UNOLS Council Meeting Minutes Campus of San Jose State University Student Union Building, 3rd Floor - Almaden Room 1 Washington Square, San Jose, CA 95172 March 14-15, 2006

Meeting Minutes

Executive Summary:

The UNOLS Council met at San Jose State University, Almaden Room, on March 13-14, 2006. A major topic of discussion focused on the continued budget shortfalls and the effect this is having on fleet operations. The Council decided to form an Ad Hoc Committee to develop a white paper to focus UNOLS Council discussion and agreement upon an equitable and defensible process to be followed by UNOLS to arrive upon a recommendation as to which UNOLS vessels would be laid up in 2007 or beyond or retired. The committee membership includes Marcia McNutt (Chair), Curt Collins, Wilf Gardner, and Peter Ortner. They will distribute their draft paper prior to next Council meeting.

Other items reported on and discussed at the Council meeting included Fleet Renewal plans and implementation. 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.

Plans for the 2006 Annual Meeting were discussed. The date for the meeting is October 6th. The Council will invite Leon Panetta as their keynote speaker. A nominating committee was formed and includes Tim Cowles (Chair), Margo Edwards, and Wilf Gardner. They will draft a slate to fill Council position terms that are ending this year.

Actions/Tasks

New Items	
Develop a white paper to focus UNOLS Council discussion and	Marcia McNutt (Chair),
agreement upon an equitable process to be followed by UNOLS to	Curt Collins, Wilf
arrive upon a recommendation by July 2006	Gardner, Peter Ortner
Review draft UNOLS brochure and provide comments.	Council
Secure an Annual Meeting Keynote Speaker	Peter Wiebe, Council
	and Office
2006 Council Nominations:	Form committee – Peter
 Form Nominating Committee (Tim Cowles, Wilf 	Wiebe
Gardner, and Margo Edwards)	
Distribute Call for Nominations	Tim Cowles, Wilf
 Prepare Slate for Council approval (July 06) 	Gardner, and Margo
	Edwards
Past Items	
Make final designation of <i>Hugh R. Sharp</i> when all	Office/Wiebe
requirements are met.	
Make final designation of Atlantic Explorer when all	Office/Wiebe

requirements are met.	
Follow-up on USFWS importation regulations.	NSF, NOAA, Council
Consider inviting speakers on Scientific Ethics, the impact of	Peter Wiebe, Cindy Van
research activities (IUCN, UN, or State Dept.)	Dover, Office
Implement priorities and goals for 2006, especially finding	Council, Office,
ways to improve communications with the community.	Agencies, &
	Committees
Mooring locations, release codes, set up information	Office
page/database in protected Web location	
Assist CORF with inventory of Frequency Spectrum use by	RVTEC
the ocean sciences.	
Standardize and implement procedures for ensuring scientists	RVOC
and crew are aware of sexual harassment policies on research	
vessels.	
Establish HOV Safety Standards	DESSC Subcommittee
Establish ADA Guidelines for R/Vs	Terry Whitledge and
 Provide guidelines for Regional Class ships 	ADA Subcommittee
 Provide Fleet guidelines for construction, conversion and 	
operation	

Appendices:

- I. Agenda
- II. Meeting Attendees
- III. NSF Report
- IV. UNOLS Fleet Scheduling Report
- V. American's with Disabilities Act (ADA) Committee Report
- VI. Marcus Langseth Conversion Status Report
- VII. Marcus Langseth Science Oversight Committee
- VIII. UNOLS Office Slides for FIC / Council Meeting
 - IX. Draft Charge for Lay-Up/Retirement Subcommittee
 - X. UNOLS Draft Brochure (6.6 Mb)
- XI. Policies Regarding Alcohol, Drugs and Sexual Harassment Aboard SIO Research Vessels
- XII. Committee Reports:
 - 1. Written Reports (submitted Prior to the meeting)
 - 2. PowerPoint Reports: AICC
- XIII. UNOLS 2006 Council Nominations Duties

Meeting Summary Report:

Day 1:

Call the Meeting: The UNOLS Council met on the Campus of San Jose State University (SJSU), Student Union Building, Almaden Room, San Jose, CA on March 14-15, 2006. Peter Wiebe, Chair, opened the meeting at 0830. On day one of the meeting the UNOLS Council met jointly with the Fleet Improvement Committee. Agenda items were followed in the order as

reported below. Meeting participants introduced themselves. Dolly Dieter, Linda Goad, Larry Clark, and Holly Smith joined the meeting via phone conference.

The agenda and meeting participants are included as *Appendix I* and *Appendix II*, respectfully.

Dr. Vida Kenk, Interim Dean, College of Science, SJSU, provided a welcome address. She has been at SJSU since 1969. CalState University system has 23 campuses and provides degrees up to the Master's degree level. SJSU recently built a new library. She encouraged the Council to visit the 8th floor of the library for a view of the area.

Accept the minutes of the October 2005 Council Meeting – Marcia McNutt noted a typo in the fourth line on the first page of the draft minutes. A motion was made to accept the minutes with incorporation of the noted correction. The motion passed.

Agency Reports, Budget Projections, Future Fleet Utilization, and Fleet Renewal Activities

National Science Foundation (NSF) – Mike Reeve provided the NSF report. His slides are included as *Appendix III*. After several years of a flat budget, there is hope that there will be some improvements. Overall NSF annual growth is projected at ~7% for the next decade. There are exciting opportunities in GEO this year and beyond in terms of research and infrastructure

Major facility investments include:

- HIAPER (jet) Construction is complete and initial operations began in 2005.
- EarthScope Construction continues on time & on budget. \$27.4 million is requested in FY 2007 to complete construction.
- Scientific Ocean Drilling Vessel There is an FY 2007 request of \$42.88 million to complete construction.
- Ocean Observatories Initiative The FY 2007 request includes \$13.5 million to begin construction.
- Alaska Region Research Vessel (ARRV) The FY 2007 request includes \$56 million to begin construction.

NSF's Ocean Sciences Division (OCE) provides about 70% of federal funding for Academic Ocean Research. OCE also provides about 65% of funding for the Academic Research Fleet operations to support NSF-sponsored sea-going research and education projects.

