

UNOLS COUNCIL MEETING
Thursday, October 13, 2005, 8:30 am
National Science Foundation, Room 1235

Meeting Summary Report

Executive Summary

The UNOLS Council met at the National Science Foundation (NSF) in Arlington, VA on October 13, 2005. The major topic of discussion focused on the impending budget shortfall and the effect this may have on fleet operations. Larry Clark (NSF) provided the attendees with NSF's response to the UNOLS letter on the recommendations regarding the Budget Shortfall. Future fleet projections and updates on several current infrastructure projects were also given. A review of the UNOLS Office and a recommendation to retain the Office at the Moss Landing Marine Laboratories for another three-year term was approved. UNOLS goals and priorities for the coming year were approved for presentation at the Annual meeting. Provisional designation of the University of Delaware's new research vessel *Hugh R. Sharp* as a UNOLS vessel was approved. A demonstration of the new STR database system was shown. There were also discussions about the US Fish and Wildlife Service's Importation Policy, the impacts of research on marine ecosystems and the need for a code of conduct for research activities, and several other issues of interest to the UNOLS community.

Action Items and Recommendations

Evaluate need and timing of vessel retirements in conjunction with renewal plans.	Council & FIC
Think more carefully about the projections being used for future ship use.	FIC
Communicate the realities of shiptime availability and scheduling to the community	Council, SSC, & Agencies
Provide input on scientific imperative to FOFC working group and review draft FOFC renewal plan if provided.	Council & FIC
Produce <i>EOS</i> article or other publication about <i>Kilo Moana</i> capabilities and operations.	FIC, Dave Hebert, and Brian Taylor
Provide report to NSF on review of UNOLS Office performance and recommendation to maintain the Office at MLML for another three years.	Peter Wiebe
Look at UNOLS Charter to see if changes are needed to align future rotations of the UNOLS Office with the cycle of reviews	Council

and competitions preferred by NSF.	
Make appointments to the MLSOC	Marcia McNutt, Peter Wiebe, & Council
Establish HOV Safety Committee	DESSC
Implement priorities and goals for 2006, especially finding ways to improve communications with the community.	Council, Office, Agencies, & Committees
Make final designation of <i>Hugh R. Sharp</i> when all requirements are met next year.	Council
Follow-up on USFWS importation regulations.	NSF, NOAA, Council
Disseminate information to PIs on regulations regarding importing wood pallets and boxes.	RVOC & RVTEC
Discussion and recommendations regarding perceptions on how requests for facility support might impact proposal success - schedule for future meeting.	Council, Office
Consider inviting speakers on Scientific Ethics, the impact of research activities (IUCN, UN, or State Dept.)	Peter Wiebe, Cindy Van Dover, Office
Form ADA subcommittee	Peter Wiebe, Council
Standardize and implement procedures for ensuring scientists and crew are aware of sexual harassment policies on research vessels.	RVOC
Past Items	
Mooring locations, release codes, set up information page/database in protected Web location	Office
Assist CORF with inventory of Frequency Spectrum use by the ocean sciences.	RVTEC
Prepare a brochure and presentation for UNOLS briefings.	Peter Wiebe, Office

Appendices

- I. [Meeting Agenda](#)
- II. [Meeting Attendance List](#)
- III. [National Science Foundation Report \(Larry Clark's Slides\)](#)
- IV. [2006 Fleet Operation Costs](#)
- V. [UNOLS Slides - Next Steps](#)
- VI. [FOFC - Long-Range Fleet Plan](#)
- VII. [Fleet Improvement Committee Report](#)
- VIII. [UNOLS Office Performance Review - Summary](#)
- IX. [Marcus Langseth Science Oversight Committee - terms of reference](#) (4.6 MB)

- X. [HOV Safety Standards - Draft Task Statement](#)
- XI. [Draft UNOLS 2006 Priorities, Goals, and Objectives](#)
- XII. [UDEL Application for UNOLS Vessel Designation for *Hugh R. Sharp*](#)
- XIII. [US Fish and Wildlife Service Importation Policy Issue](#)
- XIV. [Seward Johnson II transfer to BBSR Update](#)
- XV. [Codes of Conduct - Impact of Scientific Studies on the Environment](#)
- XVI. [ADA Guidelines for Research Vessels - Draft Task Statement](#)
- XVII. [Other UNOLS Action Items](#)
- XVIII. [Conversion plans for Icebreaker *Glacier*](#)
- XIX. [UNOLS 2005 Calendar and Winter Activities](#)

Meeting Minutes

Call the Meeting: Peter Wiebe, UNOLS Chair, called the meeting to order. Introductions were made around the room. Linda Goad, NSF joined the meeting via telephone. The agenda and meeting participants are included as appendix I and II.

Accept the Minutes of the July 2005 Council Meeting – A motion was made and approved to accept the July 2005 meeting minutes with one minor change proposed by Curt Collins.

Budget Shortfall and Impact on Fleet Operations and Construction

National Science Foundation (NSF) Report - Larry Clark ([Appendix III](#))

Peter introduced Larry Clark, NSF Director of Ocean Science. Larry announced a few personnel changes that have taken place at NSF recently. Dave Epp (MG&G, RIDGE, and R2K Programs Manager) retired on September 30, 2005 after 19 years of service. His vacated position will be announced after the first of the year. New personnel include Mary-Elena Carr and Elise Ralph, (GEO/OCE).

Larry apologized for not providing a formal response to the UNOLS letter with recommendations for addressing the budget shortfall. He thanked Peter, Marcia, Denis, Eileen, and the UNOLS Office for their efforts. He began by stating that he really had nothing to report regarding the status of the budget. NSF is under a continuing resolution, which limits their budget to 7/10 of last years' budget. There may be several outcomes in the near future, including a signed budget, an omnibus bill for the whole government with details to be worked out. They are assuming that it will be steady state, but are bracing for more drastic changes.

Larry provided slides displaying the budget numbers from the 2006 request. Geosciences would increase by 2.2% over FY05, but OCE would only go up 1.1% while the other two divisions would increase by a slightly higher percentage. This is keeping with the concept of ensuring funds to use and operate new major equipment such as Earth Scope and the HIAPPER aircraft. OCE could experience a similar increase if the Alaska Region Research Vessel and Ocean Observatories Initiative are funded in FY07. Even though this 2006 request is an increase of FY05, the amounts are still lower than FY04 for Geosciences and OCE in particular.

The budgets for OCE and the other GEO divisions have increased steadily from 1998 through FY04 and are now essentially flat, with a slight dip in FY05. The division plans to increase funding for Research and Education Grants by about 5% in an attempt to restore their ability to fund science. This will be important for long-term use of research facilities. The support for the research fleet will remain flat from FY05, however the OCE support for ship operations will be reduced by about \$5M, partly to cover the costs of new infrastructure within this flat budget.

OCE spending from 2001-2005 was shown. The amount spent on research in core programs (PO, CO, BO, MGG) peaked in 2003 at almost \$130M while ODP has remained relatively flat at around \$50M. Facility support peaked in 2004 at around \$76M and has declined since then. Other programs are taking an increasing portion of the budget (education, bio-complexity, other priority areas).

