UNOLS Council Meeting Report

National Science Foundation, Room 1235 4201 Wilson Boulevard Arlington, VA 16 September 1998

Appendices

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Wednesday, 16 September 1998

INTRODUCTION - The UNOLS Council met in Room 1235 of the National Science Foundation on 16 September 1998. Ken Johnson, UNOLS Chair, called the meeting to order at 0830. The items of the agenda, **Appendix I**, were addressed in the order as reported below. The participants of the meeting are listed in **Appendix II**.

ACCEPTING MINUTES - The minutes from the <u>July 1998</u> Council meeting were accepted as amended (pg. 11, 3rd para. change "model" to "process;" pg. 12, 1st para. change "HERRING" to "HERON").

<u>COMMITTEE REPORTS</u> - Committee Chairs submitted their written reports in advance of the meeting and are included as <u>Appendix III</u>. Ken Johnson summarized each report. The Chairs provided updates and additional information not included in the written reports.

Ship Scheduling Committee (SSC) - Ken Johnson opened the committee reports with the Ship Scheduling Committee. He announced that the chair, Don Moller, would be retiring from WHOI at the end of the year and expressed his and the community's appreciation for the excellent work Don has provided in scheduling. Ken presented a series of viewgraphs (*Appendix IV*), which list by ship the operating days from 1995 through the projected days for 1999. The totals reflect a near record high number of days for 1998 at 5355. In 1998, EWING and ENDEAVOR were slated for lay-up periods. However, both ships were successful in scheduling programs. EWING scheduled private work and ENDEAVOR scheduled NOAA fisheries work. The total days projected for 1999 is 4795 with a likelihood of growing. Class V ship demand is high in 1999.

Another table reflects the charge days for large ships during the same period of time. Most striking in these numbers is the percent decline in NSF use, from 85% to 55% over the five years and the increased usage by Navy (both ONR and NAVO) as well as NOAA. In 1999, NOAA jumps to 12.4% of the total use which is primarily the result of BROWN not being available for Pacific work while it completes an expedition to the Indian Ocean. Similar trends are reflected in the chart that includes the charge days for the entire fleet. Other viewgraphs shown depict the large ship work areas where it was noted that there is only one Atlantic program. Also shown were the ATLANTIS work areas for 1999 and the funded ALVIN and ROV dive programs. The funded programs for ALVIN provide a full schedule for ATLANTIS and an aggressive schedule for the ROVs.

Don will be stepping down as SSC chair after serving in that position for four years. Mike Prince has been elected as Don's replacement. Joe Ustach has been elected as the SSC Vice Chair.

GLOBEC cruises for 1999 remain unsettled as the funding for the NOAA portion of these cruises is sorted out. This has an impact on five different ship schedules. Projections for 2000 suggest that East Coast intermediate ships may have light schedules.

Arctic Icebreaker Coordinating Committee (AICC) - The AICC, chaired by Jim Swift, has been working with the USCG planning science systems testing for HEALY. The ship is unofficially projecting a six-month delay in delivery, which is likely now to be in June 1999. Shake down and systems testing will start later in that year and will take about 12 months to complete. It is possible that a HEALY Ship Of Opportunity (SOO) cruise could be available late in 2000. The USCG has been active in familiarizing their personnel with UNOLS technical support. They have been sending their technicians out on UNOLS ships to prepare them for HEALY science operations. This program is progressing well. In other activities, the AICC has been busy in the past year coordinating science of opportunity cruises in the Arctic.

Fleet Improvement Committee (FIC) - The FIC, chaired by Larry Atkinson, has established two subcommittees to draft Science Mission Requirements (SMRs) for both an ALPHA HELIX replacement and an east coast coastal vessel. Draft SMRs have been developed. The HELIX SMRs call for ice strengthening and a fisheries capability as well as conducting general academic oceanographic science. The FIC has also been working with the Navy in reviewing the design for the AGOR-26 SWATH vessel.

Don Heinrichs announced that NSF's representative to FIC, Dick West, would be retiring in October. His duties, with respect to FIC, will be split between Don, Dolly Dieter and Sandy Shor.