The Ocean Observatories Initiative (OOI) will have three elements: deep-sea buoys, a regional electro-optical cabled network, and a network of coastal observatories. The construction phase is requested to begin in FY 2007 with funding from NSF's MREFC Account. Mike's slides provide the annual budget request to support OOI installation.

The Scientific Ocean Drilling Vessel conversion is scheduled to begin in late 2006 with scientific operations to begin in late 2007. The total MREFC budget request to support the conversion is ~\$115M.

The Alaska Region Research Vessel has been included in the FY 2007 President's Budget to Congress.

Mike reviewed the Regional Class Research Vessel acquisition timeline. They expect to select the two design teams in April 2006. In mid 2007, they expect to select the winning ship design and proceed with detailed design & construction, Phase II. Construction schedules for the three ships are:

- Ship 1 2007-2008
- Ship 2 2009-2010
- Ship 3 2011-2012

R/V *Maurice Ewing* was sold in September 2005. The *Ewing* Replacement Oversight Conversion Committee (EROCC) has been active in modification of designs. Shipyard bids for conversion are currently under review. The seismic science equipment is currently being purchased. The vessel is anticipated to be ready for service in late 2006.

The human occupied vehicle (HOV) replacement acquisition is following a phased development approach. Phase I is in progress. A contract has been finalized (October 2005) between Woods Hole Oceanographic Institution (WHOI) and Southwest Research Institute (SwRI) for the design of the personnel sphere. The solicitation for the actual vehicle is being prepared. Phase II (dependent on successful execution of Phase I) will consist of the vehicle construction with an anticipated completion in 2009.

Sea trials are scheduled in early 2007 for the Hybrid Remotely Operated Vehicle (HROV). The HROV will be capable of operating in ROV (tethered) and AUV (untethered) mode. It is a multi-agency developmental program (NSF, NOAA, Navy).

There have been quite a few OCE Staff changes:

- Marine Geology and Geophysics Program Howard Spero, Associate Program Director
- Biological Oceanography Program Mary-Elena Carr, Associate Program Director
- Physical Oceanography Program Elise Ralph, Associate Program Director
- Sea Grant Fellow Li Zhang
- Division Director Julie Morris, (starting April, 2006)
- Environmental Officer Bill Lang

The National Science and Technology Council's Joint Subcommittee on Ocean Science and Technology (JSOST) is developing an Ocean Research Priorities Plan. It will be a National Plan and present science and technology vision, challenges, needs and benefits. It will identify areas of highest priority and opportunity. There will be a public comment period. A public workshop is scheduled for 18-20 April 2006 in Denver and is open to all interested parties. For more information, visit http://ocean.ceq.gov.

Marcia McNutt asked a question about whether or not there is a draft Research Priorities Plan. Larry Clark replied that the draft priorities plan is in the clearance process with the White House. Once cleared it will be posted.

National Oceanic and Atmospheric Administration (NOAA) - Beth White provided the report for NOAA. NOAA plans a DART array in the Pacific, Caribbean, and Atlantic consisting of 49 moorings to be operational by July 2007, but there have been some delays due to funding and manufacturing delays. There is a small amount of support from NOAA for ships to deploy the buoys, as well as some cruises of opportunity on UNOLS vessels. They are soliciting proposals for charter work for the remainder of the installation. The ship support estimate is 380 days to

install the array and 300 days per year to maintain the array. Bob Houtman asked about the vessel size requirements. Reply - Global Class vessels could support the work. *Seward Johnson* will be used in 2006 and three buoys can be held on its deck. *Wecoma* has been used for a single buoy. The ultimate goal is to deploy the array worldwide, but for now they are focusing on tsunami hazards that threaten the US.

The NOAA National Underwater Research Program (NURP) and Ocean Exploration (OE) took a big budget reduction in the 2006 appropriation. There were plans to use OE funds to pay for operation and maintenance of their new vessel, *Okeanus Explorer*. They are not sure that there will be funds to operate and maintain the OE vessel in the 2007 budget. NOAA is trying to get the budget for the vessel re-instated. There was a question regarding the rumor of combining NURP and OE in the same budget line. Reply – This has been recommended, and NOAA is looking into it.

Next, Beth reported on NOAA ship construction. Some problems have been experienced with the new Fishery Survey Vessel (FSV) *Oscar Dyson*. They include water making, a shaft noise problem, a short in a motor, and a "bottom strike" in the Alaska Inside Passage. This resulted in the need for a shipyard haul out. The FSV *Bigelow* has been towed to Pascagoula for sea trials. The ship will be delivered soon and operational by the end of FY06. The ship's homeport will be Woods Hole, MA. FSV3 is being built at Halter Marine, and there is money in the budget for FSV4 construction. NOAA is trying to get money in the budget for construction of FSV5 and FSV6. These would be shallow draft vessels and would be located in Hawaii and one in Mississippi. They are in the planning and programming phase. They are also considering a general purpose vessel to replace the *Rainer*. A SWATH vessel is planned and funds are available. They are working to finalize the design.

NOAA plans to refurbish a Navy P3 aircraft to be operational in 2008. This third P3 would free up the other two for hurricane reconnaissance. This new P3 will not be reinforced for hurricane eye-wall penetration. NOAA is selling all of their helicopters. They are trying to acquire a 4th and 5th Twin Otter for marine mammal operations, air quality and air chemistry, LIDAR, etc.

Navy – John Freitag provided the report for the Office of Naval Research (ONR). The budget for 2006 is essentially level and the Navy should be able to support the planned UNOLS operations. They have two large operations, a 3-ship operation in the Atlantic and a 5-ship operation off Monterey, CA with FLIP and an aircraft. This made fleet scheduling a bit challenging.

The plus-up funds for UNOLS FY06 support were approved and will be released to ONR in the next few weeks. There are some constraints on how the funds can be spent. They cannot comingle Congressional money to pay ship time for support of ONR funded science. Other forms of support for the UNOLS fleet will be used. The plus-up will likely be divided between the Navy ship operators for infrastructure improvements. The total plus-up funds available will be about \$4M and will likely be obligated by June.

John announced that this might well be his last UNOLS Council meeting. His ONR position will end in June and cannot be renewed. Bob Houtman will be his replacement.

With regard to the Ocean Class there are a couple of announcements. First, the CNR is now RADM Landey and Dr. Etter is now the Assistant Sec. of the Navy for Research, Development

and Acquisition. She has commissioned a Naval Research Advisory Committee (NRAC) to determine whether or not the Navy should provide continued infrastructure support for Academic ocean science research through the Ocean Class renewal program. The Navy is obligated to report to Congress within six months of the appropriation to update their plans for renewal of the Ocean Class vessels. The NRAC recommendations will be used as background material for response to Congress. The Navy has invited a panel of speakers to provide information to the NRAC panel. Speakers will include Bob Knox, Peter Wiebe, Dick Pittenger, SEC Nav Chairs, and others. Bob Detrick asked how UNOLS could provide input. Bob Houtman replied that there are speakers from the UNOLS Community that will present to the NRAC and that these individuals could be contacted.

2006 UNOLS Fleet schedules, estimated operation costs, and 2007 ship scheduling - Liz Benner, Ship Scheduling Committee Co-Chair provided a report. Her slides are included as *Appendix IV*. Liz began with a review of the scheduling process for finalizing 2006 operating schedules. In December 2005, schedulers were advised of NOAA budget cuts based on Congressional appropriations. A January 2006 scheduling meeting was held to reassess large ship schedules and intermediate ships impacted by NOAA budget cuts. They also took a preliminary look at 2007 operations. Linda indicated that the 2007 NSF budget for ship operations would likely be level with the 2006 budget.

Most of the NSF ship-ops funds for 2007 are already obligated and very few if any days will be funded out of the May 2006 panel. Also, a decision has been made to move a CLIVAR cruise in the Indian Ocean to an earlier than planned year to take advantage of a ship being in the same area for another funded project. They also looked at the OBS schedules and R/V *Langseth* requests.

Liz explained the plan for 2007 scheduling. There are a lot of double-bookings, which will need to be resolved. There are not a lot of Letters of Intent (LOIs) posted, and they are light in work. Scheduling meetings via phone/web conferences to sort out double bookings and resolve potential problems will begin in late spring and continue throughout the summer. The Ship Scheduling meeting normally held in July at NSF in Arlington, VA will be deferred to September. With the prospect of continued light schedules, the Scheduling Committee requests that the UNOLS Council provide recommendations for a rotating lay-up schedule. Planning for this possibility should start immediately.

Liz reviewed the slides that included charts showing the data from schedules and requests. The charts illustrate the budget shortfall problems. From 2002 to 2006 there was an upward trend in operation costs with a downward trend in the total number of ship days.

Linda Goad suggested that choosing ships for lay-up could be done by pulling names out of a hat to determine the order of lay-ups. All Global ships (excluding *Langseth* and *Atlantis*) and the East and West coast intermediate vessel names should be placed in the hat.

Discussion followed:

Marcia McNutt said that her ad hoc committee had not considered pulling names from a hat as a method for determining lay-ups, but it could be part of a thoughtful process. The ad hoc committee did point out that full lay-ups were more cost effective than partials. They also recommended considering early ship retirements. Ships that were close to retirement with weak

schedules could be laid up and retired early, especially if a replacement was identified for that ship. The subcommittee also thought some relief should be given to single ship operators, as multi-ship operations have more opportunities for retaining crew.

There was discussion about whether costs would continue to rise at a rate equal to or greater than the increases in the OCE ship-ops budget. Fuel is a big factor and the trends for fuel costs are somewhat unknown. Discussion then ensued about the use of alternative technologies to help mitigate the costs of fuel. The realities of trying new technologies were discussed. This is something that is examined with new ship construction but will probably only be tried when it is proven. There is concern that if an innovative ship is built, and it does not work, there would not be funds available for a replacement. Dan Rolland pointed out that research ships are unique in the way they operate, spending much time on station. Many of the innovative propulsion designs are optimized for ships that cruise most of the time. Fuel cell technology can be applied to ships, but the initial investment will be very high, and it will take many years for return on the initial investment.

There was discussion about how many ships are needed. For 2007, it seems clear that lay-ups should include a Global ship, one east coast intermediate and one west coast intermediate, according to Linda. Also, *Alpha Helix* should be laid up with the current demand. If one Global ship and two Intermediate ships were laid up, approximately \$12M would be saved (Global = \$7M annually, Intermediate = \$2.5M).

Linda and Dolly believe that serious consideration should be given to retirements in order to free up a significant amount of money for other ship operations.

Bob Detrick suggested that UNOLS formally request from ORION an estimate of what their ship use projections would be. ORION should have these projections by August 2006. Questions asked included: Do long term project needs warrant maintaining excess Fleet capacity? Is the cost of the excess capacity affordable? Jim Cochran asked where the money would come from to support the ocean observatories. Reply – This is not totally clear, but is would probably be from a mix of OCE funds.

Curt Collins asked who should make the decision regarding ship lay ups. Peter Wiebe replied that the Council should make recommendations to the agencies. There is an ad-hoc committee that can be resurrected if the members are willing, or a new ad hoc committee could be formed.

Some of the long-term considerations include:

- The Fleet scheduling process in future years
- Methods for reducing the time between proposal award and project scheduling
- Review long-term recommendations from Marcia McNutt's ad-hoc committee. Determine if further action is required.
- Global Class Mid-Life Refits? What are the needs and possibilities?

Linda Goad asked if OE would only use their ship when it comes into service. Beth White replied that NOAA will use *Okeanus Explorer*, but will also use other ships. Linda indicated that this would likely have an impact on UNOLS ships. OE would still probably use *Alvin* and HBOI assets.

Rob Pinkel commented that a confusing message is being sent to the community. There is the opinion that one should not submit proposals for ship time because no time is available in 2007 and work is being deferred. At the same time we are being told that fewer ships are needed to meet future demand.

