

UNOLS COUNCIL

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

Meeting Report

Appendices

- I. [Council Meeting Agenda](#)
- II. [Meeting Participants](#)
- III. [ALVIN/DSL Vehicle Plans/Schedules](#)
- IV. [UNOLS FIC Report](#)
- V. [Ship Scheduling Summary & Costs](#)
- VI. [AICC Meeting Executive Summary](#)
- VII. [Draft Annex VI to the UNOLS Charter](#)
- VIII. [NSF Town Meeting Calendar](#)
- IX. [CALANUS Replacement Plans](#)
- X. [Draft Post Cruise Assessment Form](#)
- XI. [ATLANTIS Profile/Layouts](#)
- XII. [UNOLS Council Slate](#)

Thursday, 19 September 1996

INTRODUCTION - The UNOLS Council met in Room 1235 of the National Science Foundation on 19 September, 1996. The participants of the meeting are listed in [Appendix II](#). The items of the agenda, [Appendix I](#), were addressed in the order as reported below. The meeting was called to order at 8:30 a.m. by Ken Johnson, UNOLS Chair.

ACCEPTING MINUTES - The minutes from the July 1996 Council meeting were accepted as written.

COMMITTEE REPORTS:

Research Vessel Operators' Committee (RVOC) - Mike Prince, RVOC Chair, provided the report for the Committee. He reviewed plans for their upcoming 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, foreign country 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 will be necessary to accommodate these new users. Three workshops are planned. A committee, chaired by Bill Coste, will review and refine draft medical and physical standards to be used by UNOLS operators in job descriptions and for physical examinations given to shipboard employees to establish a set of physical standards for ship crews. A workshop is planned to discuss strategies for maintaining a healthy and productive UNOLS fleet in an era of challenging budgets. They will address how to measure the effectiveness of the fleet. The third workshop will address crew and scientist training programs. The safety committee is 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.

DEep Submergence Science Committee (DESSC) - Mike Perfit, DESSC Chair, provided the DESSC report. He began by reporting that construction of ATLANTIS is going well and is ahead of schedule.

Delivery of the ship is expected to take place before 15 April 1997. Science operations are planned to begin in June. ATLANTIS II has been sold. The A-frame has been removed from the ship and is being refurbished for reinstallation on ATLANTIS.

The ROVs have a busy schedule for the remainder of this year and their operations have been very successful. Dan Fornari's cruise on the Mid-Atlantic Ridge was carried out in the spring. 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.

Mike reported that a mini DESSC meeting was held just prior to the Council meeting at NSF. The meeting provided the opportunity for DESSC members to meet with the operator and agency representatives to discuss plans, schedules and upgrades of ALVIN and the ROVs. Also it provided an opportunity for WHOI to present their plans for integrated deep submergence management and operations. The plan listed personnel responsibilities of the operator for both shipboard and shorebased operations. It provides scenarios for ALVIN operations combined with ROV operations on ATLANTIS. It also gives guidelines for utilizing the ROVs in a "fly-away" mode. The plan is in the draft stages and will be refined in the upcoming months.

Mike provided the ATLANTIS/A-II/ALVIN schedule (all view graphs presented by Mike are included in [Appendix III](#)). ALVIN was offloaded from A-II on 9 July to begin its overhaul period. A-II left WHOI for the last time in July and arrived in New Orleans for removal of the A-frame. The A-frame will be refurbished before installation on ATLANTIS. Builder trials for ATLANTIS took place in August and Acceptance trials are scheduled for 15 November. Although delivery of the ship with the ALVIN modifications completed is scheduled for 15 April, it is anticipated that the ship will be ready in the February/March time frame.

Next, Mike showed a map of the ALVIN and ROV operation sites for 1997 and beyond. ALVIN, for the first time, is scheduled to operate on the Southern East Pacific Rise. Also in 1997, the ROVs are scheduled to operate in the Western Pacific. They will visit the site of the Derbyshire, which is a vessel that sunk in 1986. This is a European funded cruise to perform a forensic survey of the vessel. Since the vessel and vehicles will be in this area, an NSF funded cruise for Patty Fryer was also able to be efficiently scheduled. Mike presented the 1996/97 Jason/Argo/AMS-120 fly-away schedule. Seven cruises are scheduled to be performed over a 14 month period on five different vessels. This presents a very full schedule since an average of six weeks is required for shipping the vehicles between sites.

