UNOLS ANNUAL MEETING REPORT
Room 1235
National Science Foundation
4201 Wilson Boulevard
Arlington, VA
17 September 1998

Appendixes

Thursday 17 September 1998

INTRODUCTION - The UNOLS Annual meeting was held in Room 1235 of the National Science Foundation on 17 September 1998. The items of the agenda, ***Appendix I***, were addressed in the order as reported below. Ken Johnson, UNOLS Chair, called the meeting to order at 0830. The participants of the meeting are listed in ***Appendix II***.

ACCEPTING MINUTES - The minutes from the 18 September 1997 Annual meeting were accepted as written.

KEYNOTE ADDRESS:

Dr. Garrett W. Brass, Executive Director for the Arctic Research Commission, provided the UNOLS Annual Meeting Keynote address on the future of Arctic oceanography. His viewgraphs are included as ***Appendix III***. Garry opened with a polar projection of the Arctic and explained that the Arctic region is very sensitive to global change. Change is currently being recognized in salinity levels, temperature and the Bering Sea ecosystem. The Arctic has been studied by ships, submarines, aircraft, ice camps and buoys. Access is remote and expensive. The U.S. Navy has made a major contribution to the science effort by making available a nuclear submarine for two months each year in a program named SCICEX. The program started in 1993 with a test cruise then restarted in 1995 under a five-year agreement. This will end in 1999 and, with the retirement of the 637 Sturgeon Class submarine in 2000, the program will likely not continue. Understanding the bathymetry of the Arctic floor is critical. This year's program included a hull mounted SWATH mapping system to provide multi-channel data. Garry noted that the SCICEX work areas must remain outside of the other countries' EEZs since the work is being conducted from Navy subs.

Aircraft science operations are limited and helicopter operations provide even fewer opportunities. Ice camps have been used in the past with SHEBA completing this year. The future for sustained study of the Arctic rests in icebreakers. HEALY will be on line in the near future to provide access to the Arctic Ocean. The UNOLS Arctic Icebreaker Coordinating Committee has been working closely with the Coast Guard to facilitate scientific access to Arctic science. This committee needs to transition into an

expeditionary planning mode.

The Congressional budget for 1999 has included $24M in the NSF budget for Arctic science. If this is signed into law it will make a major difference in being able to work in the Arctic and should provide funding for 200 days of icebreaker time at approximately $20k per day. This funding is new and the cost of Arctic science will not impact the funds available for lower latitude science. The future of submarine science is less clear at this time.

COMMITTEE REPORTS

Research Vessel Operators' Committee (RVOC) - Paul Ljunggren, RVOC Chair, provided the report. Last year the RVOC Annual meeting was held at WHOI and attracted 48 institutions and organizations. Presentations were given on SeaNet as well as a study by The Glosten Associates on regulatory changes and how they affect new construction. Traditional presentations were given by the Safety Committee, along with reports on medical standards, risk management and special reports from other countries' ship operators. The 1998 meeting will be hosted by the University of Hawaii on 4-6 November. Special presentations will be given on the Ship Inspection Program by Jamestown Marine Services and on fleet medical assistance by Medical Advisory Systems. A report on STCW Awareness Training and International Safety Management Code (ISM) by ABS Marine Services is planned. Other activities include a report by the Safety Committee, a review of amendments to the Safety Standards, along with the traditional meeting reports. An election of officers will be held.

DEep Submergence Science Committee (DESSC) - Mike Perfit, outgoing DESSC Chair, provided the report for DESSC. Patty Fryer has been appointed as new DESSC Chair. Robert Embly will be joining DESSC as a new member. ATLANTIS came on line last year and has been operating continuously with a very demanding schedule. It is proving to be an excellent support platform for deep submergence operations. The tethered vehicles have also been in heavy demand. DESSC pushed for expeditionary planning and is now seeing the fruits of that effort with funded programs in the Southern East Pacific Rise, Hawaii and the Indian Ocean. The traditional time series submersible programs continue to be funded also. The community needs to address the issue of how to pursue expeditionary type research while still supporting the needs of time series programs. NSF is addressing this issue. They have assembled an internal group to review multi-year deep submergence programs. The committee includes Don Heinrichs, Dolly Dieter, Dave Epp, Phil Taylor, and Bruce Malfait.

