UNOLS COUNCIL MEETING

Via Teleconference and Web Conference Thurs. July 15 & Fri. July 16, 2004 1:00 pm – 4:00 pm EDT

A pdf version of these minutes can be downloaded by clicking <200407cncmi.pdf>.

Executive Summary

The UNOLS Council held their summer meeting on July 15 and 16, 2004. This meeting was the first of its kind with attendees participating via phone and web conferencing. To accommodate this format, there were no formal presentations and instead items requiring Council attention were discussed. Some of the major discussion topics included:

- Fleet renewal implementation
- Regional Class acquisition process and UNOLS representation on the IPT
- The FOFC update of their Long-Range Fleet Renewal Plan
- Revised vessel retirement dates and SLEP estimates.
- UNOLS Charter revisions and Guidelines for becoming a UNOLS vessel
- Annual Meeting preparations
- Conflicts of interest on UNOLS Committees
- UNOLS Priorities for 2004/2005

A variety of written reports and material were provided to the Council in advance of the meeting. These included Committee reports, Ocean Class Phase II study status, Global Class mid-life refit planning, EWING replacement plans, CAPE HENLOPEN Replacement Vessel status, Regional Class SMR prioritization recommendations, and UNOLS cable performance requirements.

Key issues, concerns, and findings identified during the meeting discussions included the following:

- Ocean Class vessel projected day rates are close to those of the existing Global Class ships. If operating costs for the new ships are higher and budgets do not increase, fewer ships can be supported and there will be fewer days available for science. If the UNOLS community is concerned about the more expensive ships, these concerns need to be voiced now.
- The FOFC update of the Fleet Renewal plan will be based on the agency view of budget realities. It will likely be more conservative than the current plan.
- UNOLS/FIC will revise and publish our own Fleet Renewal or Fleet Improvement Plan (FIP). It would be the basis for consistent recommendations by UNOLS to agencies and others. The FIP would articulate the real facility requirements needed to support expected science demand. The UNOLS FIP would project facility needs based on expected science needs as opposed to

budget projections. An increased emphasis on science justification for facilities capabilities is required.

- The Council reached consensus on a variety of proposed Charter changes. They
 recommended that the Council make UNOLS vessel/National Facility
 designations. A process for appealing Council designation decisions should be
 clearly defined.
- The FIC and UNOLS Office have been working to update the projected vessel retirement dates. Some preliminary findings indicate that most of the ships (>40m) can have their lifetimes extended 5·10 years for an estimated cost of \$1-5M for each vessel, but the Council has some important concerns regarding life extensions. The Service Life Extension Program (SLEP) estimates focus on maintaining the ship in an operational condition without enhancing the scientific capabilities of the platform. The existing Intermediate Class vessels do not meet most of the Ocean Class SMRs nor do they meet several of the Regional Class SMRs. The Regional Class ships currently in operation fall short of the Regional Class SMRs in many areas.
- The Council would like to keep abreast of marine mammals permitting and foreign clearances issues, and frequency spectrum management issues. These items will be included on the fall meeting agenda.
- NSF Legal Counsel, NSF program managers, and ONR program managers will be invited to the fall Council meeting to provide clear guidelines on conflicts of interest. These guidelines could then be considered by UNOLS in establishing criteria for membership on UNOLS committees and Council.
- Council members were encouraged to review and exchange ideas on how to modify "UNOLS 2003/2004 Objectives and Strategies for Achieving UNOLS Goals" for the coming year.

Recommendations/Endorsements

- DESSC Chair Position The Council agreed to support the plan for Debbie Kelly to serve as DESSC Chair and appoint Jeff Karson as a member of DESSC and her potential successor should she decide to step down early.
- UNOLS Representative to Regional Class Integrated Product Team The Council recommended that a letter be drafted to NSF expressing concerns, recommendations and requests for information/clarification regarding the IPT representative position.
- Update Fleet Improvement Plan (FIP) The Council recommended that the Fleet Improvement Plan (FIP) be updated to articulate the real facility requirements needed to support expected science demand.

- UNOLS Charter The Council endorsed proposed Charter changes and recommended that the Council make UNOLS vessel/National Facility designations. A process for appealing Council designation decisions should be clearly defined in the charter..
- RVOC By-Laws The Council approved the RVOC By-Laws as written. The Council recommended that the RVOC By-Laws be added to the UNOLS Charter.

Action Items:

<u>Task</u>	Assigned	<u>Status</u>
Revise March Minutes in accordance with Council	Annette	Complete
comments		
Send letter to Tim explaining scenario for new	Patty Fryer	
DESSC Chair assignment and term length		
Send URL for Security Plan template to RVOC.	Tim Askew	
Regional Class Design and Acquisition Process -	Tim, Council,	
Draft letter to NSF expressing concerns,	Office	
recommendations and requests for		
information/clarification:		
 State concerns and desires/requirements for IPT 		
representative.		
 Consider how the UNOLS rep should be 		
selected and chosen, document recommended		
process		
 Recommend a separate UNOLS rep for each 		
IPT to deal with intellectual property issues		
UNOLS Fleet Improvement/Renewal Plan:	FIC and UNOLS	
UNOLS/FIC should revise and publish a UNOLS	Office	
Fleet Renewal or updated Fleet Improvement Plan		
 The report should be the basis for consistent 		
recommendations by UNOLS to agencies and		
others.		
 Articulate the real facility requirements to 		
support expected science demand.		
 Increased emphasis on science justification for 		
facilities capabilities		
 Project facility needs based on expected science 		
needs as opposed to budget projections		
- Recommend implementation strategies	GL EDG 1	T
FOFC Long-range Plan – UNOLS provide input to	- SLEPS and	Input for
the FOFC working group for their effort to update the	dates –	FOFC
Fleet Long Range Plan.	FIC/Office	Retreat - sent
- Vessel Retirement and SLEPs	- Projected Cost	
 Create spreadsheet/charts that shows projected 	– Office	