WHOI has prepared two 1997 schedules for ATLANTIS operations. Option A was generally accepted by the Ship Scheduling Committee. Under this scenario, ATLANTIS and ALVIN would begin operation 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, operations would take place on the southern EPR. The first tethered vehicle operation off ATLANTIS would take place in October. ATLANTIS would return to San Diego in March 1998 to begin its required Post Shakedown Availability (PSA) period. Because the ship is required to return to the states to undergo the PSA, some of the funded work at the SEPR will not be able to get scheduled. Option A, however, is more efficient for the UNOLS fleet as a whole. Option B is favored by the operator. It marries the ROVs and ALVIN earlier than Option A. ATLANTIS could complete its PSA in January 1998 before going to the Southern EPR. As a result there are no constraints to return to the states before completing all funded work at SEPR. Mike presented the cruise tracks for options A and B. Also presented was a world map showing the areas of interest for ALVIN operations. Interest areas for ALVIN and the ROVs are global and include the Western Pacific, Southern EPR, Mediterranean and Indian Ocean. DESSC has identified global heroes to coordinate programs for these regions.

Mike continued his report by discussing upgrade plans for ALVIN. Over the past year, DESSC polled the community to learn what they would most like upgraded on ALVIN. Dan Orange and Cindy Van Dover compiled a prioritized list of these upgrades. They include upgrades to the datalogger, payload capacity and power. The full list of 11 items can be found in [Appendix III](#). Many of the items identified as requiring upgrades will be completed during ALVIN's present overhaul period.

The Navy has reported that they will retire SEACLIFF and TURTLE. SEACLIFF is scheduled to retire in

FY98 and TURTLE will retire in FY97. They are preparing a letter which will request DESSC to survey the community on their opinion of what should be done with SEACLIFF and TURTLE.

Mike concluded his report by providing a [summary of the ROV operations](#) carried out during Dan Fornari's cruise to the Lucky Strike area on the Mid-Atlantic Ridge. He showed a pie chart of the vehicle operations and days spent during various operations. He also showed examples of the DSL 120 survey and the bathymetric data.

Fleet Improvement Committee (FIC) - Eric Firing, FIC member, provided the Council with a status report prepared by Chris Mooers, FIC Chair, see [Appendix IV](#). Chris was unable to attend the meeting. FIC has developed a draft Interim Fleet Improvement Plan (IFIP) which needs more refinement before release. FIC has begun preparations for the 1998 Fleet Improvement Plan (FIP98). FIP98 will focus on the academic fleet profile needed in the year 2010. FIC has placed a higher 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; external and internal communications, data transfer, meteorology instrumentation, winches and wires and shipboard computers. The subcommittee includes Peter Betzer, Bob Detrick, Rich Findley, Eric Firing and Bess Ward. FIC will focus its winter meeting on outlining science mission requirements for a mid-Pacific general purpose oceanographic vessel. It was noted that the lack of long-range ocean science planning, especially for large science projects/programs, is a serious limitation in planning for the future fleet.

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 and all but two programs (Karson and Silva) have been assigned to ships. NOAA and NAVOCEANO requested UNOLS ship time and were able to be accommodated. 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. NAVO requested eleven cruises and all were able to be accommodated.

Scheduling of the UNOLS intermediate and small vessels went smoothly. Large ship scheduling, however, was very dynamic and posed many challenges. Requests for the large ships 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 V](#)). 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 300 days to the total. This represents a big increase over last year. 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 provided the Council with 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. The first day will begin with discussions on new instrumentation and communications. The communications discussion will address SeaNet, MSAT and Direct PC. A conducting cable workshop is planned for the afternoon and will run into the morning of the second day. A tour of HBOI's facilities and SEWARD JOHNSON will take place in the afternoon of the second day. The third day will include the following reports, updates and discussions:

- 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.

Arctic Icebreaker Coordinating Committee (AICC) - Ken Johnson reported that 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. An Executive Summary of the meeting is provided as [Appendix VI](#). 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 also provide oversight to the construction of the Coast Guard's icebreaker, HEALY.

The draft terms of reference for the Committee were reviewed by the Council. If adopted they will become Annex VI to the Charter. The Council suggested that RVTEC and Navy representatives should be included on the Committee. It was also suggested that someone who served on the PALMER Oversight Committee should also serve on AICC. It was decided that the Committee will remain at eight members for the time being and additional people will be asked to serve on an ad-hoc basis as needed. Paragraph two of Section 2 was reworded to give a more positive tone. Jack Bash reviewed changes to the first paragraph of Section 3 which refer to committee size and term lengths. The amended Annex VI is included as [Appendix VII](#). It will be presented to the UNOLS membership at the Annual Meeting for adoption.