The DESSC will be looking ahead at long term facilities needs, which include a more robust ROV, and how to best utilize SEA CLIFF. A workshop is being planned for 1999 to address future planning. They hope to identify the community's future science objectives and needs and well as determining what tools will be required to support the science needs.

SEACLIFF was decommissioned in June and transferred (with some support equipment) to WHOI in early August. It is currently in storage at Otis AFB on Cape Cod. The federal agencies have funded an engineering study to be undertaken by WHOI to assess the potential uses of SEACLIFF and costs involved. The results of this study will be made available to the federal agencies and DESSC.

Upgrades to ATLANTIS, ALVIN and Jason continue. All are well integrated and fully employed. WHOI has drafted an "Archiving Policy" that documents the obligations WHOI and PI's have with regard to oceanographic data and samples, as well as visual and digital information obtained using the vehicles and sensors of the National Deep Submergence Facility. DESSC hopes to have the policy approved by the federal agencies and in place in the near future.

Mike presented a series of viewgraphs on ATLANTIS, ALVIN and ROV work in 1998 and the future, see ***Appendix IV***. The 1998 ATLANTIS geographic work sites were presented as well as a list of the platforms used to support the ROV operations in 1998. A list of funded ALVIN and ROV work for 1999 and beyond was provided. The list is extensive and includes work in the traditional regions as well as the southern East Pacific Rise, Indian Ocean, Hess Deep, Gulf of Alaska, Mid-Atlantic Ridge, Hawaii and the Gulf of Mexico. NOAA NURP use of the National Facility is up in 1998 and is planned to be up in 1999

according to schedules in place at the time of the meeting. Maps showing the work locations and tentative cruise track were displayed. In addition, Mike presented a list of proposed programs for ALVIN and the ROVs for 1999 and beyond. It appears that demand for the vehicles remains high.

Fleet Improvement Committee (FIC) - The FIC report was given by Larry Atkinson, FIC Chair. The FIC is working on Science Mission Requirements (SMRs) to assure new vessels coming on line meet the expectations of seagoing scientists. Two Subcommittees of FIC are currently working on a set of SMRs for an ALPHA HELIX replacement and an East Coast coastal vessel. The ALPHA HELIX replacement SMRs call for a fisheries oceanography capability. Jim Meehan of NOAA/NMFS is a member of the subcommittee working on the SMRs. The SMRs also call for this ship to be ice strengthened. A draft plan is currently under review. The East Coast coastal vessel plans under development include a requirement to carry more scientists, and to handle ROVs and AUVs. The ship is envisioned to be intermediate in size. FIC has been involved in the review of AGOR 26, the SWATH replacement for MOANA WAVE. The Committee is available to review plans of smaller vessels that may be under consideration throughout the community.

Ship Scheduling Committee (SSC) - Outgoing Chair, Don Moller, provided the presentation for the SSC. Mike Prince has been elected the new chair and Joe Ustach vice chair. The Ship Schedule Review Group met in June to review the draft schedules for 1999. The full Ship Scheduling Committee met this week to firm up the schedules. The major unresolved issue is the funding by NOAA of the GLOBEC and ECOHAB programs, which affect five ship schedules. One ship, KNORR, is scheduled for lay up in 1999. The Intermediate ships have less than optimal schedules.

