

UNIVERSITY - NATIONAL OCEANOGRAPHIC LABORATORY SYSTEM

UNOLS COUNCIL MEETING

SUMMARY REPORT

16 September 1992

National Trust for Historic Preservation
1785 Massachusetts Avenue, N.W.
Washington, DC 20036



SUMMARY REPORT

UNOLS COUNCIL MEETING 16 SEPTEMBER 1992 NATIONAL TRUST FOR HISTORIC PRESERVATION 1785 MASSACHUSETTS AVENUE, N.W. WASHINGTON, DC

The UNOLS Council met on 16 September 1992 at the National Trust for Historic Preservation at 1785 Massachusetts Avenue, Washington D.C. The meeting was called to order at 0830 by Garry Brass, Chair. The attendees are listed in **Appendix I**. The meeting followed the agenda, **Appendix II**, except as modified in these minutes.

The minutes of the July 1992 Council Meeting were accepted as written.

COMMITTEE REPORTS

Research Vessel Operators Committee (RVOC): Mike Prince, vice chair of the RVOC, presented the report. Mike stated that the RVOC had completed changes to the UNOLS Research Vessel Safety Standards and that these changes were now ready for a vote by the Council. After discussion, the Council unanimously approved the draft standards clearing them to be presented to the general membership at the Annual meeting for final approval.

Mike briefly listed the subjects to be discussed at the RVOC Annual meeting scheduled for 20-22 October at Lewes, Delaware. These included: Regulatory changes affecting the UNOLS fleet; Insurance issues; Coastal Research planning; Winch and wire issues; Navigation equipment; and the Marine Superintendents' round table discussion.

Garry Brass tasked the RVOC to review issues that might be addressed by Kerry Bolognese, Staff Director, Council on Ocean Affairs. Examples might be: the impact of the new Disability Act on sea going positions and the changes needed in the Communications Act concerning radio officers to bring this law in line with the international community.

Fleet Improvement Committee (FIC): Mark Langseth informed the Council about the activities of the FIC and has planned its next meeting in La Jolla, CA on 7-8 October. Mark reported that the Coastal Facilities Subcommittee is making progress on their upcoming workshop which will address the facility needs of the coastal

community. A workshop steering committee has met to determine the invitees and outline the agenda for this workshop. A November date had been set, however, it now appears that a new meeting date after the first of the year may be more appropriate.

A questionnaire was sent out to sea-going scientists who had recently been aboard two or more different research vessels to get their comments comparing the laboratory facilities and accommodations on the different ships. Mark reported that the response has been good and the comments enlightening. A summary of these comments will be included in the review of shipboard laboratory facilities and accommodations which he and Teri Chereskin will be writing. Bob Dinsmore has been observing labs and accommodations first hand as he performs Navy INSURVS.

Mark updated the Council on the progress of the Arctic Research Vessel Subcommittee. The Subcommittee recently met and revised the "Scientific Mission Requirements for an Arctic Research Vessel" to incorporate the comments and needs of the community. The new requirements increase the ice classification to A3, permitting the ship to operate independently in the central Arctic basin (multi-year ice) for short term, short distance missions from July through September and in the Arctic offshore shelf from July through December.

This added ice capability requires additional horsepower and fuel, and causes the ship to be longer (about 320'), of greater draft and significantly greater displacement. These changes in turn increase the cost. The subcommittee is still investigating the possibility of an unconventional hull form, such as a Thyssen/Waas hull which would require significantly less horsepower and associated fuel. NSF continues with the budget process to include funding for construction of this ship.

Considerable discussion followed, particularly in connection with the USCG's effort to design and build their own icebreaker. Funds are presently in the Navy's ship building budget for this ship. Captain Alan Walker provided the Coast Guard view and presented the progress of this program.

DEep Submergence Science Committee (DESSC): The report for the DEep Submergence Science Committee (formerly the ALVIN Review Committee) was presented by Jeff Fox, Chair. Jeff discussed the need and plans for a workshop entitled "Deep Submergence Science in the Next Decade: Scientific Challenges, Technology Developments and Investigative Strategy." It is scheduled for 13-14 October at the Embassy Suites Hotel in Old Town Alexandria, VA. A broad spectrum of the deep submergence community is expected to attend including both scientists and engineers. The meeting will have three major objectives: 1) illustrate the kinds of compelling and salient scientific questions that can only be solved with the use of deep submergence technologies; 2) elucidate the state of deep submergence technology in the US; and 3) answer how the community can best utilize the technological assets to address the science of the abyss. The workshop will also query the community to ascertain

whether significant interest exists to employ deep submergence tools in non-traditional regions of the global oceans. Jeff's slides are included as **Appendix III**.