Research Vessel Operator's Committee (RVOC) - Paul Ljunggren is the chair of the RVOC. Their annual meeting is scheduled for 4-6 November in Hawaii. The meeting will include presentations on new research vessel construction projects under consideration or in progress.

Other RVOC meeting plans include a presentation by Jamestown Marine Services on the NSF inspection program. Medical Advisory System has the new contract for providing medical advice and will be making a presentation. ABS Marine Services will be making a presentation on watchkeeper training (STCW) as well as an overview on the International Safety Management Code (ISM).

The RVOC has completed a safety video, which was available for viewing over the noon hour at the Council Meeting. The Committee has also been working on a revision to the Safety Standards. Elections will be held for the RVOC Chair and Vice Chair.

New small vessels in planning or under construction include, SAVANNAH, a replacement for BLUE FIN, a CALANUS replacement, a SUN COASTER replacement, a WHOI SWATH and a new vessel at U. Conn (R/V CONNECTICUT will arrive at the university in December 1998).

Round Table Discussion by Agency Program Managers - Science program managers from NSF, ONR, NOAA and USCG held an open discussion period on ship needs, projections and fleet issues. Included in the discussion were NSF: Dave Garrison, Dave Epp, Connie Sancetta, Kendra Daly and Paul Dauphin; ONR: Tom Kinder, Lou Goodman, Ron Ferek, James Eckman and Scott Tilden; NOAA: Steve Piotrowicz and Liz Clark; USCG, George Dupree. Each of the program managers had an opportunity to discuss their views on UNOLS and its ability to support the fleet. They also reported briefly on future science long-range plans and support needs.

Over the hour and a half, discussion of the fleet revolved primarily around technical support, scientific tools and the coordination and support of these tools. Very few comments were made on the ships and ship management. It was generally felt that more emphasis was needed on quality control of technical support. There is a perceived need for more support for onboard systems such as SeaBeam and IMET. There will also be a need for sophisticated imaging systems. Demand for specialized equipment is growing. It was suggested that UNOLS should develop a vision and strategy for specialized equipment acquisition and support: (1) what type of equipment will be needed in five to ten years, and (2) what support (people) will be needed to operate and maintain these systems? The question was asked whether specialized equipment (e.g. Seasoars) should be bought for the PIs, or would it be best to buy them for the

ship operations, in which case, the operator would be required to maintain the equipment.

The issue of the "interchangability of ships" was also raised, in particular in regard to specialization. There was discussion on whether the UNOLS ships should be more specialized in their capabilities. There was concern that this may increase the chances of lay-ups if the general-purpose characteristics of ships are compromised. Another issue associated with interchanging ships is the financial complexities due to differing cost structures among the ship operators. Some operator's charge user fees for shared use equipment, while other operators do not. This can create a problem for PIs who are rescheduled from a ship that does not charge user fees to one that does charge fees. New NSF guidelines will hopefully alleviate this problem, by moving the user fees from the science budget into the technician program budget.

There are still a few complaints being received regarding the ship scheduling process. These mostly are directed towards communications problems between the PI and operator.

The group discussed programs that are on the horizon such as long term ocean observation, GLOBEC, ECOHAB, LWAD, CLIVAR, Deep Ocean Carbon, Australian Monsoon program, and the OBS program. The Navy is moving toward more coastal studies. Increasing emphasis is on sensors that can be deployed remotely, autonomously or are expendable. There is a need to improve coring capabilities to successfully deploy a 30-meter core. NOAA is anticipating more need for charters in fish research. A few program managers noted the need for quick response platforms to study such things as bloom phenomenon. These studies require flexibility in scheduling which has posed a challenge for UNOLS and the funding agencies.

In general, there seems to be a consensus for the need to push for new technologies and that the technical support to scientists needs to grow as the technical advances are introduced into the academic fleet.