The SSC approved a change in the scheduling process, which is considered, needed to address the instant communications and the new partnering with NOAA and NAVO. This procedure will delay the posting of draft schedules until late June to allow for more funding information to be known. Prior to the first draft schedule, lists of potential cruises will be distributed by the schedulers. The summer meeting will be held in early July and will be a plenary session with the entire SSC. A meeting of the Ship Scheduling Review Group will follow this. The fall meeting will consist of only the review group. This modestly revised process is designed to smooth out some of the communications problems and produce schedules that are less speculative. The new scheduling strategy will be tried in 1999 for the 2000 ship schedule planning.

Don presented a series of viewgraphs included as ***Appendix V***, which present the Fleet charge days from 1995 to 1999. ATLANTIS and EWING both are showing full schedules in 1999. Don showed the Fleet charge days by agency. In 1998, the "other" days are high, in part due to the private work scheduled on EWING. A map was presented showing the large ship work areas in 1999. All large ship programs are in the Pacific with the exception of one program in the Atlantic. EWING will support this program.

Research Vessel Technical Enhancement Committee (RVTEC) - John Freitag, RVTEC Chair, provided the report for this committee. RVTEC was established in 1993 to coordinate technical activities and to encourage exchange of equipment and personnel. They maintain listings on the RVTEC website, which inventories the equipment and personnel in the UNOLS Fleet. RVTEC will hold its annual meeting on 19 October followed by the International Marine Technician (INMARTECH) symposium on 20-22 October hosted by Scripps. The meeting is expected to attract over 100 participants from around the world. Marine technicians from the UK, Japan, Australia, Spain, the Netherlands, South Africa, France, Canada and the Canary Islands have already registered. Eight workshops with 30 presentations are planned, as well as an exhibit session at the SIO Birch Aquarium and a tour of MELVILLE.

The RVTEC meeting will include regular business, elections for Chair, Committee reports and selection of a location for next year's RVTEC meeting.

Other RVTEC activity includes its work with the Coast Guard in setting up science systems testing for their icebreaker HEALY.

Arctic Icebreaker Coordinating Committee (AICC) - The AICC report was presented by the AICC Chair, Jim Swift. Jim's viewgraphs are included as ***Appendix VI.*** The AICC is charged with providing

scientific oversight on Arctic marine science support on US vessels, primarily those of the US Coast Guard. A goal is to match the science operations aboard Coast Guard Icebreakers with those of UNOLS ships. The Committee is also working on a framework for expeditionary planning. The AICC has been involved in coordinating the science that has gone aboard the Polar Icebreakers for their Science of Opportunity (SOO) cruises this year. Much of this effort was accomplished through the UNOLS homepage utilizing on-line request forms.

MICHAEL HEALY is the newest Coast Guard Icebreaker. It is scheduled for delivery in the summer of 1999. The ship is 420' in length and is planning 240 days of operation per year. It will be homeported in Seattle and the first ice passage is expected in late 1999. Ship shakedown and science systems testing will be conducted in 2000 with the first funded science operations expected in 2001. The AICC and the Coast Guard are expecting international cooperation during Arctic operations.

FEDERAL AGENCY REPORTS

National Science Foundation (NSF) - The NSF report was presented by Don Heinrichs. Don announced the impending retirement of Dick West on 3 October. Dick's programs will be split between Dolly, Sandy and Don for the short run. Reorganization is in order and a replacement will be recruited.

Don provided viewgraphs, which are included as ***Appendix VII***. The NSF budget request includes an 11.8% increase for OCE. Under the requested budget, the Ocean Sciences Research Support section would receive $127.5M or a 13.7% increase, the Facilities section would receive $56.96M or a 9% increase and the Ocean Drilling Program would receive a 10% increase to $45.93M. Don reviewed the Ocean Sciences priorities in 1999. A continuing resolution is likely until the budget is signed, only then will the actual budget be known.

Don reported that a big activity of the year has been the NSF Academic Research Fleet Review. The Committee, headed by Dr. Roland Schmitt, has met twice so far. The first meeting, held in June at NSF, was primarily to provide the committee with background information on 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 from other research ship operations such as NOAA, OPP, NAVO, Canadian Coast Guard and the UK NERC program. A third meeting is scheduled for the University of Rhode Island on 2-3 December. The Committee will hear the report of financial consultant Bill Humphreys. Much of the third meeting will be a closed session to begin writing up the report. The Committee's report should be out in the early part of 1999.

