UNOLS COUNCIL MEETING 8:30 A.M., Thursday, 5 October 2006 National Science Foundation, Room 1235

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Peter Wiebe, UNOLS Chair, called the meeting to order 0830 and provided an opportunity for introductions around the room. The agenda is posted as <u>Appendix II</u> and the list of participants is posted as <u>Appendix II</u>

Minutes

A motion was made, seconded and approved to accept the minutes of the June 2006 Council Meeting with minor formatting changes provided by Marcia McNutt.

Introduction of Julie Morris, NSF Ocean Sciences Division

Peter introduced the new division director for NSF Ocean Sciences, Dr. Julie Morris. Her background is in geology and geochemistry with Washington University in Saint Louis and she has worked extensively with the International Ocean Drilling Program (IODP). Her experience is not limited to the drill ship, she has also made a dive to 4,400 meters in *Alvin* despite being from a university in the heartland. She has been with the division for over four months now and is quickly coming up to speed with oceanography issues.

Dr. Morris briefly described the prospects for the NSF and Ocean Sciences budgets and gave an overview of several other issues for the division. They are expecting a continuing resolution until after the election so will not know their final budget for some time. There might be an Omnibus bill passed and it is possible it will include a rescission of around 1%. Even with a rescission the budget will be one of the best for NSF in some time. The House mark is a 7.9% increase, which is the President's budget for NSF and the Senate mark shows a 7.4% increase. The President's budget request includes a 6.5% increase for Ocean Sciences.

Dr. Morris and Dr. Margaret Leinen recently met with Senator Bill Nelson, D-FL on Capitol Hill because

of his concern over "buy American" when it comes to shipyards and ship construction. Based on input that Linda Goad received earlier this year from UNOLS ship operators they were able to show the Senator that the UNOLS fleet does a good job of utilizing and supporting American shipyards. Their concern centered on the *Langseth* and *ODV* contracts going to foreign shipyards. The Regional Class vessel contracts will go to a U.S. yard and the Alaska Region Research Vessel (ARRV) cost estimates were based on U.S. shipyards. The Senate staffers will not do anything to change the current projects but plan to monitor the future activity to ensure that American shipyards are used whenever feasible.

Also in the NSF Major Research Equipment (MRE) budget request for FY 2007 is the start of funding for the ARRV. The budget request was based on cost estimates developed in December 2005, so are still fairly recent. A new estimate will be made before the FY08 request that will include the second installment of funding for ARRV. The current plan is for a 2010 start of operations.

Julie sat in on part of the Council summer teleconference and feels she has a feeling of the balance that the Council is trying to work towards. She says that OCE will try to put together some long-term estimates of what the requirements for facilities are in the future. A big component of this is OOI. Based on an exhaustive review of the concept designs for OOI, they are working towards better estimates. They know that the Implementing Organizations need to be in place and operating for some time to be ready to make accurate plans and cost estimates. This means that they would not be ready until May to prepare estimates. This does not leave enough time for approval and implementation. They see the realistic start for OOI now as FY08 instead of FY07.

Mike Reeve will be stepping down as of October 31st. Julie thanked him for the many years of service to NSF and the ocean science community. There will be an announcement for the vacancy in the very near future. Julie asked for suggestions for new candidates. They will put in place an interim plan before Mike leaves.

Peter Wiebe raised the issue of the UNOLS recommendations for the process of assigning non-op periods and whether or not the agencies agree with the process.

Julie mentioned that the NSF budget is better and will be able to support more shiptime and there will only be one lay-up.

Mike Reeve said that NSF thought the recommendations and principals expressed were fine and he had said so in an email to Peter. As for formal recommendations they felt that scheduling was still in flux, but can now put forth some recommendations in an effort to try out the full process.

Budget Shortfall and Impact on Fleet Operations and Construction: Introduction by Peter Wiebe

Fleet Utilization – 2000 to 2007 - Appendix III – Mike Prince

2006 continued a drop in the total number of days scheduled on UNOLS vessels, dropping to the lowest level in many years. In 2007 the current estimate shows about the same number of days or less than 2006. The NOAA days have gone way down and are not expected to go up due to cuts in Ocean Exploration and NURP. The Navy days may come up a bit, but scheduled days are getting close to fully using the ONR budget. NSF days are up in 2007 and there may still be a little left in their ship operations budget.