AGENCY REPORTS

National Science Foundation (NSF) - Dolly Dieter began the NSF report by saying that the NSF facilities budget is expected to be approximately level for the next year. Mike Purdy continued by reporting that the NSF FY97 funding bill has gone through conference with a 5.1 percent increase. In other activities, the Directorate for Geosciences is planning to convene a series of "town meetings" with the community to discuss goals and objectives. The meetings are expected to be informal, open exchanges of ideas, concerns and suggestions. They will be held at many of the upcoming scientific conferences including: GSA, AGU, ASLO and TOS. The schedule is provided in [Appendix VIII](#).

NSF has prepared a response to the language regarding the Academic Research Fleet in the NSF Appropriation Bills under consideration by the House Appropriation Subcommittee and the Senate Committee on Appropriations. Appended to their response is the letter from Ken Johnson regarding the UNOLS fleet. Mike expected NSF's official response to be ready for release by early October. (Note: Since the meeting, NSF's response was released.)

Office of Naval Research (ONR) - Sujata Millick provided the report for ONR. She began by giving the budget outlook for the upcoming year. It is expected that 6.1 funding will be level to slightly declining. (Note: Since the Council meeting, the FY97 appropriation was signed. The FY97 budget is \$22M less than the FY96 budget.) The ship operations budget which supports ONR and NRL ship time is slightly up at approximately \$6 million. Sujata reported that support for the operation of FLIP over the past few years has been subsidized by NAVSEA at approximately \$500K per year. This helps to lower 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 most likely go up unless the user base is increased. 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.

The Council questioned why ONR's 6.1 funding was declining when the CEB had recommended level

funding. Sujata explained that it is difficult for money to be fenced for specific interests. However, oceanography support at ONR remains high with the establishment of three Chairs.

National Oceanographic and Atmospheric Association (NOAA) - Scott McKeller provided the NOAA report. NOAA has deactivated DISCOVERER and MALCOLM BALDRIDGE. NOAA's new AGOR, RON BROWN, has been launched and will be delivered in March 1997. In budget issues, the House recommended level funding for NOAA in FY97. The Senate recommended a \$4M decrease. As a result, the budget went to conference and a continuing resolution was expected. (Note: Since the Council meeting, NOAA's appropriation was signed, eliminating the need for a Continuing resolution. NOAA's total budget is \$11.5M less than its FY96 budget.) NOAA's OAR support for UNOLS ship time is budgeted at \$3M in 1997. In 1998, \$2.6M is expected to be budgeted for UNOLS ship time. The \$3M and \$2.6M are new funds from the Fleet Management program; it will not impact the budgets for science programs. In the final mark-up, the NURP budget is level at \$12M for FY97.

Department of State (DOS) - Tom Cocke reported that there has been a very good response by PI's in meeting post cruise obligations. There are just a few backlogs and his office is waiting two months before giving warnings. 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. Problems with Russia continue with all clearances for this year denied (three).

Oceanographer of the Navy (OON) - Pat Dennis gave the report for OON and began by introducing Captain Tim Schnoor of NAVO who will be overseeing the funds for NAVO ship use. He then introduced Captain Dieter Rudolph from NAVO who was instrumental in working with UNOLS to schedule the NAVO cruises. Captain Rudolph reported on the National Ocean Partnership Act (NOPA). Under NOPA, NAVO's partnership with UNOLS is becoming a big success. While all of the Navy's survey vessels are away from home waters, UNOLS ships will be used to characterize the waters close to the U.S. These waters are used by the Navy as training areas. NAVO is impressed by the data processing capabilities onboard the UNOLS vessels and hopes that the partnership with UNOLS will be a long-term one.

In budget issues, NAVO does not expect to see decline or growth. 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. 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 possibility that funds may be appropriated for a TAG-64 construction. Captain Rudolph also reported that a new SWATH ship has been earmarked for the academic research fleet.

CAPT Rudolph finished by noting that 1998 is the "International Year of the Ocean." Portugal will host the event. He encouraged representation from all of the U.S. fleets and hopes that all agencies will be able to have their ships sail into Portugal at some time throughout the year.

JOI/CORE - Terry Schaff reported on JOI/CORE activities. The National Ocean Partnership Act (NOPA) has been appropriated \$20.5M, however, the appropriation is stuck in conference. (Note: Since the Council meeting NOPA became law). The Act indicates that \$7.5M of the funds be designated to support the Navy's use of UNOLS vessels. The remaining \$13M is to support mainstream programs, such as: MEDEA, educational programs and general partnership interests. There is hope for continuation of the Act into the future with the inclusion of other partnerships in addition to Navy. The UNOLS/Navy partnership has worked out very well and has been a big success for NOPA.