Larry then showed two slides that demonstrated the pressure on this decreasing budget for facilities support. First, while budgets are declining or flat, costs are going up as evidenced by the rate of increase in the daily rates for Global and Ocean Class ships. Rates have increased from an average of about \$15K per day in 1999 to over \$22K in 2005. Rates are projected to be even higher in 2006. Second, was a slide showing a rapidly increasing level of ship operations support by NSF, while other agencies and institutions have remained essentially flat in terms of the dollars spent on fleet operations. With this flat level of support by other agencies and a need to reduce NSF support by \$5M, there is a big challenge for scheduling and utilization of the UNOLS fleet. Using recommendations from UNOLS, NSF feels they are close to their goal of staying within the reduced budget. However, without final budgets for NSF and other agencies, the final outcome is still up in the air.

Larry next discussed how NSF's plans were aligned with the draft UNOLS goals and priorities for the coming year.

Fleet Renewal – NSF is being questioned as to why they are proceeding with fleet renewal when the budget has been down. NSF believes that fleet renewal is an important priority and that they have to be proactive to ensure success for the long lead-time process of facilities acquisition, even at the expense of short-term difficulties with science and operations funding. OCE believes that they can proceed with mid-size infrastructure planning without major impact to ongoing programs. Funds are programmed in the current budget for the ALVIN Replacement, the R/V MARCUS LANGSETH, and design of the three Regional Class Vessels. NSF has worked out an arrangement with NAVSEA for support on the design and contracting for the Regional Class vessels. They are proceeding with the full support of the NSF Director Bement, Assistant Director for Geosciences Margaret Leinen, and the NSF Board.

Lamont-Doherty Earth Observatory (LDEO) sold the R/V EWING for \$4.5 million. This was more than was expected and these additional monies can be applied to the conversion costs.

Scheduling - With the FY06 budget requested for OCE they should be able to fund around 400 new projects and support the shiptime for those projects.

Facilities improvement – This is still in line with OCE planning and priorities. Well-equipped and maintained vessels are fundamental. However, the timeline is being adjusted for budget realities. It is hoped that the Alaska Region Research Vessel (ARRV) will be in the FY07 budget. The ODP drill ship has been pushed back a bit. OOI impacts on UNOLS scheduling and utilization will not occur until 2011.

Permitting - OCE is hiring a new staff member (environmental officer) to address permitting issues. Thirteen applications have been received for this position and it is hoped that a person will be chosen by early 2006.

Communications - OCE agrees that communications between the community, NSF, and the facility operators should be enhanced and that NSF and UNOLS should work together towards this goal.

There is a prospect for flat funding the next few years and it will still be necessary to look carefully at the number of ships in the fleet. The costs of lay-ups are high and costs are increasing over-all.

Larry showed a slide that displayed the overall success rate for all NSF proposals. The number of awards is flat, but the number of proposals has increased by 50% over the last five years causing the success rate to go down steadily, from 30% in 1999 and 2000 to 21% in 2004.

This slide caused a bit of discussion. Marcia McNutt asked why the proposal pressure was going up, was it a function of multiple proposals from PIs hoping to get one funded or is it because institutions are focusing more on NSF funding than other avenues. Larry felt it was a combination of factors including a reduction in funding from some other agencies.

Rose Dufour asked if there was a similar chart for proposals requesting shiptime. Larry responded that they did not have a specific chart for those proposals, but they had looked at this issue for the advisory panel and found that the success rate was similar whether or not shiptime was requested.

Peter Wiebe wondered if there would be a long-term impact from the large amount of deferred work on future proposal success rates or the time from funding to scheduling of projects. This would impact graduate work, staff retention, and promotional opportunities, especially for young researchers.

Larry said they are aware of this problem, but thinks that even with the larger amount of deferred work, there will still be opportunities in 2007 for new shiptime. They are looking at programs internally, so that they can improve management of facility scheduling, perhaps with some pre-scheduling.

Mike Reeve thinks that the bow wave of deferred work will go away eventually. Much of it is left over from 2004.

Peter Wiebe felt that the bow wave could only be handled by increasing ship days or funding less ship time requiring research.

Larry said that this gets back to the balance between facilities and science. They are seeing the price of fuel and other factors that are impacting the balance. They will have to re-examine the balance to determine if changes are needed.

Bruce Corliss asked if there might be a decrease in some of the other programs that OCE supports for shiptime that might help with funds for ship support and core science. Larry thought this might be possible. For example, Biocomplexity goes through 2007 and once it over, OCE is pushing for these funds to be put into OCE core science funds.

National Oceanic and Atmospheric Administration (NOAA) – Ralph Rogers

NOAA is still under a continuing resolution. They expect about \$12M in UNOLS chartering depending on the final appropriation plus some other UNOLS charter funds allocated in program budgets, but he did not have those amounts. They are beginning the long term planning for 2008-2012 and hope to be working on a better budgeting process for shiptime. Ralph thought that the use of the UNOLS fleet might be at a peak due to their Ocean Exploration (OE) vessel coming on line in 2008. There was some discussion about how the new vessel would impact UNOLS ship use and whether or not our projects could be scheduled on the OE vessel. Marcia McNutt asked what the capabilities would be. There was also a question if OE budgets would be high enough to keep the ship fully operating. Ralph replied that he thinks there will be enough funds to operate the ship 250 days. This will be a deep-ocean vessel equipped with multibeam swath mapping and capable of supporting a large remotely operated vehicle.

Mike Prince stated that OE takes advantage of opportunities for scheduling their programs and to the extent their budget allows, will probably continue to do so.

There was some discussion of the potential for use of the UNOLS fleet by the DART mooring program. Ralph thought there would be some long-term use, but not a large component of UNOLS utilization. Ralph reported that construction of the new moorings got a bit behind schedule since they are being built on the Gulf Coast and were affected by the hurricanes. In 2006 they were planning to get moorings installed in the Caribbean. They have been working with UNOLS, have held a site visit with Harbor Branch Oceanographic Institution (HBOI) and have scheduled a cruise on the SEWARD JOHNSON. They have spoken with Scripps Institution of Oceanography (SIO) and the University of Hawaii (UH) about setting moorings in the western Pacific. They would like to use the MELVILLE if possible. NOAA has tried to charter for this work, but estimates were very high. Now they are coming back to UNOLS to see if there are some mutual opportunities. The idea that they might take advantage of ships of opportunity for support is being revisited.

Tim Askew confirmed they are scheduled to deploy three moorings in the Caribbean and two in the Atlantic in April. This is still the plan even with the delay in mooring construction. Tim felt that the DART people liked using UNOLS ships because the ships are equipped for support and if they can use the same vessels in the future, training is not an issue. There is less mobilization than with charter ships. Rose Dufour said there is still a problem with a lack of flexibility with UNOLS scheduling if there are delays in mooring production.

Office of Naval Research (ONR) - John Freitag

Budgets are difficult throughout the government. John began by thanking Linda Goad, Mike Prince, and all the ship schedulers for all their hard work. John stated that unlike other ONR departments, he avoided a tax on his ONR funding and, unless significant

problems arise, should be able to fund all of his 2006 fieldwork with several large-scale, multi-ship projects on the East Coast and in the Monterey Bay, CA region. He may have to make cuts in other programs such as FLIP and CIRPAS and funds for infrastructure up-grades may suffer a bit. Some decisions on these other costs will have to wait until ship costs are better known. The number of ship days is up from 500 in 2004 to over 700, which are more in line with past use. Tim Cowles asked about ONR support for ship time in 2007, to which John replied that he thought it would be level. ONR's report on fleet renewal will take place tomorrow when Frank Herr is present.