2007 day estimated day rates are high due to fewer days and high fuel cost estimates. Even though the total days are down to just over 4,000, the cost estimate is very high at around \$76M.

The number of days scheduled for each ship was shown and in 2007, many ships are below optimal

levels. Ships that seem particularly vulnerable still are the *Melville*, which will be used primarily to support Navy programs, the *Thompson*, which is relying on several NOAA projects and the *Cape Hatteras*, which has no federally sponsored research on its proposed schedule.

Comparing estimated costs to budgets is still difficult due to uncertainties about the Federal budget. In 2007 NSF's costs are a higher percentage than in the past but are still relatively close to their projected budget. ONR's costs are also close to their projected budget. There is language in the Defense Department Appropriations Bill that will provide some plus up money for ONR use of the UNOLS Fleet, but it is not clear how that money will be used and whether or not it will have any direct impact on utilization or day rates. NOAA's budget is still very uncertain, but will most likely not be a source of any additional days. Scheduled cruises match the requested budget for the most part.

UNOLS Subcommittee on Non-op periods – follow-up – Peter Wiebe

The Council reviewed the non-operational period recommendations approved by the UNOLS Council and how they were applied in practice. Mike Prince presented an overview of the recommendations (appendix IV). This included showing the findings of the committee, the values to be considered in making recommendations for non-operational periods and finally the procedures for making and reviewing these recommendations.

The findings indicate that for the foreseeable future there will mostly be shortfalls in the utilization of the fleet. This is despite the fact that we have gone from 28 ships to 23 in the last few years.

The values to be considered in making recommendations include meeting the science needs, geographic availability, costs of operation, quality of operation, sharing the pain and maintaining diversity of operators.

It was decided that the actual recommendations would be made by agency program managers working with schedulers based on their budgetary constraints. These recommendations would be formally reviewed by a subcommittee of the UNOLS Council with input from ship operators, Council members and others. They would provide feedback to the agencies and the community regarding these recommendations and provide suggestions for alternate solutions as appropriate.

Out-year recommendations would probably be made through some type of rotational lay-up plan, but this would have to be reviewed each year to make sure it would work.

Since the schedules were still largely unresolved, recommendations by the agencies had not yet been made. They have, however, provided guidance through the scheduling process as to how the vessels would be scheduled. This included creating partial schedules for *Endeavor*, *Oceanus*, *Seward Johnson*, *Hugh Sharp*, and *Seward Johnson* on the east coast and for *Sproul*, *New Horizon*, *Point Sur* and *Wecoma* on the west coast. *Melville* is being scheduled to support Navy projects with the exception of one NSF program at the beginning of the year. *Cape Hatteras* is the one candidate for a full year lay-up.

Sandy Shor – Has an issue with the recommendations of the Committee – There is no explicit mention of technical support. This was a focus of the Academic Fleet Review and an important aspect of ship operations planning. He mentioned that quality of service in technical services and instrumentation should be included as an item that should not be cut in an effort to lower operating costs and that technical support should be considered when evaluating quality of operations.

Cindy Van Dover raised the issue of support for the Ocean Observatories Initiative (OOI). There is strong indication that this program will make use of Global vessels, but she wondered if the new Regional Class vessels would be designed with support for OOI in mind. Mike Prince said that we haven't seen the

specific requirements from OOI for the different size vessels, however, the new Regional Class vessels will have DP and better station keeping. This would make them capable of supporting many different types of operations in support of OOI.

Brian Taylor asked if there were discussions taking place within NSF about the division of funding between facilities and science programs. With the increasing costs of operations, especially related to higher fuel costs, there needs to be a higher allocation for facilities operation. Mike Reeve said this an area that they have given some thought to. When he first came to NSF the facilities percentage was 36% and it has dropped to 28%, but now it is rising again in part due to covering the rising costs.

Julie Morris said that the NSF Director has been talking with the National Science Board about the costs associated with the operation and maintenance of new Major Research Equipment and Facilities (MREF) initiatives. There are several MREF programs that will have high operational costs coming on line and this whole issue is getting a lot of high-level attention. Brian thought this was great, but commented that this problem was not limited to MREF facilities, but also to existing facilities and those being contemplated through division funds.

