Summary Report

UNOLS 1996 ANNUAL MEETING

Room 1235
National Science Foundation
4201 Wilson Boulevard
Arlington, VA
20 September 1996

The UNOLS membership met for their Annual Meeting on 20 September, 1996 at the National Science Foundation, Board Room 1235, Arlington, VA. 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

WELCOME & INTRODUCTION - Ken Johnson opened the 1996 Annual Meeting by welcoming the membership and announcing the 25th year anniversary of UNOLS. He reported that the past year has been exciting with the success in building new partnerships. UNOLS will continue their efforts to plan for the fleet of the future. UNOLS will work to match the fleet composition with the science needs of tomorrow. Ken noted that for a number of reasons the UNOLS ship scheduling process was extremely challenging this year. UNOLS is working to make this process proceed more smoothly in the future.

ACCEPTING MINUTES - The minutes from the 1995 Annual Meeting were accepted as written.

COMMITTEE REPORTS:

Research Vessel Operators' Committee (RVOC) - Mike Prince, RVOC Chair, provided the report for the committee. He began by saying that this would be his last Annual Meeting as RVOC Chair and that he has enjoyed his involvement in this capacity. Mike reviewed RVOC activities over the past year. The Research Vessel Safety Standards were reviewed and updated. A white paper about the UNOLS Fleet was written and distributed. The post cruise assessment form was reviewed and revisions are in process including development of an electronic form calls for more interaction between the marine operations and the scientists. RVOC plans to develop a safety orientation video to be reviewed at the beginning of each cruise. An RVOC subcommittee has been working to establish a set of medical standards for employment as a crew member. The operators can use these physical standards when hiring new crew.

Mike reviewed plans for the 1996 RVOC meeting to be hosted by Florida Institute of Oceanography (FIO) and the University of South Florida. The meeting will be held on 22-24 October. The first day of the meeting will be devoted to old and new business and reports from committees and agencies. Special reports will be provided by FIO, international marine operators and other marine organizations. Dennis Nixon will report on liability and insurance issues. On day two there will be a discussion on working with new partners and how these partnerships could impact UNOLS operations. They will try to determine what changes are necessary to accommodate these new users. Three workshops are planned to discuss: (1) Medical and physical standards for employment as crew, (2) strategies for maintaining a healthy and productive UNOLS fleet in an era of challenging budgets and (3) developing a safety orientation video to be shown to science parties before beginning science operations on a cruise. The last day of the meeting will host a round table discussion of the marine superintendents.

KEYNOTE ADDRESS

Rear Admiral Paul G. Gaffney, Chief of Naval Research and Commander, Naval Meteorology and Oceanography Command provided the keynote address for the 1996 UNOLS Annual Meeting. He began by discussing NAVO's new partnership with the UNOLS community. He introduced Captain Rudolph and Commander Trees who will be key liaisons between NAVO and UNOLS. Admiral Gaffney explained that he has great interest and a long standing commitment to oceanography. His first oceanographic cruise was on R/V TRIDENT. He is now splitting his time between ONR in Arlington, VA and CNMOC in Stennis, MS.

The number one issue for Admiral Gaffney is oceanographic research funding. The Navy has seen a downward trend in research funding. In 1968, there was approximately $600M budgeted for 6.1 programs. In 1996, this number has dropped to approximately $400 million and is still going down. Admiral Gaffney's goal is to put a floor on 6.1 funding. ONR will attempt to keep the budget stable at $400M, then attempt for growth. Other issues that are of high importance to Admiral Gaffney include the laboratory and test facility infrastructure and the science and technology marketing.

Admiral Gaffney continued by reviewing NAVO's ship operations. The Navy is completing their fleet modernization program. PATHFINDER, TAG-60, has been operating since summer and is planned to work in waters away from the U.S. for the next ten years. SUMNER and BOWDITCH (TAG-61 and TAG-62) are both in operation. SUMNER will be at MTS in September and will be open for tours. BOWDITCH will be in Washington, DC on 12-15 October for tours. HENSON, TAG-63, is scheduled to be launched in October. There is a chance that funds may be appropriated for a TAG-64 construction. All overhaul work to modify the vessel, WATERS, has been stopped. WATERS is an ex-cable layer which was transferred to NAVO for use as a survey platform.