2006 Fleet Operation Estimated Costs as compared to budget projections -Mike Prince and Rose Dufour ([Appendix IV](#))

Mike and Rose showed slides with 2006 UNOLS fleet utilization, cost estimates, and projected budgets. The schedulers attempted to distribute large ship operations between all the Global and Ocean class vessels so that they would each have an extended maintenance period, but none would be laid up. For the Intermediate and Regional class ships, there were several multi-ship operations that made it difficult to completely lay-up any of these ships, so many of them will have partial schedules. *Alpha Helix* and *Seward Johnson II* will be laid up for the year and the *Gyre* will be retired. As the schedules currently stand, very few are operating at their optimal levels.

2006 posted schedules and letters of intent currently show 3,286 operating days, with 2,151 days for NSF, 714 for ONR, 640 for NOAA, and 333 days for state, institutions and other federal agencies.

A major concern for schedulers and NSF was whether or not projected costs were in line with the reduced OCE budget for ship operations support. Cost projections based on these posted schedules show about \$38M in costs with a budget of only \$37M. John Freitag reminded everyone that these cost estimates are soft because it was very possible for fuel costs to continue rising. One bit of good news is that the NSF Director was able to provide funds that should help to offset the recent rise in costs from higher fuel costs. These added funds will probably not fund any additional days at sea, but should help prevent deferring any days due to increased fuel costs.

Brian Taylor put the impact of rising fuel costs into perspective by reporting that in the last year, the cost of Navy fuel has increased by 80 cents per gallon, resulting in an increase of \$2,000 per day in the *Kilo Moana's* daily rate.

As for other budget and cost comparisons, Navy is within budget and can just meet ship operations costs barring any huge increase in fuel costs. NOAA's budget is less certain, depending on whether they receive the House or Senate mark. They are hoping for the Senate mark which would most closely resemble their request. They will probably have to cut 10 days from the last OE cruise on Melville in order to stay within their requested budget. The one area of utilization that might increase as time goes on is in the area of other agencies, state and institutional support, which has traditionally increased during the course of an operating year.

A pie chart showed the percent of 2006 operating days and costs by agency. NSF days equal about 55%, but their costs amount to 61% of the total because of the amount of

shiptime on larger vessels they fund. NSF is providing around \$77M in ship ops and technician support when you include OCE, OPP, ODP, and BE costs in the total.

A chart showing UNOLS fleet utilization from 2000 through 2006 clearly shows a steep decline in the number of NSF supported days since 2004, while Navy, NOAA and other use has been relatively flat. A similar chart of the total UNOLS fleet operating days and costs since 2002 shows clearly the divergence between costs, which are going up and days, which are going down.

A preliminary look at 2007 scheduling using requested science days for funded projects multiplied by a 1.35 factor to account for port and transit days shows that NSF days are already close to the 2006 scheduled NSF days. These days include deferred time as well as time requested for 2007. With similar cost projections, this leaves little available funding for additional 2007 shiptime. At this stage, little is known about NOAA, ONR, and other requirements for 2007.

A chart showing possible trend lines for NSF funded operating days based on the past few years raise questions about projected utilization for the future. One thought expressed by Cindy Van Dover is that the utilization of larger more expensive and capable vessels is giving you more for your money. You can accomplish more with multi-PI cruises in fewer operating days with the larger vessels.

Brian Taylor, however, thought that we are facing a crisis in that we have flat budgets and rising costs out of our control. He asked if NSF is trying to get systemic changes such as a fuel adjustment. He thinks we are heading for a train wreck. Larry responded that this is why they are looking at the balance between science and facilities. They don't see any increases, no new money. Therefore, they need to make adjustments.

Peter Wiebe thought that the recent trend in ship operating days was very telling, especially since the chart does not include any funded work from the November panels or from requests to be submitted for next February's deadline.

Linda Goad said that the science community would need to be educated about their expectations for when they might go to sea. They may need to re-adjust their schedules. Rose Dufour was worried that the community would see this large number for deferred shiptime, while at the same time sea ships tied up to the dock. They will need to understand that this is not a problem of ship availability or even scientific demand, but one of inadequate budgets to support all the requested shiptime and full utilization of the fleet.

Next Steps – Where do we go from here? ([Appendix V](#))

Evaluate need and timing of vessel retirements – We need to look at retirement dates for vessels coming up in the near future. Should they be retired early or even on time without replacements ready to sail? We have a conceptual plan for doing service life extensions, but do we have the funds or does it even make sense given utilization.

Tim Cowles raised the issue of short term vs. long-term budget and program plans. Short-term decisions do have a major impact on defining the “science” that can be accomplished in the future. Constraining the infrastructure in the short term will have a long-term impact on what science can be accomplished.

NSF and other agency funding projections - We need to think more carefully about the projections for future use that we have been making. We need to consider whether any action as a result of the Ocean Commission Report might have an impact on funding for science and supporting infrastructure.

With regards to fleet scheduling in future years, the community needs to be aware of the backlog. They need to be able to write proposals that can be accommodated. As a reality check, they should probably be thinking in terms of writing proposals for 2008 shiptime now. The community is probably largely unaware of this. We need to get the word out. Methods for reducing the time between proposal award and project scheduling should be examined.

Getting a better handle on rising costs, in particular fuel costs will be critical to planning for future operations and budgets.

In terms of renewal, we should think about retirements relative to the planned fleet renewal schedule. Peter Wiebe mentioned that this would be particularly important since the costs for completing service life extensions are not programmed into any budgets.

Tim Cowles reiterated that we had talked about this earlier. When thinking about short term versus long-term objectives, we need to consider the role the FOFC fleet renewal document plays in this planning. It plays into projections for future utilization and budgets. In addition, what role will ocean observatories play in our planning? The short-term decisions, define the science that can be accomplished in the future. It affects the approaches that scientists take. Given that there are constraints on the use of facilities, this impacts science decisions.

Peter Wiebe stated that as a Council, we need to think about the next steps. This is very important and additional thought is needed.

Fleet Renewal

FOFC Fleet Renewal Plan Update ([Appendix VI](#))

Bob Houtman presented the report on behalf of Beth White and Bob Winokur. This is a five-year review and revision of the FOFC fleet renewal plan, which includes incorporating the entire Federal Oceanographic fleet. The updated Plan is broader more challenging than the previous Plan because it includes the NOAA vessels, Coast Guard vessels and Navy survey vessels along with other federal agency ships including fishery ships and UNOLS vessels. A Plan that is hard hitting is difficult when you have many messages to be given.

The plan will be a combination of the Federal Agency renewal plans. FOFC's plan is not a separate stand-alone plan, but represents the plans that each agency is moving through their internal planning and budgeting processes. This adds another layer of complexity.

Bob discussed the timeline for putting the plan together. The working group produced an initial draft by March 31. A technical writer/designer/editor was hired to assist. NORLC was briefed on the status of the Plan at their last meeting in July. There is currently a shift from the NORLC governance to one outlined in the Ocean Action Plan. The Joint

Subcommittee on Ocean Science and Technology will probably become responsible for this plan.