Academic Fleet Renewal Activities and Plans:

Summary of Fleet Improvement Committee (FIC) Meeting: (Dave Hebert)

Dave presented his slides about yesterday's meeting. (Appendix V)

Regional Class Acquisition Status

There are two design teams currently working in the Pacific Northwest. Design and cost proposals are expected around mid-year next year. There is a Request for Proposals (RFP) for the first operator institution working its way through the NSF system with a release expected soon.

Alaska Region Research Vessel (ARRV) Status

Funds for the construction of this vessel are in the President's budget request to Congress as part of the Major Research Equipment and Facilities Construction (MREFC) account. There is an RFP that is about to be signed and released soliciting institutions to manage construction and then operate the ARRV.

Ocean Class Acquisition Status

Over the past few months the Navy conducted a study of their involvement with UNOLS and the academic research fleet. The Chief of Naval Research and the Undersecretary of the Navy asked the Naval Research Advisory Committee (NRAC) to examine the benefits and costs of Navy's use of the academic fleet and to make recommendations about the level of support the Navy should provide for fleet renewal. The NRAC concluded that the association with UNOLS was in fact very beneficial to the Navy, however the level of their utilization justified the construction of two new Ocean Class vessels instead of the previously planned four. Based on this ONR is planning to budget for two vessels to come online in the middle of the next decade, however, it is still unknown what type of funds will be requested.

Federal Oceanographic Fleet Renewal Plan

Dave showed two charts based on this plan being developed by the Federal Oceanographic Facilities Committee (FOFC), soon to become the Interagency Working Group for Facilities (IWG-F). The first showed fleet projections for all Federal research and survey vessels and the other showed the planned renewal efforts. There is some uncertainty about what can and cannot be shown in this plan due to guidance from OMB. One thing that is now clear is that we will have a major gap between the currently planned retirement of UNOLS Intermediate Class ships and start of operation of the Ocean Class. There will need to be a careful evaluation of the need to extend the lives of these ships.

Global Class vessels - SMRs and mid-life refits

The Navy will do incremental upgrades to these vessels instead of the traditional mid-life refit periods. If however, a large mid-life is needed, it can be proposed.

As the next step in developing updated Science Mission Requirements (SMR), the Global Class SMR survey is now on-line and some responses have been received. The questionnaire is linked from the UNOLS homepage.

New Over-the-side Load Handling System

Dave Hebert, Matt Hawkins and Brian Taylor gave a brief update on the new handling system for *Kilo Moana*. This system will control the CTD and other packages from the deck to the water when launching from the stern. It is being built by Caley Ocean Systems, but has not been delivered yet. Because *Kilo Moana* is an inspected vessel, the new system has to be certified by ABS and this is taking longer than expected. It was also noted that there will be a test cruise to determine if and how well the *Jason II* can be deployed from *Kilo Moana* scheduled for 17 to 21 November, 2006.

Fleet Improvement Plan

Dave Hebert reviewed the status and progress with updating the Fleet Improvement Plan (FIP). The plan has been re-organized according to the table of contents, which he presented (See <u>appendix V</u>). They are using a work plan that involves a series of phone/web conferences during which a chapter or section is reviewed. Each section has one or two lead authors.

As part of the effort to keep the UNOLS FIP in line with the FOFC Fleet Renewal Plan, they came to an agreement on the various research vessel classifications and where individual vessels would fall. The former Intermediate Class vessel Seward Johnson II has been purchased and modified by the Bermuda Institute of Ocean Sciences (BIOS) and will be operated from Bermuda as the Regional Class vessel Atlantic Explorer. The problem of classifying the smaller, non-federally owned vessels that had previously been classified as regional vessels, but were not so classified under the FOFC plan was discussed. The proposal is to create a class, which would be called Regional Coastal Class or Coastal Class vessels. This would include the Pelican, the Hugh R. Sharp, and the Robert Gordon Sproul. The Walton Smith, which was previously classified as a local vessel would also be included in this class because as a catamaran, it was actually much larger than other vessels of the same length and it's mode of operation was more like the others in this class. The Local Class vessels would include the Blue Heron, Clifford Barnes, Savannah, and the Urraca. Regional Class vessels would include the vessels currently being designed for NSF, the Cape Hatteras, Point Sur and Atlantic Explorer. The Intermediate Class would be retained and used for the Endeavor, Oceanus, Wecoma, New Horizon and Seward Johnson.