Admiral Gaffney reviewed his concerns which included stability of research funding (6.1), program critical mass (is research at ONR becoming "cubicle" science?), the demanding workloads of the ONR program officers and his own workload.

Admiral Gaffney reported that the National Ocean Partnership Act (NOPA) has been appropriated $20.5M (Note: since the Annual Meeting NOPA became law). The Act designates $7.5M for support of the Navy's use of UNOLS vessels. Admiral Gaffney congratulated Captain Rudolph for his efforts in making this a success. The remaining $13M is to support mainstream programs, such as: MEDEA, educational programs and general partnership interests. Steve Ramberg will be the custodian of the 6.2 funds.

Admiral Gaffney praised the construction effort of the AGOR vessels; THOMPSON, REVELLE and ATLANTIS. He reported that $45M has been appropriated for the construction of a SWATH vessel. Admiral Gaffney explained that he doesn't think there are too many ships in the fleet and that it is time to try a SWATH design. In developing the design for the vessel as many ideas as possible should be considered.

In other platform news, Admiral Gaffney reported that FLIP will be changing its status. Support for the

operation of FLIP in the past was subsidized by NAVSEA at approximately $500K per year. This helps to lowers the day rate of FLIP to its users. At the end of FY97, FLIP will be transferred to ONR and the subsidy will end. Day rates will go up unless the user base is increased. FLIP has many years of good use as a research platform. The Navy also plans to retire SEACLIFF and TURTLE over the next two years. ONR has been asked to work with NOAA and NSF to find the best utilization of our deep sea assets.

Admiral Gaffney concluded by asking the community to start thinking about "NOPA-2." Basic research funding is important to everyone. We need to look for new funding to support both science and ship operations. The community needs to work with their respective university presidents and laboratory directors to talk to their representatives in Washington, DC and educate them on the importance of oceanography.

COMMITTEE REPORTS (Continued):

DEep Submergence Science Committee (DESSC) - Mike Perfit, DESSC Chair, provided the DESSC report. He began by reporting that this has been a very busy year with the construction and modification of ATLANTIS, ALVIN overhaul, retirement of ATLANTIS II and a full ROV schedule. DESSC held a meeting in May, then another meeting just prior to the UNOLS Annual Meeting. This second meeting gave DESSC representatives the opportunity to meet with the operator and agency program managers. ALVIN's overhaul period presented a good opportunity for integration and implementation of DESSC's prioritized list of upgrades. Mike presented a timeline of key ATLANTIS/A-II/ALVIN events, (see ***Appendix III*** for all view graphs presented by Mike). ALVIN is scheduled to be loaded aboard ATLANTIS in May 1997. The vessel and sub are scheduled to be ready for science operations by early June, 1997.

Mike presented a world map showing the areas of interest for ALVIN work. These areas included the mid-Atlantic, Juan de Fuca, off California, and the northern and southern East Pacific Rise. Mike showed a summary of funded programs for ALVIN in 1997. There are 136 ALVIN dives funded. The ROV funded requests for 1997 are for work in traditional areas plus operations in the Mediterranean and Western Pacific. They will visit the site of the wreck of the MV DERBYSHIRE, a vessel which sank in a typhoon in 1980. This is a UK/European funded cruise to perform a forensic survey of the vessel. The DERBYSHIRE cruise will enable ROV Jason (and R/V THOMPSON) to be in the western Pacific where Patty Fryer (U. Hawaii) has an approved NSF-funded cruise that otherwise could not have been efficiently scheduled. Mike presented the 1996/97 Jason/Argo/AMS-120 schedule. Seven cruises are scheduled to be performed over a 14 month period on five different vessels. This presents a full schedule since an average of six weeks is required for shipping the vehicles between sites. The ROV 1996 operations have been very successful. Dan Fornari's cruise to Lucky Strike over the summer went very well. A summary of his cruise operations and survey results is included in ***Appendix III***. Currently JASON is operating from THOMPSON on Juan de Fuca for Paul Johnson. In this cruise, JASON completed 87 continuous hours of operation on the bottom during one lowering.

