

# UNOLS COUNCIL MEETING

Hotel Pacific, Soberanes Room  
Monterey, CA

April 24-25, 1995

## *MEETING MINUTES*

The UNOLS Council met on 24-25 April, 1995 at the Hotel Pacific, Soberanes Room, Monterey, CA. The meeting was called to order by Ken Johnson, UNOLS Chair, at 8:30 a.m. The participants are listed in [Appendix II](#) and the meeting agenda is included as [Appendix I](#). These minutes reflect the order in which items were addressed.

## APPENDICES

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**COUNCIL MINUTES:** The minutes of 19 September, 1994 Council Meeting were accepted as written.

## COMMITTEE REPORTS

### RESEARCH VESSEL OPERATORS' COMMITTEE (RVOC)

Mike Prince, RVOC Chair, reported on plans for the 1995 RVOC Annual Meeting scheduled for 24-26 October in San Diego, CA. The format will be similar to past meetings and the agenda is in the process of being developed. The Safety Standards have been distributed to the Committee for review. Comments are due back no later than 1 May. If there are no substantial modifications, the changes will be incorporated into the Safety Standards and distributed to the UNOLS Council in the summer.

### DEEP SUBMERGENCE SCIENCE COMMITTEE (DESSC)

Mike Perfit gave the report for the DESSC. He provided a summary of: (1) the December DESSC Meeting at AGU, (2) the agency meetings, and (3) the status of the KNORR conversion to DSRV ALVIN support ship.

There was a terrific turn-out at the December DESSC Meeting. The Community was given an overview of ALVIN's 1994 operations and was updated on the progress of imaging improvements. In 1994, ALVIN saw a 99 percent success rate. Numerous proposals and letters of intent were received for work in the Western Pacific, South Pacific, Juan de Fuca, and the Atlantic. Seventeen requests were made for work in the Western Pacific for a total of over 200 dives. Whether or not ALVIN goes to the Western Pacific will be driven by proposal pressure.

In February, Mike, Jeff Fox and Dick Pittenger met with Bob Correll of NSF; Fred Saalfeld of ONR; and Ned Ostenso of NOAA in three separate agency meetings to discuss future plans for deep submergence. Two issues were discussed: (1) the need to identify one agency as a lead agency for deep submergence support and (2) the refit of KNORR to a deep submergence platform. All agencies indicated their interest and dedication for the continuance of a national deep submergence capability; however, there are no intentions at the present time to change their ways of business. The present Memorandum of Agreement (MOA) for support of the National Deep Submergence Facility expires at the end of this year. The agencies have indicated that they will delay initiating a new MOA until the end of 1996. With the uncertainty of the future of the NOAA/NURP program, the agencies would like to wait and see if the picture becomes more clear before signing into a new Agreement.

At the agency meetings, Dick Pittenger presented a proposed plan for conversion of KNORR to a submersible platform. The plan included a summary of the work tasks identified for the conversion, a time schedule, and the estimated cost of the conversion. The optimum schedule proposed for the conversion has ALVIN beginning its overhaul at the start of 1996. KNORR would transit directly back to Woods Hole from Kenya to begin the refit in the early part of the year. The conversion and overhaul would be complete by mid year when deep submergence operations would resume. WHOI has offered to front the money for the conversion. The agencies responded to WHOI's proposal with a letter indicating that a decision whether or not to proceed with the KNORR conversion would not be made for six months. At the very least, the conversion schedule would be delayed by six months. This would allow KNORR to work its way back to Woods Hole with a healthy schedule of operations.

In response to the agencies' letter, DESSC sent a memorandum to the community to alert them of the change in plans and asked them to submit letters of intent for ALVIN operations in 1996. The community responded, and in summary, approximately 60 dives were indicated for the Atlantic, ten of which are funded; approximately 70 dives were requested for the South Pacific, 40 of which are funded; 60 dives were requested for northern East Pacific Rise, six of which are funded; and approximately 150 dives were requested for Juan de Fuca, fourteen of which are funded. Some of these letters of intents are actually in the form of proposals. DESSC is seeking guidance from the agencies on how to proceed. They are willing to work with NSF to set up a special proposal review panel if necessary. Mike indicated that guidance from the agencies prior to the June DESSC meeting would be helpful to DESSC.

## **FLEET IMPROVEMENT COMMITTEE (FIC)**

Chris Mooers, FIC Chair, provided the report for FIC. He began by giving an overview of the FIC meeting held at the University of South Florida in January. A FIC plan was developed to identify immediate (months to a year), mid-term (a year or two), and long-term (three or more years) goals.

Immediate plans call for establishing Science Mission Requirements (SMRs) for coastal vessels, developing an inventory of small research vessels, a primer on small research vessels, and identifying the regional science needs throughout the community. The next year and a half will be devoted to analyses of SMRs for coastal vessels. Chris provided a point paper he drafted with Otis Brown outlining the attributes of a UNOLS regional research vessel consortium, see [Appendix III](#). The inventory of small research vessels is already beginning to materialize and is being posted by region on the World Wide Web (WWW). Jack Bash has been recruiting regional points of contacts to coordinate their local small vessel inventories.