costs number of shins available days and	EOEC	
costs, number of ships, available days and berths with proposed vessels	- FOFC document –	
·		
 Tim, Peter, Bob and Dave to work with Mike and Annette to create document for FOFC 	Tim, Peter W, Bob Knox,	
	<i>'</i>	
retreat based on input from operators	Dave	
Charter - Consensus on proposed changes:	Charlie Flagg	
- Add DESSC and SCOAR Terms of Reference	and Peter Ortner	
as Annex VII and Annex VIII	to finalize draft	
- Adopt common format for the Annexes	language for all	
- "Shall" replace "will" in many cases	charter revisions	
- Incorporate Revision 4 of the AICC annex	to be presented	
- The liaison of RVTEC/RVOC with other	to Council.	
UNOLS Standing Committees		
- UNOLS vessel/National Facility designation		
procedure - Council designation (change Annex		
II to reflect this, delete last sentence in draft		
charter change.)		
- Add clarification of appeal process; clarify how		
issues can be brought before the membership.	Cin de Les Ven	
Changes to guidelines for becoming a UNOLS vessel	Cindy Lee Van Dover and Curt	
- Draft rewrite of these guidelines, consistent with	Collins with	
charter changes.	UNOLS Office,	
	Charlie Flagg	
	and Peter Ortner	
Keynote speaker	Tim Cowles and	Bob
- Follow up on ADM Watkins letter	UNOLS Office	Winokur
 If negative response from Watkins, work to 	ONOLS Office	invited and
form a panel of speakers:		accepted.
Margaret Leinen		accepted.
 Congressional member/ staffer 		
Member of Ocean Commission other		
than Watkins		
Also, consider a retrospective and future vision		
speech by Dick Pittenger on panel.		
RVOC By-Laws – Include as Appendix to Charter?	Tim Askew and	Done
include as Appendix to Charter:	Office	Done
Marine Mammals Permitting and Foreign Clearances	UNOLS Office	NSF
- include on Fall agenda, contact NMFS and NSF,		contacted,
review record from recent meetings		will report
20.12 1000ta Hom toom mounts		on current
	i	
		activities
		activities. Still need to
		Still need to
		Still need to contact
UNOLS Cable Performance Requirements - Chair and	Tim Cowles and	Still need to

Vice Chair to draft letter to NSF and other agencies recommending appropriate action.	Peter Wiebe	
Spectrum Management Issues - Make contact with NOAA personnel working on this issue, invite to Fall meeting	UNOLS Office	Contacted first person, referred to others, still to be contacted
Conflict of Interests on UNOLS Committees - Invite NSF Legal and program managers, ONR program managers to provide clear guidelines that could be considered by UNOLS in establishing criteria for membership on UNOLS committees and Council. Agenda item for fall meeting.	Tim Cowles and UNOLS Office	
UNOLS Priorities for 2004 – 2005 – Incorporate comments and circulate to Council for further review.	UNOLS Office & Council	

Appendices

- I. Meeting Agenda
- II. Meeting Participant List
- III. UNOLS Committee Reports
- IV. Regional Class SMR Prioritization Final report
- V. Phase II Study Project Summary
- VI. Global Class SMR Tasking and Committee Status
- VII. Revised UNOLS Vessel Retirement Dates and SLEPs
- VIII. Updated Utilization Projections with Observatory Facility Needs
 - IX. EWING Replacement Plans:
 - A. EWING Replacement Status Report
 - B. Replacement Vessel Project Timeline
 - C. Charge to ERROC
 - X. Status of CAPE HENLOPEN Replacement effort
 - XI. RVOC By-Laws Council review and consider endorsement
- XII. Seismic Cruise Proposal Deadlines.

Meeting Minutes:

Session I – July 15, 2004

Call the Meeting: Tim Cowles, UNOLS Chair, called the meeting to order at 1300 hours. This meeting was the first of its kind, with attendees participating via phone and web conferencing. Meeting participants introduced themselves. The meeting agenda is included as *Appendix I* and the attendee list is included as *Appendix II*.

Accept the minutes of the March 2004 Council Meeting – Tim Cowles asked the Council if there were any changes to the draft minutes of the March 2004 meeting. Curt Collins indicated that the Council concerns regarding the Regional Class acquisition process should be included in the minutes. The concern over the lack of community input into the proposed acquisition process, as well as the issue of the additional cost to the construction program by having a second agency (NAVSEA) involved in the construction management should be included.

The Council accepted the meeting minutes conditional on the addition of the comments addressed by Curt Collins.

Committee Reports – Prior to the meeting Committee Chairs were requested to submit reports summarizing current and planned activities. These reports are included as *Appendix III*. Tim Cowles introduced each Committee Chair and invited them to raise any additional issues of interest to the Council.

<u>DEep Submergence Science Committee (DESSC)</u> – Patty Fryer, DESSC Chair, submitted a written report that summarizes the Committee's May meeting (<u>Appendix III</u>). The meeting included reports on:

- NDSF vehicle operations and upgrades for ALVIN, the ROVs and NDSF Support Ships.
- New security rules.
- Archiving of deep submergence data
- The new interim Chief Scientist for the NDSF is Maurice Tivey. A search for permanent Chief Scientist continues.
- Status report of the internal WHOI Access to the Sea Task Force
- Request for upgrades to science sensors and operational capabilities of NDSF vehicles were reviewed and the status of the response to Tim Shank's survey of the biological community's needs.
- Rock drill status.
- Discussion on the potential for transitioning ABE into NDSF.
- Deep Submergence scheduling for 2005 and beyond.
- DESSC identified high priority areas and issues that are likely to arise in the next three years.
- ALVIN replacement proposal status.
- Status of the HROV.