Don Heinrichs reported that he had recently attended a JAMSTEC sponsored meeting in Japan that discussed international cooperation for submersibles. The focus of this meeting was the Pacific and included representatives from the US, Japan, UK and France. Don Heinrichs and Marsh Youngbluth agreed to host the meeting in March 1993 to explore international work in the EPR. Japan has expressed an interest in bringing the SHINKAI 6500 to this region.

Scheduling Committee: Ken Palfrey summarized the Scheduling Committee meeting held on 14 September. The schedules presented at the meeting represented 5335 operating days with a total operating cost of \$51.72M. The NSF portion of this requested amount was \$36.84M. After a review of the presented schedules, the double bookings were eliminated and the cruises that were declined funding were deleted. This resulted in reducing the total operating days by about 650, most of which were NSF days. In the large ship group only EWING saw a reduction in operating days. The intermediate ships took the largest cut, with the recommendation that ENDEAVOR not operate after its mid-life refit, COLUMBUS ISELIN's schedule being reduced to approximately 60 days and VICKERS operating days being reduced by two thirds. The Class IV ships' schedules remained essentially as presented. The Review Committee's recommendations were to be transmitted to the operating institutions by week's end.

Ken Palfrey and Ron Hutchinson were re-elected as Scheduling Committee Chair and Vice Chair, respectively. These appointments were confirmed by the Council.

AGENCY REPORTS

National Science Foundation. Don Heinrichs presented the NSF budget figures reflecting the requested funds for 1993. These are included as **Appendix IV**. Although the Congressional action is not complete, indications are that the NSF budget will, at best, be level funded and could possibly be cut up to 5%. This is a significant reduction from the planning figures presented earlier in the year as the ship schedules were forming. Reduced operating schedules are anticipated.

Office of Naval Research. The ONR report was presented by Keith Kaulum. Keith reported that the Navy funding for research should remain about level at \$7-8 million representing 500-600 days of ship operations. He informed the Council that the Navy's three pool ships were being retired providing an opportunity for additional shiptime for UNOLS. BARLETT, the remaining pool ship will cease operations in 1993. First, it

will require the Navy to reprogram their funding for this shiptime from the operating fleet to research. Keith announced that NAVSEA has officially transferred AGOR-23, THOMPSON, to ONR. AGOR-24 has been funded in the 1992 budget, however, a supplement is needed which will be in the 1993 budget. When funded the Navy will be able to let the construction contract for this ship. The Navy is cleared to transfer GYRE to TAMU and WASHINGTON to Chile by the end of the month. This brings the number of ONR ships in the UNOLS fleet to five (counting AGOR-24). The AGOR-25 remains in the Navy's 1994 budget.

The KNORR and MELVILLE are both operating and experiencing no serious problems. The final settlement is under negotiation for the overhaul costs of these two ships. Funds have been budgeted for their scientific equipment.

Keith announced several personnel changes. Eric Hartwig will depart ONR on 1 October with Gordon Hamilton filling the position in an acting role for one year. June Keller had a baby girl and is presently out on maternity leave. Annette DeSilva is filling in for her during this absence. Pat Dennis is working part time for ONR and part time for the Oceanographer of the Navy's Joint Program Office.

National Oceanographic and Atmospheric Administration. Scott McKellar provided the NOAA report. Chris Andreasen has left NOAA to be President of the International Hydrographic Bureau in Monaco with (the new) RADM Bill Stubblefield taking his job at NOAA. The 1993 budget for NOAA is still in Congress but looks grim. It could result in the loss of their ship SURVEYOR. There are 1992 carryover funds for chartering of UNOLS ships. This includes time on VICKERS, PELICAN and LONGHORN. The \$4 million TOGA TAO money is not in the 1994 budget. Scott presented a series of slides that are included as **Appendix V**.

United States Coast Guard. Captain Alan Walker gave an overview of the USCG's oceanography program. He reported that a new Coast Guard ice breaker is in the Navy's budget. The original bids were well in excess of the amount budgeted so the Coast Guard has redeveloped a new design package. They worked closely with the oceanographic academic community in developing the new specifications. This package will be negotiated with the two original bidders to build a vessel within the funding constraints. They expect to award the construction bid by summer '93 and get delivery by 1997.

Captain Walker indicated that the Coast Guard budget looks positive for 1993 and should continue to grow. The USCG has been working closely with the Canadians to coordinate both hardware and operations. Within the US, the Coast Guard is active in providing leadership in Arctic operations. Captain Walker distributed to the Council a copy of the "Interagency Arctic Research Policy Committee (IARPC) Policy Statement" which is included as **Appendix VI**. He emphasized the Coast Guard

interest in maintaining a working interface with the US academic community for the purpose of providing platforms for science. Captain Walker indicated the availability of their ships during transits for science use, particularly their long transits to and from Antarctica. Their new emphasis is on having their ships user friendly. They are assigning a civilian to each Coast Guard ship on a scientific mission to act as liaison between the ship and the science party to enhance the science operations.