At FIC's January meeting, the committee was tasked to compile statistics to show the past geographic distribution of research operations of the UNOLS fleet and to assess how this distribution of operations matches the geographic distribution of the fleet. The UNOLS Office compiled statistics for a ten year

period, 1986 to 1995, for vessels in Classes I/II and III. These statistics are provided as [Appendix IV](#). The statistics are based on science days and exclude transit cruises in which science was not conducted. They also exclude days spent in port and days devoted to ship trials and inspections. The statistics for years 1986 through 1993 were collected using cruise reports. The data for 1994 and 1995 is based on the latest ship schedules posted by the UNOLS Office. Statistics were also compiled for 1996 and 1997; however, this data was collected from ship time requests and much of this time is still pending funding decisions.

The Council was asked to review the statistics and provide recommendations on additional information/modifications that should be included in the summary. Mike Prince suggested that geographic statistics for Class IV be included in the compilation. It was also suggested that the geographic grid size possibly should be refined to smaller zones.

Chris Mooers continued the FIC report by explaining that he has been drafting a, "Customer Satisfaction Survey," for chief scientists to complete. A draft of the survey has been circulated to the FIC for comment. It was pointed out that a survey of UNOLS had been conducted a few years ago. The Council recommended that the UNOLS Office provide Chris with the results of this survey. The results may be useful in drafting this latest survey. The new questionnaire should be sent jointly to the chief scientists from both FIC and UNOLS.

A brief discussion evolved on the issue of cruise assessments and their effectiveness. The NSF inspection examines science success through the cruise assessments. Mike Prince recommended that a digital version of the cruise assessments be made available so that assessments can be made and received in real time. Since the issue of cruise assessments is an agenda item to be addressed later in the meeting, further discussions were tabled until that time.

Chris reported that the FIC plans to have a point paper completed by their July meeting on safety responsibilities by the Principal Investigators.

FIC's mid-term and long-term plans were outlined as follows:

#### Mid-range

1. Evaluation of NSF inspection. The inspection was reviewed in 1992, but further review may be needed.
2. Arctic Research Vessel oversight activity
3. Development of a long range science plan in coordination with FOFCC (especially for Class I/II & III ships)
4. Nuclear submarine report and follow-up action
5. Use of UNOLS ships for continuous data collection for long term programs. A representative from NOS will be invited to the July meeting.

#### Long-Term

1. Specialized Facility Oversight
2. Mid-life reviews for NEW HORIZON, POINT SUR and CAPE HATTERAS
3. Update Fleet Improvement Plan by summer 1997
4. FIC acquisition oversight on new vessels (MARCO, Swath at UH, CALANUS/ISELIN). David Karl indicated that efforts to obtain a swath vessel at U. Hawaii are dead. Barry Raleigh will bring the Council up-to-date during his report.
5. Joint effort with DESSC on exploring potential options for ALVIN replacement.

Eric Firing's term has expired, if asked he will serve another term. FIC would like to have Eric stay on-board as a member of FIC.

### **SHIP SCHEDULING COMMITTEE**

Don Moller, Ship Scheduling Committee Chair, reviewed the 1995 ship schedules and presented

estimated ship time for 1996, see [Appendix V](#). In 1995, COLUMBUS ISELIN is out of service, GYRE is working with a severely reduced schedule and EDWIN LINK and PELICAN are showing low utilization. A large NOAA charter of approximately 60 days may be scheduled on PELICAN. Class III vessels are operating with less than full schedules in 1995. Class I/II vessels are showing an over utilization as a result of operations in the southern oceans, away from home ports, for a large portion of the year. All vessels are operating on or close to schedule, even with KNORR experiencing an engine failure.

Proposal pressure for UNOLS ships in 1996 is low. With the exception of Class IV, most ships are undersubscribed. Large ship operators have had conference calls to address 1996 schedules and identify ways to return the ships to the U.S. All of the large ships will be in distant regions at the start of the year and need to be back in the U.S. by the end of the year. It was also noted that REVELLE will come on line in 1996 and is available for operations in the fall of 1996.

Don listed the total 1996 scheduled days for each of the intermediate vessels:

- ENDEAVOR - 230
- OCEANUS - 241
- SEWARD JOHNSON - 212
- CAPE HATTERAS - 211
- WECOMA - 80+ days
- MOANA WAVE - 176
- NEW HORIZON - 245

All of the intermediates are undersubscribed and at least 60 days are quadruple booked among the four east coast intermediates. NEW HORIZON hopes to undergo a mid-life refit in 1996.

## **RESEARCH VESSEL TECHNICAL ENHANCEMENT COMMITTEE (RVTEC)**

Rich Findley, RVTEC Chair, reported that the annual RVTEC meeting is scheduled for the week of 16 October in Monterey, CA. Some of the issues to be discussed include establishing data standards, science/technician safety issues, and shipboard equipment inventory sharing. Rich pointed out that the science community needs to be involved in setting data standards. FIC plans to investigate this area and will help suggest ways in which to proceed. RVTEC is exploring the possibility of creating a home page on the World Wide Web which would include a catalog of shipboard equipment. This would provide a means for the community to learn what equipment is available and where it is located for sharing purposes.

## **AGENCY REPORTS**

### **NATIONAL SCIENCE FOUNDATION (NSF)**

Don Heinrichs provided the report for NSF by first reviewing personnel changes at the Foundation. Dolly Dieter's current IPA has been extended to March 1996. Beginning this fall, Lisa Rom will be working remotely for NSF from the University of California, Berkeley. She expects to stay in the Berkeley area for approximately one year. Lisa will spend 50 percent of her time on the NSF instrumentation and technicians program. In other personnel news, the Ocean Science Division of NSF has named Mike Purdy as its new director. He is tentatively planning to be onboard in September.