In September, the working group presented the final draft to FOFC. Upon review, and based on the many comments received, the draft was sent back to the working group with some specific suggestions for strengthening the focus of the plan, which included the need for more emphasis on science imperatives. Also needed was more discussion on increasing costs. The key is to make sure the message is clear and strong with the following main points:

The Federal oceanographic research and survey fleet provides the infrastructure needed to support the nation's science and operational requirements funded through specific federal agency missions.

- These ships are invaluable national capital assets critical to the future success of the broad ocean community.
- To accomplish federal agency missions, at a minimum it is necessary to maintain current fleet capabilities.
- Regardless of the budget environment, ships age and need to be replaced.
- Implementation of this fleet renewal plan maintains current agency mission capabilities and considers the integration of new technologies.

Curt Collins asked that education be included in the first bullet of the message.

The plan is organized around the following assumptions and conclusions:

- Types of ships needed for agency missions have been grouped into two categories, Research and Survey, and three classes, Global, Ocean, and Regional.
- Based on agency budget projections, the overall fleet size will decrease from 48 ships to 47 by 2015; 18 ships will be retired and 17 new advanced ships are planned during this period.
- Assuming a typical ship has a functional service life of 30 years, by 2025 an additional 14 ships will be retired while only two new, advanced ships are planned, decreasing the fleet size to 35 ships.
- If funding for these replacements, and others not yet being planned, is not appropriated, the fleet will decrease from 48 to 21 ships by 2025, seriously compromising the ability to support agency missions.

We discussed the idea that this really was a ten-year plan and not a twenty-year plan. Either the plan timeline needs to be shortened, or some projections can be made with assumptions and caveats stated or the plan should clearly indicate that only the first ten years represent actual renewal planning commitments.

Mike Prince asked why not speculate for 20 years, why not say that ships would likely be replaced. Bob agrees, but it is up to the UNOLS community to make that point to the individual federal agencies as the FOFC plan reflects what each agency is officially planning.

Bruce Corliss felt that there should be words that the second ten years represented hesitancy by the agencies to project that far. He was concerned that it represents a planned downward trend as it stands.

Tim Cowles asked if there is a discussion in the report on how to increase capacity and capability. Dolly Dieter said there was.

Bob showed a chart with ship construction plans. In conclusion, the plan addresses the need to maintain capabilities and that fleet size should be balanced to agency budgets. There is a real potential for rapid reductions in capability if appropriations do not materialize as planned. If they do, then renewal should be able to keep up with the aging of the fleet.

There was some question about the inclusion of Ocean Observatories, what will the demands be? This is somewhat complicated and timing is dependent on the overall budget environment.

A systematic program to conduct a SLEP for any part of the fleet has not been budgeted and it was felt this should be included in the Plan. Brian Taylor asked whether the report was going to adequately address the justification for maintaining fleet capabilities given that across the entire navy fleet there is a reduction in size.

Bob thought that reduction of the Navy grey fleet was stabilizing and that the survey fleet still felt that their capabilities needed to be maintained at current levels. UNOLS fleet justification is complicated by the different budget paths.

Navy plans will need to be reflected in the plan and the plan needs to reflect the best available projections.

The Council discussed UNOLS community input to the FOFC plan. A key element, which they have already asked for input on, was the scientific imperative for fleet renewal. Mike Prince asked if there would be an opportunity for review of the plan, at least the academic fleet portion. Bob said he cannot answer this question, but that Bob Winokur had indicated that some review of the Plan would take place and he asked that this question be deferred to Bob.

Peter Wiebe said that he and Dave Hebert have seen the report, but that he feels uncomfortable representing the entire community without their input. He has encouraged Bob Winokur to allow the UNOLS community to see the report and provide input.

Dolly Dieter said that this is a federal report and it is a plan for all the agencies, not just the academic fleet. It has to be acceptable to all of the agencies and be a report that they are all comfortable with.

Mike Prince commented that FOFC has asked for UNOLS input on the scientific imperative and perhaps we should re-ask the UNOLS community for more feedback and then provide that feedback to the working group in a more formal and complete manner.

They are working to have the draft ready by early December. At that point, it would go out for additional review, but not necessarily to the UNOLS community.

Fleet Improvement Committee (FIC) Report - Dave Hebert, URI ([Appendix VII](#))

Dave provided a slide presentation and reviewed agenda items from the FIC Meeting of October 5th. He mentioned a couple of points of interest.

ADA Guidelines - Terry Whitledge drafted a white paper on guidelines for research vessels to meet the requirements of the Americans with Disabilities Act (ADA). There is interest on the part of FIC and NSF to see a committee formed to address these guidelines, building on Terry's efforts.

ORION – the plans for implementation of the Ocean Observatories Initiative won't be known until at least March 06 based on proposals to provide infrastructure. Funding should be included in the FY07 NSF MRE budget request.

KILO MOANA – debriefs with PI's are ongoing. They discussed where they were going with this effort. We know that there are rumors in the community about the capabilities and performance of *Kilo Moana* that are not all true. There have been several improvements made to address some of the early problems. They are also getting a new CTD handling system that should improve control over the CTD to the water's surface. It would be good to get the facts straight and lay the rumors to rest. Dave will talk to Brian Taylor about how to proceed, perhaps with an EOS article.

UNOLS Fleet Improvement Plan - Dave reviewed the table of contents and some of the underlying assumptions for the Fleet Improvement Plans. FIC members have all been assigned sections and are working on the first draft.

Global Class Science Mission Requirements - A subcommittee chaired by Bruce Howe is working on this project. A community questionnaire is being developed as a first step in this process.

Peter Wiebe made a motion to appoint Clare Reimers for a second term on the FIC Committee. The motion was passed and approved (Wilf Gardner/Tim Askew)

Ron Benner will be stepping down after his first term in office. A Call for Nominations for the FIC will be needed.

Regional Class Acquisition – Mike Reeve, NSF

Mike stated that they have been working for a year to put together documentation for solicitation of Regional Class design competition. Next week, Admiral Hamilton and Margaret Leinen will approve the documentation and solicitation to allow NAVSEA to proceed with the RFP for the design teams. Mike expects the teams to be selected in January 2006, with two UNOLS representatives providing input. In about a year, January 2007, they will down-select to one design. Because of the dollar amount, the award of a contract to build the ship must be approved by the National Science Board. In addition, NSF cannot solicit for the operator of a new facility until that facility has been approved. This would mean the ship operator selection could not happen until January 2007 or so.

Bruce Corliss asked whether just one operator would be selected at a time. Mike thought that would be correct. Curt Collins asked if there would be opportunity for broad community input. Mike indicated that for the team selection it would be limited to the two representatives and during phase-one design, the six person team would represent the

community. The designs will be based on the Performance Specifications, which was given broad community review.

Other Facility Planning - Coast Guard icebreakers - Mike Prince

Renewal of the USCG Polar Class icebreakers is in limbo awaiting further definition of the requirements for Coast Guard icebreakers. The Coast Guard and NSF signed an MOU in August for icebreaker support of science missions, the details are being worked out as we speak. NSF Polar Programs will have the budget for icebreaker operations and will reimburse the Coast Guard. This does raise issues about how other agencies would pay for icebreaker shiptime. There is also an ongoing National Academy of Science study of the role of Coast Guard icebreakers. This study will address some immediate issues with an interim report at the end of this year and will further address the long-term requirements for Coast Guard icebreakers with their final report in mid-2007. Definitive action with regards to any replacement or renewal of Coast Guard icebreakers will be decided at the highest levels, but not until after release of the NAS study.