United States State Department. The State Department presentation was provided by Tom Cocke. Tom reported 300 clearances have been processed this year with very few problems. If this rate continues it will exceed the 330 clearances processed in 1991. Tom attributes the smoother operation to the computerized processing of clearances and the additional help he has received. He did state that about 40% of the requests are coming in later than the published time frame but even this is an improvement. Post cruise reporting is still the major problem, yet manageable. Obtaining clearances from Mexico remains difficult.

UNOLS ISSUES

Risk Management Update. Jack Bash provided a progress report on the new plan to centralize insurance purchases for the UNOLS fleet. The plan has been presented to the community in a letter signed by Grant Gross and Eric Hartwig. Responses to this letter are being received and will be reviewed. NSF and ONR are expected to respond to the concerns of the community. Because of the nature and number of responses, the timetable for implementation will probably be delayed.

Research Vessel Technical Enhancement Committee (RVTEC). At the July Council meeting, Rich Findley presented a proposal to form a standing UNOLS committee that will address the concerns of the technical support persons in the academic fleet. The plan proposed a committee similar to that of the RVOC that would meet annually, probably in conjunction with a major science meeting, and discuss problems of the technical support community. The plan received a favorable review by the Council and a verbal intent to fund by NSF. It is to be presented to the UNOLS Membership at the 17 September Annual meeting for their final approval. If approved, an organizational meeting of this group is scheduled for 18-19 October at the Omni Shoreham Hotel in Washington, DC.

ALVIN Memorandum of Agreement (MOA) Update. Keith Kaulum provided the Council with an update on the new MOA, which is in draft form and being routed through the three agencies involved. The agreement is for support of a "Deep Submergence Facility" which would integrate ROVs with ALVIN for enhancing deep submergence science. Some of the elements in the new MOA are: integration of ROVs with ALVIN; a safety net of 150 days will be in place for ALVIN/ROVs, this will be divided among the agencies(82 days NSF, 34 days ONR and 34 days NOAA); there will be no support for the support ship; a longer lead time will be attempted for proposal review to permit alternate use of the support ship if ALVIN does not provide a full ship year; new technology will be encouraged; a re-compete clause (a process permitting other institutions that are interested in operating ALVIN will get an opportunity to compete) will be included. The new MOA will be routed to WHOI and the DESSC before becoming official.

Fleet Coordination. Garry Brass reported that he had responded to the letter from John Knauss requesting shiptime for NOAA programs in the out years. Garry's response stated that if funds were available for the ship time the UNOLS ship capacity could satisfy these needs.

Research Vessel Safety Standards. This subject was addressed in the RVOC presentation provided by Mike Prince.

Modes of Fleet Acquisition and Operation. No action has been taken on this UNOLS tasking. It is understood that Congress has tasked the Government Accounting Office (GAO) to evaluate the cost of operating the NOAA fleet as compared to other US fleets. The progress of this study is not known.

UNOLS Review. Tom Johnson provided the UNOLS Council a "UNOLS Review Study" at their July meeting. The Council took the study under advisement and were asked to provide Garry Brass with their comments. Garry will promulgate the review with a cover letter noting comments of the Council.

Utilization of East and Gulf Coast Intermediate Ships. Bob Knox, Ken Palfrey and Robert Hinton, a subcommittee, were tasked to review intermediate ship use on the East and Gulf coast to determine whether or not there was excess capacity. A graph was developed, **Appendix VII**, that reflected the ship use over the past ten years and projected the use for 1993. The graph suggests a relatively level and reasonable utilization for the ten year period but notes a significant reduction for 1993. The conclusion was that 1993 is an anomalous year but that the utilization needs to be watched to see indeed if a trend is starting. No actions were recommended.

Radio Officer Requirement. A brief discussion was held concerning the radio officer requirement law. This requirement adds \$300-400 per day to the ship operating costs. It will take a Congressional Act to change the law unless an exception to the law can be worked out. Dick Pittenger will work with Terry Bolognese of COA to develop a plan of action.

Ship Construction/Renovation/Refit. The KNORR/MELVILLE renovation and the AGOR-24/25 construction were addressed earlier. Limited funds were made available for change orders during initial construction of AGOR 24. ONR is in the process of prioritizing a list of desired changes. Plans for the mid life refit of the OCEANUS class ships are well underway. ENDEAVOR is scheduled to be first in line for the refit which is scheduled to start in late fall of this year. OCEANUS will follow in the late summer of '93 and WECOMA in the fall of '93. All three ships are planning major science enhancements including more storage, lab and deck working space. The refits should also enhance maintainability of the ships. Two million dollars each are planned for these refits.