Don continued his presentation with a series of view graphs on the budget. These have been included as [Appendix VI](#). The first view graph provided the 1993-1995 budget for the Ocean Science Division and further expanded on the Oceanographic Facilities portion. The ship operations budget of \$35.2M is a \$2.5M increase over 1994 or 7.6%. The next view graph provided the 1996 Budget Request. Ocean Science Division is requesting \$205.6M or a 6.3% increase. Overall the Foundation is asking for a 3% increase. Don explained that the "Other Research Activities" line represents the NSF core program support. These are requesting a \$9M increase.

The next series of view graphs outline the NSF National Performance Review. It is titled NSF IN A CHANGING WORLD (Strategic Plan). The thrust of the plan is "reaffirming the core values". The plan includes a statement of the NSF Mission. The next view graph discusses the NSF focus on "Reinventing Government". The planning calls for a static budget for the next three years, then a 3% budget reduction for 1997 and a 2% reduction each year through the year 2000. This equates to a total 9% cut over the present FY96 operating budget request, totaling a \$290M reduction. Don pointed out that all NSF facilities are under review. In the next view graph NSF lists its priorities as: People, Instruments then Infrastructure/facilities.

In Don's final two view graphs he presents NSF Modes of Support and Facilities Planning. The Modes chart divides the NSF budget into Research Projects, Facilities, Centers and Education & Training. Research Projects are planning for a 7.2% increase in 1996 while NSF Facilities is budgeting a 3.7% decrease. Centers are looking for a 3% increase and Education & Training a 0.4% increase. In total this accounts for the 3% budgeted increase for 1996. The final view graph illustrates the facility breakout. Academic Research Fleet/Ship Operations represents 7.3% of the overall facility budget or \$53M of \$710.2M.

Don concluded by reporting that Polar Programs has signed a contract with Edison Choest to lease a replacement for POLAR DUKE. It is a five year lease and is estimated at 10-15 percent higher than the existing POLAR DUKE operation. There was a requirement for the replacement to be a U.S. flag vessel. The expense of converting POLAR DUKE to a U.S. flag vessel was too high to be economical.

## **OFFICE OF NAVAL RESEARCH (ONR)**

Jim Andrews provided the ONR report. He announced that Sujata Millick has been named as Keith Kaulum's replacement. Sujata is presently a Legislative Fellow on Capitol Hill and should be available for the ONR position in late summer. Jim reported that Admiral Watkins of JOI/CORE has been talking with the Chief of Naval Operations (CNO) concerning oceanographic issues. The CNO has established an Executive Board on Oceanography which should raise the visibility of oceanography in the Navy and possibly lead to new activity. They plan to meet in late June. The Oceanographer of the Navy and ONR are involved in this activity. Steve Ramberg and Jim DeCorpo are the ONR contacts. In other action, FLIP completed Phase I of a major maintenance period, funded by NAVSEA. Improvements were made to the structural and electrical systems. A strain gage system was installed to monitor these improvements. In November, FLIP will enter the ship year and review the monitoring results to estimate life expectancy.

On the budget picture, Jim reports that Congress' rescission action for 1995 will cost ONR Science & Technology \$39M. It is unclear where this presently stands. The 1996 facilities' budget is planned for level funding, but uncertain, and growth is not expected in the out years. Jim said that they hope to see more emphasis on field programs.

## **NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION (NOAA)**

The NOAA report was presented by Captain Martin Mulhern. Rear Admiral Sigmund Petersen, Director of the Office of NOAA Corps Operations, will retire at the end of April. Rear Admiral William Stubblefield's nomination as the next Director is pending in the Senate.

Recent progress in NOAA's Fleet Replacement and Modernization Program includes construction of the RESEARCHER (the NOAA AGOR) being about 1/3 complete, with launch expected in June 1996 and delivery in August 1997. Contracts have been awarded for conversion of a former T-AGOS ship to support the TAO array of oceanographic moorings and related oceanographic observations (about \$7.5M, to MCI of Bellingham, WA) and for repairs to extend the service life of DELAWARE II (about \$7.2M, to Bender Shipyard, Mobile, Alabama).

SURVEYOR is presently returning from Antarctic Marine Living Resource research off the Antarctic Peninsula, and is scheduled to go off-line at the end of FY 95. MALCOLM BALDRIGE is in the Indian Ocean conducting WOCE, GLOBEC, OACES, and RITS cruises, and will return across the equatorial

Pacific servicing the TAO array, arriving in Miami in January 1996. DISCOVERER has recently been in the Pacific supporting Global Ocean Atmosphere Land System (GOALS), VENTS, and Pan American Climate Studies (PACS) research. NOAA's use of the UNOLS fleet in FY 95 includes approximately 60 days at sea for GLOBEC aboard the SEWARD JOHNSON, and more than 60 days at sea aboard PELICAN in support of fisheries programs.