Patty explained that nominees for replacement of DESSC members who are completing terms have not yet been selected. At their May meeting, nominations and applications were presented and reviewed. Because additional CVs and statements of interest were needed, voting on new members and the new chair was postponed until later this summer.

Patty reported that during the DESSC meeting, NSF raised the issue of committee membership and conflicts of interest. They indicated that a facility oversight committee should not include a representative(s) from its respective operating institution. As a

result, they have requested that Tim Shank step down from DESSC. Tim has been an active member of DESSC and his participation will be missed. Patty indicated that she wanted to bring this to the attention of the Council as it might apply to other UNOLS Committees. Tim Cowles added that he has discussed the conflict of interest issue with NSF and has requested a legal definition of the conflict. Dolly Dieter has indicated that NSF Legal Counsel can be available at the fall Council meeting to further address the issue.

Lastly, Patty discussed DESSC's recommendations regarding the committee Chair position. DESSC would like to nominate Debbie Kelley to serve as the Chair. Debbie is an active vehicle user and is currently serving on DESSC. Debbie is interested in the position, but is concerned that she may wish to step down early, perhaps after serving one year. DESSC has recommended that Jeff Karson be nominated to DESSC and if Debbie decides to step down early, Jeff could take over as Chair. Jeff has a great deal of submersible experience. Jeff has been contacted and is willing to serve as Chair if called upon. The UNOLS Council discussed the DESSC recommendation. They agreed to support the plan for Debbie Kelly to serve as DESSC Chair and appoint Jeff Karson as her potential successor should she decide to step down early. Tim recommended that Patty send a letter to him with this nomination arrangement.

<u>Arctic Icebreaker Coordinating Committee (AICC)</u> – Margo Edwards, AICC Chair, provided information on the USCG icebreakers. Her written report is in <u>Appendix III</u>.

The "Perfect Storm" scenario for the Polar Class icebreakers is happening sooner than later. During an official inspection, two out of three of POLAR SEA's engines were "condemned." Given the extent and expense of the repairs needed, the POLAR SEA will be unable to support Deep Freeze in 2005. POLAR SEA will be off line for at least 12 months and repair cost are estimated at \$5M to \$10M. POLAR STAR's condition isn't good enough to support Deep Freeze alone in 2005 if the ice around McMurdo is thick. NSF is currently exploring options for sending a second ship south, including HEALY or using a foreign icebreaker. Regardless of how many ships are needed to support Deep Freeze, it is highly unlikely that the POLAR class vessels will be used for Arctic science anytime soon. Both NSF and USCG are addressing this issue. More information about the CG/NSF plan for POLAR Icebreakers and potential HEALY support of Deep Freeze mission is expected in August.

The process of determining whether to replace or refit the POLAR class icebreakers is continuing - a science mission needs analysis report is under development by Booz Allen Hamilton.

In other activities, AICC has recently revised and re-adopted their Charter, which clarifies the committee's function since the HEALY has become operational. Nine applications have been received from scientists wishing to replace Lisa Clough who cycled off the committee in March.

Research Vessel Operators' Committee (RVOC) - Tim Askew, RVOC Chair, reported that the Committee is beginning to working on agenda items for their 2004 Meeting. The Bermuda Biological Station for Research will host the meeting in October. Prior to the July Ship Scheduling meeting there will be a brief meeting of RVOC members to discuss agenda items.

Tim discussed issues regarding Vessel Security Plans. He recently went through the process of preparing a plan for HBOI. During the process he received mixed messages from the USCG on whether or not the requirement for a security plan applied to uninspected vessels. The requirement for a security plan is determined by a vessel's tonnage. In the past, HBOI had gone by domestic regulatory tonnage and the USCG agreed. Now, it appears that the USCG has now based the requirements on international tonnage. They have indicated that vessels over 500 GT international will require a Vessel Security Plan. If this is the case, it will apply to the UNOLS intermediate vessels. RVOC will follow up on the application of Security plan regulations to all vessels over 500 GT international.

Tim indicated that the facility plan isn't very difficult to prepare, and there is a template for completing the security plan. He will forward the URL for the template to RVOC.

<u>Scientific Committee for Oceanographic Aircraft Research (SCOAR)</u> - Mike Prince reported that the committee has drafted an article for EOS. The article introduces SCOAR to the community. It provides information about SCOAR's planned activities and how these plans will enhance access to research aircraft facilities.

The committee has recommended that an on-line aircraft request and scheduling system be developed. It should be modeled after UNOLS' ship scheduling system.

Ship Scheduling Committee (SSC) – Liz Brenner, SSC Co-Chair, provided a written SSC report prior to the meeting and it is included in Appendix III. These are the busy months for the ship scheduling community. They are putting together the 2005 ship time Letters of Interest. Schedulers have been conducting web conferences for the various regions and classes. Lee Black, SSC Vice-Chair, has been working with the east coast intermediate operators. Liz is working with the west coast intermediate operators. The large ship schedulers have held several conference calls to evaluate each other's schedules and to identify problems. This process of conference calling and schedule editing will continue right up to the July Scheduling meeting and through the summer.

NSF and ONR have requested each large ship to have approximately three months of down time in homeport. This will go into effect for 2005 schedules. If this proves to be impossible to schedule, down time may have to be taken at a reasonable non-home port.