WHOI has prepared two schedule options for 1997 ATLANTIS operations. Option A was generally accepted by the UNOLS Ship Scheduling Committee. Under this scenario, ATLANTIS and ALVIN would begin operations in June in the Atlantic. At the end of July, the ship would transit through the Panama Canal and resume operations off San Diego. In the fall, one cruise is planned on the northern EPR to be followed by a series of cruises on the southern EPR. In October, the AMS-120 towed sonar system would be placed onboard ATLANTIS (integrating ALVIN with the towed vehicles for the first time on the same platform). The ship would return to San Diego in March 1998 to begin its required Post Shakedown Availability (PSA) period. If any additional proposals for work on the SEPR get funded, they would not be able to be scheduled for the early 1998 opportunity since the ship is required to return to the states to undergo its PSA.

Option B integrates the ROV and ALVIN operations earlier than option A. After completing operations off San Diego in August, ATLANTIS would transit to Juan de Fuca for three Jason cruises. In October, the ship would return to San Diego for one ALVIN cruise to be followed by a Jason cruise at the northern EPR. Option B moves the PSA to January 1998 before conducting operations at the Southern EPR. As a

result, any additional proposals that get funded for the SEPR could get scheduled in 1998. Mike presented the cruise tracks for options A and B. Both option A and B leave one funded cruise unscheduled; Karson's cruise to Hess Deep.

Mike continued his report by discussing upgrade plans for ALVIN, see ***Appendix IV***. In June 1995, the DESSC realized the potential opportunity to upgrade ALVIN systems during its 1996/97 overhaul period. Dan Orange and Cindy Van Dover solicited the community for input, then compiled a prioritized list of ALVIN upgrades. After a series of meetings and discussions with the operator and funding agencies, the list was revised. The revised priority list of upgrades was as follows:

1. Datalogger/video upgrade
2. Add syntactic foam
3. Power
4. (tie) Obtain dual head scanning sonar
   (tie) Obtain 4 slurp pumps with chambers
5. Laser ring gyroscope
6. Image infrastructure
7. Improve the in-hull 35 mm cameras
8. Homer Probes
9. Pencil cameras
10. (tie) Obtain an improved CTD pump
    (tie) Obtain a flat LCD monitor
11. Obtain a new set of push cores with core catchers

In addition to the prioritized list of upgrades, other suggestions included developing a power training video, upgrading the VB system, replacing the navigation receiver and increasing the number of science transponders. A few items have already been purchased and will be incorporated during this overhaul. These include the pan and tilt camera and the new 3-chip video camera.

Mike reported on ALVIN's overhaul schedule, see ***Appendix IV***. About 95 percent of the recommended upgrades will be implemented during the overhaul. The overhaul is scheduled to be complete by 31 March 1997. In April, ALVIN will be put on ATLANTIS and the sub and ship will be ready for science in early June.

WHOI has prepared a draft management plan for the Deep Submergence Operations Group. The plan provides an organizational outline of the WHOI personnel, functional relationships and modes of operation for an integrated ALVIN/ROV facility. DESSC is reviewing the plan and will provide feedback to Woods Hole.
Mike concluded by reporting that the Navy plans to retire SEACLIFF and TURTLE. SEACLIFF is scheduled to retire in FY98 and TURTLE will retire in FY97. The Navy is preparing a letter which will request DESSC to survey the community on their needs for future deep submergence science operations (note: since the meeting DESSC has received this letter). DESSC is establishing a task force to address this issue.

Fleet Improvement Committee (FIC) - Eric Firing, FIC member, provided the Council with a status report prepared by Chris Mooers, FIC Chair, see ***Appendix V***. Chris was unable to attend the meeting. FIC continues their ongoing efforts to make incremental improvements to the ships of the UNOLS fleet. They have placed a high priority on ensuring the capability of the fleet rather than maintaining a large fleet. As a result, FIC is studying the technological upgrading of the fleet as real-time data platforms. FIC has established a subcommittee to study various ship technologies such as; navigation systems, external and internal communications, data transfer, meteorology instrumentation, winches and wires and shipboard computers. The subcommittee includes Peter Betzer, Rich Findley, Eric Firing and Bess Ward. Over the past year FIC has been developing an Interim Fleet Improvement Plan (IFIP). The IFIP was initiated because of the funding shortfall projections predicted by the Betzer report. However, with the addition of new partnerships to the fleet, the report is a moving target and is not ready for release yet. FIC has begun preparations for the 1998 Fleet Improvement Plan (FIP98). The FIP98 will provide a vision of the fleet in the year 2010. FIC will focus its winter meeting on outlining science mission requirements for

a mid-Pacific general purpose oceanographic vessel.