A variety of other activities are underway. A revised Fleet Replacement and Modernization plan is presently being developed by a committee chaired by John Carey, Associate Deputy Under Secretary of NOAA. A process for disposal of excess ships has been approved, and the OCEANOGRAPHER, FAIRWEATHER, DAVIDSON, HECK, SURVEYOR, and MT MITCHELL are expected to be affected. USGS and NOAA had planned to jointly operate a former T-AGOS vessel, the WORTHY, but USGS has recently decided to defer operations in the near future. It was disappointing to all parties that full operation of WORTHY was precluded by the budget, but this relationship was successful and provided valuable experience for future cooperative activities. NOAA anticipates that its future oceanographic research will require stationing the T-AGOS and DISCOVERER in the Pacific and the NOAA-AGOR in the Atlantic.

## **UNITED STATES COAST GUARD (USCG)**

CDR Rick Rooth gave a summary of the USCG activities. He reported that the Coast Guard has been told to expect a \$100M cut per year for the next five years. Accompanying this would be a 1000 person reduction in their manning per year for this same period. Rick provided copies of the U.S. Coast Guard Ice Operations, see [Appendix VII](#).

Over the past year, USCG provided input to two studies:

1. GAO &
2. Ocean Studies Board (OSB)

Rick reported on the GAO study presented at the Ocean Studies Board Review of the Arctic. GAO's report will state that there is insufficient science funding to support an additional Arctic Research Vessel. The Coast Guard is concerned that if there is not enough funded science in the Arctic to fully utilize the present USCG icebreakers (including HEALY), so why is there a need for the ARV? He said that the Coast Guard will work with NSF in reviewing the findings of the studies. Tom Royer pointed out that the science plan for the Arctic has been completed. Rick said that the Coast Guard would welcome a list of scientists who could be called upon to provide advise on science outfitting issues for HEALY. The Council agreed to provide such a list. There is general concern that there is no organized mechanism for getting access to the Arctic. In response, the Council identified an ad hoc committee to determine whether or not UNOLS should establish a separate committee to discuss and review Arctic facilities issues. The ad hoc committee will also examine the pros/cons of including Antarctic programs in this plan. Members of the ad hoc committee are Tom Royer, David Karl and Cindy Lee.

## **UNOLS ISSUES**

### **POTENTIAL CHANGES ON THE HORIZON FOR THE UNOLS FLEET**

#### **- GENERAL DISCUSSION -**

A series of issues have arisen that could have a major impact on the UNOLS Fleet. The issues were grouped together and addressed in a general discussion. The issues are: The long-range budget picture with REVELLE and ATLANTIS; Ocean Studies Board review of the ARV; KNORR/AGOR 25 as submersible handling ship; Crew stability and crewing standards; Initiatives for new vessels at UNOLS institutions and RSMAS/HBOI plans.

The Long-Range Budget Picture with REVELLE and ATLANTIS - Ken Johnson introduced the discussion session then turned the floor over to Don Heinrichs for a review of the funding picture. Don

presented a series of view graphs starting with the "Heinrichs Model" of UNOLS Ship Classification. This divides the UNOLS fleet into four groups: Large Ships, Intermediate Ships, Regional Ships and Local Ships. The classification differs from the traditional divisions of Class I through IV by designating by operating profiles rather than ship length. This method better groups the ships into similar operating cost classifications. This series of view graphs is included as [Appendix VIII](#). Don's next view graph provided a three year summary of the UNOLS Operations Support (1993-1995). These figures were derived from the annual NSF ship operations proposals. He pointed out that NSF had increased its fleet support from 30.6M to 37.2M over this period or an increase of 22%. He further pointed out that the other supporters of the fleet (ONR/NRL, NOAA, other and institutional) decreased over this period by 23%.

Don's next view graph divided the funding by ship groups and the cost by sponsor of each operating group. These numbers reflect the dominance of NSF funding for the large ships and the fact that NSF is the largest supporter of all groups. The next view graph "Other Support" for UNOLS Operations defined those funders which are included in the "other" category. This group provides between 5 and 10% of the funding and is spread between eleven different funding entities. Don remarked that even if this support increased it would not make a serious impact on the total. The 1995 figures for "other" actually declined by 50% over that of 1994.

The 1995 operating days by sponsor were the subject of Don's next view graph. These were broken down by ship in their respective operating areas. This was followed by a profile of support for these ship days. Don then showed the 1995 and 1996 proposed days for the large ships. All large ships return to the U.S. in 1996 with viable schedules, except for the REVELLE, which presently is unscheduled after it starts operations in the second half of 1996. All of these view graphs reflected the dominating support of the ships by NSF. For the large ships, the NSF support increases from 87.8% to 93.1% from 1995 to 1996. Don explained that there was not enough money in the NSF budget to support six large ships. NSF's ship use has been close to what they had predicted in the past, however, other agency support has gone down. The need to drum up support from other agencies was recognized.

Don's next several view graphs, see [Appendix IX](#) were quotes from the recommendations of the 1995 Fleet Improvement Plan (FIP). He pointed specifically to the recommendation "Agencies that support UNOLS ship operations evaluate geographical distribution of year 2000 fleet." The recommendation goes on to establish a criteria for geographical distributions and suggests that any changes be approached cautiously and based on the cited criteria. Don then provided a view graph with various quotes from the FIP for which comments were not offered, however, the quotes reinforced Don's point that overall funding in the future will be difficult.

Don suggested that he would like to open the discussion on the issue. He said that the federal agencies needed input from the community, however, any decisions for ship lay-ups or changes in geographical distribution would be the responsibility of the agencies.