There was discussion on the 2004 budget shortfall and its impact on schedules. NSF is tracking their ship time as programs get scheduled. They are carefully watching their estimated ship time costs so as to not exceed the budget.

A question was asked regarding the amount of carry forward ship time. Mike Prince indicated that there is some carry forward into 2006. EWING is not going to operate in 2005, so all seismic work will be deferred a year. Additionally, ROV facility conflicts continue and some work will need to be deferred.

<u>Fleet Improvement Committee (FIC)</u> - Dave Hebert, FIC Chair, reported that the FIC report is brief because most items will be discussed later in the meeting. Some of the projects that FIC is currently working on are listed in <u>Appendix III</u>. FIC is continuing the KILO MOANA debrief interviews. Based on the debrief comments, FIC has drafted a letter to the University of Hawaii identifying KILO MOANA issues requiring attention.

Dave reported that Chris Measures (U. Hawaii) is completing his second term on the FIC and a replacement is needed. Someone in the field of MG&G is preferred. Experience with ROVs would be a benefit. Representation from the Pacific Northwest is also desired.

Academic Fleet Renewal Activities and Plans:

Regional Class – Mike Prince summarized the Regional Class SMR prioritization effort. Earlier this year, NSF requested that UNOLS prioritize the Regional Class SMRs. This information is needed during the design process to ensure that the operating costs for the new vessels will be affordable. In response to the NSF request, a UNOLS Regional Class steering committee was formed. JJMA assisted in the project by identifying those SMR items that have the biggest impact on cost. Using this information the Regional Class committee drafted a prioritized list of SMRs that was posted for community comment. Individuals also were contacted and asked to provide feedback. A good response was received with over 90 people replying. The UNOLS recommendations were finalized and sent to NSF. *Appendix IV* contains the SMR Prioritization Final Report. NSF appreciated the input.

Crewing costs and fuel costs have the largest impact on operating budgets. Mike briefly summarized the prioritization Table of Recommendations. The area where the community was willing to make the biggest tradeoff was in the range criteria. They were not willing to make tradeoffs regarding laboratory size.

Discussion followed:

Peter Wiebe asked if a Regional ship could be built that would be less that 300 GT domestic? Response: It may be possible to build a ship less that 300 GT domestic. However, it is unlikely that a Regional ship could be build so that it is less than 500 GT International, there are very few loop holes. The CAPE HENLOPEN replacement vessel is just under 500 GT international.

Crew size and day rate estimates were discussed. Crew-size is a major cost in operation budgets. It was suggested that the USCG be contacted to see if they would grant

permission for smaller crew sizes. Crew size could depend on the ship's mode of operation and whether or not there will be an automated engine room.

Regional Class Acquisition Process, Selection of UNOLS rep, and RFP Status - NSF is in the process of formalizing their relationship with NAVSEA. The Memorandum of Agreement between the two agencies is expected to be signed in August [Note – the MOA was signed in early August]. The process appears to be moving slower than was reported in March.

The Council agreed that selection of a UNOLS representative to the Integrated Product Team (IPT) is an area of high interest for UNOLS and that we need to keep abreast of this issue. The Council recommended that the following actions be taken:

- Draft a letter to NSF expressing concerns, recommendations and requests for information/clarification regarding the IPT representative position.
- UNOLS should document concerns, desires, and requirements for the IPT representative.
- Decide how the UNOLS rep should be selected and chosen, and document the recommended process.
- NSF should consider whether or not a separate UNOLS rep for each IPT would help to deal with intellectual property issues.

Ocean Class Phase II Study – Tim Cowles reported that FIC and the Ocean Class Steering Committee have been holding phone/web conferences with NAVSEA and JJMA to review the Ocean Class Phase II status. Dan Rolland of JJMA provided slides summarizing the project. These are included as *Appendix V*.

Annette DeSilva reviewed the slides. JJMA has been tasked to evaluate general concept designs to determine how they meet SMRs for three different hull variants. The hull variants include a monohull, a SWATH, and an X Craft. The X Craft is ONR's high-speed catamaran technology demonstrator. JJMA was also tasked to investigate new technologies to improve reliability, reduce manning, and reduce life cycle cost. Lastly they are to develop design criteria and requirements to support future acquisition efforts. The study is nearing completion. The fifth and final FIC web meeting was on 7 July. JJMA is finalizing cost estimates, the DP study, technology assessment, and final report.

The slide package includes the specifications for each of the variants studied. Two configurations of the X-craft were examined, a 1,400 ton hull and a 2,400 ton hull. The 1,400 ton variant is based on the existing X craft hull form and does not fully meet the Ocean Class SMRs. The 2,400-ton X-craft variant is modified to increase displacement and fully meets the Ocean Class SMRs.

A slide summarizing the seakeeping analysis for Sea States 5 and 6 was presented. It includes a variety of seakeeping polar diagrams comparing the SWATH, monohull, X-Craft 1-400 ton variant, and REVELLE. The SMR motion criteria were applied. The SWATH, REVELLE and monohull variant designs meet the upper range of the UNOLS Ocean Class SMRs as SS5 in short crested seas. The X-craft exceeded the criteria in

short-crested seas. At SS6 all variants exceeded the motion criteria with the X-Craft greatly exceeding the criteria at this sea state.

JJMA conducted an operating cost analysis that compares the average large ship operating costs for the past four years with the Ocean Class monohull, SWATH and X craft. The study indicates that the annual operating cost for the Ocean Class and SWATH is comparable to the 2004 large ship cost. The average operating cost for the large UNOLS vessels is \$5.9M for 2004. The displacement of the large ships is 2,985 LT. The displacement of the Ocean Class monohull is estimated at 2,500 LT and the annual operating cost is estimated at \$5.7M.

The study preliminary conclusions indicate:

Monohull and SWATH Variants Meet Full SMRs

- Monohull slightly below seakeeping SMR in sea state 6, long crested seas
- Monohull is 75% displacement of AGOR 24 Class and SWATH is similar to KILO MOANA
- Operating Cost Similar to GLOBALs Unless Crew Size Can Be Reduced Below 21

X Craft Variant

- Existing design (1,400 ton) has insufficient displacement to meet full SMRs
- Requires significant reduction in some SMRs (range, payload) or upsize of hull displacement to approximately 2,400 tons

Program Cost (Preliminary Estimate)

- Monohull \$70 75M (in 2007\$)
- SWATH \$85 89M (in 2007\$)

There was some discussion about the projected day rates and impact on overall budget. Tim Cowles pointed out that minimal budget growth is expected in the coming years, so operations support at NSF is not expected to increase significantly. If operating costs for the new ships are higher, fewer ships can be supported and there will be fewer days available for science. If the UNOLS community is concerned about the consequences of more expensive ships, these concerns need to be voiced now.

Tim Cowles reported that the agency representatives have indicated that the updated FOFC Fleet Renewal plan would be based on the agency view of budget realities. This could translate to fewer more expensive vessels. UNOLS needs to evaluate the impact of the cost of these vessels on the overall fleet composition. It was suggested that we create a spreadsheet/chart that compares projected costs, number of ships, available days and berths with proposed new vessels.

UNOLS Meeting with Agency Reps – Tim Cowles continued the discussion by reporting on a July 15 meeting that he, Peter Wiebe and Bob Knox had with Frank Herr

(ONR), Jim Yoder (NSF) and Beth White (NOAA) to discuss Fleet renewal issues, particularly the Ocean Class. During that meeting they discussed plans for the update of the FOFC long-range fleet renewal plan. The agencies have indicated that they will not incorporate an "optimistic" plan from UNOLS into the revision of the Fleet Plan. As an example, the ships recommended by UNOLS and displayed as gray ships in Figure 17 of the 2001 FOFC report will probably not be included in the updated plan. The need for additional ships has to be based on science justification and come from the community. One of the points of the morning meeting was to address the mismatch between the agency plan and the community's vision. The agencies were clear that they plan to take realistic, budget view when drafting the update. The future plan will quite likely have fewer ships than the current plan. Any new ships will have to be justified by exciting science.

It was pointed out that if the revised FOFC plan is to be the new agency vision for the fleet, UNOLS should work to ensure that any new ships are the most capable ships that are possible.

Since many on UNOLS Council and in the community feel that the updated FOFC plan will not be able to adequately meet the real facility needs of the science community for the next 10-20 years, it was recommended that UNOLS develop its own plan. It was recommended during the discussion that the FIC's 1995 Fleet Improvement Plan (FIP) be updated. There are quite a few recent studies that could be referenced as the science justification for new facilities. These include the Cowles/Atkinson report, the Chave observatory report, the Futures documents, etc. There was concern that unless UNOLS publish their own report, a new administration would think that the updated FOFC plan would adequately meet future research facility needs. The UNOLS report should reinforce the agency's fleet renewal plan, but should also encourage the support for a fleet that will meet future science needs.

Tim cautioned that we would need to be specific in documenting the exciting science that will require new facilities. He also introduced the idea of having a National Research Council (NRC) study, as it may carry more weight.

Bruce Corliss suggested that it would be useful to include statistics and projections on the ship day rates in the UNOLS report. Wilf Gardner added that it would be good to reference the Ocean Commission report in the new report. The OC report documents the need for Fleet renewal. We need to clearly document the significance of the ocean research.

Tim Cowles commented that using past ship time utilization trends would not justify continuing need. We need to show that the science demand is there.

Tim Cowles explained that a major purpose of the meeting with the agency reps was to come up with a strategy for fleet implementation. With the absence of Navy funds for Ocean Class ships, what will be the strategy for getting ships built? It is a very tough problem. Tim, Peter and Bob did not come out of the meeting feeling very optimistic.

Bob Knox reported that Admiral Cohen (ONR) has repeatedly tried to get funds for ship construction in their budget and has not been successful. As an alternate strategy they can try to get research dollars for the construction. There is not a lot of optimism that this will be successful. If this doesn't happen, what's next?

There was discussion about how to try to get funds for a Fleet of new vessels. NSF's approach has basically been to acquire one ship at a time. Peter Wiebe suggested the need for a strategy to promote a whole Fleet of vessels. Patty Fryer suggested UNOLS should perhaps promote construction of the fleet through a series of ship construction proposals, where each ship would be somehow unique and specialized in an area that was in demand. This would allow using the NSF MRE process to support building several vessels.

The question was asked about how the ocean observatory facility needs would be addressed by FOFC in the plan update. Tim replied that the agencies would fold it into the plan especially in terms of the super-Global ships.

In summary of the discussion:

- The FOFC update of the Fleet Renewal plan will be based on the agency view of budget realities.
- It will likely be more conservative than the current plan.
- UNOLS/FIC should revise and publish our own Fleet Renewal or Fleet Improvement Plan (FIP)
- The UNOLS FIP should be the basis for consistent recommendations by UNOLS to agencies and others.
- The FIP would articulate the real facility requirements needed to support expected science demand. The UNOLS FIP would project facility needs based on expected science needs as opposed to budget projections or past utilization trends
- An increased emphasis on science justification for facilities capabilities is required.
- The UNOLS report would address recommended implementation strategies.