Don presented view graphs showing the both the total and NSF ship days by class for the period 1988-1998. The total days show a modest increase while the NSF use shows a downward trend.

Also presented were a series of graphs depicting the NSF proposal requests, awards and declines over the same ten-year period. Separate graphs were included for total requests, requests by discipline and requests for both sea-going proposals and non-sea going proposals. The four large disciplinary programs in the NSF Ocean Sciences Research Section - Physical Oceanography, Biological Oceanography, Marine Geology and Geophysics, and Chemical Oceanography collectively, represent approximately 85% of the research funds in the division. The number of awards for proposals with ship requests over the ten-year period was reasonably constant. The overall success rates for the four disciplinary proposals and success rates for proposals with ship requests and without ship requests are all approximately 25% for 1998. Over the ten-year period, it appears that the success rate is showing a slightly downward trend. These graphs are included in ***Appendix VII***. *[Also included in that Appendix is a subsequent analysis of the same data by program and by seagoing/non-seagoing proposals, showing some success-rate biases in favor of non-seagoing proposals in certain disciplinary programs.]*

Office of Naval Research (ONR) – Sujata Millick presented the ONR report. Ocean Science funding is expected to be $75M for 6.1, $10-15M for 6.2 and $10M for NOPP. ONR provides an 80/20 split for sea going projects with 80% of ship costs provided from Facilities and 20% from the science programs. In

the past, the facilities budget has been roughly $4.5 M to $5M. The 1999 facilities budget is expected to be approximately $5.6 M. The added $600K is to support ship time for 6.2 programs. This will be a new type of work for the UNOLS Fleet. Andy Silver will be returning to work with the Navy labs with Tim Pfeiffer to be his replacement.

Naval Oceanographic Office (NAVO) - Commander Jim Trees provided the report for NAVO. His viewgraphs are included as ***Appendix VIII***. Jim's viewgraphs reflect the NAVO operations accomplished using UNOLS ships. This includes gravity surveys, physical oceanography observations and Fleet training area work. NAVO will be using 431 days of UNOLS ship time in 1998 and anticipates using 460 days in 1999. The 1998 and 1999 work will be done using eight ships from seven institutions. Funding each year to support the NAVO operations has been $7.5M. Jim reports this to be a very successful program. 1999 could potentially be the last year for NAVO work on UNOLS ships. Various UNOLS member representatives commented on the success of the partnership between UNOLS. It was suggested that efforts should be made to continue the partnership.

Oceanographer of the Navy (OON) - Pat Dennis gave the OON report. The Navy's newest oceanographic ship of the TAG 60 class is TAG 64 and is named BRUCE HEEZEN. The ship was launched in January. TAG 65 is in the 1999 budget and should start construction at the end of the year. Pat announced that Norm Cherkis is retiring from NRL.

National Oceanic and Atmospheric Administration (NOAA) – Commander Beth White gave the NOAA presentation. Dave Evans has been named the new administrator for OAR. Alan Thomas has moved to the Office of Global Change. Louisa Koch will fill Dave Evans' position as the Deputy for OAR. Scott Gudes has been named Deputy Undersecretary for NOAA. OAR expects to be providing $2.6-3M in funding for UNOLS charters in 1999. This number could double in 2000 if the requested budget is funded.

United States Coast Guard (USCG) - Jon Berkson provided the report for the USCG. HEALY is now scheduled for delivery 30 June 1999. The first planned funded science is scheduled for 2001. Plans call for the systems testing trials to be conducted in four phases. Phase 1 will be open water testing to include SeaBeam tests; Phase 2 will be a transit; Phase 3 is to test the ice breaking efficiency of the ship and Phase 4 will be the high latitude science testing. The USCG has established a new web site for HEALY <http://www.uscg.mil/hq/g-a/healy/>. A 30-meter coring arrangement has been funded for HEALY. Both Polar Sea and Polar Star have deployed to the Arctic this year. Polar Star provided support for the SHEBA program. OMB has instructed that the Coast Guard seek full reimbursement for conducting science on HEALY. This ruling is being questioned and is yet to be resolved.