Ship Scheduling Committee (SSC) - Don Moller, SSC Chair, reported on the results of the ship scheduling meeting from 9 September. Approximately 95 percent of the scheduling issues have been resolved. The ship scheduling for 1997 evolved over a number of meetings. On 25 June 1996 there was a scheduling review meeting. Next, the NOAA fleet allocation meeting was held. Scott McKeller reported that with the lay-ups of DISCOVERER and MALCOLM BALDRIDGE NOAA needed time on the UNOLS ships. In 1997, approximately $3M of NOAA ship time has been scheduled on UNOLS vessels. The NOAA programs include the FASTEX program to be carried out on KNORR in the North Atlantic. A FOCI program is planned in the Gulf of Alaska using WECOMA. A moorings program is scheduled using Harbor Branch's vessels in the South Atlantic and a program is scheduled on REVELLE in the Equatorial Pacific. On 17 July, Don and Jack Bash met with NSF and ONR representatives to address, GLOBEC, Coastal Mixing and Optics (CM&O) and large ship schedules. In August, Don and Jack visited NAVO at Stennis to review their scheduling needs. Eleven potential cruises were presented, ten of these were scheduled on UNOLS ships for a total of approximately $7.5M. Five of these cruises are on large ships; two will be in the Atlantic and three will be in the Pacific. The remaining cruises are for physical oceanography. They are more seasonal in nature and require smaller vessels. Also in August, a meeting was held in Seattle to bring the large ship operators together to resolve a variety of scheduling issues.

Scheduling of the UNOLS intermediate and small vessels went smoothly. Scheduling the GLOBEC and CM&O cruises was challenging; however, all requests have been accommodated. Large ship scheduling was very dynamic and posed many challenges. Requests for the large ship were spread across the globe and many had strict time constraints. These constraints included mooring retrievals and launches, ROV operations, seasonal weather windows and ODP survey work. Don presented a map showing the programs which had time constraints. Next, Don presented a view graph of the charge days for each UNOLS ship for the years 1995, 1996 and 1997 (see ***Appendix VI***). All of the large ships had full schedules with the exception of REVELLE which is on the light side. The intermediates are all a bit undersubscribed for 1997. The small vessels, with the exception of SEA DIVER and LAURENTIAN have good schedules. The total charge days for 1997 is 4,774, however this number does not include ship time for BLUE FIN and URRACA which could add an additional 150 days to the total. This represents a big increase over last year. All ships will be in operation. As was shown in Don's final view graph, this increase can largely be accredited to the addition of NOAA and NAVO's ship time. The increase represents a lot of hard work in building new partnerships.

Research Vessel Technical Enhancement Committee (RVTEC) - Rich Findley, RVTEC Chair, gave the report for the committee. He began with an overview of RVTEC's activities for the past four years, see ***Appendix VII***. They have conducted workshops at their annual meetings on salinity, dissolved oxygen, CTD/Hydro, networking, ADCP, and cables. An RVTEC home page has been established and includes equipment and technician lists. They have been publishing a newsletter, *Interface*, which is available on hard copy and electronically on the home page. The technician exchange/cross training program has been successful. There is an increased cooperative spirit of technical groups and key people have been employed through ship lay-ups

Rich reviewed plans for the upcoming RVTEC Annual Meeting. The meeting will be hosted by Harbor Branch Oceanographic Institution on 11-13 November in Fort Pierce, Florida. Discussions on new instrumentation and communications are scheduled. The communications discussion will address SeaNet, MSAT and Direct PC. Also planned is a conducting cable workshop and tours of HBOI's facilities and SEWARD JOHNSON. Other reports, updates and discussions planned include:

- Technician and Equipment Database Subcommittee Report
- Data Standards Workshop
- CHIRP Inter-comparison Update
- Show and Tell
- Elections of a Chair
- Long Range Instrumentation Planning
- NAVO Technician RequirementS

- Updating of Action Plans

Rich encouraged all institutions to send as many of their technicians as they can to the meeting. Also, he encouraged NAVO and NOAA to send their technical representatives.