Calendar for UNOLS Meetings. The following dates have been set for UNOLS meetings.

<u>Meeting</u>	<u>Dates</u>	<u>Location</u>
FIC	7-8 Oct	Scripps, La Jolla, CA
DESS Workshop	13-14 Oct	Alexandria, VA
RVTEC Workshop	18-19 Oct	Washington, DC
RVOC	20-21 Oct	Lewes, DE
DESSC	6 Dec	San Francisco, CA
UNOLS Council	14-15 Jan	Scripps, La Jolla, CA
FIC Coastal Workshop	22-24 Feb*	Williamsburg, VA
Ship Scheduling	23 Jun	Washington, DC
DESSC	Jun	Woods Hole, MA
UNOLS Council	15-16 Jul	OSU Newport, OR
Ship Scheduling	Sep/Oct	Washington, DC
UNOLS Council	Sep/Oct	Washington, DC
UNOLS Annual	Sep/Oct	Washington, DC
RVOC	Sep/Oct	TBA
FIC	TBA	TBA
DESSC	Dec	San Francisco, CA

* Tentative

The meeting was adjourned at 1630 hrs.

APPENDIX I

APPENDIX I

COUNCIL MEETING ATTENDEES

Jack Bash	UNOLS
Peter Betzer	U of South Florida
Garry Brass	RSMAS
Tom Cocke	State Department
Mary D'Andrea	UNOLS
Patrick Dennis	JOI (Navy Support)
Annette DeSilva	ONR/UNOLS
Dolly Dieter	NSF
P.Jeff Fox	URI
Grant Gross	NSF
Dennis Hayes	L-DGO
Donald Heinrichs	NSF
Tom Johnson	Duke
K. Kaulum	ONR
Dave Karl	U of HI - SOEST
Bob Knox	SIO
Mark Langseth	L-DGO
Scott McKellar	NOAA
Martin Mulhern	NOAA
Chuck Nittrouer	SUNY Stony Brook
Wadsworth Owen	U of Delaware
Ken Palfrey	OSU
Dick Pittenger	WHOI
Mike Prince	MLML
Mike Reeve	NSF
Lisa Rom	NSF
Neil Sullivan	USC
Alan Walker	USCG
Richard West	NSF

APPENDIX II

UNOLS COUNCIL MEETING AGENDA
8:30 a.m. - SEPTEMBER 16, 1992
NATIONAL TRUST FOR HISTORIC PRESERVATION
1785 MASSACHUSETTS AVENUE, WASHINGTON, D.C.

Call the Meeting: Garry Brass, UNOLS Chair, will call the meeting to order at 8:30 a.m. on September 16, 1992.

Accept Minutes of July, 1992 Council Meeting.

COMMITTEE REPORTS

Research Vessel Operators Committee: Jim Williams, Chair, will report on the progress of RVOC action items and on the upcoming RVOC meeting in Lewes, Delaware scheduled for 20-22 October. The update of the Research Vessel Safety Standards will be addressed below in the agenda.

Deep Submergence Science Committee (formerly ARC): Jeff Fox, Chair, will report on the status of the fall workshop and any other related committee events.

Fleet Improvement Committee: Marcus Langseth, Chair, will report on the progress of action items from the FIC February, 1992 meeting: Coastal Oceanography subcommittee progress and workshop, Arctic Research Subcommittee progress (Enclosure 1), review of shipboard laboratory facilities and accommodations, and the Fleet Improvement Plan update.

Ship Scheduling Committee: Ken Palfrey, Chair, will provide the Council with a report on the fleet's 1993 schedules and the results of the September Scheduling and Scheduling Review Panel's meetings.

AGENCY REPORTS

Agency Reports: Reports from representatives of NSF (D. Heinrichs), ONR (K. Kaulum) and NOAA (W. Stubblefield) on funding outlooks and special projects. The State Department (T. Cocke) will provide an update on foreign clearance problems.

UNOLS ISSUES

Risk Management Update: Jack Bash will review developments in the proposal to provide a group insurance policy for the UNOLS Fleet.

Research Vessel's Technical Enhancement Committee (RVTEC) Proposal: Jack Bash will provide an update on the progress of the proposed RVTEC standing committee and two-day organizational meeting.

ALVIN Memorandum of Agreement (MOA) Update: Funding Agency representatives will provide an update on the status of the MOA.

Fleet Coordination: JOI, NOAA, FOFCC and UNOLS have continued discussions for integrating portions of NOAA's ship time with the academic fleet, see correspondences (enclosure 2). Garry Brass will review the latest events.

