of approximately $60K.

12. Under Other Specialized Facilities there was a great deal of discussion of the precise role of UNOLS in identifying, sponsoring and supporting new concepts of facilities. Prof. Craven stated strongly that some overview activity such as UNOLS or NACOA must become more active in this area.

Regarding submersibles and habitats it was agreed that UNOLS should develop close contact with the MUS&T Office of NOAA. In regard to new concepts in general it was agreed that the OAB (NAS) be requested to help identify unique facilities which are science oriented and might be part of UNOLS. Along with identifying areas, growth patterns and reasonable resources to achieve growth should be sought through OAB.

13. In the agenda topic of National Oceanographic Facilities, the Advisory Council was joined by Drs. Nierenberg, Bullock and Carey of Scripps in a discussion of the role of R/V ALPHA HELIX. Dr. Nierenberg reviewed the concept and activities of that ship and it was his opinion that it belonged within UNOLS but that its research programs should not have constraints but should compete freely within the capabilities of the ship.

Dr. Maxwell expressed his appreciation for Dr. Nierenberg's views and advised that Scripps views would be transmitted to UNOLS members.

Dr. Bullock expressed the hope that any future UNOLS selection of a Review Panel for ALPHA HELIX would recognize the interest and expertise of the existing body.

On the other aspects of National Oceanographic Facilities, there was discussion on how future NOF's could and should come into being. It was agreed that action by the Advisory Council should generally be limited to reviewing new ideas as national needs occur or are otherwise identified. The Advisory Council should not endeavor to rescue bankrupt ships or facilities.

The Executive Secretary submitted a request by the Bermuda Biological Station that R/V PANULIRUS II might be considered as a NOF. The Chairman stated with agreement by all members that the Advisory Council Role would be to review such a proposal but not to instigate it. Dr. Menzel felt that the new UNOLS Executive Committee might be the more appropriate body to receive it.

14. Discussion returned to the Coastal Zone Report. In regard to the report as a whole the Advisory Council agreed to accept the report and to express its appreciation to the chairman and members.

The conclusions and recommendations were reviewed in detail and a list of comments were prepared to be transmitted to the chairman and members of the working group and to serve as current Advisory Council action on the Report. In general there was a reluctance to endorse specifics such as regional limits or ship characteristics at this time but there was a general concurrence with the basic principles.

15. Under Other Business

- The Chairman advised that Dr. Charles Drake had tendered his resignation from the Advisory Council, and that a vacancy now exists. It was agreed that the Advisory Council needed another member now and the vacancy should not continue until the next Annual UNOLS Meeting. Dr. Byrne will formally request the UNOLS Chairman to seek a means to fill the vacany as soon as possible.

- It was agreed to hold the next meeting, if possible, at the University of Wisconsin at Milwaukee on 8-9 September 1972.

16. There being no other business, the meeting was adjourned at 4:30 p.m. June 1, 1972.

Submitted

R.P. Dinsmore
Executive-Secretary, UNOLS

Approved: