# **UNOLS COUNCIL**

Conference Room A
Courtyard by Marriott, Orlando Airport
Orlando, Florida
25-26 July 1996

## **Meeting Report**

## **Appendices**

- I. Council Meeting Agenda
- II. Meeting Participants
- III. FIC Report Outline
- IV. NSF View Graphs
- V. R/V ATLANTÎS/ALVIN Schedule

Thursday, 25 July 1996

INTRODUCTION - The UNOLS Council met in the Courtyard by Marriott, Conference Room A on 25-26 July. The participants of the meeting are listed in <u>Appendix II</u>. The agenda, <u>Appendix I</u>, was followed except at noted in these minutes. The meeting was opened at 0830 25 July 1996 by the Chair, Ken Johnson.

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

### **COMMITTEE REPORTS:**

Research Vessel Operators' Committee (RVOC) - Paul Ljunggren, Vice Chair for the RVOC, provided the report from that Committee. The Committee continues to work on a set of physical standards for crew members which will be keyed to their job description. A subcommittee is beginning the process of developing a safety video for science parties. Jack Bash reported that a supplemental proposal has been submitted to the NSF for funding of this video. Mike Prince and Peter Betzer have been working on revisions to the cruise assessment reports. Dave Powell has volunteered to lead the effort to develop a small vessel primer. Paul reported that the annual meeting will be held in St. Petersburg, FL 22-24 October 1996. Subjects planned for discussion include GMDSS, phasing out of radio officers, INMARSAT B and SeaNet as well as the above activities that are in progress.

DEep Submergence Science Committee (DESSC) - Mike Perfit, DESSC Chair, was unable to make this Council meeting and a brief report was given by Jack Bash. Jack reported that the AII has been retired and ALVIN was in overhaul. The ATLANTIS has been launched and will be delivered in the spring of 1997. The ATLANTIS and ALVIN expect to start operation in the summer. With ALVIN in overhaul the ROVs are in a "fly away" mode and are fully subscribed. The problem seems to be scheduling and ensuring that the vehicles can be transported from one location to the next in time for the operations. Jack suggested that there was a lag in the apparent acceptance of the ROVs, however, they are now fully subscribed. The question is will they continue to be sought when ALVIN is available and if so will there be enough money to accommodate both the ROVs and ALVIN. Dick Pittenger said that there should not be a problem if both the ROVs and ALVIN are operated from the ATLANTIS but could be a problem if the ROVs are continually needed in the "fly away" mode. The DESSC has requested that WHOI provide the Committee with a white paper on how the personnel from the ALVIN group and DSL will be integrated and the operational plans for the combined group. The Committee is concerned with the high tempo of ROV operations.

Fleet Improvement Committee (FIC)- The FIC Chair, Chris Mooers, provided the report. Chris passed out an outline of his report which is included as <u>Appendix III</u>. The FIC met at ODU in June and received information from Tom Curtin and Bob Bluth concerning autonomous underwater vehicles (AUVs) and remote pilotless vehicles (RPVs). This technology provides real time telepresence utilizing inexpensive data collection nodes linked together. Chris pointed to this technology as a window into the future for oceanographic studies and that it would be a multiplier for shipboard science. Chris reported on the subcommittee work of Eric Firing and Rich Findley in shipboard technical support and Bob Detrick's report on the possible UNOLS/NAVO science interaction. Discussion followed as to how this interaction should or could work. It was concluded that there is great potential here but that we should proceed very slowly letting the cultures work through their differences before expecting the possible interaction.

Chris wants to focus the FIC on the future by looking at long-term needs for UNOLS. In the mean time the FIC is working on an Interim Fleet Improvement Plan as well as the new FIP. The FIC also plans to develop ship Mission Requirement Statements for mid-Pacific Basin.

Ship Scheduling Committee (SSC)- The SSC Chair, Don Moller, informed the Council that the 1996 schedules are inplace and essentially firm. R/V CAPE HATTERAS was laid up for the year and both the NEW HORIZON and POINT SUR had short schedules because of overhauls. The ATLANTIS II has left the Fleet and the REVELLE is presently on its delivery cruise. The schedules for 1997 are still in flux. Significant progress has been made with the complex ship requirements of the Atlantic GLOBEC (NSF/NOAA) and Coastal Ocean and Mixing (ONR) programs.