Alvin Replacement Status – Bob Detrick reported on the status of the Alvin replacement effort. Woods Hole Oceanographic Institution (WHOI) signed a contract with South West Research Industries (SWRI) to be the prime contractor for the sphere construction. SWRI visited several possible vendors for the titanium sphere fabrication. Vehicle design and fabrication will be handled through a separate contractor. A Request for Information (RFI) will be issued in the next couple of months and a Request for Proposals (RFP) is expected it the fall. The oversight committee has reviewed the specifications. Work on the battery design and finding vendors for the buoyancy foam have also proceeded in parallel. The long delivery time and skyrocketing prices of titanium are the biggest problems they are facing. The lead-time for titanium is about 52 weeks for delivery.

FOFC Fleet Renewal Plan Update – Beth White provided an update on the Federal Fleet Renewal plan, which started as an update to the FOFC Academic fleet renewal plan. It now covers the academic fleet, NOAA fleet, Coast Guard Icebreakers, Navy survey vessels, EPA and other vessels. They had a draft ready in September 2005, but there were concerns about OMB's role in review of the renewal plan. FOFC consulted with OMB and the feedback they received was that the only things that should be in the renewal plan were those that were in a submitted or approved/appropriated public budget. This required FOFC to reconsider those ships that were not yet in a submitted budget, such as the Ocean Class vessels. FOFC hired a new technical writer and then submitted a new draft to the FOFC principals in January 2006. Kathy Olsen, the deputy director of NSF, will meet with the head of CEQ to discuss what the process should be with writing these plans based on the OMB review. In the meantime, Holly Smith and Bob Houtman are working to incorporate some of the suggested changes. When ready, the draft would be distributed for agencies review. It may also go out for public comment, but this hasn't been confirmed. The report would be a five year report with a review every year.

FIC Meeting Summary and Fleet Improvement Plan Update - Dave Hebert, FIC Chair, reported on the development of the Fleet Improvement Plan (FIP). The FIP is not constrained by length and will include a more thorough discussion (than the FOFC Plan) of the science imperatives needing facility support in the future. The FIP would include the planned Ocean Class vessels. Including the facility requirements for the ocean observatories is planned, but is moving slowly while we wait for those to be better defined. The FIP will also provide information on what UNOLS is. The FIP will provide detail on some of the background behind utilization numbers, peak demand and other factors. One of the sections that FIC has not drafted yet is what should be the future fleet composition. As a starting point, the FOFC plan will be used as the blueprint for fleet renewal. The FIC would like to have the next draft of the document by July.

Open Discussion on Ship Lay-Ups or Retirements - Peter Wiebe opened the discussion by stating that we need a process to think about lay-ups and retirements, but not until we have a lot more information. We should have more information by July. The schedulers will have a better idea on ship operations for 2007. The NRAC recommendations should be available. Agency budgets for 2007 will hopefully be better known. The following questions and comments were raised during the discussion:

The question was raised - How would we go about recommending lay-ups or retirements in a fair and informed way? Reply - A process should be developed that shows how the decision will be made.

The community values must be defined. Some values include:

- Maximizing the number of science days for science within the available dollars.
- Maintaining fleet capacity for future requirements.
- Maintain or maximize the diversity of the facility providers
- Maintain a geographic distribution of ship support.

Question - How will the values be ranked that would be used for deciding the lay-up and retirement recommendations?

Ideas:

- Put schedulers for each class/region in a room and have them develop schedules that are cost effective and a recommendation for lay-ups.
- Build four reasonable schedules and then assign them to ships based on cost effectiveness.
- Have the directors and operators make recommendations.

Recommendations regarding lay-ups are needed by late summer at the latest, but earlier is better. The question was asked if there are any other incentives for laying up your institution's ship. It was noted that "hot" lay-ups do not save money.

There was discussion on state support for ship time and the concern that lay-ups would jeopardize the chances of securing future funds.

Rob Pinkel commented that he feels that it is very odd that we are talking about retirements. The impact of having fewer ships to support ocean observatories should be considered.

Developing recommendations for lay-ups should be done in a multi-faceted way:

- Schedulers will optimize the schedules. They need additional information regarding NOAA time, Navy time, and State time.
- Council should define the values and establish the criteria.
- Provide some criteria for rotating lay-ups.

There is a concern that retiring ships would signal a lack of need for new ships. This is not the case we should be making. Al Suchy asked if this process would send a mixed message to those that are making decisions about Ocean Class acquisition. Mike Prince replied that this could be seen as consistent with the Fleet Renewal Plan. Older ships are being retired so that the new, more capable ships of the Fleet Plan can come on line. Dolly added this is similar to what took place when the old R/V *Thompson* and R/V *Washington* were retired before their replacements came into service.

Peter Wiebe, Curt Collins, Peter Ortner, Marcia McNutt and Wilf Gardner volunteered to draft a charge for dealing with lay-up and retirement criteria. They will present the draft during Day 2 of the meeting.

To support the effort:

- Beth White will find out about NOAA ship time request (STR) allocation and submission.
- John Freitag will ask for Navy STRs
- Schedulers will be asked to define "other" ship time.
- Shannon McArthur will be contacted about the possibility of providing a UNOLS ship or two for the DART work in 2007. Could two six-month periods on two different ships be accommodated? Could there be any cost guarantees negotiated if work is delayed or cancelled?

Break

American's with Disabilities Act (ADA) Guidelines – Terry Whitledge reported on the status of efforts to develop guidelines for research vessels to accommodate researchers with disabilities. His slides are included as *Appendix V*. Members include:

- Terry Whitledge (UAF) Chair, FIC Member
- Amy Bower (WHOI) Sea-going Scientist
- Eric Buck (SIO) Ship Master
- David Chapman (UDel)
- Jim Cochran (LDEO) Langseth Conversion Rep, FIC Member
- Matt Hawkins (UDel) Safety Committee Rep, New Vessel Operator
- Dennis Nixon (URI) Risk Manager
- Al Suchy (WHOI) Marine Superintendent
- Joe Ustach (Duke) RVTEC Rep
- David Glover (WHOI) Disabled Scientist (corresponding member)

Their tasking is to:

- Draft preliminary ADA Guidelines for the Regional Class acquisition effort.
- Convene a 2-day community workshop to define shipboard and procedural guidelines required to accommodate sea-going scientists with disabilities.
- Establish general ADA Guidelines for new ship construction/conversion.
- Draft procedural guidelines for at-sea research operations by seagoing scientists with disabilities.