UNOLS ISSUES:

Scheduling Procedures - Ken Johnson introduced the topic of reviewing the current scheduling

procedures. Although the current procedures have worked well in the past and the vast majority of science programs requesting ship time have been scheduled, the process is becoming more complex. Part of the complexity is due to the addition of new users to the fleet. Some of these partnerships became firm late in the scheduling process. Yet, this year's addition of nontraditional users have made UNOLS ship schedules more efficient and cost effective. It was pointed out that the scheduling process may be more difficult because users have greater access to schedules and reports as a result of electronic communications. Ken asked the Council to think about the procedures and that they would revisit the topic later in the meeting.

Congressional Funds for a SWATH Vessel - Ken Johnson began the discussion on the status of the SWATH vessel. The appropriation for funds for a SWATH vessel is in conference and negotiation with the White House. The conference report, if signed would appropriate funds to Navy. Although this process is unusual, it was pointed out that it is in the best interest of DOD to operate as directed by Congress. The language of the Bill is not known at the time of the meeting and as a result many questions went unanswered. (Note: Since the meeting the Conference language has been released). The committee recommends 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. During discussion by the Council it was pointed out that plans for this vessel were not identified in the Fleet Improvement Plan. Also, there was concern over operating support once the vessel is built. It was suggested to look towards NOPA. The Council tasked FIC to look at the oceanographic requirements and establish Science Mission Requirements (SMR) for the mid-Pacific. A SWATH study was performed by UNOLS in the late 1980's. The report will be resurrected and distributed to FIC.

On a separate ship construction issue, NSF is preparing a long range plan which should be ready for a first review in November. The plan addresses ship refits and Major Research Equipment (MRE) expenditures. A coastal research vessel is included as part of the MRE for the year 2010. The ARV will most likely drop out of the MRE.

Scheduling Procedures (Continued from earlier in the meeting) - Don Moller continued the discussion on scheduling procedures by explaining the issues facing the Ship Scheduling Committee:

1. Reduced funding levels from the traditional funding agencies,
2. Introduction of NAVO and NOAA ship time requests,
3. A changing user group (more users from institutions from in-land states),
4. More users from institutions other than the operator institution,
5. Multi-agency support,
6. Increased equipment needs,
7. PIs with multiple cruises per year, and
8. E-mail and network communications scheduling process.

The scheduling discussion was opened to the Council and Federal representatives for comment. The following comments/recommendations were made:

- The current process is messy, but it works. It needs smoothing.
- The scheduling process is suffering from an information flow problem.
- PIs need more information on the ships' capabilities.
- The 831's are too vague. After funding, there should be another level of detail on ship needs.
- The back page of the 831's many times do not get filled out and submitted.
- PIs should be contacted by the operator before placing them on a schedule.
- The community needs educating on the scheduling process.
- We need standards for allocation of transit time with four major players now funding UNOLS ship time.

It was suggested that an ad-hoc committee be formed to review the scheduling process. Ken Johnson will

draft a charge for the committee and try to recruit volunteers. It was recommended that the committee should include two agency representatives, two schedulers and two scientists.

Preliminary 1998 Fleet Improvement Plan (FIP98) - Discussion on this item was tabled.

UNOLS Review - Jack Bash presented a pre-proposal for support of the UNOLS Office. He noted that since the proposal's preparation, there have been several changes. For example, the budget calls for support of a seven person AICC, but it has been decided to increase the committee size to eight people. New to this year's proposal is the addition of the NSF Inspection. UNOLS has been asked to handle the contracting out the inspection. The proposal also requests support for an additional person to the UNOLS Office. The Council noted that justification of the fourth person should be clearly stated in the proposal. The fourth person will be required to handle the increased computer/electronic communications demand. The Council moved to accept the pre-proposal. Ken Johnson will write a letter endorsing the pre-proposal. His letter will be appended to the proposal.

NAVO Liaison - Jack Bash explained that NAVO and UNOLS had considered hiring a liaison to assist in scheduling NAVO ship time. The individual would need to be knowledgeable in scheduling cruises, shipping equipment and technical issues. NAVO decided that rather than hire a new person, they would appoint Gordon Wilkes to act as this person.

NOAA/UNOLS Cooperation - Ken Johnson began a discussion on planning of the NOAA/UNOLS cooperation. The process is evolving. Ken introduced Steve Piotrowitz from NOAA and explained that Steve has been communicating with UNOLS on this issue. Some of the issues under discussion include allowing NOAA labs to apply for UNOLS membership. Also, there is discussion of whether NOAA's new AGOR, RON BROWN, should become a UNOLS vessel. This ship is not clearly associated with an institution. It will be replacing MALCOLM BALDRIDGE and will be homeported in Charleston, S.C.