Annual Meeting Preparations:

Council Nominations - Bob Knox, Nominating Committee Chair, provided a status report on the nominating process. Other members of the Committee include Charlie Flagg and Peter Ortner.

The 2004 Council slate is coming together. In the At-large position, Bruce Corliss has agreed to run for a second term. The committee is contacting other potential candidates to run for this position. Two candidates have agreed to run for the Chair–elect position, Marcia McNutt (MBARI) and Jim Swift (SIO). Two candidates have also been confirmed to run for the Non–operator position, Eileen Hofmann (ODU) and Al Hine (USF). Denis Wiesenburg has moved from the University of Southern Mississippi to the

University of Alaska. The Council agreed that Denis' move to Univ. of Alaska does not affect his "member-at-large" position on the Council.

Once two candidates are identified for each position opening on the Council, the slate will be circulated for Council confirmation.

UNOLS Charter – Prior to the meeting a variety of Council comments were received to the Charter. These are posted on the UNOLS web page at: <<u>charter_comments.html</u>>. The Council comments and revisions have been incorporated into one document and are posted on the web at <<u>unols_charter_all_coments.doc</u>>. The major changes include:

- DESSC and SCOAR Terms of Reference were added as Annex VII and Annex VIII, respectively.
- A common format was applied to the Annexes. Every attempt was made to avoid text changes. The format followed was:
 - I. Introduction
 - II. Purpose
 - III. Membership / Organization
 - IV. Specific Tasks
 - V. Meetings / Reports
- "Shall" replaced "will" in many cases.
- The AICC annex was updated by AICC
- The liaison of RVTEC with other UNOLS Standing Committees was stated in Annexes
- The comments regarding vessel designation were inserted this issue still needs to be resolved.

There was considerable discussion on the UNOLS vessel/National Facility designation procedure. Four scenario options were identified:

- 1) Council designation (Revise Annex II to reflect this, no change needed for the Charter)
- 2) Membership vote on vessel designation (Revise Charter to reflect this, no change needed for Annex II)
- 3) Membership vote after Council recommendation (similar to second option, change wording in both Charter and Annex II)
- 4) Member ratification of Council decision (need a lawyer to explain how to word this...)

The Council was asked to consider this issue of vessel designation overnight for discussion during Friday's session.

Keynote Speaker – Tim Cowles reported that he sent a letter to Admiral Watkins inviting him to be the Annual Meeting keynote speaker. He hasn't received a response. Tim asked the Council to consider other possible keynote speakers in the event Admiral Watkins declines. This will be revisited during Friday's session.

UNOLS Priorities for 2004 & 2005 - Mike Prince asked the Council to review the 2003/2004 Objectives and Strategies for Achieving UNOLS Goals, http://www.unols.org/info/issues.html He asked the Council to identify items that should be added or deleted for the upcoming year and email them ahead of Friday's session if possible.

1600 Adjourn Session I

Session II – July 16, 2004

1300 Session II - Tim Cowles called Session II of the Council phone / web conference to order. Discussion began with the items that had been deferred or continued from Thursday.

UNOLS Charter – Council consensus was reached on the following proposed Charter changes:

- Add DESSC and SCOAR Terms of Reference as Annex VII and Annex VIII approved
- Adopt common format for the Annexes Approved
- "Shall" replaces "will" in many cases approved
- Revision 4 of Annex VI as provided by AICC- approved
- The liaison of RVTEC/RVOC with other UNOLS Standing Committees approved

After discussion, the Council agreed on the following changes regarding UNOLS vessel/National Facility designation procedures. It was recommended that the Council should make UNOLS vessel/National Facility designations. An appeal process for addressing Council designation decisions would be clearly defined. Annex II would be revised to reflect this process. The last sentence in the draft Charter change, "Recommended changes will be voted upon by the membership, normally at the annual meeting" would be deleted. Clarification of appeal procedures would be added to the Charter. The procedures would clarify how issues can be brought before the membership.

Tim Cowles appointed Charlie Flagg and Peter Ortner to finalize draft language for all charter revisions to be presented to Council.

Changes to guidelines for becoming a UNOLS vessel – Prior to the Council Meeting, Mike Prince drafted a revision to the "Guidelines for Becoming a UNOLS Vessel" that brings them more up-to-date and provides additional information regarding the evaluation criteria. The revised document was available for Council review at <http://www.unols.org/meetings/2004/200407cnc/reports/guidelines_unols_vessel.ht m>.

Tim Cowles appointed Cindy Lee Van Dover and Curt Collins (with assistance from the UNOLS office) to further revise the Guidelines for Becoming a UNOLS Vessel so that they are consistent with the Charter changes regarding vessel designation procedures.

Keynote Speaker – The discussion on keynote speakers was continued from Session I. Tim Cowles reported that he does not expect a positive response from Admiral Watkins. [NOTE – following the meeting Admiral Watkins' office indicated that he is not planning any speaking engagements regarding the Ocean Commission Report until the report is officially final.]

Council suggestions for other keynote speakers included:

- RADM Richard Pittenger, Retired Navy
- Margaret Leinen (NSF)
- A Congressional member with an interest in ocean sciences
- A Congressional Staff member
- A member of the Ocean Commission other than Admiral Watkins

Further discussion led to the suggestion that the Keynote Address be provided by a panel of presenters consisting of:

- Margaret Leinen
- A Congressional Staffer
- A member of the Ocean Commission

It was suggested that the panel presentation/discussion could also consider a retrospective and future vision speech by Dick Pittenger.

The UNOLS Office will contact NSF to determine if they have any objections to this format and if Margaret Leinen would be willing to participate as a panel member.