The next view graph titled KNORR/ATLANTIS framework opened the discussion on the large ship issue suggesting there will be an excess of large ships when ATLANTIS joins the fleet. Don (considering NSF as over 90% supporter of the large ships) listed the requirements for large ships as one MCS/MGG ship, one deep submergence support ship, and three general purpose ships. His expectation is that one general purpose ship will not operate in the late 1990's. He cited the long-term institutional support for REVELLE and THOMPSON and the specialized capability for EWING. Don suggested that three ships (MELVILLE, KNORR and ATLANTIS) were potential options for the deep submergence support ship.

Don followed by saying that both ONR and NSF agree that it is necessary to re-think the selection of a replacement ship for ATLANTIS II since there are no budgeted funds in either agency to support the \$1.9M WHOI proposal to convert KNORR. It may be more logical to convert ATLANTIS as the submersible handling ship. ONR and NSF have told WHOI that it would take six months to evaluate the conversion proposal and to review all of the options.

As one option to save operating funds, Don suggested that it may be necessary to cease operating one of the older large general purpose ships with KNORR and MELVILLE being candidates. Don then provided the current status:

- ONR has requested NAVSEA to review the feasibility/cost for outfitting ATLANTIS as the submersible handling ship.
- KNORR is planned for operations in 1996.
- ATLANTIS II/ALVIN will operate in 1996 if science projects dictate.

Conversion of the submersible support ship will be done in 1997.

As a final series of view graphs ([Appendix X](#)) Don presented "A Modest Proposal", his strawman of a possible UNOLS fleet alignment in years 1997-2002. This alignment included the retirement of five ships (COLUMBUS ISELIN, GYRE, MOANA WAVE, ALPHA HELIX and ATLANTIS II) which are the five oldest intermediate/large ships. In addition, two geographical re-locations were suggested. These were OCEANUS to Alaska and MELVILLE to Hawaii. Don pointed out that this is not the ultimate solution, just a suggestion.

Dick Pittenger pointed out that taking ATLANTIS II out of service in 1996 and outfitting ATLANTIS as the submersible support platform may result in a two year hiatus in ALVIN operations. Delivery of ATLANTIS is scheduled for 1997.

Don's presentation gave the Council considerable food for thought as Ken closed the meeting for the first day.

## **OCEAN STUDIES BOARD REVIEW OF THE ARV**

The Council reconvened at 0830, 25 April 1995 in the Soberanes Room of the Hotel Pacific. Ken opened the meeting with a discussion on the Ocean Studies Board Review of the ARV. A kickoff meeting was held in January at the National Academy to review Arctic research needs. A series of presentations were made including those from USCG, Arctic Research Council, ONR and UNOLS. A GAO preliminary report of their review of the Arctic research requirements was presented to the Oceans Studies Board. This review concluded that the U.S. needed only four icebreakers. With the two Polar Class USCG breakers, the NATHANIEL PALMER and the soon to be built HEALY there was no need for an ARV. GAO did not look at the mix of ships and their scientific capabilities. GAO was asked by Senators Johnston and Murkowski to examine alternative constellations of icebreakers to determine whether or not these ships could support both the USCG mission and scientific requirements of the polar seas. A copy of this request is included as [Appendix XI](#).

Ken Johnson reiterated the UNOLS view of the Arctic Research Vessel at the OSB meeting stating that this vessel is needed and should be built as long as its support does not adversely impact other UNOLS assets. The annual operating cost for the ARV is estimated at \$9.1M. Based on UNOLS ship history this largely covers fuel consumption and heavy maintenance. The Polar Class is estimated at \$20M/year. This breaks down to \$11M for fuel and \$9M for maintenance and helo. Ken said he understands there is some pressure to equalize the Antarctic and Arctic budgets. This would be boon for the Arctic since there is significantly more funding support for Antarctic research. A follow-on OSB meeting was held in Irvine, CA to define the science required for the Arctic.

The final meeting of the Ocean Studies Board is scheduled for 2-4 May. Their recommendations and conclusions are due out by 1 September 1995. It was suggested that Neil Sullivan be invited to the September Council meeting to get his views on the Board's findings and to open a dialog between UNOLS and the Office of Polar Programs. It was also suggested that Garry Brass from the Arctic Research Council and Paul Stoffa, OSB, be invited.

## **KNORR/AGOR 25**

The next area addressed in the "Potential Changes on the Horizon for the UNOLS Fleet" discussion was the conversion plans for KNORR to a submersible handling ship. Peter Betzer started the presentation with a brief history of the ad hoc committee's work on providing advice to WHOI on the scientific needs for the submersible handling ship. The committee met twice, once in September 1993 and then on the 31st of January 1995. Ken Johnson chaired the first meeting and Karen Von Damm the second. It was a



key objective to maintain a general purpose capability on KNORR. The subcommittee also recommended that KNORR's conversion should locate the DSV hangar to port and that the Dynacon winch be permanently installed below deck. Jeff Fox, Mike Perfit and Dick presented the KNORR conversion proposal to NSF, NOAA and ONR in February. Peter noted that the timing of the conversion would be critical if the minimum of down time was to be experienced. KNORR would need to return to Woods Hole early in 1996 to start the conversion in order to dove-tail with the completion of the ALVIN overhaul. This would require a dead-head transit from Kenya to Woods Hole. NSF has indicated that they will not support a dead-head transit and that KNORR must work its way home. This means that KNORR would not be back until mid-1996. Also, the federal agencies (ONR & NSF) would like to delay the conversion funding decision for six months while they explore all options. As a result, the ad hoc committee's timetable for the conversion will be abandoned.