Dave showed the vessel classifications with Atlantic Explorer as a Regional Class and a new class Regional Coastal or Coast Class that would include *Sharp*, *Pelican*, *Sproul* and the addition of the *Walton Smith*. No one seemed to object and Peter Ortner likes the change for *Walton Smith*. The Kilo Moana and new ARRV would be Ocean Class vessels and the Global Class would continue to contain *Atlantis*, *Knorr*, *Marcus Langseth*, *Melville*, *Revelle* and *Thompson*.

Several charts showing recent utilization of the UNOLS fleet and then projected utilization were shown. The projections that had been previously used, as shown at the March Council meeting included fleet capacity assuming four new Ocean Class vessels and a fairly substantial increase in demand from the Ocean Observatories Initiative (OOI). A revised projection chart was shown that was based on two new Ocean Class vessels coming online later and reduced demand from OOI. Even under this scenario, the demand could potentially outstrip capacity by early in the next decade. There was quite a bit of discussion about what the right level of projected demand was and what the impact of deferred programs was on theses projections. The last chart showed the statistics for the fleet of 2020 versus today's fleet in terms of number of ships, science berths available and days available. In all categories, the 2020 fleet will be a

reduction from what is available today.

Retirement dates, mid-life refit plans and needs for the future - open discussion

Dave showed slides that summarized the FIC discussion about retirement dates, cost estimates for completing Service Life Extension Programs for the various older vessels and the potential need for considering this option for some of the Intermediate vessels given the delay in bringing on new Ocean Class vessels and the reduction in number.

Discussion on this subject covered whether or not we needed to continue operating some or all of the intermediates beyond their planned retirement dates, whether a SLEP would be necessary to do so and which vessels should be considered for continued operation. It was noted that in 2007 scheduling, even with a very reduced utilization, you would need at least two of the intermediates on the East coast and with one not operating, it would be difficult to schedule all of the work in the time frames needed. The same could be said for the West coast intermediates as well. Cindy Van Dover thought that we should also take into account the potential utilization for OOI installation and maintenance when deciding which vessels should continue operating. We may not yet know the extent of this utilization, but we do know the geographic areas for the regional and coastal observatories.

Brian Taylor asked whether or not there had been any cost analysis done for the projected fleet of 2020. There had been some rough estimates and it was felt that the costs for this reduced fleet would be roughly the same as the current fleet in current dollars. Brian and Peter Ortner felt that it would be useful to create cost models for various fleet compositions.

Going back to the retirement dates, Marcia McNutt asked if we should redo the estimates for SLEPS and also re-evaluate when they might be needed. It was agreed that we should ask the operators at what point would they need to carry out a SLEP in order to extend the life of the ship. Al Suchy pointed out that in the case of the Oceanus, he could probably do one more overhaul of the generators before they would have to look at replacing them due to the difficulty of getting parts. Operators would have to consider these factors in determining how many more years we can get from these vessels without spending some significant money. Any improvements in science capabilities would require even more funding.

Lastly, Dave reviewed the current membership of FIC and introduced the new members, Maureen Conte of BIOS and Al Hine from the University of South Florida.

UNOLS objectives, priorities and goals for 2006 – 2007 (Mike Prince)

Mike Prince reviewed the UNOLS Vision, Mission and Goals and presented input received from Council members and UNOLS Representatives regarding the pressing issues for the coming year. There was some discussion about how well we did with last year's objectives and what would be important for the coming year. Dan Schwartz said he thought that we continue to make progress in improving the information flow for scheduling. Peter Ortner said that we should identify some big challenges for the future, such as some of the issues discussed this morning. For example, Marcia wondered how we could plan for mitigating a future shortage of ships when we are struggling to keep the existing ships fully utilized. Marc Willis said that the science community was still quite a bit in the dark about these challenges and issues and that we could still do a much better job of communicating this to the community. The idea of writing articles, perhaps with eye-catching titles for EOS and journals that are read by biologists would be useful again. Others suggested town hall meetings. There was also a concern that we be careful about the terms we use, such as underutilization or over capacity. There is a fear that these could become self-fulfilling prophecies. Rob Pinkel said that what was important was to provide facilities adequate to support the size of the scientific community that the country needs as opposed to the size of the community that can be afforded with current budgets. As recommended by the U.S. Commission on Ocean Policy, the size of the ocean science budget needs to be increased and the facilities need to be available to match the consequent demand.