Department of State (DOS) - Elizabeth Maruschak has been hired to work with Tom Cocke and provided the presentation for DOS. She is presently working part time but expects to work full time with support from NOAA and ONR. Liz will be working on communications including increased use of the Web.

AGOR 26 Construction Report - Robert Hinton, now employed by the University of Hawaii, provided a report on the status of AGOR 26. His viewgraphs are included as ***Appendix IX***. The AGOR 26 project has been funded for $45M to build a SWATH vessel. Robert provided an organizational chart showing all of the parties involved in the project. Lockheed Martin has teamed with Ingalls Shipyard to design and build the ship. The process includes Phase I for ship design and Phase II for construction. Phase I is in progress. The design process started with the UNOLS FIC Science Mission Requirement statement. A web site has been established, known as the Vault, which provides a status of the design. A matrix showing the SWATH's capabilities was provided. The University of Hawaii identified eleven mission descriptions for research in the central Pacific. These missions were also put into a matrix and the requirements needed to match the missions were identified. Lockheed/Martin has developed a notional concept layout to meet the SMRs. The current design has a displacement of 2370 LT. To meet the requirement for range, a variable draft has been recommended. The FIC met in Sunnyvale over the summer to review Lockheed/Martin's progress on the design. Robert invited the community to provide their input on the notional design.

Robert provided a table showing a comparison of specifications for AGOR 24, UNOLS SWATH '97 SMRs, RFP desired capabilities, Lockheed/Martin design, and the KAIYO design. Initial cost estimates from Ingalls for construction of the SWATH are high. Lockheed/Martin plans to see if any other yards might be interested in bidding on the construction. They believe that there are yards that can build the ship and remain within budget. Robert noted that the big cost drivers are not related to the SMRs. The major cost driver for the ship is the size needed to meet the Sea State requirements. By reducing the ship's size, the mission of the ship would be limited to near-island operations.

The ship is scheduled for delivery in 2001 and ready for operations by the end of that year.

SeaNet Update - Ellen Kappel provided a review of the SeaNet project. Ellen's view graphs are included as ***Appendix X***. The purpose of SeaNet is to extend the Internet to the oceanographic fleet. It has the ability to transfer large data files through batching. The program was funded by ONR with NOPP funds. The two-year funding, which began on August 1, 1997, was awarded to a consortium consisting of Joint Oceanographic Institutions, WHOI, L-DEO, Naval Post Graduate School, and OMNET. The first ships to be outfitted with SeaNet are ATLANTIS, EWING, MELVILLE, PELICAN and SEWARD JOHNSON. These ships were selected by a review committee from eight proposals. The review committee consisted of two people from RVOC, one person from RVTEC and one person from NOAA's Internet at Sea group.

Ellen reviewed the SeaNet installation status and schedule. In September, SeaNet was partially installed on ATLANTIS for beta testing of the system. The official turn-on of the SeaNet system is planned for January 1999.

COMSAT will provide OMNET with detailed, electronic billing information for each SeaNet unit. OMNET will bill for all INMARSAT use that goes through SeaNet. The first year of operation will be paid through the NOPP grant, however, dummy bills will be sent out to develop a budgeting track record. OMNET will be able to itemize billing by project, individual or account.

UNOLS Charter Revision - The UNOLS Charter requires a quorum of two thirds of the membership for a vote on charter revisions. A quorum did not exist at the meeting necessitating a mail vote for changing the Charter. The proposed revisions to the Charter will be mailed to the UNOLS member representatives along with a ballot for voting.