Deep Submergence Facilities, Alvin Replacement Status – Dolly Dieter

WHOI is presently letting the contract to Southwest Research Institution of San Antonio, Texas for design and construction of the personnel sphere. The oversight committee has provided a superb effort, led by Karen Von Damm of the University of New Hampshire. The timing has slipped some due to budgets and contracting delays and this will be a 5-year effort.

Open Discussion and Identification of Fleet Renewal Issues that require Council Attention

A major concern for the community and UNOLS is the apparent backlog of deferred work being shown in the potential utilization for 2007. There is some question about how this is communicated to the community. Also, Peter Ortner felt there was some disparity between the NSF and UNOLS characterizations of how much ship availability still exists in 2007. We need to clarify the facts and have a discussion between NSF and UNOLS about where we really stand with regards to funded work for 2007 and how this will really affect the community. The community needs a realistic interpretation.

Mike Reeve said that he needs to look at the data and talk to Linda Goad and Mike Prince to make sure we are all making projections based on the same assumptions. There was some question about the actual status of some projects that are being counted as funded and it is not clear that all of the work shown as deferred could actually go in 2007. As an example, not all of the deferred work requesting Langseth could be scheduled in 2007 and would need to be spread out over a couple of years.

Peter Ortner raised another issue. The intersection of fleet demand and fleet renewal raises some difficult questions. Without renewal, ships will go away and then we cannot even meet the current demand. However, the cost of renewal may be eating into the funds to support the current demand.

Other issues include the fact that there are no funds programmed for service life extensions of existing vessels that are nearing retirement or for mid-life refits of the

Thompson class vessels. Without funding for new Ocean class vessels and these funds, which would keep existing vessels operating, we face a real problem.

Bruce Corliss thought that it was important that these uncertainties and issues should be conveyed to the community. The question is, what should UNOLS responsibility be for communicating the trade-offs in making certain decisions about fleet renewal and ship operations costs/budgets? Peter Ortner thought that it was UNOLS that needs to let the community know of the tradeoffs. We are responsible for the tradeoffs. We want the community to think creatively.

As an example, Peter Wiebe wondered what advice the science community should be given about when to request shiptime. At the moment, requesting shiptime in a February proposal for the following year is less likely to be successful. Bruce Corliss felt that it would be useful for this type of information to come from NSF as well as UNOLS. Wilf Gardner was concerned that the message did not become a self-fulfilling prophecy. Mike Prince thought that to some extent, the current problem was like a bow-wave that would work itself out in time as long as budgets did not continue to decline. At that time, we would want to ensure that there were still plenty of good proposals being submitted with shiptime included.

Larry Clark reiterated that this is a problem that was caused by budgets. Mike Reeve has said that Core programs may have less shiptime in the near term and there is a backlog of *Langseth* work. These will be pushed into 2007 and beyond. Larry would like to take a closer look at the numbers and the factors involved. For example, another impact on the backlog is the availability of OBS, so the issues surrounding deferred work are not simple.

UNOLS Office Review and Competition ([Appendix VIII](#))

NSF requested that competition for hosting the UNOLS Office be made about every 5 years to be consistent with how other similar Cooperative Agreements for facilities and offices are conducted. If the Office was not awarded to another institution then a review of the current Office would be made. This was the first formal review ever made of a UNOLS Office. An ad hoc subcommittee was assembled comprised of Peter Wiebe (Chair), Margo Edwards, and Wilf Gardner. An e-mail message was then sent out to all the UNOLS Institutions asking if anyone was interested in competing to host the UNOLS Office. Only three responses were received, none offering to compete. A review of the Office then followed. All Council members were asked to complete a survey and the results were then compiled. Sixteen (16) out of 18 Council members responded. Peter presented a histogram showing the results. The average score was 1.2 showing the UNOLS Office doing an excellent job. Based on this evaluation, the ad hoc committee finds the performance of the UNOLS Office to be excellent and recommends that the Council endorse MLML to host the UNOLS Office for a third 3-year term. A motion was made by Curt Collins to recommend MLML continue as the host. The motion was seconded by Cindy VanDover. The motion then passed.

Discussion then followed regarding a possible Charter Change to reflect NSF's preferred timeline for a periodic competition and review. Dolly asked that they receive the Council's report and recommendations.

Establishment of a National Oceanographic Facility – Seismic Vessel ([Appendix IX](#))

Marcia McNutt reviewed the subcommittee's recommendations regarding the terms of reference and the committee membership. There have been a couple of changes on the make-up of the committee. They could like to have the committee up and running in advance of the ship being brought online. Potential committee members will be selected from three categories: 1) Seismic Specialists – Tom Shipley or Steve Holbrook would be good choices. Tom may be willing to commit on a short-term basis. There is also a rumor that Steve Holbrook is being courted by LDEO, which could create a conflict of interest. This will need to be resolved. People with industry experience would be useful in this category 2) Users of MCS information, but not specialists. 3) General oceanographers and marine mammal specialists. We would need to get some names of people in the last category that would be interested in serving.

If the committee could be formed soon, before the 2005 Fall AGU meeting, they may be able to participate in the Town Hall Meeting that LDEO has planned. This may be overly ambitious at this point in time.

Marcia asked that if the Council feels that this is acceptable, formation of the committee could begin. Marcia will contact the individuals first before sending the list to Peter.

Establishing Safety Standards for the use of Human Occupied Vehicles ([Appendix X](#))

Annette DeSilva reviewed the plans being formulated by DESSC with NSF and NOAA to form a subcommittee to develop safety standards for Human Occupied Vehicles (HOV). A draft task statement has been provided by NSF and NOAA. The safety standards should address certification of:

- The vehicle
- The ship
- The handling system
- The operation
- Training (vehicle and ship crew)

This will likely be a two-year effort. UNOLS will need to form a subcommittee, which should include science users, including a DESSC representative, an RVOC Safety Committee representative, HOV operators (WHOI, HBOI, HURL), HOV pilots, a marine superintendent, and a ship captain along with participation by a Navy/NAVSEA certification expert. It was felt that since ABS will review the standards produced by this committee they would not be a member.

Review Draft UNOLS objectives, priorities and goals for 2005/2006 ([Appendix XI](#))

Mike Prince reviewed the UNOLS Charter, vision and mission statements, goals and priorities for the coming year. The UNOLS Charter was originally adopted in 1972 and serves as the bylaws and guiding document for operation of the organization. The

introduction and objectives underscore the overall purpose of UNOLS. In recent years, the UNOLS Council has adopted a vision and mission statement and over-arching goals.