A set of important issues and objectives was prepared for presentation at the Annual meeting that included the following major points. These will be posted to the UNOLS website.

- Scheduling and Utilization Address issues related to retirement of research vessels and planned retirements as it relates to fleet renewal and better utilization of the fleet.
 - o Explore methods for better serving the requirements of NOAA and ONR programs and to better align NOAA funding processes with the UNOLS scheduling and proposal process.
- Quality of Fleet Operations Recruiting and retention of skilled and experienced technical personnel and crewmembers is extremely important to successful science operations.
 - o Better identify areas needing improvement and successful operations through improved Post Cruise Assessments.
- Fleet Renewal Articulate UNOLS vision for oceanographic facilities of the future through the Fleet Improvement Plan that addresses the infrastructure needed to support new and innovative science.
 - o Support and participate in ongoing fleet renewal programs such as ARRV, Regional & Ocean Class and new HOV.
- Communications Improve communication within and between the UNOLS subcommittees and the UNOLS Council. Too few people in the academic or congressional ranks really know what UNOLS is or what it does.
 - o Better communication of important issues to the broader science community.
 - o Better explain the process of proposing to use a UNOLS vessel and what is expected and the responsibilities of all the different parties (scientists, crew, technical services.)
- Data Management We are entering a new era when PIs or groups of PIs will have to more effectively and efficiently make their data available within prescribed time periods to the community at large (other researchers, managers, and the public). UNOLS should play a role in the dissemination of the information on best practices for the collection of data/metadata when working at sea.

• Challenges Ahead

- o The projected shortfall in ship availability over the next 5-10 years despite the federal agency plan for fleet renewal.
- o The increased demands on the fleet as the Ocean Observatory Initiative is implemented.
- o No room for increased demands made upon the fleet if the vision of the Ocean Commission is realized and ocean science funding is increased as recommended to the President. There is a projected shortfall in ship availability over the next 5-10 years despite the federal agency plan for fleet renewal.

Codes of Conduct - The Impact of Scientific Studies on the Environment - Lee Kimball (Appendix VI)

Cindy Lee Van Dover introduced Lee Kimball a consultant with Law of the Sea experience and with international efforts at conservation. Ms. Kimball presented information about the current activity in "high seas" conservation efforts and the implications for marine science research.

The underlying legal framework for much of this falls under the U. N. Convention on the Law of the Sea (UNCLOS). This convention outlines the rights and obligations of all states and it is comprehensive, addressing all existing and emerging ocean activities. In addition, global and regional treaties complement and supplement UNCLOS and usually function within its framework. There are specialized treaties for things like shipping, fishing and minerals development and there are broader treaties such as the Biodiversity Convention.

Geographic jurisdiction is defined in terms of coastal state jurisdiction, which would include territorial sea, exclusive economic zone (EEZ) and the continental shelf and the areas beyond national jurisdiction. This includes the traditional "High Seas" (water column) and what is referred to as the "Area" (seafloor beyond the continental shelf). There is an international seabed authority that deals with the "Area".

Lee then reviewed the Convention on Biological Diversity (CBD/1992). The objectives of this convention include the conservation of biodiversity and sustainable use with fair and equitable sharing of the benefits from using these genetic resources. Implementation of the CBD is to be consistent with UNCLOS. Beyond national jurisdiction the parties to the convention would cooperate to conserve and use biodiversity in a sustainable manner. The convention addresses activities and processes rather than applying directly to the components of biodiversity. This would be more or less on a voluntary basis with the parties agreeing to identify and monitor their activities, conduct environmental impact assessments (EIA) of activities that might have a significant adverse effect, and to avoid environmental damage. Marine science research (MSR) is among the activities that would be covered under this convention.