Dick Pittenger followed with a series of view graphs ([Appendix XII](#)) relating to the delivery of ATLANTIS, KNORR's schedule and ALVIN's overhaul. Dick said that ATLANTIS' construction was on schedule and on budget. Dick's view graphs first listed the major recommendations of the Von Damm subcommittee including the need for KNORR to return to Woods Hole in early 1996 to accommodate the conversion and resume operations. Dick reported that as a result of the agencies' intention to push the conversion decision back six months, Jeff Fox canvassed the community to determine whether or not there is a potential for dives that can utilize ALVIN in the first half of 1996 from ATLANTIS II. Mike Perfit indicated that there is already some funded ALVIN work that could be conducted in 1996 from ATLANTIS II, but weather windows would need to be considered. Don Heinrichs said the results of this canvas should be available at the June DESSC meeting to permit NSF and other agencies to assess procedures to review the new proposals. Dick informed the Council that WHOI is developing a 1996 schedule for KNORR that would include work in the South Atlantic and cruises to bring it north. This tentative schedule would have KNORR back to Woods Hole in the fall of 1996. Dick presented the ATLANTIS construction schedule and pointed out that with delivery scheduled in 1997, to be followed by fitting out periods and sea trials; ALVIN operations may be impacted by a lengthy hiatus. Mike Perfit indicated that he and Karen Von Damm will keep in touch with the agencies regarding this issue.

## **CREW STABILITY AND CREWING STANDARDS**

Ken Johnson opened the discussion on crew stability by stating that maintaining crew stability during a lay-up is difficult. This could lead to unsafe operations. A discussion followed and questions arose whether vessels with low utilization should be re-examined for safety. Do we have an effective mechanism to evaluate ship's crew performance? Chris Mooers said the FIC was looking at the NSF Inspection process to determine if this is the tool needed and accepted the action for this item. Further discussion was tabled until cruise assessments were addressed.

## **INITIATIVES FOR NEW VESSELS AT UNOLS INSTITUTIONS**

Barry Raleigh, Dean of SOEST at the University of Hawaii, provided the first presentation on the initiatives for new vessels. Barry said that SOEST had considered construction of a SWATH vessel as a replacement for MOANA WAVE through federal defense conversion funds, but that it is highly unlikely at this time. SOEST is presently talking with NOAA on the possibility of operating NOAA's new AGOR (presently under construction) in some form of a cooperative agreement where the operating funding may be split 50/50 NOAA/UNOLS. Although this is in the earliest stages of discussion, conversations between Barry and NOAA's Jim Baker suggest that this may fit NOAA's plans for reducing the NOAA Corps.

Barry then opened the subject of the present assignment of the two AGORs under construction (AGORs 24 and 25). He suggested that if the institutional operating agreements are changing, it may be necessary for the agencies to revisit their evaluation process and possibly consider assigning the ships differently. Barry said that Hawaii, in their bid for an AGOR, had proposed state operational support of \$500K per year. This offer still stands. Barry further said, in response to Don Heinrichs' re-alignment strawman, that Hawaii would accept MELVILLE as a replacement for MOANA WAVE if that were the agencies decision. Barry fears that if UH does not get a vessel, it will substantially weaken their program, and impact their state funding. These comments were seconded by Dave Karl. With respect to KAIMIKAI-O-KANOLA (KOK), Barry said that this ship is not a replacement possibility for MOANA WAVE and is

only to support the HURL/NURP program. If funding is lost for this program the KOK will be lost as well. KOK is not considered a general purpose ship and it is unclear whether or not it can be converted to one.

## **RSMAS/HBOI PLANS**

Tom Lee of the University of Miami and Tim Askew of Harbor Branch Oceanographic Institution opened the discussion on their institutions' ship operating plans. He said that RSMAS and Harbor Branch are working on a MOU that would combine their ship operations and technicians programs. They are making progress but there are still outstanding issues to be resolved. Along with ship-ops, the plans include science collaboration and joint proposals. Presently SEWARD JOHNSON is using the RSMAS technical group and has integrated the Miami technical equipment. HBOI is building a new marine operations building which will include science staging and technician facilities.

RSMAS presently plans to continue operating CALANUS or the CALANUS replacement, but will consider moving its operation to HBOI. COLUMBUS ISELIN is now out of the shipyard and will be in lay-up at the HBOI piers. The ship has new berthing facilities and a new bottom. If conditions warrant ISELIN can be brought back in operation for science in 1996. Both Tom Lee and Tim Askew agreed that the marriage of the two institutions was a good fit with very few duplications. The broad agreement would include facility appointments.

Tom Lee reported that RSMAS is working on a replacement for CALANUS. They feel they need a shallow water, multi-disciplinary vessel that is fast and can carry more scientists than CALANUS. They would like to offer a day rate of \$2000/day, no higher than \$3K. A donor has pledged \$500K and has designated the ship should be a catamaran. Tom said that a RFP is ready for the yards. The total cost of this ship could reach \$3M. The CALANUS replacement specifications are included as [Appendix XIII](#). They have held a preliminary meeting with regional users to discuss the vessel's capabilities.