They hope to have draft ADA guidelines for the Regional Class acquisition effort by April 2006. These would be sent to NSF and PEOShips. For the Regional Class guidelines, they will look at the *Hugh R. Sharp, Langseth* and ARRV efforts to see what can be done. They will also look at Terry's draft paper on guidelines and at the Passenger Vessel guidelines.

Once the Regional Class guidelines are drafted, the committee will work to establish general ADA Guidelines for new ship construction/conversion. They will define the UNOLS philosophy for accommodating persons with disabilities at sea. ADA guidelines for UNOLS vessels would be established to take into consideration the various vessel classes/sizes, the nature of the disability (hearing, vision, and mobility), and the levels of compliance that should be recommended. Estimated costs associated with the various design modifications necessary to accommodate ADA requirements would be evaluated and defined.

The committee is considering holding a workshop, possibly at an operating institution with part

of the meeting on a vessel. They might bring in guest speakers such as from the Coast Guard, Naval Architects, ABS, etc. For the ADA procedural guidelines they would look at egress, shipboard mobility, access areas and emergency procedures.

Terry reviewed the project timeline. They hope to have a draft document for review in the fall 2006. Lastly, Terry shared information on the Jubilee Sailing Trust, which has square-rigged sailing vessels and makes them working vessels for people with disabilities.

Ship Design, Construction, Conversion, Transfers, and UNOLS Vessel Designations

Marcus Langseth Conversion Status - Jim Cochran reported on the Langseth conversion effort. The conversion was awarded to Shelburne Yard in Nova Scotia. During transit to the yard from Rhode Island, there was a noise analysis test conducted and they expect a report in the next few weeks. LDEO has pre-purchased several items to avoid tax, mark-ups, and delays in delivery. These include an A-Frame and crane. The plan is to finish the yard work in early July 2006 and then start the integration period and installation of equipment. The calibration and shakedown period will take place after the integration period. There are proposals in to conduct these tests. There is a hope that they can collect some 3-D data sets during the trials. Pictures of the ship conversion are included in Appendix VI.

Question – Will there be a multibeam? Jim replied – Yes, there would be a multibeam installed on a pod. It is modeled after the French system.

New Standing Committee for the National Oceanographic Facility (Seismic Vessel) – Mike Prince reported on the Marcus Langseth Science Oversight Committee (MLSOC). His slides are included as *Appendix VII*. Steve Holbrook is the Committee Chair. The current oversight committee, EROCC, includes Peter Littlewood and Tom Shipley, who are also on the MLSOC to provide continuity. LDEO is now sharing information with both groups so that they can come up to speed. The first real meeting of the MLSOC is probably no earlier than Fall AGU 2006.

Mike Prince commented that *Langseth* scheduling in the out years is going to be an issue as the requests are all over the globe. The dayrate is estimated at \$29k plus, but will be variable depending on the type operation. There is an issue on what should be provided as an output.

R/V Seward Johnson II Update – Annette DeSilva reported that R/V Seward Johnson II (SJII) would arrive in Bermuda on March 17th. Slides are included as Appendix VIII. SJII began a 4.5 month modification and maintenance period at Lyon's Shipyard in Norfolk, VA on 23 October 2005. In December 2005 Weatherbird II arrived at Lyon's shipyard for cross decking. SJII inclining tests, and ABS and Coast Guard inspections are complete. The christening / naming ceremony is planned on 20 March in Hamilton, Bermuda. The ship inspection is scheduled for April 10 & 11, 2006. SJII begins operations from BBSR and support of BATS in April 2006. Weatherbird II is for sale. The R/V Seward Johnson II major modifications are listed in Appendix VIII.

R/V *Hugh R. Sharp* **Update** – Next Annette provided an update on R/V *Hugh R. Sharp*. The ship arrived at U. Delaware, Lewis, DE, on Jan 11, 2006. The winter months were spent outfitting and cross decking. There were weekly underway trials to test various systems, experiment with maneuvering, deployment of gear, and to run drills. The JMS inspection is scheduled for March 21-22 and the first cruise is on March 26-28. The new Caley CTD handling

system is scheduled for installation in May 2006. A small Markey CTD winch has been borrowed from *SJII* for the meantime. On May 7th there will be a commissioning ceremony at U. Delaware. *Cape Henlopen* has been sold to a private party.

This concludes the joint meeting of the FIC and Council.

Safety Standards for Human Occupied Vehicles (HOVs) – Annette DeSilva provided the status of the effort to establish safety standards for HOVs. Slides are included in *Appendix VIII*. NSF and NOAA have provided DESSC with a draft task statement to establish safety standards for HOVs. It will be a multiyear effort.

The Committee membership includes:

- Dana Wilkes NOAA Representative
- Tim Askew (HBOI) HOV Operator, UNOLS Safety Committee
- Colleen Cavanaugh (Harvard U.) Science HOV user
- Pat Hickey (WHOI) HOV pilot
- Terry Kerby (HURL) HOV Operator and Pilot
- Dan Schwartz (UW) Marine Superintendent, past Ship Captain
- Barrie Walden (WHOI) HOV Operator
- Craig Young (U. of OR) Science HOV user, DESSC

The first meeting was held on January 25th. The agenda included reports from HOV operators from WHOI, Hawaii Undersea Research Laboratory (HURL), and Harbor Branch Oceanographic Institution (HBOI). The Committee brainstormed on what areas should be addressed by an HOV Safety Standards Document. Writing and research assignments were defined. The Committee decided that the HOV Safety Standards would be modeled after the Research Vessel Safety Standards.