The large ship schedules were driven by the need to pick up the Nowlin moorings in the Indian Ocean and the Luther moorings south of Tasmania. Because R/V MELVILLE was the only large ship in position to do this work significant schedule adjustments were necessary. The THOMPSON is expected to be involved in a British funded project that will be using the ROV JASON working near Okinawa. The scheduling of JASON has been very difficult because of the funded programs at all points of the globe.

Don Heinrichs said this year has stimulated significant comments from the PIs and suggested that we need to look at our scheduling process more closely. Many scientists have been moved from one ship to another. Jack Bash suggested that tight funding and the need to produce the most cost effective schedules has been the primary cause of the many changes. This, coupled with the more open process and instant e-mail communications, exposes some of the rough edges in scheduling. The Ship Scheduling Committee will address this issue at its September meeting.

Research Vessel Technical Enhancement Committee (RVTEC)- Rich Findley, RVTEC Chair, provided the report. RVTEC has scheduled their annual meeting at Harbor Branch Oceanographic Institution, Ft. Pierce, FL 11-14 November 1996. The RVTEC has been working on real-time data collection problems, INMARSAT and SeaNet, virtual instrumentation, ROVs/AUVs/RPVs, fiber optic cables (both steel and KEVLAR), standardization of data formats, and shipboard upgrades (in conjunction with the FIC). These will all be addressed at their annual meeting.

### **AGENCY REPORTS:**

National Science Foundation (NSF)- Don Heinrichs provided the report for NSF. His slides are included as <u>Appendix IV</u>. Don started with a review of the NSF Strategic Plan "NSF in a Changing World". The plan, "The NSF Basic Mission and Purpose", explains the NSF major themes and provides a long range GEO plan (FY 1997-2001).

Don explained staff changes at OCE with Lisa Rom taking one year of leave and Sandy Shor filling her responsibilities. He gave a summary of the 1996 budget which reflects an increase over 1995 of \$.9M or .5% overall, however, Ocean Centers & Facilities receives a \$1.5M cut in funding.

NSF has been tasked by both the House and Senate for testimony on the impact of adding a new Navy built ship to the UNOLS Fleet. A summary of each of their requests is included in Appendix IV. Don has asked for input from UNOLS so that NSF can respond. Discussion followed both at this time and later in the meeting.

Office of Naval Research (ONR)- The ONR report was presented by Sujata Millick. ADM Gaffney has relieved as Chief of Naval Research and is double hatted as Chief, Naval Meteorology and Oceanography Command. Congress is getting closer to passing the National Ocean Partnership Act. This act had a provision for \$7.5M for NAVO to use UNOLS vessels for survey work. Although the funding for the Partnership Act has been reduced and the survey money dropped out, a separate earmark has restored the money for NAVO surveys. Sujata reported that NOAA will relinquish the chair of FOFFC which will go to ONR.

The Navy is planning to retire SEACLIFF and TURTLE. The future of these vehicles is still under discussion. The Navy funding for FLIP will end in 1997 and if the ship is to remain active it must earn its daily rate. Presently FLIP has been heavily subsidized. The future of this vehicle is in question.

Sujata informed the Council that Congress continues to support the \$45M for a Navy owned, university built SWATH. The money is expected to go into the Navy's ship construction funds and will be administered by NAVSEA.

ONR is working with Japan on a partnership program for work in the Sea of Japan. One Class I UNOLS ship is likely to be used in this program.

National Oceanographic and Atmospheric Administration (NOAA) - The NOAA report for the fleet was presented by Captain Marty Mulhern. The NOAA ship RONALD H. BROWN was launched May 30, 1996 and is presently being outfitted. The ship will be delivered in March 1997 and is expected to be in operation 60 to 90 days later. The KA'IMIMOANA is in its first operational TAO cruise. The conversion was completed in mid-June and met all program requirements. The ship conducted very successful Acoustic Thermometry of Ocean Climate (ATOC) work for Dr. Walter Munk of SIO on its transit from Seattle to Hawaii. It has been equipped with a real-time high speed data transmission system. The MALCOLM BALDRIDGE and DISCOVERER are both completing their final cruises. These ships will become inactive upon their return. The ship MOUNT MITCHELL has been sold, and the OCEANOGRAPHER and HECK are in various stages of preparations for sale/disposal. Modification of the HALCYON, a small SWATH vessel obtained from the Corps of Engineers for the Great Lakes Environmental Research Laboratory (GLERL) of NOAA, has been completed in Norfolk. It will transit to GLERL in August.