During the Council discussion on this issue, it was noted that the "U" in UNOLS represents "University." We need to proceed cautiously. There can be benefits and ramifications to NOAA's labs and ships coming under the UNOLS flag. Since NOAA needs to use the UNOLS vessels, they need to have representation. Also, the more interaction between UNOLS and NOAA, the more comfortable NOAA will become with the UNOLS vessels. There will be greater chance for scientific exchange. The cooperation will provide another tool for efficiency in ship scheduling.

In June, UNOLS explored the NOAA fisheries vessel needs. There are two parts to the fisheries requirements: fish stock assessment and fisheries oceanography. The UNOLS vessels are best suited for the fisheries oceanography work.

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). 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.

In other University of Miami news, Ken Johnson reported that he received a letter from Otis Brown regarding replacement plans for CALANUS, see [Appendix IX](#). Plans to replace CALANUS were placed on hold due to a high construction cost estimate. However, the University has now decided to proceed by exploring a stock catamaran hull design. Their consensus is that a stock design could be configured as a shallow draft coastal zone research vessel and built for a reasonable cost.

Rethinking the Status of a UNOLS Vessel - Bob Wall reported that the subcommittee has not been very

active since the Orlando meeting. They are examining what it means to be a UNOLS vessel. They will work on their tasking for the next 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, see [Appendix X](#). Once completed, the form should 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 is also an important tool in identifying equipment which may need replacement or upgrade. It was recommended that Ken Johnson attach 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 at Scripps. The cruise from the shipyard to San Diego went well and is described in the UNOLS Newsletter, Volume 13, No. 2, page 4. When asked about cruise speed, Bob indicated that it is 12.5 knots; however, the fuel consumption is a little high and they are looking into it. The noise problem which had been experienced originally on THOMPSON has been improved on REVELLE and ATLANTIS. This was achieved by lining ducts, installing air conditioning and tightening noise specifications for the ship. Praise was given to the shipyard representatives; Robert Hinton, Ed Peterson and John Thompson, for their oversight in the construction of the new AGORs.

ATLANTIS - Dick Pittenger provided a timeline for ALVIN, ATLANTIS II and ATLANTIS, see [Appendix III](#). ALVIN was offloaded from AII in July and will undergo an overhaul before integration with ATLANTIS. 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. Dick showed the outboard profile of ATLANTIS with the deep submergence modifications highlighted, see [Appendix XI](#). The modifications are very functional and everyone is pleased with the design. DESSC's oversight to the design was useful. ATLANTIS will begin operations in early June, 1997.

Mid-Life Refits:

POINT SUR - Mike Prince reported that the overhaul of POINT SUR went well and the ship resumed operations in April. Any future improvements to the ship would be focused on enhancing the science capabilities.

NEW HORIZON - Bob KNOX reported that there were no surprises in the mid-life refit of NEW HORIZON. They have only a few tasks unfinished because time ran out. These items will be completed when the ship is in port. Although the time was short, the funding was sufficient. The mid-life changes were aimed at increasing the range of the vessel.

CAPE HATTERAS - Duke/UNC, with the assistance of an architect, is still considering a stretch of CAPE HATTERAS.

OTHER BUSINESS:

UNOLS at AGU - Jack Bash reported that UNOLS is planning to have a booth at AGU. The booth will have posters describing UNOLS issues, committee activities and the newly formed AICC. We will be looking for volunteers from the Council and membership to staff the booth.

UNOLS Council Membership - Peter Betzer, Nominating Committee Chair, presented the slate for the UNOLS Council elections to be held at the Annual Meeting, see [Appendix XII](#).

UNOLS CHARTER - The Council voted to readopt as amended Annex V of the UNOLS Charter, "The Research Vessel Technical Enhancement Committee." The amendment limits terms of the Chair and Vice Chair to no more than two consecutive terms.

ANNUAL MEETING - Ken Johnson reported on plans for the Annual Meeting. Admiral Gaffney will deliver the keynote address. Bob Dinsmore, the first UNOLS Executive Secretary, will recount the 25 year history of UNOLS.

UNOLS Ship Inspections - Jack Bash reported that an RFP will be advertised for the UNOLS ship inspection service. It will be a five year contract, subject to an annual review. The Council recommended that the whoever is awarded the contract should have an intimate knowledge of UNOLS.

CALENDAR - The Council discussed the time and site for the winter Council meeting. Dennis Hayes offered to host the meeting at the Biosphere in Arizona. The suggested date for a two day meeting was 16-17 January.

The meeting was adjourned at 4:50 p.m.