General Topics of the document will address:

- The vehicle
- The ship
 - Submersible Support Ship Procedures
 - o ISM and Ship Support
- The handling system
- The Operation
 - o Operational Guidelines and Limitations
 - o Emergency Procedures
- Training
- Science Party Guidelines

US Fish & Wildlife Service (USFWS) Importation Policy – Beth White provided the status of NSF and NOAA discussions to address issues that arose during the summer 2005 cruise on R/V *Ron Brown*. Scientists were required to report and provide an inventory of all "wildlife" specimens collected during the cruise, including those that did not fall under the CITIES treaty of endangered species.

Guidance is needed to determine if scientists who collect non-CITIES listed samples from the high seas, international waters, are considered to be "importing" under this regulation. Beth reported on her efforts to find points of contact within USFWS to try to resolve the interpretation of the regulations and how they should be complied with. Beth will continue to pursue this issue

and Mike Reeve will help.

At present, specimens can be collected, but you might have to provide a detail account of all collections and species. We need to determine if the law applies, then if it does apply determine which forms are needed.

Marine Mammals and Acoustic Permitting Update – Mike Reeve provided the report. The Marine Mammal Commission deliberated for two years and could not come to a consensus for a final report. There will be a series of "caucus" reports from NGO's, agencies and from the steering committee, which might provide an overview. These will be sent to Congress.

Mike Reeve and Mike Purdy went to Bermuda to seek the requirements for getting a permit to conduct Marcia McNutt's acoustic survey. After several inquiries, Bermuda indicated that the elements affecting the first denial of the cruise had not changed. There is legislation in progress in Bermuda that will deal with the safety of marine mammals within 200 miles of Bermuda.

The work on the programmatic Environmental Impact Statements (EIS) continues and expected completion is around July 2007. This is costing about \$1.7M of OCE funds. The EIS will provide a high level clearance for seismic work in general. 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. NSF has hired an Environmental Officer, Bill Lang.

Adjourn Day One

Day 2: Council Meeting

Call the Meeting: Peter Wiebe, UNOLS Chair, called Day 2 of the meeting to order.

Ship Lay-up/Retirements - The topic of lay-ups and retirements was revisited. A task statement was drafted overnight for the ad-hoc committee on ship lay-ups/retirements (Marcia McNutt, Curt Collins, Wilf Gardner, and Peter Ortner). Peter Wiebe provided a review of the document (also included in *Appendix IX*):

Draft Charge to Ship Lay-up/retirement Subcommittee

Problem:

There appears to be insufficient funds to keep all of the designated UNOLS vessels operating at optimal levels in 2007 and perhaps for several more years. The shortfall is now estimated to be about \$12 million, which could be accommodated by the lay-up or retirement of one of the four general purpose global class ships and two of the general purpose intermediates (one from each coast). Partial lay-ups as was done in 2006 have been ruled out. The decision to lay-up or retire vessels depends upon the need for theses assets in the out-years before the new regional and ocean class vessels are constructed.

Information Required:

• To make a recommendation about the specific vessels to be laid-up or retired, information about the ship use by NOAA and ONR (and other agencies) is needed so that

- an optimization of the schedule for the fleet can take place. This would allow determination of which ships need to be laid-up.
- Criteria for rotating lay-ups need to be developed if retirements are ruled out for now.
- Information about the UNOLS ship needs for the ORION observatory installation and maintenance is needed to help determine whether to recommend rotating lay-ups or retirements.
- Information about NOAA DART mooring installation ship requirements in 2007 and possibility that a laid-up Global Class Vessel could do the work cost effectively needs to be determined.
- The NRAC deliberations about the NAVY construction of Ocean Class vessels need to be known.

Time-frame for Decision/Recommendation:

Most of the information should be available before the summer UNOLS council meeting (by phone conference). Draft recommendations should be prepared and, after council discussion, finalized.

Charge:

Develop a short (3-5 page) white paper to focus UNOLS Council discussion and agreement upon an equitable and defensible process to be followed by UNOLS to arrive upon a recommendation by July 2006 as to which UNOLS vessels would be laid up in 2007 or beyond or retired.

Membership:

- Chair: Marcia McNutt
- Membership: Curt Collins, Wilf Gardner, and Peter Ortner

Questions to Address:

- What values need to be considered in making a recommendation (cost-savings realized; institutional impact; whether a specific vessel is operated by a multiple or single vessel operator, planned retirement date, geographic distribution; class of vessel(s); and number of vessels, etc.);
- What relative weightings of these general values are appropriate in this specific context and why;
- How will out-year recommendations be made (and what is the relevancy of prior year recommendations);
- Who (and how many) should develop the substantive recommendations to UNOLS Council (RVOC subcommittee(s); schedulers; lab directors, others?);
- By what process should the above group settle upon the recommendation it will make to the UNOLS Council (majority; super-majority; consensus; non-veto consensus, randomization, etc.);
- What additional information is relevant to the eventual substantive recommendation and when is the estimate to be available (ORION needs; individual schedules; shiptime request constraints; NOAA lease for DART installation; other agency (NOAA, ONR, USGS, EPA, BLM, state) shiptime requirements)?

Exclude from Scope:

No substantive recommendations (which ships and when) at this stage

Council discussion followed:

Linda Goad stated that enough information is known now to make decisions regarding lay-ups. She would like this to happen now. Mike Prince replied that we don't disagree with some of this. We agree with the scale of the problem, but we feel that additional information is needed. Linda's major concern is the timeline.

Rob Pinkel expressed concern that this item wasn't on the meeting agenda. He would like to know how the decision was made to reduce the Fleet size by 20% when we are being told to expect a 7% increase. There needs to be a conscious decision that this is the right way to proceed. This is a major agenda item, but it wasn't included on the agenda. Mike Reeve replied that the fact that the Global ship costs are rising is known and NSF does not have the funds in their budget to support the entire fleet. Peter Ortner also pointed out that this is an issue that most of the Council was aware of since it has been an on-going issue.

The UNOLS Office will poll the Council to determine if they want a face-to-face meeting for the next Council meeting and which dates they are available.