AGENCY REPORTS

Department of State (DOS) - Tom Cocke from the State Department reported that processing of post cruise clearance requirements within his office is going very smoothly. His office came up with a new policy a few years ago and it has been very successful. There has been a very good response by PI's in meeting post cruise obligations. The U.S. has made an agreement with the U.K. to require only three months advanced notice for clearances. This year, the first clearance for research in Cuban waters was granted. Tom's office will soon have a homepage on the World Wide Web. It will include instructions and policies. This year there have been problems with coastal states not responding to clearance requests. Ship captains are hesitant to proceed into coastal waters without papers. Clearances are rarely easy to obtain. France is now requiring four months advance notice for clearances. Mexico is requiring six months notice.

Naval Oceanographic Office (NAVO) - NAVO's report was covered by Admiral Gaffney's keynote address.

National Oceanographic and Atmospheric Association (NOAA) - Steve Piotrowicz, NOAA/OAR, reported on the status of NOAA's ships and plans to use UNOLS vessels. He is concerned with how NOAA is to maintain field programs with their ships going off line. DISCOVER and MALCOLM BALDRIDGE have been layed up. NOAA has activated KA'IMIMOANA, which has 90 days of TOGA-TAO work scheduled. NOAA has roughly 240 days of science and both oceans to cover. They will need support from the UNOLS ships to meet these obligations. Next year, when RON BROWN is on-line, NOAA's need for UNOLS ships is expected to drop to a half year of support.

NOAA's new AGOR, RON BROWN, has been launched and will be delivered in March 1997. It will be activated in mid June 1997 and is will represent one of the most complete meteorological platforms in the world. In 1999, the vessel is scheduled to operate in the Indian Ocean. BROWN will be homeported in Charleston, NC.

Oceanographer of the Navy (OON) - NAVO's report was covered by Admiral Gaffney's keynote address.

Naval Research Lab (NRL) - Norm Cherkis reported that NRL cruises this year included work off of the UNOLS vessels CAPE HENLOPEN, SEWARD JOHNSON and WEATHERBIRD II. Next year, operations are planned from CAPE HENLOPEN, EDWIN LINK and WEATHERBIRD II. NRL has scaled down its 6.1 research support, however, funds are still available for ship time support. Scientists with 6.1 programs can't support the travel expenses necessary for field work and as a result they are becoming armchair scientists. Research support for 6.2 projects remains level. NRL is attempting to arrange a ship time matching program similar to the matching program for 6.1 ship time. Norm explained that he is still looking for 1997 NRL ship users. There are potential users for Pacific work using MOANA WAVE. Another potential program may be scheduled for CAPE HATTERAS in the fall of 1997. The 6.1 budget for facilities support remains level at approximately $1M.

National Science Foundation (NSF) - Dolly Dieter reported on NSF's budget, see ***Appendix VIII***. Facilities support was down in FY96 as compared with FY95. In 1995, the Infrastructure Program budgets took cuts so that funds would be available to support the ship operations in the Indian Ocean. For 1996, the Infrastructure Program budgets were increased and the ship operations budget was decreased. NSF science funding was also increased in 1996. Facilities funding for 1997 is expected to be flat to slightly decreasing.

Office of Naval Research (ONR) - Sujata Millick provided the report for ONR. She began by giving a

budget summary. ONR oceanography support is at approximately $75M. Navy's ship support for 1997 operations is estimated to be between $6M and $7M. This includes their matching support for NRL operations. In facility issues, Sujata reported that the Navy plans to retire SEACLIFF and TURTLE in the next two years. Navy will seek input from the DESSC on their future platform needs for deep submergence science. Sujata also reported that Navy's annual operating support for FLIP will end at the end of FY97. Over the past few years, FLIP has been subsidized by NAVSEA at approximately $500K per year. This helps to lowers the day rate of FLIP to its users. At the end of FY97, FLIP will be transferred to ONR and the subsidy will end. Support for FLIP will need to be recovered through it day rates. Bill Gaines (SIO/MPL), operator of FLIP, plans to hold an open house on FLIP on 13 December at Scripps. He will also have a booth at the AGU conference in San Francisco in the hopes of attracting new FLIP users. Sujata also reported that plans for construction of a Navy SWATH may become a reality in the very near future.

United States Geological Survey (USGS) - Peter Barnes, from the Coastal and Marine Geological Program provided the report for USGS. USGS is completing the budget planning for next year. There is potential ship time needs in the Gulf of Mexico and along the East Coast. USGS still holds title to a large ship which is presently on loan to the army. The budget for their program is $37M and level funded is expected. Included in this budget is $7M for operational support.