Dick Pittenger followed with a WHOI plan for acquiring the SWATH ship KAIMALINO, see [Appendix XIV](#). This ship has been owned and operated by the Navy for over 10 years. WHOI is working with NUWC of Newport, RI on plans to bring the ship from San Diego and operate it out of WHOI. The ship is an 80' SWATH and would be used for coastal work. A three person crew is planned with an operating cost of \$3-4,000/day. WHOI is putting together a consortium for use of this vessel. Present members planned for this consortium are: WHOI, NUWC, USGS, NMFS, UMASS System, Mass Maritime and the NE Aquarium. The ship transfer has not been finalized. Dick indicated that they do not plan on adding this ship to the UNOLS Fleet, but they will bring it to UNOLS standards.

## **ACTION**

Considerable discussion followed these presentations on "Potential Changes on the Horizon for the UNOLS Fleet". An ad hoc committee was formed to recommend the UNOLS response to these issues. The committee appointed was Peter Betzer, Chair, Bob Wall, Chris Mooers, Dick Pittenger, Bob Knox and Denny Hayes. A charge to this committee will be drafted by Ken Johnson and forwarded to the committee via e-mail for critique and fine tuning. The committee was asked to provide a preliminary report by August so that more action can be addressed at the fall UNOLS Council meeting.

## **End General Discussion**

## **USCG's ICEBREAKER HEALY**

Rick Rooth reported that HEALY is scheduled to start construction in March 1996 with delivery planned for 1998. The ship is expected to have a crew of 75 which is a significant reduction from the original manning plan. This number would drop to 67 without the aviation personnel. To date approximately \$80M has been spent on ordering long lead material for the ship. Approximately \$100M is expected to be spent prior to actual construction. A general discussion followed concerning the exchange of correspondence between Senators Johnston/Murkowski and the Commandant of the Coast Guard. Copies

of these letters are included as [Appendix XV](#). It is the perception of the UNOLS community that the Coast Guard is not seeking advice from the science community on the construction designs of HEALY. The Coast Guard, on the other hand, believes that they have offered the community several opportunities to offer advice. The difference of opinion seems to be in the degree and detail of the exchange. CDR Rooth said that the Coast Guard would welcome a standing committee of scientists who would be available for their counsel. UNOLS agreed to establish such a "committee". Ken Johnson assigned the action for this to an ad hoc committee of Tom Royer, David Karl and Cindy Lee. It was also recommended that FIC poll the ARV subcommittee to see if they would be interested in serving on an advisory group for HEALY. This will be discussed further at FIC's July meeting.

## **UNOLS CHARTER CHANGE PROPOSAL**

The UNOLS Charter, as presently written, does not permit the UNOLS Office to remain at a single location for more than six years. The current office has been at URI for four years and if it is to move it would be necessary to start the search process. The current UNOLS Office has requested that the Charter be changed to permit a nine year (3, three year proposal grants) stay at a particular location. After a short discussion the Council unanimously agreed to the Charter change. The Charter change will be presented to the Membership at the Annual Meeting for a vote. Bob Wall pointed out that the entire Charter needs to be reviewed and readopted by the Council this year and any recommended changes be passed around electronically so that they too can be incorporated in the Charter changes recommended above.

## **FOFCC**

Captain Marty Mulhern reported that a Federal Oceanographic Fleet Coordination Council has been formed by the members of the former Subcommittee on Federal Oceanographic Fleet Coordination. There is enthusiasm by all of the agencies, and new charters for both the Council and Coordination Board are nearing approval. NOAA will Chair the new FOFCC through September 1996, and a representative of the Oceanographer of the Navy will Chair the Coordination Board. One of the first action items will be to update the Federal Oceanographic Fleet Report.

## **SCIENTIFIC OPPORTUNITIES ON NUCLEAR SUBMARINES**

Jack Bash informed the Council that the report from the 21-22 September 1994 meeting in Washington, DC on the Scientific Opportunities on Nuclear Submarines is being written by Lloyd Keigwin, WHOI, and should be completed by mid-summer.

## **SOUTHERN CALIFORNIA MARINE INSTITUTE APPLICATION FOR UNOLS MEMBERSHIP**

A UNOLS membership application from Southern California Marine Institute was presented to the Council for approval. The Council had several questions about the appropriateness of membership since two members of the consortium, USC and Occidental are already UNOLS members. It was felt that the application was vague and did not provide adequate rationale for becoming a UNOLS member. The UNOLS Office was instructed to return the application for further clarification.

## **SHIP CONSTRUCTION**

Bob Knox reported that AGOR 24 was launched on 20 April during a well attended ceremony. Bob reported that the construction is going well. Dick Pittenger said that AGOR 25 was also doing well and was on schedule and on budget.

## **RADIO OPERATOR/GPS**

Dick Pittenger said that a bill was before Congress that would remove the requirement for ships to have licensed radio operators, see [Appendix XVI](#). He is hopeful that it will pass. Dick further reported that both KNORR and ATLANTIS II have P-Code GPS receivers and a third one is on order for OCEANUS. THOMPSON is equipped with a P-Code receiver and Scripps has three. It has taken three years to

complete all the bureaucratic requirements for these installations. NSF will report at the September meeting on the evaluation period. If it is deemed successful efforts will be made to expand the installations to other UNOLS institutions. Both Dick and Bob offered their respective institutions as providers for future units rather than going through the detailed and laborious procedures of having clearance at each institution for the receivers. David Karl requested that MOANA WAVE be given an opportunity to install the P-Code GPS.