Global Class Mid-Life Refit Planning – At the fall FIC meeting the Committee recommended that they move forward with development of Science Mission Requirements (SMRs) for general purpose Global Class vessels. This information would be useful in planning for the mid-life refits of *THOMPSON*(2006), *REVELLE*(2011), and *ATLANTIS*(2012). The IC also recommends that the model used for developing the Ocean & Regional Class SMRs be followed. Slides summarizing the project are included as *Appendix VI*.

Dave Hebert working with the UNOLS Office has formed a Global Class Steering Committee. Members include:

- Tom Althouse (SIO) Marine Superintendent
- Jim Broda (WHOI) Coring
- Bob Embly (NOAA/PMEL) ROVs, MG&G
- Bruce Howe (UW) Ocean Observatories
- Ken Johnson (MBARI) Chem O.
- Paul Ljunggren (LDEO) Marine Superintendent
- Dan Schwartz (UW) Marine Superintendent
- Niall Slowey (TAMU) FIC Rep, MG&G

- Al Suchy (WHOI) Marine Superintendent
- Woody Sutherland (SIO) Marine Technician
- Randy Watts (URI) Phys. O
- Patricia Wheeler (OSU) Biol. O.

A Steering Committee Chair needs to be appointed. Draft task items for the committee are listed in Appendix VI. The Committee will review past SMRs and other documentation to form the basis of the SMRs. Recent experience and comments will be used to define methods for getting broad community input. Draft documents and project status will be posted on the UNOLS website for community review.

Long-Range Fleet Plan:

Revised Vessel Retirement Dates and SLEPs – Dave Hebert reported that the FIC and UNOLS Office have been working to update the projected vessel retirement dates that are listed in the FOFC long range plan, Appendix A. They have been polling the UNOLS ship operators for information about their vessel retirement dates and the feasibility of 5-year and 10-year Service Life Extension Programs (SLEPs). Additionally the ship operators were asked to provide information about how their respective vessel(s) compare to the Regional and Ocean Class Science Mission Requirements (SMRs). A copy of the survey form that was sent to each operator is included in *Appendix VII*. Appendix VII also includes preliminary data on revised retirement dates. It was cautioned that this information is preliminary and will need to be reviewed carefully. After the information is compiled we will ask the ship operators to re-examine the input relative to the rest of the Fleet. Additional information is still needed from a few operators.

Once the FIC finalizes the revised dates and estimates, the information will be provided to FOFC for consideration as they update the Fleet Renewal plan. The agencies have indicated that they are interested in this data. The final data will be provided to FOFC in the fall.

Some preliminary findings indicate that most of the ships (>40m) can have their lifetimes extended 5-10 years for an estimated cost of \$1.025-5M each. The Council discussed the preliminary results and some important concerns were raised:

- The SLEP estimates focus on maintaining the ship in an operational condition without enhancing the scientific capabilities of the platform. The existing Intermediate Class vessels do not meet most of the Ocean Class SMRs nor do they meet several of the Regional Class SMRs. The Regional Class ships currently in operation fall short of the Regional Class SMRs in many areas.
- The SLEPs do not account for unseen failures with propulsion systems, ship equipment and machinery, and science instrumentation.
- Ship machinery and major shipboard science equipment of aging vessels can become obsolete. Replacement components may no longer be manufactured or available in stock. This could result in full replacement of failed systems.

• Many of the Intermediate Class ships are in the threshold of the 300 GT classification. Naval Architects should be consulted to undertake a review of the tonnage impacts for any service life extension program early in the planning process.

Tim Cowles assigned a group that includes himself, Peter Wiebe, Bob Knox, and Dave Hebert to work with Mike and Annette to create a document that will provide preliminary information for the FOFC retreat based on input from operators.

Updated Utilization Projections with Observatory Facility Needs – Prior to the April FOFC meeting, the UNOLS Fleet utilization projections were updated to include the ocean observatory facility needs as identified in the Alan Chave's working group report. Peter Wiebe presented this information to FOFC during their April meeting. His viewgraphs are included as **Appendix VIII**. This information is provided to Council for information only.

The projections indicate that with the addition of Ocean Observatory ship time (installation and O&M), demand is expected to increase by approximately 1000 days by 2020. The additional observatory ship time represents over 40% of the current use of the Global Class. In 2020, a total of 21 new ships will be needed to meet estimated ship time demand (if observatory ship time is added to current utilization):

- 5 Global ships (includes Seismic)
- 5 Ocean Class ships (includes ARRV)
- 3.5 Regional Class >40m ships (includes the 3 ships to be funded by NSF)
- 7.5 Regional and Local Ships < 40m

<u>Ship Design and Construction Efforts</u> – Prior to the meeting, written status reports on the EWING replacement plans and the CAPE HENLOPEN Replacement Vessel were provided. These are included as <u>Appendix IX</u> and <u>Appendix X</u> respectively. They were briefly reviewed:

EWING Replacement Plans - Lamont Doherty Earth Observatory (LDEO) proposal "Replacement of the R/V MAURICE EWING by a Commercial 3D Seismic Vessel" was approved and funded. In June, LDEO notified WesternGeco and began the acquisition process of the WESTERN LEGEND. As part of the acceptance process the vessel will be dry-docked for inspection and required maintenance (planned for August).

An EWING Replacement Oversight Conversion Committee (EROCC) has been established and an initial meeting was held on 22, 23 April at NSF. The committee members are listed in Appendix IX.

Prior to any science cruises LDEO will request to have this vessel considered a National Oceanographic Facility under UNOLS due to the ship's unique seismic capabilities. A Science Oversight Committee will be established and managed by UNOLS to advise LDEO on long-term operational policy.