Office of Polar Programs (OPP) - Al Sutherland reported on OPP ship operations. NATHANIEL PALMER is conducting JGOFS operations through November in the southern oceans. In 1997, a series of JGOFS cruises are planned beginning in the fall using both THOMPSON and PALMER. Construction of GOULD is going smoothly. Delivery is expected on schedule in early fall of 1997. GOULD will devote 30 percent of its operations time to resupplying Palmer Station. The remaining 70 percent of its time will be devoted to research cruises in the Antarctic Peninsula.

ISSUES BEFORE UNOLS:

Ship Scheduling Review - Ken Johnson reported that an ad-hoc committee will be formed to review the UNOLS scheduling process. The committee will include two agency representatives, two schedulers and two scientists. This year's scheduling process was particularly challenging. It needs to be determined whether this trend will continue and the process will get more difficult with each year. There have been integral changes in the scheduling process as UNOLS has evolved. In the early 1970's, 75 percent of the ocean going scientists used ships from their own operating institution. This percentage has dropped significantly. There is a changing user group with more users from institutions from in-land states. There are also more users from institutions other than the operator institution. Other issues facing the Ship Scheduling Committee today are:

- Reduced funding levels from the traditional funding agencies,
- Introduction of NAVO and NOAA ship time requests,
- Multi-agency support,
- Increased equipment needs,
- PIs with multiple cruises per year and
- E-mail and network communications scheduling process.

The community needs educating on the scheduling process. Ken will draft a charge for the ad-hoc committee and recruit volunteers.

Congressional Funds for a SWATH Vessel - Ken Johnson reported that the appropriation to construct a SWATH vessel is in conference. (Note: Since the meeting the appropriation bill was made into law. The Conference language recommended an increase to the budget request of $45M to provide the additional funding needed to build a SWATH based on the TAGOS-23 class. The committee directs the Navy to negotiate a time sharing agreement with the university or institute that will operate it, whereby a certain portion of the ship's annual operating time would be dedicated to meeting the Navy's needs. The Navy is

to report on its progress in achieving this agreement by December 15, 1997.) Ken pointed out that in the UNOLS Fleet Improvement Plan there is no requirement for a SWATH, however, we must start considering new replacement vessels.

NSF was asked by the conference committee for their input regarding this appropriation. Ken wrote a letter to NSF at their request to provide the UNOLS view regarding this matter. Ken's letter was appended to NSF's response. (note: since the Annual Meeting, the NSF response was released to the committee.)

Arctic Icebreaker Coordinating Committee (AICC) - Ken Johnson reported that at the request of NSF and USCG a committee has been formed to schedule and coordinate Arctic research facilities and provide oversight to the construction of the Icebreaker HEALY. Presently there is no formalized method for requesting ship time in the Arctic. Jim Swift has agreed to chair the AICC. The committee's focus will be to work with the U.S. Coast Guard to gain access to the Arctic for oceanography. The committee held an organizational meeting on 11-12 September at NSF. Another meeting is scheduled on 5-7 November to review the design of HEALY. Members of the committee include Lisa Clough, Joe Coburn, Glenn Cota, Kelly Faulkner, Lawrence Lawver, Dan Lubin, Jim Swift and Tom Weingartner. The committee is reviewing the National Research Council report, "Arctic Ocean Research and Supporting Facilities, National Needs and Goals." They will meet at least twice a year. Funding to support the committee will come from the USCG and NSF.

Preliminary 1998 Fleet Improvement Plan (FIP98) - Ken Johnson reported that FIC has been tasked to develop a preliminary FIP98. The report will look at various budget scenarios form the funding agencies. It will look at the distribution of the UNOLS fleet and determine what can be afforded. It will determine the composition of the fleet. FIC met in July and is working on the IFIP. FIC is also continuing to work on FIP98. It is a long-range plan with a focus on fleet needs in the year 2010. Among other things, it will look at coastal vessels needs, replacement for the small and intermediate class and science needs for the mid Pacific. NSF's Geoscience long-range plan includes a coastal vessel.

UNOLS Review - NSF requested that the UNOLS Office prepare a pre-proposal for their office support and circulate it for review by the Council. With minor changes, the Council approved the pre-proposal. Ken will prepare a letter to go along with the proposal before submission to the National Science Foundation.