Application for Membership- Two institutions and two consortiums applied for UNOLS membership. The two institutions applying, University of California Santa Cruz and University of Minnesota Duluth were approved as UNOLS Members. The two consortium membership applications, Southern California Marine Institute and New Jersey Marine Sciences Consortium were deferred. The reason for deferral revolved around the UNOLS Charter revision, which could not be voted on due to a lack of a quorum. The proposed revisions to the Charter address the issue of membership by consortia. Both consortium applications will be re-evaluated after the Charter revisions have been accepted or rejected.

It was noted that the application form for becoming a UNOLS member is too brief. It was recommended that it be revised to require the applicant to provide additional information about their institution and marine programs.

UNOLS Elections - The Nominating Committee (Dennis Hansell, Chair; Peter Lonsdale; and Clare Reimers) offered the following slate for election to the UNOLS Council:

UNOLS Council Chair (2 year term)	Dr. Robert Knox
UNOLS Council Vice Chair (2 year term)	Dr. Thomas Royer
UNOLS Council Member (3 year term) At Large	Dr. Eric Firing Dr. Thomas Lee Dr. Marsh Youngbluth

UNOLS Council Member (3 year term) Non operator — Dr. James Bauer
Mr. Alessandro Bocconcelli
Dr. Charles Flagg

Special Council Slate (In the event that a Council Member is elected as Chair or Vice Chair thereby vacating his/her seat as a Council Member)

Dr. William Bryant
Dr. Timothy Cowles
Dr. Daniel Fornari
Dr. John Tochko

There were no nominations from the floor. UNOLS member representatives present at the meeting voted. Elected were:

UNOLS Chair	Dr. Robert Knox
UNOLS Vice Chair	Dr. Thomas Royer
UNOLS Council Member (At large)	Dr. Thomas Lee
UNOLS Council Member (Non operator)	Dr. Charles Flagg
Special Slate	Dr. Timothy Cowles

Appreciation to the outgoing Council members, Mike Perfit, Don Moller, Dick Pittenger and Bob Wall, was expressed for their dedication to UNOLS activities over the years.

ISSUES BEFORE UNOLS:

NSF Academic Fleet Review – Ken Johnson gave a brief recap of the review. Don Heinrichs gave a full report earlier in the meeting.

National Ocean Conference – Ken Johnson reported that he and Jack attended the National Ocean Conference held in June in Monterey. It was well attended and brought the attention of the highest levels of Government with the President attending.

UNOLS Town Hall Meeting and Future Public Outreach Plans – Ken reported that a UNOLS Town Hall meeting was held in February at the Ocean Sciences meeting in San Diego. The meeting was lightly attended, but those who did attend provided interesting comments and input.

There was discussion on how UNOLS could increase public outreach programs. It was suggested that customer surveys be implemented on a regular basis. Since NSF has plans to conduct a survey as part of their academic fleet review, it was decided to wait until the results are available before conducting a new survey.

NOPP Status/CORE Activities – Terry Schaff gave a brief summary of the status of NOPP and other CORE issues of interest to UNOLS. The 1999 NOPP funds look to be on track. They will include $7.5M to support fleet operations for NAVO programs. A request for proposals for the remaining funds is expected to be sent out in the next few weeks.

Terry continued by reporting that the National Oceans Act recommends a Presidential Commission on the ocean. It is expected that the commission's study will cost $4M and will last approximately a year and a half. They will look at the existing laws and policies of the seas. They will have a very broad mandate. The commission has not been identified. CORE has been contacting their membership for suggestions.

NOAA Fisheries Needs - The Southwest Fisheries of NOAA/NMFS has opened discussions with WHOI and SIO investigating the possibility of whether KNORR and or MELVILLE could being outfitted for fisheries work to do their AMLR work off Antarctic. Southwest Fisheries is looking for a five-year commitment of 70-100 days per year for this project. Negotiations are continuing. The program has the

potential to offer a healthy partnering between academia and NOAA fisheries programs.