The NOAA ship RUDE was on the scene quickly following the crash of TWA Flight 800 off Long Island. After participating in the initial search for survivors and surface debris, the RUDE has been providing systematic surveying data using its high resolution side scan sonar. The ship operations are integrated with both the Navy, USCG, and other Federal agencies. The NTSB, Navy, and the divers have expressed the highest regard for the side scan sonar data quality.

NOAA/UNOLS cooperation is steadily increasing, and the NOAA/UNOLS committee, chaired by Alan Thomas, Acting Associate Administrator for OAR, and Ken Johnson, is exploring new approaches to cooperation.

NOAA has identified \$2.6M per year for charter of UNOLS ships for OAR programs. These funds are from the Marine Services line item that support the NOAA fleet. In 1997 the figure will be \$3.1M because the RONALD H. BROWN will not enter service until mid-year. Other charters funded by NMFS and other NOAA programs such as NURP, usually on the smaller UNOLS vessels, also will continue. A cost comparison (A-76 study) is being started for the KA'IMIMOANA to determine the most cost effective way to operate this ship. NMFS has decided to exercise the option to continue the charter of a Russian ship for the second year for fisheries Antarctic Marine Living Resources (AMLR) work. A copy of a letter from the principal investigators about the fact the vessel is excellent for the program and met all requirements was provided to the Council. The ship's trawling equipment will be re-installed to meet the scientific cruise requirements.

Congressional language in the proposed NOAA budget for FY 1997 differs in the House and Senate. The House version zeroes out NOAA Marine Services funds and provides those funds to the line organizations for "acquisition of data". The total is split between NOS, OAR and NMFS. The fleet

modernization line item (FRAM) would be funded to \$6M, a decrease of \$2M from 1996, and would be restricted to be used only for "routine maintenance of existing vessels". The size of the NOAA Corps would be reduced to zero by the end of September 1997. In the Senate (which was considering the NOAA budget at the same time as the Council meeting) the proposed budget and size of the Corps were essentially unchanged from FY 1996 levels. This will be reviewed when a House/Senate conference committee meets later this year. The Administration has proposed that NOAA Corps be downsized and/or eliminated, but has also expressed concern that most of the functions now performed by NOAA Corps must continue. It would require legislative action in order for something like elimination of the CORPS to occur.

NOAA/OAR - Alan Thomas provided a programmatic view of NOAA's oceanographic and atmospheric research programs. Alan explained that the TOGA TAO array will need servicing and will take the greater part of a ship year. The KA'IMIMOANA has been outfitted to do this work and could be available for other programs. An evaluation of the operating mode will be conducted through the A-76 process. NOAA would like to investigate innovative ways for ship operations to maximize the effectiveness.

Alan discussed the NOAA/UNOLS Working Group he co-chairs with Ken Johnson. The Group was organized at the request of NOAA Administrator, Jim Baker, to investigate ways for NOAA and UNOLS to work more closely together. All options should be kept open. A subcommittee of this Group has been working on the NOAA programs that would be available for UNOLS ships in 1997. The Group is addressing how best for the agencies NOAA, NSF and ONR to interact. Discussions will be starting on how UNOLS might work with NOAA Fisheries in some of their oceanographic programs. Finally, the Group plans to look at coastal issues and how there may be a NOAA/UNOLS interaction.

Alan expressed, and the Council agreed, that there are presently many programs that include both NOAA and academic scientists. These function very well and should be expanded. Ken Johnson stated that NOAA already has one person on a UNOLS Committee (Hugh Milburn on DESSC) and that UNOLS would very much like one or more on the Council. Alan agreed.

A discussion followed as to whether or not NOAA labs could be UNOLS members. Discussion pro and con ensued, and no conclusion was reached, however, further investigation is planned. This will be an agenda item for the next Council meeting.

Hugo Bezdek, NOAA/AOML, reiterated the Atlantic Oceanographic and Meteorological Laboratory's interest and openness to discussion of opportunities for increased cooperation. He pointed out that presently almost all of the activities of the NOAA laboratories are collaborative with academic scientists, either scientist to scientist, through the joint institutes, or as part of national and international scientific programs.

Eddie Bernard, NOAA/PMEL, provided the Council with information on the programs of the Pacific Marine Environmental Laboratory which include three major time series. These are TOGA TAO, FOCI and VENTS. Eddie explained that these programs need repeated servicing and that consistency of both science and operating platforms are paramount. This consistency of operation results into economies of both time and cost. The value of the data increases exponentially with time and is only enhanced with repeatable service.

