

UNIVERSITY - NATIONAL OCEANOGRAPHIC LABORATORY SYSTEM



UNOLS NEWS

HIGHLIGHTS

1987 Ship Schedule
Fleet Replacement
Congressional Subcommittee
on Oceanography
International Cooperation
Submersible Research

IROSC Report
UNOLS Elections
Shipment of Equipment and
Supplies
Notice of Intent
Special Facilities Committee

1987 Ship Schedule

The effects of the gaps between fundable oceanographic research, funded research, and ship support continues to plague ship operations (not to mention research programs). Projected ship-time requirements total 5,756 days which approximates the capacity of the fleet but exceeds the anticipated budget for ship operations by about 1,000 days. Tentative schedules and costs are summarized below.

	Op Days	Costs (\$Million)			
		NSF	ONR	Other	Total
Projected East West Total	3211 2545 5756	18.532 16.443 34.975	2.469 1.081 3.550	1.473 1.620 3.093	22.473 19.144 41.617
Anticipated Total	44-4800	25.9	3.6	3.1	32.6

Based on scheduling and funding information available 3 June, the Chairmen of the Scheduling Groups made the following recommendations: (1) three west coast ships should be considered for lay up in 1987, the



MELVILLE, OSPREY and THOMPSON; (2) two east coast vessels should be considered for lay up, the KNORR and either the ENDEAVOR, GYRE, ISELIN, or OCEANUS. More explicit recommendations should await science funding decisions still pending.

While these potential lay ups are primarily related to funding levels for oceanographic research and ship operations, the problem is exacerbated by the continuing decline in the use of UNOLS vessels by Federal Agencies other than the NSF. ONR support of academic research continues to decline. However, declines in the "other" category have been most rapid in recent years. From 1984 through 1987 funding in this category had declined from \$7.0 M to \$3.1 M. In particular, USGS and DOE use of UNOLS vessels has virtually ceased. In the case of USGS, this is partly a consequence of the use of more economical foreign charters. In response to this trend, UNOLS has recommended that the UNOLS Advisory Committee initiate an investigation into the future demand for UNOLS vessels by government agencies (other than NSF).

Fleet Replacement Committee

The FRC has achieved its charge with the release of three reports: "A Plan for Improved Capability of the University Oceanographic Research", "Science Mission Requirements for New Oceanographic Ships", and "Summary of Concept Designs". The FRC has done an outstanding job and deserves the applause of the oceanographic community for its timely completion of its work. However, it is clear that the effort to upgrade the research capabilities of the fleet through the replacement of aging and technically obsolete vessels has just begun. Thus, the FRC has recommended that the committee be restructured and charged with (1) continuing to review and update the fleet replacement plan and (2) the development of conceptual designs for smaller ships (100-200 ft. size range) and innovative platforms. In particular, the next phase in the design spiral (the preliminary design phase) for larger ships must be initiated and funding sources identified. The AC has endorsed this proposal.

In this context, the FRC is working closely with ONR on the Navy's fleet replacement plan which calls for funding of 12 new research vessels by 1992. Several of these new ships would be for the UNOLS fleet. Funds for AGOR-23, a medium endurance vessel, have been approved (\$33 M), and a request for proposals will probably be issued in July. AGOR-23 is intended to replace one of the older AGOR class vessels in the UNOLS fleet.

Congressional Subcommittee on Oceanography

Hearings on the federal oceanographic fleet were held 24 June by the Subcommittee on Oceanography of the House's Committee on Merchant Marine and Fisheries. Academic witnesses included Drs. James Baker (JOI), Robert Ballard (WHOI), Don Boesch (LUMCON), Bob Corell (UNH), Edward Durbin (URI), Feenan Jennings (TAMU), and Ferris Webster (UD and Chairman of UNOLS). Federal agencies were represented by Mr. Anthony Calio (NOAA), Dr. William Merell (NSF), Rear Admiral Clyde Robbins (USCG), and Mr. Robert Winokur (USN).

The hearing focused on current and projected research requirements for supported research vessels. The adequacy of the current fleet and its availability to support future research needs were examined. Of particular concern was the declining support for civilian oceanographic research. Note was made of NOAA's aging fleet for which there is no current plan for replacement. This was in sharp contrast with the Navy's aggressive plan for fleet replacement and its newly reiterated commitment

to oceanographic research. Other issues discussed were the competitiveness of the U.S. fleet in the international oceanographic community and future demands on the fleet for global research.