Prior to this meeting, major issues were suggested by members of the UNOLS Council and Committees and by UNOLS representatives. These issues include:

- Fleet Renewal - Support the implementation of existing FOFC plan, vessel design efforts, and funding for new ship construction. Many of the ships in our fleet are aging and the resources to replace those ships are needed now.
 - Several indicated this as their top priority.
- Facilities Improvement Planning - Update the UNOLS Fleet Improvement Plan in order to assess the current and projected status of the Academic Research Fleet and other major facilities, detail the scientific facility requirements of the future based on recently published documents and make recommendations in support of the review, and update of the FOFC renewal plan for additional research vessels and facilities that may be required including icebreakers, aircraft, submergence vehicles, and seismic vessels.
- Scheduling - Make the best use of existing vessels, particularly in light of the cutback in ship availability in 2006 (and likely to continue in 2007) due to increasing costs and decreasing ship operations support budgets.
- Communications - RVTEC believes that UNOLS is in a unique position to communicate to the scientific user, support facilities, and funding agencies. UNOLS should strive to improve the communications and interactive support between these three groups. Issues such as funding levels, regulatory measures, understanding of ship and technician capabilities, and how these issues affect each of the three groups and ultimately the overall science missions should be better disseminated between the three groups.
 - RVTEC is an optimal position to communicate with the science community.
- Facilities improvement - The UNOLS community is going to need more high-tech access to the sea. UNOLS should assess the need and start the planning necessary to bring additional ROVs and AUVs into the suite of facilities available to support new research initiatives such as observatories.
- Permitting - support efforts for improving the processes for obtaining permits and clearances related to seismic reflection cruises.
- Education - Support and promote the capabilities on our ships to facilitate public education and outreach efforts by scientists, educators, and facility operators. The public feels part of NASA missions in a way that is not currently the case for oceanographic expeditions. The recent attempts to bring real time oceanography to the public are laudable, but too expensive to be done on a routine basis. Can UNOLS change that?
- Increasing Costs - One trend over the last ten years, but accelerating in the last two to five years, is an expectation for ships and shipboard technician groups to provide

more and more services and support for increasingly expensive and complex instrumentation. This is not necessarily a bad thing, but increased mission requirements generate higher costs. Other factors such as increased fuel prices and increasing regulatory and training requirements have greatly escalated the cost of ship operations. With the current budget difficulties in the federal agencies, the financial resources are not as readily available for continually escalating service levels. Maintaining safe and high quality operations costs money and trying to do more with less can lead to problems in the long-run. Finding the right balance between available resources and the level of support that can be provided should be a UNOLS focus along with promoting the allocation of sufficient resources to support quality operations.

- Regulatory Impacts - The increasing burden in time and money being imposed under new regulatory requirements for safety management, security, and pollution response are impacting the cost and capabilities of more and more ships in the UNOLS fleet. Advocating for support, resources, and relief for these requirements as well as facilitating cooperative solutions is an important role for UNOLS.
- Finding, recruiting, and retaining qualified, technically literate personnel to operate our platforms and instrumentation is increasingly a challenge for the member institutions. Technicians with the skills required to operate and maintain data acquisition networks, multi-beam sonars, seismic profiling equipment, remote-sensing suites, chemical analyzers, and the plethora of other essential components of these facilities have numerous well-paying opportunities that can be pursued ashore. Similarly, a 'perfect storm' has formed in the area of maritime personnel recruitment: The current population of merchant mariners is graying with an average age in the low fifties, the U.S. flag merchant marine has shrunk to relative insignificance on the world ocean (meaning that the job opportunities are few and far between), and the new STCW regulations--while arguably improving professionalism and safety--have had the unintended side effect of choking off the entry level for new seafarers who, in the past could sample the lifestyle and work before deciding whether or not to invest in thousands of dollars worth of training. The ability of the UNOLS operators to field and support future expeditions could be impacted by these serious industry-wide challenges.

A question was asked, have we been talking to the schools that train maritime crews. Dan Schwartz replied that they recently spoke to the California Maritime Academy. They hold career fairs and some institutions have participated. This should be an RVOC issue to join forces and participate in these fairs. Pooling resources will be necessary. Part of the problem is getting people to even attend the maritime academies.

Rose mentioned that another issue is sharing personnel among institutions. As lay-ups come up, personnel should be able to go to other operators. Crew issues such as union, benefits, retirement, etc make sharing personnel challenging.

Sandy Shor has been very successful in facilitating personnel transfers by funding the technician's home institution to provide available technicians to other institutions.

Mike will reorganize the issues and objectives, make them more precise, and then they will be presented at the annual meeting tomorrow. Tim Cowles suggested organizing by goal – access, improvement, and planning

University of Delaware Preliminary Application for UNOLS Vessel Designation of *Hugh R. Sharp* ([Appendix XII](#))

Peter Wiebe reviewed the application submitted by the University of Delaware. Bruce Corliss and Curt Collins motioned to approve the resolution. The application was approved pending acceptance of the new vessel, retirement of the *Cape Henlopen*, and successful completion of the required inspection.

US Fish & Wildlife Service (USFWS) Importation Policy ([Appendix XIII](#))

Peter Wiebe provided the background information on the incident that arose during the summer cruise on R/V *Ron Brown* when the scientists were required to report and inventory all “wildlife” specimens collected during the cruise, including those that did not fall under the CITIES treaty of endangered species.

We need to address whether or not scientist who collect non-CITIES listed samples from the high seas, international waters, are considered to be “importing” under this regulation. At present, Tim Shank is required to list all of the species collected on this cruise within 180 days of “importing” the collected animals.

Peter said that this is really problem for UNOLS. It is a critical issue and is something the federal agencies need to resolve with the USFWS. Clearer guidelines appear to be needed. Originally, they would have been required to clear customs, quarantine all samples, and have their samples inspected. All this would be at the cost of the scientist.

Someone asked if there is a definition of “wildlife.” Within the regulations, the term is defined. Bruce Corliss commented that there has also been a problem of bringing marine sediment back with the samples. They consider it a soil.

Rose Dufour stated that at SIO she thinks that every two years they automatically apply for an exemption for collected samples from USFWS. It hasn't been a problem and they are always given the exemption. It wasn't clear whether this was related to the same regulations.

Peter then asked Mike Reeve if they had addressed this situation. Mike indicated that they had not spoken to USFWS yet. Peter Ortner offered to speak with them. It was generally felt that UNOLS cannot solve the problem on their own, it is an agency issue. Mike Prince will send Mike Reeve the contact information for the USFWS people, located at their headquarters just down the street from NSF. There was resolution from UNOLS Council asking the Agencies to address this issue

New regulations regarding importing wood in pallets and boxes

Dan Schwartz mentioned that the USDA, Animal and Plant Health Inspection Service (APHIS) have issued a final ruling, effective 9/16/2005. This ruling will require all regulated wood packing material imported into the U.S. to be either heat treated or

fumigated with methyl bromide and then marked with an approved international mark certifying treatment. A stamped pallet/box/crate cannot be changed in any way. If the item is taken apart and reassembled, it must then be re-treated and re-stamped. Untreated Wood Packing Material (WPM) cannot come into the U.S. and must be exported to a country willing to accept the WPM (the choice of which country to export to is the responsibility of the importer.) It is an international law that all boxes must have been treated. Therefore, if scientists use wood boxes, they might not be able to get them back into the country.

Marine Mammals and Acoustic Permitting Update

Mike Reeve reported on the process of getting a programmatic Environmental Impact Statement (EIS) for conducting seismic reflection work. The first step for starting the EIS process is to hold public scoping meetings. They already held one in Woods Hole, Sandy Shor is now in College Station for the second, and there are plans for meetings in Seattle, Alaska, Honolulu and other locations. This process may take up to 18 months with more public meetings after the draft EIS is published. The idea behind the programmatic EIS will be that future permits would focus on the area and season more than on the whole process and ship.