## **LAW OF THE SEA DISCUSSION**

Tom Cocke of the U.S. State Department informed the Council that clearances for Mexico, Brazil and Russia continue to be a problem. Tom provided a copy of the 1994 clearance summary which is included as [Appendix XVII](#). Tom said that the State Department is hopeful that the Senate will ratify the Law of the Sea now that the required number of countries have approved it and it will come into force.

## **EXECUTIVE COMMITTEE**

Dick Pittenger was appointed as the new member of the UNOLS Executive Committee replacing Ken Palfrey.

## **COMMITTEE APPOINTMENTS**

The Council Chair, with the concurrence of the UNOLS Council, approved the following appointments: Mike Perfit for Chair of DESSC; Mike Prince for Chair of RVOC (second term); Rich Findley for Chair of RVTEC (second term); and Eric Firing for membership on the FIC (second term).

## **UNOLS COUNCIL MEMBERSHIP**

A nominating committee was appointed by the UNOLS Chair to prepare a slate of candidates to replace those Council members completing terms. The terms of Dick Pittenger and Bob Wall are expiring. Both are eligible for second terms. Appointed as the nominating committee were: Bob Knox (Operator institution); David Karl, Chair (Operator institution) and Cindy Lee (Non-operator institution).

## **RESPONSIBILITY OF THE CHIEF SCIENTIST**

Mike Prince reminded the Council that a study into the responsibility of the Chief Scientist was put on hold due to litigation which has now been settled. He said that the RVOC would like to re-open this study. The FIC has this for action. It was suggested that the study reviews what is already in the Cruise Planning Manuals and the Research Vessel Safety Standards to ensure they are consistent and cover all the issues of concern. It is perceived that the Chief Scientist does not always appreciate the level of responsibility he/she has assumed as leader of a scientific cruise.

## **ASSESSMENT REPORTS**

Mike Prince reported that the RVOC is not satisfied that the current assessment reports reflect the true state of operating excellence of the UNOLS Fleet. They believe that this is caused by 1) lack of 100% submission of the assessments, 2) some scientists are intimidated by the report or choose to report problems by other methods and 3) the questions on the assessment report may not elicit the desired response. Mike suggested that we must first decide what the goals of the assessment reports should be, then work toward meeting those goals. Action for this effort was assigned as the joint responsibility of the RVOC and FIC.

## **USCG INSPECTION OF UN-INSPECTED VESSELS**

Mike Prince cited an example where the USCG wanted to inspect a ship during the process of administering the R/V designation letter. After a review of the NSF Inspection the USCG decided that their inspection was not necessary.

## INTERNET

Jack Bash reported that the UNOLS Office is working on different ways to build a communication network using Internet now that OMNET is defunct. He explained that OCEANIC, at the University of Delaware, has acted as a server for posting UNOLS ship schedules, and ship characteristics for small vessel inventories. They also provide a way to utilize group addresses for UNOLS. What is missing is a bulletin board system that can be used by a discreet group for the purpose of exchanging information so vital to oceanographic science and operations. Several groups are working on this. They are NODC, TOS and CORE. Jack was instructed to discuss the issues with Margaret Leinen since she is actively involved in both TOS and CORE.

Jack also discussed further ways to use the Internet. He said the RVOC, RVTEC and UNOLS newsletters would be posted on Internet, probably through OCEANIC. He also suggested that \$10 to 20K per year could be saved if the minutes of the various UNOLS meetings were electronically posted rather than copied and mailed. The Council instructed the UNOLS Office to start immediately with this electronic posting with the idea that a limited number of hard copies would be made up and available upon request. Jack asked the Council to appoint an ad hoc committee that would work with the UNOLS Office to provide advice and direction for future and more advanced uses of electronic communications. An ad hoc committee of Tom Royer, Ken Johnson and Rich Findley was appointed.

## NEW HORIZON MID-LIFE REFIT

Bob Knox provided a brief report on the plans for a mid-life refit for NEW HORIZON. The refit would address the current stability problem and increase the ship's operating range. It would fix the admeasurement problem and replace a generator. An estimate of the total package would be \$2M which includes shipboard scientific equipment. Scripps is seeking an 80% Federal to 20% State split in the funding which represents its usage profile. View graphs of the proposed mid-life are included as [Appendix XVIII](#).

## CALENDAR FOR UNOLS MEETINGS

<b>Meeting</b>	<b>Dates</b>	<b>Location</b>
Arctic Facilities Meeting	30 May	Baltimore, MD (AGU)
DESSC	31 May-2 Jun	Woods Hole, MA
Schedule Review	27 Jun	Arlington, VA
FIC	20-21 Jul	Seward, AK
SSC	11 Sep	Arlington, VA
Schedule Review	11-12 Sep	Arlington, VA
UNOLS Council	PM 12-13 Sep	Arlington, VA
Annual	14 Sep	Arlington, VA
RVTEC	16-18 Oct	Monterey, CA
RVOC	24-26 Oct	San Diego, CA
DESSC	10 Dec	San Francisco, CA

The meeting was adjourned at 1630 hrs.