Alan Thomas concluded with a brief update on NOAA/NURP. As in the past the Administration did not include NURP in the FY 1997 budget request. However, because of NURP's strong support in the Senate, it is expected that the programs will be continued and that NOAA will continue to support ALVIN operations.

United States Coast Guard (USCG)- Larry Jendro provided the report for the USCG. The reorganization at the Coast Guard headquarters has been completed. RADM Norman Saunders is now Chief, Operations. RADM Paul Busick is Chief, Operations Policy Directorate which houses the Office of Navigation Aids. Rick Rooth has relieved Captain Summy as Chief, Icebreaker Division under the Office of Navigation Aids. Personnel in the Icebreaker Division has been reduced from seven to three.

Progress has been made in cooperation between the USCG and NSF. A senior policy group has been named and a working group appointed. Larry and Rick Rooth will represent the Coast Guard and Tom Pyle and Don Heinrichs, NSF in the working group. The working group plans to publish a description of the HEALY's oceanographic capability, formalize an annual event to schedule the icebreakers, produce a strawman research plan, produce an announcement of opportunities, and collect proposals.

Larry reported that there was no funded icebreaker science in 1995 or 1996 and none apparent for 1997. The Coast Guard had a training cruise in 1996 to the Arctic and provided an opportunity for science participation. This was well received by those involved.

The Council briefly discussed the charter of the Arctic Icebreaker Coordinating Committee (AICC). Concern was expressed that the Committee's activities were limited to the Arctic and that there is a duplication with the Antarctic Research Vessel Oversight Council. It was suggested that the membership of these two committees overlap and that their meetings coincide in time and place. Ken Johnson reported that Jim Swift had agreed to serve as chair of the AICC but that the Committee has yet to be named. The charter for this Committee will need approval at the Annual meeting this year. The Committee is expected to receive funding from both the Coast Guard and NSF.

On Friday, July 26, Larry reported on the HEALY. The construction of the HEALY is on schedule. The keel will be laid in September with delivery expected in June 1998. The ship is being built for the Navy, delivered to the Navy, then will be transferred to the Coast Guard. It is not known if many changes can be made during construction, however, changes should be possible after delivery. The Coast Guard is enthusiastic about the planned AICC and expects to work with this Committee for the betterment of the HEALY.

Department of State - Tom Cocke provided the Department of State presentation. Tom said that the State's Office of Ocean Affairs was now up on the web which includes the Notices to Research Vessel Operators. Jack Bash suggested that this should be linked to the UNOLS Shiptime Request form which will soon be on the web.

Tom explained that clearances continue to be late and are difficult to process. The requirements of the Coastal States for long lead times seems to be the biggest problem. Some countries are sensitive to any changes in the research requirements such as dates or sampling areas. Changes add to the delays. The Council was supportive of Tom's efforts. It was suggested that the electronic ship time request form not only link to the vessel operator notices but that it provide a window that gives the submitting scientist the lead time needed for each of the countries involved in their research. Jack will investigate.

Ship Construction - Dick Pittenger reported that the REVELLE was delivered to Scripps and is in transit to San Diego. The ship will shakedown and be available for operations later this year. The ATLANTIS has been launched and is scheduled for delivery in early 1997. The AII has been sold and ALVIN is in overhaul. The ATLANTIS/ALVIN integration is scheduled for June 1997 (see *Appendix V*).

Friday, 26 July 1996

Small Vessels of the UNOLS Fleet - Bob Wall led the discussion on the work of a subcommittee looking into the status of vessels in the UNOLS Fleet. Bob chaired the subcommittee which included Tom Royer and Steve Rabalais. The discussion centered around a paper produced by the group on this subject. The results of the discussion follow:

- 1. UNOLS should remain an association of academically-oriented institutions.
- 2. UNOLS should expand its mission to include more of the marine science community.
- 3. UNOLS should continue to base the composition of the Fleet on community projections of the needs of sea-going science.
- 4. UNOLS should continue to base annual ship operating support levels on the research funded to use the

ships.

5. The subcommittee will continue work on developing a generic model for a UNOLS vessel. A model that categorizes UNOLS vessels on the basis of type of usage, size national/regional, significant ownership etc. and that makes categorical distinctions with regard to "requirements" and "treatment".