International Cooperation

The NSF has been successful in effecting an informal program of shiptime exchanges with France and the U.K. to take advantage of the availability of ships in regions where UNOLS ships do not normally operate. Over the last three years NSF has been working with the NERC of the U.K. and IFREMER of France to permit the exchange of ship time without the complexity of having to pay each other for ship use. The agreement is that each agency provides ship time on a roughly equal basis for scientists who otherwise might have to wait considerable time to work in a particular region.

The first exchange was completed in 1985 with a French program being conducted on the CONRAD and a U.S. Scientist (Art Yayanos of SIO) working on LE NOROIT. Both cruises were very successful and scientifically productive. During 1986-87 a similar exchange between NERC and NSF will involve U.S. scientists using the DARWIN in the Indian Ocean and the U.K. scientists using the WASHINGTON in the Western Pacific. Additional cruises are under discussion and there will be a meeting of U.S., U.K., French, West German and Canadian representatives this summer to discuss an expansion of this informal program.

Submersible Research

ALVIN is currently scheduled to spend 1987 in the North Pacific working from San Diego to Honolulu to Guam to Japan to Oregon and back to San Diego by Christmas. The next overhaul is scheduled for mid to late 1988 after transiting to the east coast. Demand for ALVIN time is high with requests exceeding available time in 1987 by a factor of 3.

The report of the Special ALVIN Study Committee, "ALVIN '86: A Report on the Program's Status", has been released and is available through the UNOLS Office. The report concludes that ALVIN's ability to take human eyes, brains, sampling equipment, and experiments to the deep sea floor has played a uniquely important role in the development of U. S. Ocean science during the 1970's and 1980's. It is clear that the program is operating effectively and that ALVIN will continue to play a key role in solving important scientific problems. As a consequence of greater demands on planning, scheduling, and technology development, the Study Committee recommended that the ARC be enlarged, renamed the ALVIN Advisory Committee, and standing committees for long range planning, scheduling, and technology development be established. It was also recommended that an annual meeting be held for ALVIN PI's in order to augment present procedures for obtaining user and community input to ALVIN activities. The Committee also recommended that a major study of submersible science be sponsored in 1986 with the charge of identifying (1) scientifically important research topics at 0-1000m depths that can be addressed using new technology, and (2) scientifically important research that requires submersibles with depth capability substantially greater than ALVIN. (Note: the AC recommended the ARC not be enlarged and that its name be retained but that the sense of recommendations to emphasize planning, scheduling and technology development be followed.)

The Navy has several research submersibles that have been used by members of the scientific community since the mid-70s. These vehicles include SEA CLIFF, TURTLE, AND NR-1. SEA CLIFF has recently been converted

to a 6200 m depth diving capacity. This vehicle is currently available for limited use within 150 miles of San Diego. The Navy expects to have a full program developed for 1988.

IROSC Report

The International Restriction to Ocean Science Committee has issued a report to the AC on problems encountered by UNOLS' institutions in obtaining clearances to work in foreign waters. A survey of institutions indicates that the main problem is not the denial of requests but inordinate delays in the approval of requests for clearances.

The "Handbook for International Operations of U.S. Scientific Research Vessels" has been distributed and is available through the UNOLS Office. This useful guide contains information on zones of jurisdiction, research activities for which consent is required, when and how to seek consent, and much more.

UNOLS Elections

Dr. George Keller has been elected Chairman of UNOLS, Dr. Keller is the Vice President for Research and Graduate Studies of Oceanography at Oregon State University. Dr. Robert Corell, Professor and Director of Marine Operations at the University of New Hampshire was re-elected Vice Chairman. Dr. Keller replaces Ferris Webster who has served as Chairman for the last three years.

The terms of Dr. Charlie Miller, Dr. Harris Stewart and Captain Bob Dinsmore have expired. Capt. Dinsmore was re-elected for a second term. New members of the AC are Dr. Robert Knox and Dr. Ken MacDonald. Capt. Dinsmore is a Consultant for Marine Operations at WHOI and Dr. Knox is an Associate Research Oceanographer and Academic Administrator at SIO. Dr. MacDonald is at UCSB where he is a Professor of Geological Sciences.

The Advisory Council will miss Charlie Miller's leadership, candor and willingness to question authority, especially when that authority seemed to lack direction or purpose. Charlie's sense of indignation at situations he views as misguided and outrage with ineptitude have served UNOLS well since 1980. Although they will be lost for the time to UNOLS, Charlie's friends and colleagues should be assured that his indignation, outrage and candor will remain as a refreshing part of the oceanographic conscience.

Shipment of Equipment and Chemicals

Given recent concern and restrictions involving the shipment of radioactive and hazardous material, ship users would be advised that sensitive materials to be used for research in foreign waters are best loaded and off-loaded in U.S. ports whenever possible. This will require both long-range planning on the part of scientists and a more formal vetting procedure by operators.

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