The ad-hoc committee will work to complete their draft white paper by the end of May and send it to the Council before their next meeting.

RVOC Safety Committee Membership and Safe Working Loads – Tim Askew reviewed the Safety Committee membership: Tom Althouse (SIO), Chair, Matt Hawkins (UDel), Peter Zerr (OSU), Todd Chlaupak (URI), Steve Lanoux (UT), Bill Martin (UW, RVTEC Rep), Tim Askew (HBOI), and Paul Ljunggren (LDEO).

The issue of safe working loads for wire ropes, winches, over boarding equipment, etc. (hardware) is still unresolved. No uniform policy, or guidelines exists among all UNOLS Operators. The safety committee will discuss this at their next meeting on Monday, 24 April. Also the topics of "winch and wire" (safe working loads, wire specifications, winch and wire inventories, and fiber optic cable), the "Load handling system workshop," and wire testing will be special reports at RVOC.

Codes of Conduct - The Impact of Scientific Studies on the Environment – It was decided to pursue a speaker for a future meeting to address codes of conduct and in particular the need to prevent interference between projects and minimize impacts on the environment by scientific research. Marcia McNutt remarked that once ocean observatories are established, there must be procedures in place so that one experiment does not impact any other science at that site. ORION would probably be the lead on this.

UNOLS Briefing Package for Congressional Staffers, report on the CORE Ocean Public Policy Forum - Peter Wiebe reported that he has put together a UNOLS brochure. He gets the sense that many people in the community do not know what "UNOLS" is. The draft brochure was put together quickly (*Appendix X*). Peter used it last week during his visit to Washington, DC. He has also circulated it to a few individuals for comment. Terry Schaff provided some useful comments. Peter asked the Council to review the draft and provide feedback. Marcia thought it would be important for the brochure to consist of sound bites and the operators' states should be shown. As long as the brochure is used as informational literature, it would not be considered a lobbying tool.

Notification and reporting of mooring locations, safety zones, and release code conflicts - Mike Prince provided an update. There are problems with interference with ships and other moorings. Problems associated with release codes are a growing issue. Information about mooring locations will be included on the UNOLS web site if appropriate.

Frequency Spectrum Management – RVTEC has formed a subcommittee to liaison and provide input to CORF, Government managers, and Otis Brown. The problem is that bandwidth is being sold off to commercial industries, radio astronomers, etc. The RVTEC will take the first step in defining the radio spectrum used from ships. There may be additional information needed to define other ocean science uses.

Gender Climate at sea –RVOC has been tasked to address this issue. It has been recommended that a uniform Fleet policy be established to inform sea going scientists and crews on whom to report to in the event of a harassment incident. An example of SIO's form, "Policies Regarding Alcohol, Drugs and Sexual Harassment Aboard SIO Research Vessels" can be viewed at http://www.unols.org/meetings/2006/200603cnc/reading/SIO_DAandSH_pol.pdf and in Appendix XI. This form requires a signature from the scientists. Tim Askew reported that most if not all operations have some policy in place that addresses harassment (sexual or other). One of the special reports at next months RVOC meeting will be the results of a "harassment survey" conducted by WHOI and will be presented by Liz Caporelli. They plan to have the operators bring to the meeting their institutions' policy(s) on alcohol, drugs, and sexual harassment aboard their vessels, along with any forms that require a signature to acknowledge that the policy has been read and understood. The plan would be to establish a uniform policy and form for all operations.

Other Business

Annual meeting – The date of the 2006 UNOLS Annual Meeting is October 6th. Keynote Speaker suggestions were discussed and included Leon E. Panetta, Admiral Watkins, RADM Landay (CNR), and Representative Boehert. Marcia will contact Leon Panetta. It was also agreed that invitations should be sent to the new NSF Division Director, Julie Morris, and to RADM Landay of ONR.

Break

Committee Reports – Committee Chairs had an opportunity to raise issues requiring Council attention. Written reports were provided in advance of the meeting and are available in *Appendix XII*.

Arctic Icebreaker Coordinating Committee (AICC) - Margo Edwards provided the report. USCGC HEALY is preparing for the summer 2006 field season. Before the summer programs begin the ship will be making an unscheduled visit to the dry dock to fix a bow propeller. This is likely to push the start of the summer season back by a few days. The first trip will begin in mid-April with an oceanographic program to the Bering Sea.

Deep Freeze 2006 had problems. The Russian Vessel, *Krasin*, was contracted to break out the channel, which they did. But they then broke a blade and could not do the escort. The *Polar Star* was recalled from Seattle to assist. Also, NSF contracted for the *Kapitan Khlebnikov to*

assist with the escort. By the time *Polar Star* arrived the escort had been completed. This will be an expensive Deep Freeze year. Margo showed the iceberg and its movement.

Margo showed the recommendations from the interim report from the National Academies Study (NAS) on icebreakers. Margo stated that she thinks that the relationship between mid to upper management at NSF and USCG has been deteriorating while at the same time the relationship between the ship and their support crew with the science community has been improving. There was a discussion about how the NAS report will impact this relationship. The report will address some of the underlying issues. It is not clear whether or not the final report will address specific recommendations for new or overhauled Coast Guard icebreakers. Margo felt that the ship's Captain and Science users should be involved in the discussions with the higher-level folks to help bring the focus back to the goals and to try to restore the cooperative approach.

DEEP Submergence Science Committee (DESSC) – Annette DeSilva provided the report. DESSC held their winter meeting in December at the Fall AGU. It was well attended with about 70 to 80 people. They heard from science users, the operator and agency reps. They looked at the requests for the vehicles and out year planning. Updates on the replacement HOV and the Hybrid ROV were provided.

Some of the current DESSC activities include:

- Establishing criteria for adding assets to the National Deep Submergence Facility (NDSF). After a few iterations, they are close to a final draft.
- An on-line survey will be developed so that the community can provide input on the types of sensors and science instrumentation that should be provided with the RHOV.
- Establishing HOV safety standards.

A call for DESSC nominations has been announced.