Research Vessel Technical Enhancement Committee (RVTEC) - The 1998 RVTEC Annual meeting will be coupled with an International Marine Technician symposium, INMARTECH '98, and will be held in La Jolla, CA on 19-22 October. It will be hosted by the Shipboard Technical Support group at Scripps Institution of Oceanography. RVTEC will meet on the first day followed by INMARTECH '98. A full agenda of technical workshops is planned. INMARTECH '98 will also include a ship tour of MELVILLE and equipment demonstrations.

In other activities, RVTEC has been involved with the USCG in planning for science systems testing on HEALY. Nine different technical support groups are involved in the planning process. Four legs are planned during the ship's test period and will include warm water testing, testing during the ship's transit, as well as in-ice testing. Berths will be made available for the science testing groups.

A discussion followed the RVTEC report suggesting that the community is not aware of what shared use equipment is available on the different ships. This information is posted on the UNOLS/RVTEC web site but needs better advertisement. It was suggested that the scheduling guidelines should be expanded to include how and where to get the information on shared use equipment and that this document be a "one stop shopping" for investigators, informing them on how the scheduling system works as well as what is available on the ships. Development of a white paper was recommended.

DEep Submergence Science Committee (DESSC) - Patty Fryer is the incoming chair to the DESSC and will be replacing Mike Perfit. ATLANTIS is operating and has a full schedule for this year and next. There is vehicle demand for work in the East Pacific Rise, Juan de Fuca and Southern East Pacific Rise. NURP has requested time for their Gulf of Alaska initiative. There is still an issue of when the ROV program (VanDover/Fornari) in the Indian Ocean can be accommodated. Patty Fryer will attend an international conference, MOMAR, in the fall to discuss the establishment of observatories on the Mid-Atlantic Ridge.

SEACLIFF has been delivered to WHOI. An engineering study has been funded to look at ways to best use SEACLIFF. WHOI has drafted an archiving policy and its review is in progress.

It was suggested that the Third Party Tool policy adopted by DESSC and the NDSF operator can be used as a template for the entire UNOLS community for handling specialized equipment. A workshop is being planned for this winter to get community input in addressing future directions and facility needs for deep submergence science.

NSF Academic Research Fleet Review - Don Heinrichs provided an update on the NSF Fleet Review. His viewgraphs are included as <u>Appendix V</u>. The Committee, headed by Dr. Roland Schmitt, has met twice so far. The first meeting, which was held in June at NSF, was primarily for providing background information of UNOLS and NSF programs associated with the Fleet. The second meeting was held in September at Scripps Institution of Oceanography. The committee visited ATLANTIS and REVELLE and received briefings on science drivers including future trends. They also heard reports from alternative ship operation groups such as NOAA, OPP, NAVO, the Canadian Coast Guard and the UK NERC program. A third meeting is scheduled at the University of Rhode Island on 2-3 December. Bill Humphreys, a consultant hired by NSF, will provide a financial report to the committee at the meeting. Most of this meeting will be a closed session to begin writing of the report.

As part of the NSF Review Study, NSF solicited letters from ship users asking how they perceived the fleet. Don gave a summary of this survey. Fifty responses have been received to date. Most of the letters were favorable and expressed that the fleet is in a reasonably good state and an effective system. Some problems were cited such as the need for more technical support, more equipment upgrades and too many scheduling scenarios. There were comments on the need to start the replacement of intermediate ships. Don will continue to update the survey as new letters arrive.

Don reviewed viewgraphs that were shown at the Fleet Review Meeting, which provided fleet utilization figures. He noted that NSF considers optimal ship utilization at 300 operating days for large ships, while UNOLS/RVOC considers optimal utilization at 275 operating days for large ships. Using the NSF figures for optimal utilization, the large ships are showing a half-ship less than optimal utilization, while the intermediate ships are showing two ships less than optimal utilization.

The Fleet review committee is expected to have their report drafted by early 1999.

Lastly, Don provided a handout which shows proposal award and success rate data for the four large disciplinary programs are in the NSF Ocean Sciences Research Section - Physical Oceanography, Biological Oceanography, Marine Geology and Geophysics, and Chemical Oceanography (*see Appendix VI*). Collectively, these programs represent approximately 85% of the research funds in the division.