Sandy Shor asked if the US has ratified the convention on Biodiversity. No, although the US accepts most of the tenants of UNCLOS and in the case of biodiversity, what is in place is within national jurisdiction. So far the discussions of future initiatives have been focused on the seafloor but could easily move to the water column with regards to bio-prospecting.

Dennis Nixon asked who is developing the code and how is it different than the requirements in the UNCLOS. The difference is that the code would be voluntary compliance outside any national jurisdiction.

The future of ocean conservation developments beyond national jurisdiction involve three separate but linked issues related to high seas fisheries, marine protected areas and bio-prospecting. Other issues are seabed minerals development and marine science research environmental impacts generally. Through the United Nations, the biodiversity convention meetings, the international seabed authority meetings and those of the various fisheries bodies there are discussions that could lead to implications for marine science research on the high seas and the underlying seabed. With regards to high seas fisheries there are concerns about over exploitation, illegal, unreported and unregulated fishing as well as destructive fishing practices. These activities could result in loss or damage to areas or species of scientific interest, while at the same time, MSR could help to better inform conservation and management decisions.

In the realm of seabed minerals development the International Seabed Authority (ISA) administers the UNCLOS regime. Areas of interest include manganese nodules, polymetallic sulphides from vents and cobalt crusts from seamounts. The implications for MSR again include the potential loss or damage to areas or species of scientific interest and the potential to influence conservation and management decisions. The ISA could also get involved in promoting and coordinating MSR for the seafloor and would most likely be involved in the development of regulations.

Bioprospecting is a rapidly emerging field and raises the most issues for international cooperation. At issue are the legal status of genetic resources on the seabed and whether MSR activities could be classified as bioprospecting. Environmental considerations include the very localized impact at areas such

as hydrothermal vents, the conflicts between different scientists and with other uses and the potential for very large-scale harvesting for biotechnology development. In addition, there is a divide between developing countries and the developed countries. Developing countries would like to see a new legal regime for genetic resources outside national jurisdiction that is based on UNCLOS and the CBD, including benefit-sharing. Developed countries are concerned about too much regulation of MSR and bioprospecting as an infringement of high seas freedom. All are interested in stronger international collaboration and capacity-building in MSR and possibly in developing an international MSR Code of Conduct. There are some developed countries that are willing to discuss benefit-sharing regimes for genetic resources.

The U.N. informal working group on Area Beyond National Jurisdiction is considering further study, looking at the nature and scale of bioprospecting, what the commercial interests are, how to implement patents and intellectual property rights, what the range of public and private partnership opportunities are and what the options are to develop benefit sharing mechanisms.

Opportunities for action by the MSR community include setting up an International Code of Conduct for MSR, expanding international collaboration, cooperate in establishing marine protected areas and providing advice on international deliberations. An international MSR Code of Conduct could help to avoid adverse environmental impacts and conflicts of use. Better advance communications on planned activities could lead to better coordination that could help to maximize scientific results and reduce negative impacts and generally enhance international collaboration. This would also serve to enhance widespread availability and sharing of samples and findings.

It is clear that ocean conservation developments can have significant and important implications for the marine scientific research community and it may well be time to engage these issues proactively. There is not any established forum for communicating about these issues, perhaps UNOLS could help in this regard. There was additional discussion about how a Code of Conduct could be applied and how it might be implemented. The consensus was that UNOLS should stay abreast of developments in ocean conservation and engage in these activities as they evolve.

Committee Activities and Issues requiring Council Attention:

Committee Chairs had an opportunity to raise any other issues requiring Council attention.

AICC - Carin Ashjian gave a brief overview of this past summer's field season on Healy. She reported that despite two successful programs, towards the end of the third cruise, they tragically lost 2 divers. Shortly after that, the Coast Guard cancelled the rest of the field season, which affected two planned cruises. The Commanding Officer was relieved of duty and the Healy returned to Seattle. A full investigation is ongoing. AICC is following up with a small focused meeting with the Coast Guard Pacific Area Commander, who is the person that made the decision to cancel the rest of the season.

Other major issues are the recommendations from the National Academy of Sciences study on the need for icebreakers and interactions with the Arctic communities.