Fleet Improvement Committee (FIC) – The Committee activities were reported earlier in the meeting. There is one opening on FIC. Also, Niall Slowey's (TAMU) status has changed from Operator representative to Non-Operator representative. This will have to be addressed.

Research Vessel Operators' Committee Report - Tim Askew, RVOC Chair, provided a written report that is included in Appendix VII. University of Washington will host the 2006 meeting on April 25-27. The agenda is taking shape.

Research Vessel Technical Enhancement Committee (RVTEC) - Stewart Lamerdin, RVTEC Vice Chair, provided the report and included details about current RVTEC activities:

- INMARTECH 2006 The INMARTECH symposium is a biannual meeting where marine technicians from around the world meet and discuss issues and procedures common to all. This year Woods Hole Oceanographic Institution will host the symposium on Oct 17-19, 2006. The agenda is still in the planning stages.
- 2005 and 2006 RVTEC Meetings The annual RVTEC Meeting will be conducted on Oct 16, the day before the INMARTECH 2006. The 2005 RVTEC meeting included a half-day session for the RVTEC Managers. Items discussed included personnel training and retention, and group funding to procure spare components for fleet-wide specialized instrumentation.
- Committees:
 - o Stewart Lamerdin was elected as the RVTEC vice-chair.

- o Mary Lynn Dickson was elected to the Post-Cruise Assessment Committee
- o Joe Ustach was elected to the ADA Committee
- o In response to the Council's request for RVTEC to assist with the radio frequency spectrum issue, a Radio Frequency Subcommittee was created. Members include Richard Perry (chair), Steve Hartz, and Toby Martin.
- Regional Class Science Outfitting A small subset of technicians were assembled to address the technical specifications associated with the Statement of Requirements (SOR) issued by PEOShips for the Regional Class Research Vessels (RCRV). The group had representatives from across the fleet as well as a representative from FIC and UNOLS. All parties have responded well to this review and we feel that the time and effort spent now, revising the SOR, will result in a more cost-effective and useful Regional Class vessel.

Stewart thanked Peter Wiebe for attending the RVTEC meeting.

Scientific Committee on Oceanographic Aircraft Research (SCOAR) Report - John Bane, SCOAR Chair, reported that the last meeting was held in November 2005 by teleconference. A year ago, NASA reported that they were going to take several aircraft out of service. They now have one P3 still operating and the DC8 will be transferred to the University of North Dakota for operation. NOAA reported the acquisition of a third P3.

SCOAR is approaching its three-year anniversary. The rotation of members was worked out within the committee and approved by the Council. Ken Melville will step down at his request. Carl Friehe will rejoin the committee now that he is no longer at ONR. John Bane will stay on another two years, but only one more year as Chair. Other committee members will rotate off at one, two and three years to set up a staggered rotation.

John mentioned that the two main activities of SCOAR were to promote understanding and interaction with aircraft users and operators. The other major activity is to act as the science oversight committee for CIRPAS. Carl Friehe is a major past user of CIRPAS and would be well suited to this task.

The next meeting will be a joint meeting as usual, with ICCAGRA. There will be a third day, which will be an inaugural Aircraft Ocean Sciences Conference. Just over one hundred invitations to the conference were sent out and the responses for making presentations on the uses of aircraft in marine sciences have been very strong. An attendance of 30 to 40 people is anticipated. There might be a social get together the night before, perhaps with posters and a keynote speaker.

SSC and MLSOC – Reports were provided earlier in the meeting.

Form Nominating Committee – Peter Wiebe reported that a Nominating Committee is needed to review the Council membership and positions opening, and to recruit individuals to stand for election in 2006. The duties for the Nominating Committee are provided *Appendix XIII*.

The UNOLS Council terms that will be ending in 2006 include:

- Peter Wiebe Woods Hole Oceanographic Institution UNOLS Chair 9/02 -10/06
- Marcia McNutt Monterey Bay Aquarium Research Institute UNOLS Chair-Elect 109/04 -10/06

- Tim Cowles Oregon State University UNOLS Immediate Past Chair 9/98 10/06
- Curtis Collins Naval Postgraduate School Member Operator 9/00 9/06 (2nd term)
- Wilford Gardner Texas A & M University Member At Large 9/00 9/06 (2nd term)
- Cindy Lee Van Dover College of William and Mary Member Non-Operator 9/03 9/06 (1st term)

Peter appointed the following individuals to the Nominating Committee: Tim Cowles – operator (Chair), Wilf Gardner – non-operator institution, and Margo Edwards – Any UNOLS Institution.

Nomination should be sent to the UNOLS Office or Nominating Committee.

Calendar of UNOLS meetings for 2006 – Possible dates for the next Council meeting are June 20, 21, and 22. If an in-person meeting is held, we would need to provide justification to the agencies. The Office will poll the Council on availability and preference for an in-person meeting.

Other Issues of Interest:

Regional Ship Operator Selection - Wilf Gardner asked when the selection of the Regional Ship operators would take place. Mike Reeve replied that at the May meeting of the National Science Board, Margaret Leinen would present their plan to solicit for Regional ship operators. Unless the Science Board objects to the plan, NSF will move forward to announce the operator solicitation in summer 2006.

JOI, CORE, and UNOLS - Peter Wiebe asked if anyone had any information about the rumored merger of JOI and CORE into one organization. He had learned of this during the CORE Ocean Policy forum. Included in this, is the possibility of including UNOLS under this umbrella. Marcia McNutt replied that there has been a need for one voice for ocean sciences. A new, merged organization would still be governed by ocean science institutions. JOI is involved in operating facilities and CORE is involved in public education and advocacy. Bringing UNOLS into this umbrella is perceived to improve the long term planning for infrastructure and advocating for it. Since UNOLS is an advisory body to the agencies and is supported by the agencies it would be necessary to ensure that including UNOLS under JOI/CORE would not violate the rules against using federal dollars for lobbying. The details would have to be considered carefully and vetted by NSF and other agency attorneys.

Mike Reeve was asked for his views on this. He indicated that since it was the first he was learning of it, he would like to think about this further.

Adjourn – There was a motion to adjourn at 12:00 noon (Gardner/Edwards).