SEA CLIFF and ATV Report - Dick Pittenger reported that SEA CLIFF was turned over to ONR on 22 June. His viewgraphs are included as <u>Appendix VII</u>. SEA CLIFF arrived at WHOI on 5 August 1998 and is presently in storage at Otis AFB on Cape Cod. The current plan is to develop a lay up maintenance program and arrange for long term storage. WHOI will work to obtain the manipulators, replacement trim systems, spare parts, and maintenance and engineering records from the Navy. An engineering study has been approved and funded. The study will look at the integration of SEA CLIFF and ALVIN systems into a 6,000m submersible. Design concepts and cost projections will be developed.

The Navy has decided to have ATV remain in San Diego with SUBDEVGRU-5. After the FY99 2nd quarter (March), the SUBDEVGRU will be responsible for the vehicle's operation and support. In the past, the science users of ATV were only required to pay for the support ship consumables, which was approximately \$5K per day. Under the new scenario, the user would be required to pay for both the ATV operational costs, per day plus ship costs.

Ship Scheduling Process - There have been concerns that the ship scheduling process is not as responsive as it should be. Don Moller and the SSC developed procedural changes to address the problem. The recommendations included a more efficient scheduling meeting process. The procedure calls for an elimination of the initial publishing of schedules but that letters of intent listing potential cruises be substituted for a formal schedule. These letters of intent will be provided in May of the scheduling year and offered wide distribution. The letters would include all programs planned for a particular ship for the coming year. They should include the area of operation, funding agency, and

number of ship days; however, the order of cruises and how they might fit on a schedule need not be presented. The purpose of this letter of intent is to identify double bookings and early conflicts as well as provide an inventory of potential cruises to ensure all programs have been accounted for. The traditional June scheduling Review Group meeting will not be held. As funding decisions become known in June, schedules would be prepared and ready for review near the end of the month. A full scheduling meeting would be held in early July to review all schedules and address conflicts. The Scheduling Review Group would meet immediately after the scheduling meeting. Institutions would be encouraged to coordinate with ship operators where efficiencies could be realized during the remainder of July and August. Large ship operators would be required to coordinate their schedules probably through electronic or conference call methods. In September, the Scheduling Review Group would meet again to finalize schedules. If contentious issues existed the affected ship schedulers would be invited to this meeting to assist in the resolution of the problems. This process will be tried next year for planning 2000 fleet operations after which a decision will be made as to whether it will be a permanent change.

On-Line Ship Scheduling Improvements - Jack Bash reported on the on-line ship scheduling improvements. The Two-Section Ship Time Request Form is on-line. It will soon be linked to a world chart that will archive each request. Clicking on a block at the geographic location where the work is to be performed can then access the requests. Further, a ship scheduling web format is under construction. This form, when submitted will develop cruise tracks that are displayed on a world chart. All of these changes are scheduled to come on-line in the next six months.

Science Mission Requirement (SMRs) - The SMRs were addressed during the FIC committee report.

UNOLS/NMFS Memorandum of Agreement - It was suggested that the UNOLS/NOAA transition team contact NOAA/NMFS to establish a Memorandum of Agreement (MOA) between UNOLS and NMFS. This MOA could be modeled after the MOA between UNOLS and NOAA/OAR.

AGOR 26 Update - Sujata Millick provided an update of the AGOR 26 design and construction project. Lockheed Martin is working on the design for the SWATH, AGOR 26. The present configuration is 182 ft LOA and 88 ft beam, with a draft of approximately 25-ft. The design team is presently conducting propulsion trade-off studies. The initial cost estimate from Ingalls for construction of the ship is approximately \$52M, which significantly exceeds the funds available. Lockheed Martin will be going out to additional builder yards for more estimates.

Interchangability of Ships - The Council had an open discussion on the process to gain access to ships and whether or not ships should become more specialized or similar. No conclusions were reached concerning specialization; however, several council members felt the access to ships was a mystery to new investigators. More effort is needed to inform investigators of the options available and the procedure to get into the scheduling process. An ad hoc committee of Dennis Hansell, Barbara Prezelin and Tom Royer was appointed. Sandy Shor also offered to provide input. Jack Bash will draft a white paper on the topic and route it through the committee.