SEA CLIFF – SEA CLIFF has been decommissioned and delivered to WHOI. See comments in the DESSC report above for additional details.

ATV Plans – ATV will not be retired in 1998. It will remain with the Navy's SEBDEVRON 5.

Improvements to UNOLS Ship Scheduling Process - In addition to the plans to modify the scheduling process as discussed in the SSC report, UNOLS has also upgraded the Ship Time Request Form. It will soon be linked to a world chart that will archive each request accessible through a block at the geographic location where the work is to be performed. Further, a ship scheduling web format is under construction. This form, when submitted by the ship schedulers 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.

RVOC Safety Video - An RVOC safety video has been produced and is being distributed to each of the UNOLS institutions operating ships. The video is designed to provide an orientation for the science parties prior to each cruise.

USCG Regulations and their impact on Crewing Requirements and Ship Construction - UNOLS is awaiting a report from Glosten Associates on the new USCG and international regulations and how these impact crew requirements and new ship construction. The report has been briefed to both the RVOC and FIC. The new changes will require an increase in training and management oversight; however, additional crewing is probably not a requirement.

AGOR Z-Drive Thruster Update - Dan Schwartz provided an update on the gear problems of the AGOR Z-drives. Historical data suggests that the SCR electric motors can emit transients that spike up the torque on the gear. Some currently installed gears are considered to be at a moderate risk for failure. These gears had been purchased from a subcontractor that is no longer used. Spare gears are available for the AGORs in an event of a failure. New gears have a higher standard of quality testing by the factory. KNORR is presently operating with a de-rated starboard system until new gears are installed. There is a new technique, laser scanning, available for checking the z-drive lubricating oil for debris. The laser scanning is very sensitive to zinc, metals, etc that might be in the oil and should be able to send out warning signals well in advance of a failure.

New Ship Construction - **AGOR 26** is currently in the design phase as reported by Robert Hinton. The shipyard has been selected for construction of Skidaway's new ship, **SAVANNAH**. SAVANNAH will replace BLUE FIN. The ship should be ready for operation in 2000. 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. The design calls for a catamaran. A bid package for construction of this ship is expected out in October.

In other, non-UNOLS ship news, 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, **CONNECTICUT**. **BLUE HERON**, at the University of Minnesota, Duluth, has been operating successfully and may apply to be a UNOLS vessel. WHOI has been working on a design for a 120' SWATH vessel. Model testing analysis is completed. The ship is designed to operate in a Sea State 5. Funds have yet to be identified for its construction.

UNOLS Dues - Jack Bash reported that the balance of UNOLS dues for 1997 was $3,803.86. Dues collected for 1998 were $1400. Funds expended to date in 1998 were $1104.53. The current balance is $4,099.33.

UNOLS Office Transfer - The UNOLS Office is scheduled to transfer from the University of Rhode Island on 30 April 2000. The Chair will solicit "letters-of-intent" from UNOLS Operating institutions. Responses are due by 30 October 1998. The Chair will invite proposals from interested institutions in the fall and will appoint an evaluation committee from non-conflicting members of UNOLS. Proposals will be due in winter 1999. An evaluation period will follow. The evaluation committee will forward their

recommendations to the UNOLS Chair by 30 April 1999. In June/July the Council will forward their recommendation to the membership for concurrence. The successful institution will be notified by 6 August 1999. The UNOLS Office will be established at the new host institution 1 May 2000.

Appointments - Ken Johnson announced the Committee appointments made in 1998:

AICC: None
DESSC: Patty Fryer (DESSC Chair), Bob Embly
SSC: Mike Prince (SSC Chair), Joe Ustach (Vice Chair)
RVOC: None
RVTEC: None
FIC: Chris Measures

Farewell and Thanks - Jack Bash presented Ken Johnson with a long glass on behalf of the UNOLS Community and thanked him for his years of service as UNOLS Chair.

Adjournment - The meeting was adjourned at 1530.