FIC – Dave Hebert requested that the Council confirm him, Toby Garfield and Jim Bauer for second terms. Dave would continue to serve as Chair. Bruce Corliss made a motion, seconded by Marcia McNutt to make these appointments and it was approved unanimously.

RVTEC – Bill Martin invited Marcia to attend the RVTEC/INMARTECH meeting as the new Chair.

Review the Status of UNOLS Action Items and Activities - Peter Wiebe

American's with Disabilities Act (ADA) Guidelines - Terry Whitledge (Appendix VII)

Terry Whitledge provided an overview of the ADA committee membership, tasking and the work accomplished to date and planned. The tasking for this came from NSF due to their need to ensure that new construction and conversion efforts address ADA requirements. Besides design elements, the committee will consider procedural guidelines for shipboards operations when persons with disabilities are onboard.

There were four main tasks, the first of which was to draft preliminary ADA design guidelines to be used in the Regional Class Acquisition effort. Using existing documentation these were completed and provided to NSF in early June, 2006.

Next the committee started work on the general ADA guidelines for ship construction and conversion. A first draft was completed by Terry in mid September. Shortly afterwards, the committee convened a Workshop at WHOI on September 18 & 19, 2006. This workshop included a tour of the *Knorr*. It is generally thought that hearing and sight disabilities can be dealt with both in conversions/existing vessels and new construction without too much expense. Mobility accommodations will be harder to deal with in existing vessels because it could involve dealing with passageway width, room size and layout and stairs than cannot be easily modified. It is better to deal with these issues in the initial design.

During the workshop, the tour of the *Knorr* was very instructive about the challenges for persons with disabilities. Some of the workshop science participants and one of the crewmembers are people with vision, hearing, and mobility disabilities and getting their perspective on getting around the ship and responding to various situations was extremely useful. Some of the suggested solutions would actually enhance safety for all people on board, such as improving markings and the visibility of hazards and the use of a buddy system for emergencies and dangerous situations.

Paul Beatty from the U.S. Access Board attended the workshop and he was very proactive and helpful in helping to define what is actually required by the law and what would be useful. The recommendations from the workshop will be incorporated in the next draft of the ADA guidelines.

Procedural issues will be handled in the Research Vessel Safety Standards (RVSS) and these topics will improve safety in general. Recommendations will be provided to the Safety Committee for inclusion in the RVSS. Also discussed was whether or not to ask about disabilities on the Ship Time Request form (STR). The consensus was that it might be useful as new vessels that have accommodations come on line and also to get PI's to think about these issues sooner in the process. It was definitely thought to be necessary to ask for this information in pre-cruise planning documents and make sure there is thorough communications about the requirements for safe accommodations.

A revised Draft of the ADA Guidelines will be shared with the UNOLS Council before being submitted to NSF and the community. The guidelines would be included as part of the Science Mission Requirements (SMR), which will start getting these accommodations into the fleet as a result of new designs and conversion efforts. The committee will probably recommend a buddy system as a general safety procedure. This is already in place for all practical purposes in many cases.

Safety Standards for Human Occupied Vehicles (HOVs) – Subcommittee status report – Annette DeSilva (Appendix VIII)

Because the replacement for Alvin will not be inspected and certified by Navy and because of interest in using or operating other human occupied submersibles such as the HURL and HBOI vehicles it was appropriate to develop safety standards for these vehicles that could be applied broadly. This effort is of interest to NSF and NOAA. Certification of the replacement HOV will be by ABS as is done with several other existing HOVs.

A committee was formed to develop these safety standards, which will be modeled after the UNOLS Research Vessel Safety Standards. Two in person meetings and two phone conferences have been held during which the project tasking was defined, current procedures and operating manuals were reviewed and an outline of areas to be addressed was formulated. Writing and research assignments were made and progress on first drafts was reviewed.

Major chapters include HOV Operations, HOV Support Ship, HOV Handling Systems, Training Procedures for HOV Crew and Science User Safety Guidelines.

This will be a multi-year effort with a goal of being completed before the new HOV comes on line. Monthly phone/web conferences will be held to review chapters and make changes as needed.

Brian Taylor raised the issue of including ADA Guidelines for HOVs. It was agreed that this should be addressed.