NOAA/UNOLS Cooperation - Ken Johnson reported that the NOAA/UNOLS cooperation process is evolving. This summer, NOAA's OAR program put together a coordination team. The team was co-chaired by Ken Johnson and Alan Thomas of NOAA and included members of the UNOLS Council and NOAA representatives. Some of the questions under discussion included:

- Should NOAA labs be included as UNOLS members?
- How should NOAA and UNOLS share/use ship time?
- Should NOAA ships be included in the UNOLS scheduling process?

Steve Piotrowicz from NOAA has been communicating with UNOLS on these issues. He reported that NOAA will only have one oceanographic research vessel to cover three oceans. Steve reported that there are three branches within NOAA; OAR, Fisheries and Charting and Survey. UNOLS should concentrate on working with the OAR program. Some fraction of the fisheries research could be performed using UNOLS vessels. Steve reported that NOAA recently activated a fisheries vessel, HALCYON in the Great Lakes. The vessel will be operated throughout the ice free year by GERL. It is a 60-foot by 30-foot SWATH.

Steve praised Peter Betzer, Bob Knox, Bob Wall and Ken Johnson for their help in providing input for Jim Baker's testimony to Congress.

UNOLS/NAVO Partnership - Another important partnership that has developed over the year is between UNOLS and NAVO. In addition to providing ship time, there has been a beneficial sharing of technology between the two organizations.

The Status of a UNOLS Vessel (100-foot limit) - A subcommittee, chaired by Bob Wall, is examining what it means to be a UNOLS vessel. Other committee members include Steve Rabalais and Tom Royer. In particular, they are looking at the small vessels to determine whether or not they should be considered UNOLS vessels. The small vessels normally do not create scheduling conflicts since they operate regionally. However, UNOLS vessels get funding through NSF Facilities program instead of the science programs. By adding small vessels to the UNOLS fleet, there would be more vessels to fund from the same NSF facilities budget. This topic will be brought up for further discussion at the RVOC meeting.

Post Cruise Assessments - Mike Prince reported that he and Peter Betzer have been redesigning the Post Cruise Assessment report. They have drafted an on-line questionnaire to be filled out by the cruise PI, technician and ship captain. Once completed, the form would be submitted electronically to the marine operator and the UNOLS Office. The operator would be responsible for responding to all reports received. UNOLS will provide a yearly summary of all reports. The report is meant to provide constructive feedback for future operations. It asks the user if there is anything that he/she would like to see done to the vessel before they sail on the vessel again. It is also an important tool in identifying equipment which may need replacement or upgrade. Ken Johnson will write a cover letter to the form indicating why it is important to submit. Mike will put the draft form on the World Wide Web at <color.mlml.calstate.edu/WWW/marineops/draft.html>. He encouraged all to demo the form and provide feedback.

New Ship Construction:

REVELLE - Bob Knox reported that REVELLE is now operating out of Scripps. The cruise from the shipyard to San Diego went well and is described in the UNOLS Newsletter, Volume 13, No. 2, page 4.

ATLANTIS - Dick Pittenger reported that delivery of ATLANTIS is expected in the February/March 1997 timeframe and science operations are expected to begin in early June. Construction is going along smoothly. ATLANTIS II was removed from service in July. After a retirement ceremony at Woods Hole (see UNOLS Newsletter, Volume 13, No 2, page 5), the ship transited to New Orleans for removal of the A-frame. The A-frame is being refurbished and will be installed on ATLANTIS. AII was sold and will be used for fisheries research in the Pacific and Gulf of Alaska.

Mid-Life Refits:

POINT SUR - Mike Prince reported that the overhaul of POINT SUR went well and the ship resumed operations in April.

NEW HORIZON - Bob Knox reported the mid life refit of NEW HORIZON went well. The mid-life changes were aimed at increasing the load carrying capability and the range of the vessel.

Additions/Deletions to the Fleet:

REVELLE - entered the UNOLS fleet in July at Scripps

URRACA - entered the UNOLS fleet in July and is operated by the Smithsonian Tropical Research Institute. It will serve as a coastal vessel.

ATLANTIS II - was sold during the summer, 1996.

COLUMBUS ISELIN - a contract is pending for its sale.