Research Vessel Safety Standards - The draft Standards were distributed to the membership for review. Jim Williams will provide an update of the status. The Standards will be presented to the membership for endorsement.

Modes of Fleet Acquisition and Operation: Progress on the study of Modes of Fleet Acquisition and Operation will be provided.

UNOLS Review: Garry Brass will provide the Council with a cover letter for the final report of the UNOLS Review. The cover letter will incorporate the Council's recommendations/comments to the report.

Utilization of East and Gulf Coast Ships - The subcommittee (Bob Knox, Ken Palfrey, and Robert Hinton) to study the problem of underutilization of East and Gulf Coast Ships will report on their progress.

Radio Officer Requirement: Dick Pittenger will provide a status of work to change the law concerning the radio officer position on vessels over 1600 gross tons.

Ship Construction/Renovation/Refit: ONR and Bob Knox will provide the construction status of AGOR 24 and funding status of AGOR 25. Ken Palfrey will provide an update of the mid-life refit for OCEANUS Class.

1991 Cruise Reports - Cruise statistics for 1991 operations will be provided.

Review of UNOLS Institutions: As required by the UNOLS Charter, the Council will review the list of UNOLS Institutions and recommend any additions, status changes, and terminations, enclosure 3. Changes will require a vote of the UNOLS membership and are indicated below:

- Johns Hopkins University: status change from "operator" to "non-operator"
- University of Southern California: clarification of status?

Review of UNOLS Charter: The UNOLS Charter is up for review this year, enclosure 4. As required by the Charter, it shall remain in effect for a period of three years after which time it shall be dissolved unless modified or readopted by vote of the UNOLS Institutions. The Council shall discuss readoption.

UNOLS Council Elections: The terms of four Council members will expire: Garry Brass (Chair), Tom Johnson, (Vice-Chair), Jeff Fox (at large), and Peter Betzer (non-operator institution). The nominating committee of Dennis Hayes (Chair), Jeff Fox, and Chuck Nittrouer have provided a slate of candidates for the elections at the Annual Meeting, enclosure 5.

UNOLS Appointments to Committees: The Chair will present appointments for Council endorsement.
Ship Scheduling: Ken Palfrey will provide the name of a new Chair and Vice Chair.

Executive Committee Appointment: Garry Brass will appoint a UNOLS Council member to the Executive committee to replace Ken Palfrey whose Council term is expiring as ex-officio member.

Calendar for UNOLS Meetings: In setting the calendar, it is reminded that the last target date for NSF proposals requiring ship time is 1 May 1993.

Meeting/Workshop Schedule and Dates to be Set:

MEETING	DATES	LOCATION
FIC	7-8 Oct	Scripps, La Jolla, CA
DSS Workshop	13-14 Oct *	Washington, DC
RVTEC Workshop	18-19 Oct *	Washington, DC
RVOC	20-22 Oct	Lewes, DE
Coastal Workshop	mid-Nov *	Williamsburg, VA
DSSC (formerly ARC)	6 Dec	San Francisco, CA
UNOLS Council	Jan-Feb 1993	Someplace Warm
" "	July 1993 (2 wks after Ship Sched)	Open
" "	Sep-Oct 1993 (with Annual)	Washington, DC
UNOLS Annual	Sep-Oct 1993	Washington, DC
Ship Scheduling	Late June ?, 1993	Washington, DC
" "	Sep-Oct 1993 (with Annual)	Washington, DC
Fleet Improvement Committee	Will set their own 2 meetings	
RVOC	Sep-Oct 1993- will set own date	
DSSC	June ?, 1993	Woods Hole, MA

* Dates are tentative, Workshops are subject to funding and/or membership approval

Adjournment

APPENDIX III

APPENDIX IV

Deep Submergence Science In The Next
Decade: Scientific Challenges, Technology
Developments, And Investigative Strategies

October 13 and 14

Embassy Suites Hotel
Old Town Alexandria, VA

61 Scientists and Engineers responded to
announcement

Scientists: 15 biologists
6 chemists
22 geologists

Engineers: 14

Draft Agenda
Deep Submergence Science In The Next Decade: Scientific Challenges, Technology Developments And Investigative Strategy

I. Examples of Deep Submergence Priorities: Now and Future

Focus:

- Definition of compelling nature of scientific questions
- Definition of technological capabilities needed to advance science
- Methodology: Integration of deep submergence technologies to maximize capabilities of submersibles and ROV's

Presentations:

- Ridge tectonism (J. Karson)
- Hydrothermalism (J. Edmond)
- Benthic Biology (J. Childress)
- Water Column Biology (B. Robinson)
- Sea floor observatories (J. Delaney)

II. A Review of the State of Deep Submergence Technology in the US

Focus:

- Present-day capability
- Under development
- Future development
- Prioritization of future development and how can the user community help.