Yesterday, Mike Reeve and Mike Purdy went to the permanent secretary in Bermuda and discussed the elements of getting a permit for conducting Marcia's cruise next year when the R/V *Marcus Langseth* comes on line. They believe that they are moving in the right direction and believe they will receive feedback from Bermuda about what they will need from LDEO and NSF in order to issue a permit. This permit would be necessary prior to the programmatic EIS being completed.

Mike Reeve mentioned that for the MARS observatory in Monterey they went through the EIS process. No one came to the scoping meeting. Marcia said that it is best to show that you are dotting all of your I's and crossing all the T's. There may have been opposition if they had not done the scoping meeting and completed an EIS. The scoping meetings are an opportunity to get feedback from the community.

RVOC Safety Committee Membership and Safe Working Loads

Tim Askew reported that they held a phone conference recently. The first issue is membership on the committee. Two members retired recently. Their replacements have been contacted to determine interest. They also discussed adding a scientist to the committee. This is a Council issue. It would be beneficial.

There is no uniform method for determining safe working loads for wires and cables throughout the fleet. This major issue is not easily resolved. A program of wire testing for breaking strength and retirement criteria is being conducted that will help quantify how safe working loads are determined. From this it may be possible to develop guidelines.

When Jon Alberts left WHOI, Rick Trask became the wire pool manager. He has funding to do some testing of 9/16-inch wire rope and other cables from NSF. This will help with this effort.

Status of BBSR plans to acquire *Seward Johnson II* from HBOI and retire the *Weatherbird II* ([Appendix XIV](#))

BBSR is moving forward with plans to acquire R/V *Seward Johnson II* and retire R/V *Weatherbird II*. Annette DeSilva presented the reported provided by Lee Black, however the schedule may slip a little.

- September 29 -SJII sea trials completed.
- September 30 -ABS certified the ship classification.
- October (Imminent) - Sale closing.
- October 22 –SJII arrives at Lyon’s Shipyard in Norfolk, VA for a 4.5-month modification and maintenance period.
- January 25, 2006 –Weatherbird II arrives at Lyon’s shipyard for cross decking. (Cape Hatteras will support BATS during this period.)
- February 28 –SJII arrives at BBSR. New Name TBD.
- March 2006 –SJII begins operations and support of BATS.

Tim Askew verified that they have ABS confirmation of classification. It was noted that Lee needs to call Linda regarding having CAPE HATTERAS cover BATS ops early in 2006.

UNOLS STR/Scheduling Database

Mike Prince provided a brief status report on the database project and showed some of the features that have been developed to date.

Brian asked the how the existing STRs would be transitioned. Mike indicated he maintains these as a tab delimited database and they can be transitioned although much of the information will need to be edited in the new system.

It is not ready for beta testing yet, but should be early next year.

Discussion Item – Overall Perceptions on how requests for facility support may or may not impact proposal success

It was decided to hold this for another meeting.

Codes of Conduct – The Impact of Scientific Studies on the Environment ([Appendix XV](#))

Cindy Van Dover presented an overview of issues related to the potential adverse impacts of scientific research on deep-sea environments, such as hydrothermal vent communities. Examples include the likely un-authorized sale of vent invertebrates or their shells on e-Bay and the possible transport of deep-sea organisms from one site to another in submersible ballast waters or sampling devices. This could easily result in the inadvertent introduction of invasive species or diseases from one location to another.

These issues have been the subject of recent articles in Nature (see appendix for citations) and the subject of United Nations reports on the impacts of scientific research on the marine environment. There is a growing interest in regulating oceanic bio-prospecting and resource extraction. There are various international biodiversity conventions and

other activities where concerns are being raised and there could be a growing interest on the part of the international community to regulate not only the mining and extraction activities, but scientific research as well.

Cindy and others believe the scientific community should take the high road and work towards self-regulation in terms of their practices and procedures in an effort to protect these environments and minimize the adverse affects of scientific research. This means that there needs to be greater effort to understand these deep sea ecosystems and to identify impacts that marine scientific research and other activities, such as fishing, have on these ecosystems. Marine scientific research might entail physical disturbance or disruption of the ecosystem or alteration of environmental conditions through in-situ experiments or the introduction of light and noise or pollution in the form of debris and biological contamination. The frequency of research expeditions to a given site might also constitute a negative impact.

Taking the “high road” means that researchers should have a mindset of conservation and responsible stewardship. Cindy pointed out one example of putting this into practice. InterRidge is an organization for international cooperation in ridge-crest studies. They have developed a “code of conduct” that includes responsible research practices, copied below from their *InterRidge statement of commitment to responsible research practices at deep-sea hydrothermal vents*, which can be found at the InterRidge website:

<http://www.interridge.org/> click on the New and Information link to find it.

http://195.37.14.189/public_html/INFORMATION/IR_statement_Feb06.pdf

RESPONSIBLE RESEARCH PRACTICES

The Primary purpose of this document is to affirm our commitment to responsible research activity at hydrothermal vents. As members of an international research community, we encourage all scientists to abide by the following guidelines:

- 1) Avoid, in the conduct of scientific research, activities that will have deleterious impacts on the sustainability of populations of hydrothermal vent organisms.*
- 2) Avoid, in the conduct of scientific research, activities that lead to long lasting and significant alteration and/or visual degradation of vent sites.*
- 3) Avoid collections that are not essential to the conduct of scientific research.*
- 4) Avoid, in the conduct of scientific research, transplanting biota or geological material between sites.*
- 5) Familiarize yourself with the status of current and planned research in an area and avoid activities that will compromise experiments or observations of other researchers. Assure that your own research activities and plans are known to the rest of the international research community through InterRidge and other public domain databases.*
- 6) Facilitate the fullest possible use of all biological, chemical and geological samples collected through collaborations and cooperation amongst the global community of scientists.*

We also reaffirm our commitment to open international sharing of data, ideas and samples in order to avoid unnecessary re-sampling and impact on hydrothermal vents, and to further our global understanding of these habitats for the good of all people on Earth.

There are a couple of examples of actions that our community could take to minimize impacts on research sites. We could ensure that new submersibles have ballast systems or ballasting procedures that eliminate the possibility of bio-contamination. Limiting the real estate used for ongoing research projects would minimize and localize the impacts to smaller areas. Examples of this practice include the MARS observatory and the Juan de Fuca sensitivity zones.

Peter Wiebe asked if there were specific action items for the Council and Tim Cowles asked if these issues had been addressed at major scientific conferences. It would appear that making these issues more widely known in the community would be an important step. Carin Ashjian pointed out that a similar challenge confronts Arctic researchers with regards to working with Native communities and in their environment. In this case, NSF has led the way with researchers to develop *Guidelines for Improved Cooperation between Arctic Researchers and Northern Communities*, which is posted on the Arcus Website at: <http://www.arcus.org/guidelines/>. These represent another community attempt to conduct research in a responsible way. Mike Reeve thought that this might be another issue for their new environmental officer.

Cindy suggested that perhaps someone from the World Conservation Union (IUCN) Global Marine Program group could address a UNOLS Council or Annual meeting. The Union's mission is to influence, encourage, and assist societies throughout the world to conserve the integrity and diversity of nature and to ensure that any use of natural resources is equitable and ecologically sustainable. Their Global Marine Program focuses on the preservation and rehabilitation of marine ecosystems. Lee Kimball was suggested as a good candidate to address the Council. She is an advisor on ocean governance and international institutions working in the Washington D.C. office of IUCN. She is on the board of Woods Hole Oceanographic Institution. Web links to relevant IUCN pages are:

<http://www.iucn.org/themes/marine/>

<http://www.iucn.org/places/usa/webdocs/programs/marine.htm>

<http://www.iucn.org/themes/marine/contact.htm>

Dolly Dieter suggested that Margaret Hayes at State Department might also be a good person to address these issues.