CORE/UNOLS MOA - A revision to the CORE/UNOLS MOA was recommended to better facilitate communications between the two organizations. The revision included adding a sentence to the third paragraph of the existing MOA. The new paragraph will read: "We agree to communicate freely, appraising each organization of issues of mutual interest. Specifically, we agree to hold working level discussions at least twice yearly to exchange information. To further enhance this communication, UNOLS extends an invitation to CORE to attend all Annual, Council and Committee meetings. In addition, UNOLS will provide CORE with the minutes of these meetings. CORE invites a UNOLS liaison to the CORE Board when such meetings involve issues of interest to UNOLS." The Council agreed to this MOA change.

Post Cruise Assessment Follow-up - The usefulness of the summary report for the post cruise assessments came under discussion. The UNOLS Office has in the past provided a one-page summary of all assessment reports received for the year. The report has not been received well by the ship operators and its value has been questioned. Jack Bash reported that it took 2-3 weeks of his time to put the report together. After discussion, it was suggested that the statistics from the report, such as science days lost on

the cruises, are of significant value, however, the summary of comments was not worth the effort. Jack was instructed to continue with the statistical part of the report and to give a verbal report to the Council each year at the fall meeting.

RVOC Safety Video - The Safety video was reported on during the RVOC committee report. The Council recommended that it be widely publicized. It should be reported on in the UNOLS Newsletter, and referenced in the white paper on access to the fleet, and on the UNOLS web page.

New Ship Construction - The shipyard has been selected for construction of Skidaway's new ship, SAVANNAH. The ship should be ready for operation in 2000 and will replace BLUE FIN. The design has been selected for the CALANUS replacement. Model tests have been completed and the final design should be completed by the end of September. A bid package for construction of this ship is expected out in October. Florida Institute of Oceanography has plans for the replacement of SUN COASTER. The University of Connecticut will soon complete construction of their new research vessel, RV CONNECTICUT. BLUE HERON, at the University of Minnesota, Duluth has been operating successfully and may apply to be a UNOLS vessel.

UNOLS Brochure - Vicky Cullen has been funded to publish a revised edition of the UNOLS brochure. The UNOLS Office will be working with Vicky on the update.

UNOLS Council Membership - Dennis Hansell, Chair of the nominating committee, described the process for arriving at this year's Council slate. His presentation is included as <u>Appendix VIII</u>. The process included a Newsletter article, advertisement on ScienceNet and in EOS, letters to the institutional representatives and deans/directors of UNOLS institutions, a second letter to representatives, and direct recruitment by telephone and e-mail. This aggressive campaign provided numerous candidates for Council members but only one candidate each for the UNOLS Chair and Vice Chair positions. Dennis presented the slate of candidates. A special at-large slate has also been established in the event that Bob Knox gets elected as Chair (and must vacate his present seat on the Council). Ken Johnson thanked Dennis and the nominating committee on their efforts in establishing the 1998 slate.

The Council discussed the election process to be held at the Annual meeting on 17 September. They agreed to vote on the UNOLS Charter Revision prior to holding the Council elections. If the Charter revisions are adopted, the elections will be held in accordance with the revised Charter. It was also noted that the applications for membership from the New Jersey Marine Sciences Consortium and the Southern California Marine Institute would be mute if the Charter revisions are adopted.

UNOLS Office Transfer - Jack Bash reported that letters of solicitation for a new UNOLS Office host would be sent to the UNOLS operator institutions. They will have approximately two months to submit letters of intent. After the letters of intent are received, a selection committee will be assembled. In early 1999, all proposals for the UNOLS office must be submitted. The committee will review the applications and send their recommendation to the Council, which in turn will go before the UNOLS membership.

Outgoing Council Members - Thanks was given to outgoing Council members Ken Johnson (Chair), Bob Wall, Dick Pittenger and Committee chairs Mike Perfit (DESSC) and Don Moller (SSC) for all their contributions to UNOLS over the years.

Adjournment - The meeting was adjourned at 1700.