The Replacement Vessel website is at: http://www.ldeo.columbia.edu/res/fac/oma/.

Appendix IX includes:

- A. EWING Replacement Status Report
- B. Replacement Vessel Project Timeline
- C. Charge to ERROC

Status of CAPE HENLOPEN Replacement effort - Matt Hawkins provided a letter to UNOLS that provided the proposed transition plan for the CAPE HENLOPEN Replacement Vessel (CHRV). The CHRV is scheduled to be delivered to Port Everglades, FL on October 15, 2005. After the vessel is brought to Delaware, acquisition systems and deck equipment will be cross-decked, and CAPE HENLOPEN will be retired from service. The proposed plan indicates that the NSF inspections will be conducted in two steps, and that the application for UNOLS membership will begin early and proceed in parallel with delivery, trials, and cross-decking. The new vessel is planned to begin science operations in April 2006. Full details are provided in <u>Appendix X</u>.

Other Issues:

RVOC By-Laws – Tim Cowles asked that the Council review the RVOC By-Laws (<u>Appendix XI</u>) and consider them for endorsement. The Council approved the RVOC By-Laws as written.

The Council suggested that the RVOC By-Laws be added to the UNOLS Charter. RVOC should be notified regarding this recommendation.

Ship Scheduling Issues and Operation Budgets – Most of the ship scheduling issues were addressed in the Committee written report (*Appendix III*). Some of the schedules are still pending funding decisions by other agencies. These issues will be addressed during the Ship Scheduling meeting on July 21 –22.

Post Cruise Assessment (PCA) Subcommittee Work Plan - Curt Collins reported that the PCA Subcommittee plans to review PCARS for all ships over a three-year cycle. The process will begin when the UNOLS Office sends them the reports for this year. The Committee plans to contact PI's that do not fill out reports to get their reasons for not replying and to get their feedback. For now, no changes to the PCAR form are planned.

Marine Mammals Permitting and Foreign Clearances – Tim Cowles reported that this is an important issue and it will be included on fall Council agenda. Mike Prince will contact NMFS and NSF for their input. Also, the proceedings from recent meetings regarding Marine Mammals and Acoustic permitting will be reviewed. NSF has issued proposal deadline guidelines for new proposals for projects involving seismic survey cruises beyond 2005. The guidelines are included in *Appendix XII*.

UNOLS Cable Performance Requirements – Mike Prince reported on the status of developing the UNOLS Cable Performance Requirements. The cable functional

requirements have been developed as requested by the agencies. Mike submitted the Cable Report to NSF. The requirements are posted on the UNOLS website at http://www.unols.org/publications/reports/wire/Cable Functional reg.html>.

As an action item, Tim Cowles and Peter Wiebe will draft a letter to NSF and the other agencies recommending that the next generation cable development move forward. The letter will encourage the agencies to move forward with cable design.

Spectrum Management Issues – Mike Prince reviewed the activities that have been carried out to address ocean science needs as they relate to spectrum management. Mike will contact NOAA personnel working on this issue and invite them to the fall Council meeting.

Establishment of a National Oceanographic Facility – Seismic Vessel – This item is included on the agenda as an information item. In the next year it is likely that LDEO will request establishment of a National Oceanographic Facility for the seismic vessel.

Conflict of Interests on UNOLS Committees - Tim Cowles reviewed the conflict of interest issue that had been raised earlier in the meeting during the DESSC report. Tim indicated that the NSF Legal Counsel and program managers and ONR program managers would be invited to the fall Council meeting to provide clear guidelines that could be considered by UNOLS in establishing criteria for membership on UNOLS committees and Council. This will be an agenda item for fall meeting. Any potential changes to the Charter will be deferred until additional information is provided.

UNOLS Priorities for 2004/2005 – Mike Prince reviewed the UNOLS 2003/2004 Objectives and Strategies for Achieving UNOLS Goals http://www.unols.org/info/issues.html#objectives>:

Access, Scheduling & Utilization (Ongoing Responsibilities)

- Scheduling improvements Improve systems and results to maximize access to facilities.
- MMPA/ESA Permitting facilitate compliance and cruise planning.
- Outreach and Education bring the knowledge of ocean science research to the public along with an understanding of the facilities needed to support that research.

Continuous Quality Improvement (Improvements to Existing Facilities and Systems)

- Quality Improvement Use Post Cruise Assessments as core of quality improvement plans
- Standards of Service set standards for facilities, instrumentation and service.

Plan for Future Facilities (New Opportunities and Facilities)

• Fleet Renewal - Implementation of FOFC plan, concept designs and funding for new ship construction.

- Observatories Assess the needs and impacts of observatory systems with respect to facilities, ships, submersibles and aircraft.
- Icebreaker renewal service life extension and science system improvements for POLAR Class icebreakers.
- Integrated Facilities planning plan for ships, submersibles, aircraft, observatories and instrumentation through a systematic and coordinated approach.
- Submergence vehicle renewal develop the tools to enhance access for submergence science.

There was a brief discussion on the wording of the goals and it was cautioned that the wording should clearly reflect the activities that UNOLS plans to carry out. As an example, the last bullet "Submergence vehicle renewal - develop the tools to enhance access for submergence science." should probably be reworded since UNOLS will not be the organization that develops the tools. Instead, perhaps it should be modified as "Submergence vehicle renewal – promote the development of tools to enhance access for submergence science."

Mike encouraged the Council members to exchange ideas on how to modify these "Broad" objectives for the coming year and agree on final version at next meeting to present to the membership at annual meeting.

1545 The Council Web / Phone Conference was adjourned.