UNOLS at AGU - UNOLS is planning to have a booth at AGU. The booth will have posters describing UNOLS, committee activities and the newly formed AICC. We will be looking for volunteers from the UNOLS community to staff the booth.

UNOLS Dues - Jack Bash reported that in 1996, $1,450 was collected in UNOLS membership dues. This brings the total account to $4,679.50. Dues for 1997 will remain at $50 for operator institutions and $25

for non-operator institutions.

SECOR Update - Virginia Newell, Assistant Dean from the University of Miami, gave a report on the status of the South Eastern Consortia of Oceanographic Research (SECOR), see ***Appendix IX***. The consortia, originally formed in 1988, has recently become revitalized. They have three full members: University of Texas, University of Miami and Texas A&M. The NOAA OAR lab has joined as an Associate Member. The Consortia covers the Intra-Americas Sea region which consists of the Gulf of Mexico, the Southeast U.S. coast, Florida Straights and the Caribbean. They are establishing a framework within which to structure ship and technical support. Their emphasis will be on science needs and a workshop is planned for early 1997. Recently in response to an RFP from Antarctic Support Associates (ASA), SECOR won a contract with ASA to provide technician support for PALMER and POLAR DUKE. The contract is with the University of Miami with the other SECOR institutions listed as subcontractors. Last fall SECOR submitted a proposal to NOAA for the operation of their vessels, BROWN and DELAWARE II.

Bob Dinsmore Remembers 25 Years of UNOLS History - Bob Dinsmore provided the UNOLS membership with an enlightening review of UNOLS over the past 25 years. Bob began by reporting on the 1960's, "the golden years of oceanography" when the funds flowed freely and labs were expanding. In 1969, the President's Stratton Commission recommended an oceanographic partnership between the federal government and the academic institutions. This eventually evolved into "UNOLS." In September, 1971, the UNOLS founding meeting was held and the Charter was established. Bob was appointed to serve as the Executive Secretary. The UNOLS emphasis was placed on scheduling and coordination. In 1972, the first general meeting of UNOLS was held. The original make-up included 17 labs and 30 ships. As UNOLS grew so has its role. A transcript of Bob's entire report is provided as ***Appendix X***.

Presentation of the Ancient Albatross Award - Bob Dinsmore announced the first presentation of the Ancient Albatross Award to ALPHA HELIX. Tom Royer accepted the award on behalf of the ship. The award signifies the oldest and longest operating research vessel in the UNOLS fleet. ALPHA HELIX began operations in 1966. In addition to the award, Bob presented Tom with instructions on "How to prepare a proposal," a can of rustoleum and a check for $100, see ***Appendix XI***.

UNOLS Membership Votes - Ken Johnson introduced the proposed Annex VI to the UNOLS Charter. Annex VI provides the terms for a new standing committee, the Arctic Icebreaker Coordination Committee. Ken read changes to sections 2 and 3 of the Annex VI. The changes were recommended by the UNOLS Council. The UNOLS membership voted to adopt Annex VI as modified. See ***Appendix XII*** for the modified Annex VI.

UNOLS Elections - Elections were held to fill four UNOLS Council positions. The slate is enclosed as ***Appendix XIII***. Jack Bash announced the names of the elected Council members:

Ken Johnson,	UNOLS Chair
Tom Royer,	UNOLS Vice Chair
Clare Riemers,	Member at-large
Dennis Hansell,	Operator Representative

UNOLS Appointments - Ken Johnson announced the appointments to the UNOLS standing committees over the past year:

DESSC:	Jim Bellingham (re-appointed)
	Robert Collier (re-appointed)
	Dan Orange (re-appointed)
	Marvin Lilley
	Patty Fryer
FIC:	Tom Crowley
	Bill Smethie

AICC: Jim Swift, Chair
Lisa Clough
Joe Coburn
Glenn Cota
Kelly Falkner
Larry Lawver
Dan Lubin
Tom Weingartner

CALENDAR

Meeting	**Date**	**Location**
RVOC	22-24 October	St. Petersburg, FL
AICC	5-7 November	New Orleans, LA
RVTEC	11-13 November	Ft. Pierce, FL
FIC	12-13 December	San Francisco, CA
DESSC	14 December	San Francisco, CA
Council (tentative)	16-17 January 1997	Biosphere, Arizona

The meeting was adjourned at 3:00 p.m.