UNOLS Briefing Package for Congressional Staffers, UNOLS Brochure - Peter Wiebe Peter reaffirmed the need for this type of document and circulated the latest draft. There were a few typos identified and corrected. The brochure will be updated to reflect changes in some of the information.

Alcohol Policy Aboard UNOLS Vessels – A discussion on the policies and requirements

Mike Prince reviewed the history and status of alcohol use regulations/policies and whether or not a uniform policy was ever in place. The are no Coast Guard regulations banning the possession or consumption of alcohol on vessels, but there are fairly strict regulations about when a crew member can consume alcohol, what the allowable blood alcohol level can be and what the testing requirements are. There are also testing requirements and prohibitions against illegal drugs and UNOLS ships have had a "zero tolerance" policy towards illegal drugs since the late 1980s. Also in the late 1980s, the UNOLS Council passed a resolution stating that UNOLS institutions should have policies regulating the use of alcohol on board their vessels and that these policies should be adhered to by scientists using the vessels. Many institutions, but not all implemented policies banning the use of alcohol and those that did not, had specific policies controlling the use. There have been some misconceptions about whether or not UNOLS had a policy of maintaining alcohol free ("dry") ships, even to the point of having that fact included in a novel. The reality was that although most ships were dry, some were not. This has led to the recent discussion of the subject and the expression by several people that such a ban on alcohol use should be put in place and included in the UNOLS safety standards. It was discussed extensively at the recent RVOC meeting and that committee had decided to work on crafting a policy for use in the safety standards revision currently being written.

Mike Reeve stated that NSF would like to see a UNOLS ban on the use of alcohol on board UNOLS ships. Dennis Nixon has consistently recommended that alcohol be banned from our ships for safety and liability reasons. Peter felt that the consensus of the Council was that the Council should go ahead and vote on a ban as a resolution of the Council. RVOC and the Safety Committee would incorporate this new policy in the RVSS. A motion was made by Peter Ortner to ban the use of the alcohol on board UNOLS vessels and seconded by Tim Askew. The motion was approved by all Council members present with the exception of Rose Dufour and Rob Pinkel, who abstained. A message will be sent to operators informing them of this new policy and it will be included in the safety standards.

Frequency Spectrum Management, RVTEC Subcommittee status – Bill Martin

Bill Martin provided a report on the status of the RVTEC subcommittee efforts to provide input to the Committee on Radio Frequencies (CORF), government spectrum managers and Otis Brown (Ocean science member of CORF). Bill Martin reported that the survey was circulated and there have been three responses. The plan is to start with input from the RVTEC community and then to circulate to a wider

community to catalogue the ocean science communities' use of the radio spectrum and what their requirements are.

Gender Climate at sea – RVOC actions on this issue - Tim Askew

Tim Askew reported on action taken by RVOC and UNOLS on the issue of gender climate and sexual harassment policies since this issue was raised as a concern last year. As a result of a survey of students at WHOI, over 20% of respondents reported some sort of unwanted sexual advance and it was noted that almost all of these incidents were unreported. These problems were also raised as a major concern at a meeting of Women in Physical Oceanography. RVOC took this issue for action with assistance from Liz Caporelli of WHOI. Liz gave a report at the last RVOC meeting on the results of their survey and what WHOI was doing to make their policies more visible to their crews and embarked scientists. A workshop on what action was required was held on the second day of the RVOC meeting. Policies from several UNOLS operators were presented along with a brochure developed by SIO. Every institution has existing policies, university regulations and state laws that they are required to follow. A goal for RVOC is to ensure that these policies are made known to crews and scientists in a consistent and clear manner and to the extent possible ensure that the application of these regulations to the shipboard environment is carried out in a uniform way across the fleet. Liz Caporelli will develop a brochure for all to use, and a section in a new chapter of the RVSS for Personnel Safety will address sexual harassment policies. The key is to ensure that everyone is made aware of policies and procedures and make sure they are enforced.

Opportunity for Additional Reports

Formal reports by Agency representatives and UNOLS Committee Chairs will be made at the annual meeting tomorrow. Committee reports are included as appendix IX

Other Business:

The next Council meeting will be held in March at Scripps with dates to be determined.

The meeting was adjourned at 1640