Presentations - Institutional Deep Submergence Programs:

- WHOI
- MBARI
- Harbor Branch
- US Navy/NOAA
- SIO (?)

III. Science Strategy and the Utilization of Technological Assets

Focus:

- Areas of interest and investigative strategies
- The global adventure - identification of areas, organization and phasing of efforts

OCEAN SCIENCES DIVISION

	<u>Actual FY 1990</u>	<u>Actual FY 1991</u>	<u>Estimated FY 1992</u>	<u>Requested FY 1993</u>
Ocean Sciences Division	\$147.4 M	\$164.8 M	\$178.8 M	\$206.4 M
Ocean Sciences Research	72.9 M	82.1 M	90.8 M	109.3 M
Ocean Drilling Program	32.0 M	35.0 M	36.4 M	37.8 M
Oceanographic Facilities	42.5 M	47.7 M	51.6 M	59.3 M

OCEANOGRAPHIC FACILITIES DETAIL

Operations				
Ship Operations	\$ 22.4 M*	\$ 26.7 M*	\$ 30.2 M*	\$ 34.0 M*
ALVIN, Aircraft, etc.	1.4 M	1.8 M	1.3 M	1.5 M
Marine Techs	<u>3.7 M</u>	<u>4.0 M</u>	<u>4.3 M</u>	<u>4.6 M</u>
	27.5 M	32.5 M	35.8 M	40.1 M
Infrastructure				
Science Instruments	\$ 1.8 M	\$ 1.9 M	\$ 4.0 M	\$ 4.5 M
Shipboard Equipment	2.1 M	2.2 M		
Ships, Upgrades	3.4 M	3.7 M	3.3 M	6.1 M
UNOLS, Misc.	<u>0.6 M</u>	<u>0.6 M</u>	<u>0.7 M</u>	<u>0.7 M</u>
	7.9 M	8.4 M	8.0 M	11.3 M
Technology, Centers, Reserves				
Technology Development	\$ 3.5 M	\$ 4.2 M	\$ 4.5 M	\$ 5.0 M
AMS Center	1.8 M	1.7 M	1.5 M	1.1 M
Cross Directorate/Reserves	<u>1.8 M</u>	<u>0.9 M</u>	<u>1.8 M</u>	<u>1.8 M</u>
	7.1 M	6.8 M	7.8 M	7.9 M

* Plus \$1.0 M from ODP (1990), \$1.6 M (1991 and 1992) , \$1.5 M (1993)

APPENDIX V

**NOAA-CHARTERED UNOLS VESSELS
FY 1992**

<u>VESSEL</u>	<u>PROJECT</u>	<u>DAYS</u>	<u>\$K</u>
CAPE HATTERAS	S. ATLANTIC BIGHT RECRUITMENT	7	23.1
VICKERS	GLOBAL CHANGE	91	1203.0
PELICAN / LONGHORN	NECOP	60	246.0
OCEANUS	DWD-106 BOX CORING	9	98.4
MISCELLANEOUS	NOAA UNDERSEA RESEARCH PROGRAM (SUBMERSIBLE SUPPORT)	*625	*4500.0
ALASKA	BOTTOM TRAWL SURVEY	70	299.0
	TOTAL	862	6369.5

*ESTIMATES ONLY

NOAA CHARTERING

<u>SOURCE</u>	<u>1992</u>	<u>1993*</u>	<u>1994*</u>
VICKERS	91	115	80
OTHER UNOLS	701	708	754
COMMERCIAL FISHING	696	730	923
<u>COMMERCIAL CHARTING</u>	<u>28</u>	<u>250</u>	<u>200</u>
TOTAL	1516	1803	1957

*Estimated and subject to funding

FUTURE UNOLS CHARTERING

FY 1993

<u>VESSEL</u>	<u>PROJECT</u>	<u>DAS</u>	<u>\$K</u>
VICKERS	TOGA COARE	115	1,380
PELICAN/OTHERS	NECOP	120	498
TBD	MONITOR	23	222
VARIOUS	NURP	625	4,500

FY 1994

<u>VESSEL</u>	<u>PROJECT</u>	<u>DAS</u>	<u>\$K</u>
VICKERS	WOCE	80	960
TBD	TOGA TAO	109	1,300
VARIOUS	NURP	625	4,500

* NURP (SUBMERSIBLE SUPPORT) DATA IS ESTIMATED

CHARTER FOR TOGA-TAO FY 1994

- NOAA HAS REQUESTED UNOLS ASSISTANCE IN TOGA-TAO (109 DAS)
- UNOLS RESPONDED WITH VARIOUS OPTIONS FROM:
 - UNIVERSITY OF WASHINGTON
 - SCRIPPS INSTITUTION OF OCEANOGRAPHY
 - UNIVERSITY OF HAWAII
 - UNIVERSITY OF SOUTHERN CALIFORNIA
 - COLUMBIA UNIVERSITY
- CHARTER SUBJECT TO AVAILABILITY OF FUNDS

SUPPLEMENTAL SUPPORT

	FY 93	FY 94	FY 95	FY96
OCEANOGRAPHER	N.O.	RTE ?	240	240
DISCOVERER	221	205	RTE	240
MALCOLM BALDRIGE	171	180	180	RTE ?
SURVEYOR	180?	193?	180?	180?