Americans with Disabilities Act (ADA) Guidelines for Research Vessels ([Appendix XVI](#))

Peter Wiebe provided some background information. NSF has indicated the need for new ship construction and ship conversion efforts to address ADA requirements. Although UNOLS vessels are not passenger vessels and fall under USCG Subchapter U, vessels that support Federally funded academic research should be equipped and arranged as

feasible to accommodate persons with disabilities. Procedural guidelines to carry out shipboard operations with persons with disabilities on board are needed.

UNOLS will form an ad hoc committee. The tasking was reviewed. At the present time, the Regional Class RFP does not include ADA, so it was considered important to quickly draft some preliminary ADA guidelines for the Regional Class Acquisition effort. A two-day community workshop to define shipboard and procedural guidelines could be included as part of this effort. From this, the group could develop general ADA guidelines to be used for new research vessel construction and for refits. They would also draft the procedural guidelines with input from scientists, technicians and ship operators.

Dave Chapman, a naval architect associated with the University of Delaware, has been funded by NSF for a study of ADA accessibility. We thought it might be good to coordinate with him as feasible. Other membership suggestions include seagoing scientists with disabilities, naval architects, and ship operators. Getting started as soon as possible and providing some preliminary guidelines for the Regional Class vessels by March is a good target. The workshop would come later.

A motion was made by Tim Cowles and seconded by Denis Wiesenburg to form this subcommittee and was approved by the Council. .

Gender climate at sea

This a new item just raised by Bob Detrick and Dave Hebert. Bob Detrick provided the following report prior to the Council meeting based on a survey of MIT/WHOI students.

In a recent survey of current or recently graduated MIT/WHOI Joint Program students, over 50% of the sixty respondents reported having experienced inappropriate gender or sex-related behavior at sea and more than 20% reported unwanted sexual advances. Incidents reportedly occurred on a number of different research vessels operated by UNOLS, as well as vessels operated by U.S. government agencies and international organizations. Few, if any, of these incidents were reported, and therefore, they were not formally investigated. Women students reported experiencing unwanted attention more often and in more serious forms than men. Detailed descriptions of many of these incidents indicated that they may have been sexual harassment. Other incidents, while they may not have been sexual harassment, were disturbing to the students and created an unpleasant and intimidating workplace.

This survey, while sampling only a small segment of the student population sailing on UNOLS vessels, suggests these are not isolated incidents. Nor were these incidents confined to WHOI vessels - in fact the majority of specific incidents cited in the survey occurred on other UNOLS or gov't ships. WHOI is taking immediate steps to try to improve the gender climate on our ships, including informing the science party at the start of every cruise about acceptable sex- and gender-related behavior during the standard "safety briefing"; improving the system for reporting unwanted sexual attention and sexual harassment; and publishing a policy on sexual harassment written specifically for the seagoing environment. We are also investigating ways of educating both the

shipboard crew and students about acceptable sex- and gender-related behavior, and how to respond appropriately.

Ensuring that going to sea is a positive, inspiring, and productive experience for all students is obviously an important goal for the entire UNOLS fleet. While this is a difficult and sensitive issue, the results of this survey suggest it is one UNOLS needs to address. There are several ways in which UNOLS may be able to contribute to a more favorable gender climate on its ships. For example, UNOLS could adopt a policy regarding how operators provide information to participants on every leg regarding acceptable sex- and gender- related behavior, and how to report unwanted sexual attention and sexual harassment. UNOLS might also provide operators with tools (e.g. brochures, videos) to help educate shipboard crew and students about acceptable sex- and gender-related behavior, and how to respond to inappropriate behavior. There may be other policy or educational approaches UNOLS should explore.

I would like to suggest that "improving gender climate on UNOLS vessels" is an important topic for discussion at a future meeting of the UNOLS Council. Gender Climate at sea – there have been recent issues.

In addition, Dave Hebert had just returned from a conference on 'Mentoring Physical Oceanography Women to Increase Retention (MPOWIR)' and a UNOLS-related item came up. It is an issue that we, the Council, can adopt and show a pro-active response to that concerns inappropriate behavior by people on ships. It appears that the IODP ships include guidance on this in their briefings to the science party and new crew. Some UNOLS vessels do this as part of their safety lecture and some don't. WHOI has a committee formed to address this concern related to their vessels. Dave's suggestion, which the MPOWIR committee attendees endorsed, is that UNOLS state that as part of the normal safety and shipboard-life lecture given at the start of every cruise, the statement that if anyone feels that there is inappropriate behavior by crew or scientists, that person should contact the Captain (for crew) or Chief Scientist (for science party). Those two people will consult and an appropriate action will be taken. The women at this meeting thought that such a simple statement and action might be all that is needed at this time.

Marcia McNutt stated that it is always necessary to have two paths of reporting in the event of a problem. Carin Ashjian said that she likes to have these policies stated as the part of the pre cruise training and Cindy Van Dover felt these briefings were better if done before the ship leaves the dock. Dan Schwartz said that if a complaint gets as high as management, there is a mandatory reporting requirement with the USCG.

Bruce Corliss thought the policy guidance should go further and identify what the process is after an incident is reported. The consensus was that all of the institutions have policies regarding sexual harassment in place, usually mandated by law or institutional policy. It was agreed that their needs to be a renewal of effort to ensure that these policies are given more visibility as part of the process of going on board our research vessels. The policies and procedures should be clearly stated to visiting scientists sailing on our vessels. Rose Dufour mentioned that at Scripps, they have a drug and alcohol

policy information form that is signed by all scientists before they leave. She thought that perhaps another part to this form is needed to address harassment policies.

Tim Askew felt that a uniform policy is needed. He will make this an RVOC action item to be discussed at next year's meeting.

Review the Status of Past Action Items ([Appendix XVII](#))

Peter Wiebe reviewed several items.

- Mooring Locations, release codes - Database that is not open to the general public would be useful.
- Frequency Spectrum Management – Otis Brown called. He would like RVTEC's help in defining the spectrum use by the marine science community. His committee has no idea what portion of the spectrum is being used by this sector of the scientific community. This will be assigned as a task for RVTEC
- UNOLS Briefing – Peter Wiebe would like to put together the information, presentation and brochure to be used for briefings to Congress and other groups.

Former USCG icebreaker *Glacier* ([Appendix XVIII](#))

Dan Rolland of JJMA presented information on a project that their naval architectural firm might become involved in. This is an ongoing program to restore the former Navy and Coast Guard Icebreaker *Glacier*, which has been sitting in the mothball fleet on Suisun Bay in California for years after being retired in the 1980's. This conversion has been planned for years and has proceeded slowly with mostly volunteer labor until now. This new effort would be funded by a large private donation that would make this a more viable project.

UNOLS 2005 Calendar and Winter Activities ([Appendix XIX](#))

A calendar of upcoming meetings and planned activities for the fall AGU meeting in San Francisco was quickly reviewed.

1740 Adjourn