Request for the REVELLE to Become a UNOLS Vessel - The Council reviewed a Scripps request that the REVELLE become a UNOLS vessel. The Request was unanimously approved.

Request for the URRACA to Become a UNOLS Vessel - The Council reviewed the request from Smithsonian Tropical Research Institute that the URRACA become a UNOLS research vessel. Discussion followed. STRI has a unique location and a place of interesting coastal research. To send a current UNOLS vessel there would require several days of transit. STRI supports the URRACA presently with its own research. The designation as a UNOLS vessel would permit the Facilities side of NSF to support ship time on funded science programs. The Council felt that it was a cost effective way to support coastal science by approving this request. The request was unanimously approved.

UNOLS Committee Appointments - The DESSC presented three persons for candidates to that Committee for approval by the UNOLS Chair. These were: Marv Lilley, University of Washington, new appointment to replace the resigning J. C. Sempere, and Dan Orange and Bob Collier for re-appointment. The Chair approved the recommended Committee appointments.

UNOLS Council Membership - Peter Betzer, Chairman of the Membership Committee presented the following slate for membership to the Council:

Chair: Ken Johnson

Vice Chair:Tom Malone and Tom RoyerMember At-Large:Richard Feely and Clare ReimersMember Operator Institution:Eric Firing and Dennis Hansell

No further nominations were offered. The slate will be voted on at the Annual Meeting in September.

UNOLS Review - Don Heinrichs presented a summary of the UNOLS budget for the past three years. He asked the UNOLS Office to prepare a pre-proposal for the next three years and asked that the Council provide their endorsement. This is to be ready for discussion at the next Council meeting in September. Don informed the Council that MMS and DOE have stopped support of UNOLS. Their contributions were modest but not inconsequential. He explained that one or more agencies were not supportive of several elements within the budget. These included the contracts for medical advice and clipping, support for the chairs and the services of a risk manager. The new proposal will go out for peer review and the endorsement of the Council would be necessary.

Arctic Icebreaker Coordinating Committee - This agenda item was covered during the USCG discussion above.

Internet Update - Jack Bash reported that the UNOLS Office was making ever more use of the web. Minutes, Newsletters and Manuals have been posted on the UNOLS homepage (http://www.gso.uri.edu/unols/unols.html). A ship time request form will be active within the next 30 days permitting electronic filing of requests.

Primer/Small Boat Inventory - Jack reported that the long awaited Small Vessel Primer may be underway. Dave Powell has agreed to coordinate the effort. The inventory of small boats is on the web (except for two regions) and can be accessed through OCEANIC (http://www.cms.udel.edu).

Post Cruise Assessment Reports - Peter Betzer has been working with Mike Prince to refine the form for submitting post cruise assessments. Peter said the form should be electronically filed and sent to the respective marine office and the UNOLS Office only. The UNOLS Office would act to oversee the

reports and send out an annual summarized report. The effort to complete the form is still in progress.

Method for Assessing UNOLS Fleet Performance - No action was taken on this agenda item.

DoC Fishing Vessel Buyout Program - Jack Bash reported that the Department of Commerce is about to take proposals for fishing vessels volunteering in their buyout program. After 60 days these offers will be evaluated for acceptance into the program. UNOLS has been working with DoC to see if any of these vessels might be appropriate for research institutions. Fifteen research institutions have indicated interest and may get an opportunity to negotiate for a vessel accepted for buyout.

Interim Fleet Improvement Plan - The remainder of the meeting was spent discussing the Fleet Improvement Committee's draft Interim Fleet Improvement Plan. Chris Mooers led the discussion. The draft plan assumed various funding scenarios from very optimistic to very pessimistic. Very optimistic assumed some increased funding while very pessimistic assumed severe cuts in funding. The plan divided the Fleet into four groupings: Global (Class I/II), Regional (Class III), National Coastal (Class IV) and Local Coastal (Class V). It estimated the cost for each of the ship sizes then developed scenarios for numbers of ships for four funding possibilities.

After much discussion it was concluded that the draft plan was a good approach but probably in more detail than necessary. The FIC was tasked to refine, remove recommendations on regional consortiums, and present a more brief discussion of the four scenarios with their corresponding pros and cons.

The FIC was encouraged to work on Mission Requirements for a Pacific Basin vessel. Chris will try to set the next FIC meeting for November 1996 and hold it in Hawaii.

Adjournment - The meeting was adjourned at 1700.