CHARTER DAS

UNOLS	258	189	240?	240?
COMM. MAPPING	250	200	?	?
COMM. FISHING	30	108	?	?

CHARTER \$ AVAILABLE

UNOLS	\$2.1M	\$2.26M	?	?
COMM. MAPPING	\$4.0M	\$.5M	?	?
COMM. FISHING	\$.6M	\$1.14M	?	?

SOURCE OF FUNDS

C & GC	\$.6M	\$.5M	?	?
FLEET MOD. *	\$1.5M	\$4.0M?	\$4.0M?	\$4.0M?
CONGRESS. INTENT	\$4.0M	\$0M	\$0M	\$0M
FY 92 CARRY OVER	\$.6M	\$0M	\$0M	\$0M

* Subject to Budget & Allocation (FY 94-96)

APPENDIX VI

Interagency Arctic Research Policy Committee (IARPC) Policy Statement

August 27, 1992

The U.S. and other countries are becoming aware of a potential problem that requires international cooperation: the extent of contamination of the Arctic area and the bordering seas by radioactive materials and a variety of other hazardous substances.

For example, there are many reported instances of Former Soviet Union (FSU) disposal of radioactive and other toxic wastes directly into the Arctic Ocean and into aquatic and terrestrial arctic and sub-arctic sites. The contamination in the FSU is of concern to eight Arctic nations and other countries because of the potential for redistribution and:

- 1) the level and distribution of radioactive and toxic contamination in terrestrial, aquatic, and marine arctic environments,
- 2) the ecological risk of surface contamination to terrestrial, aquatic, and marine arctic ecosystems
- 3) the health risk to human populations, and
- 4) the economic impacts associated with contaminant transport throughout the Arctic and adjacent seas, and affecting fisheries, foodstuffs and other resources.

At present there is limited information regarding such contamination. Scientifically-based quantitative data is essential for sound risk assessment activities.

IARPC agencies support a coordinated U.S. program to evaluate the ecological and health risks of arctic contamination and a coordinated international effort under the umbrella of appropriate international organizations to:

- 1) evaluate the scope of this problem,
- 2) rescue data from world archives, and
- 3) promote international scientific cooperation.

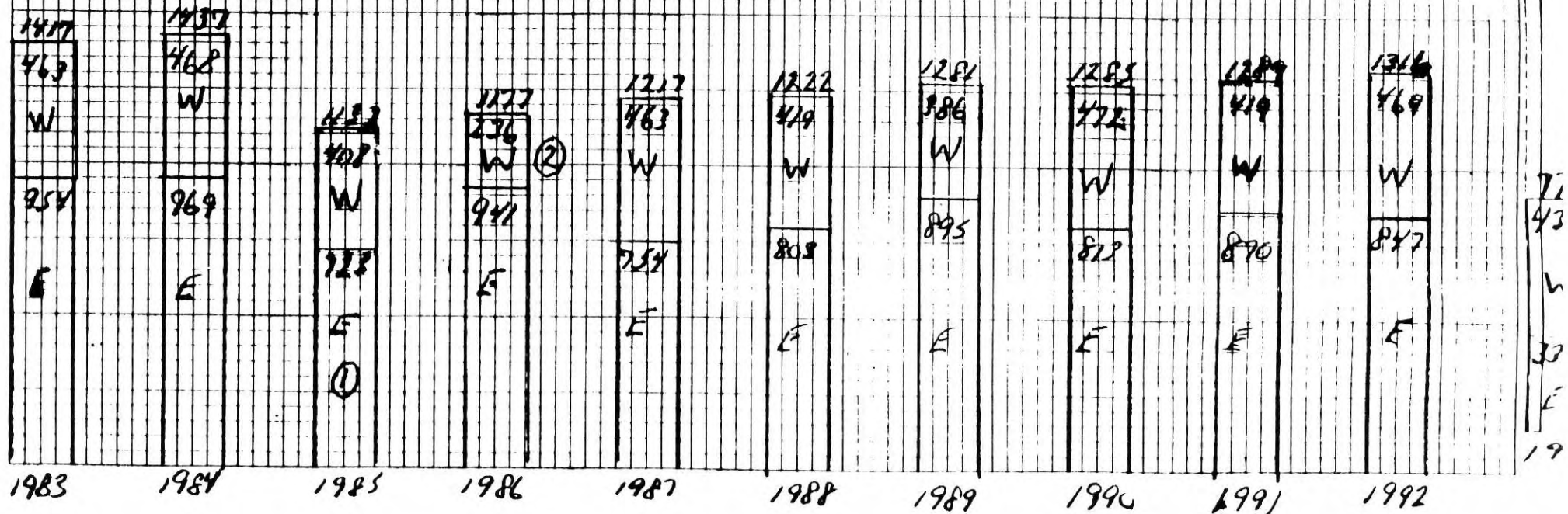
The international organizations include, for example, the Arctic Environmental Protection Strategy, with its focused efforts under the Arctic Monitoring and Assessment Program (AMAP), the International Atomic Energy Agency (IAEA), the International Maritime Organization (IMO), and the International Arctic Science Committee (IASC).

APPENDIX VII

E = ENDEAVOR, OCEANUS, C. ISELIN, B, RE
 W = NEW HORIZONS, WECOMA

① C. ISELIN OOS.

② WECOMA OOS.



APPENDIX VIII

September, 1992

UNOLS COUNCIL ELECTIONS

The UNOLS Nominating Committee has assembled the following slate of candidates for the UNOLS Council positions to be filled at the Annual Meeting. This election will be held in accordance with the UNOLS Charter as adopted September 1989. The current membership of the Council and a UNOLS directory are attached.

UNOLS COUNCIL SLATE

CHAIRMAN (2 year term) - individual affiliated with an Operating Member Institution:

Garrett Brass University of Miami

Nominations are invited from the floor during the Annual meeting. Persons nominated should be from an Operating Institution and have indicated a willingness to serve. A brief vitae of the nominee should be available to the membership.

VICE CHAIRMAN (2 year term) - individual affiliated from any Member Institution:

Peter Betzer University of South Florida
Vera Alexander University of Alaska

COUNCIL MEMBER (3 year term) - representative from non-operating Member institution:

Bob Wall University of Maine
Doug Capone University of Maryland

COUNCIL MEMBER (3 year term) - individual affiliated with any Member Institution:

Dick Pittenger Woods Hole Oceanographic Inst.
Neil Sullivan University of So. California

VITAE

- Garry Brass** Professor and Chairman, Division of Geology and Geophysics, Rosenstiel School of Marine and Atmospheric Science, University of Miami
Geochemistry; Paleo-oceanography and circulation and geochemistry of the Mesozoic ocean
- Peter Betzer** Professor and Chair, Department of Marine Science, University of South Florida
Geochemistry, Analytical Chemistry, Particle-solute interactions, sedimentology, atmospheric transport, phytoplankton, mineralogy
- Vera Alexander** Director of the Institute of Marine Science and Dean of the School of Fisheries and Ocean Science, University of Alaska
Marine Science and Biological Oceanography
- Dick Pittenger** Associate Director for Marine Operations, Woods Hole Oceanographic Institution
Underwater Acoustics, Global change
- Neil Sullivan** Professor of Biological Sciences and Director of Graduate Programs in Ocean Science and of the Hancock Institute for Marine Studies
Marine microbiologist, biological oceanography and marine biology
- Bob Wall** Director, Center for Marine Studies and Sea Grant College Program, University of Maine
Submarine Geology and Geophysics
- Doug Capone** Professor, Chesapeake Biological Laboratory, University of Maryland
Biological Oceanography, Microbial Ecology

UNOLS COUNCIL

1991-1992

<u>Member</u>	<u>Term</u>
G.W. Brass, U/Miami, Chair	10/90-10/92
T.C. Johnson, Duke/UNC, V-Chair	10/90-10/92
P. Betzer, U/So Fl	10/89-10/92
P.J. Fox, URI	10/91-07/92
D.E. Hayes, L-DGO	10/91-10/94
R. Janke, Skidaway	10/91-10/94
D.M. Karl, U/Hawaii	10/90-10/93
R. Knox, SIO	10/91-10/93
C.A. Nittrouer, SUNY Stony Brook	10/91-10/94
P.J. Fox, URI, ex-officio	07/92-07/95 DSSC CH
M.G. Langseth, L-DGO, ex-officio	10/90-10/93 FIC CH
K.P. Palfrey, OSU, ex-officio	10/90-10/92 SSC CH
J.G. Williams, SIO, ex-officio	10/88-10/92 RVOC CH

Terms Expiring:

Garry Brass
Tom Johnson
Jeff Fox
Peter Betzer

Resignations:

Jeff Fox (resigned as Council member to take chair DSSC)