

UNOLS COUNCIL – Phone/Web Conference
Wednesday and Thursday, July 11 & 12, 2007, 2:00 pm – 4:00 PM EDT (each day)

Executive Summary:

The UNOLS Council convened a phone/web conference on July 11 and 12, 2007. This conference served as the summer meeting. UNOLS Fleet schedules, estimated operation costs, 2008 ship scheduling, and agency budget projections were discussed. The Council endorsed the draft 2007/2008 UNOLS Council slate. An ad-hoc committee on data management best practices was formed and will be asked to provide a status report during the fall Council meeting. There was a Council discussion on two charter issues: 1) Opening the Office host to all UNOLS Institutions (extend beyond operators), and 2) Changing the term from 3-year to 5-year to conform to NSF timelines. The Charter currently does not exclude the non-operator institutions from hosting the office. The Council agreed that it is most important that the UNOLS Executive Secretary possess the skills and expertise required to host the office. All also agreed with changing the Office term from three years to five years. Other topics addressed included crew and marine technician retention issues, academic fleet renewal activities and plans, and frequency spectrum management.

Action Items:

Minutes of the March 2007 Council Meeting - Incorporate clarifications and corrections on pages 5, 10, and 25. (DeSilva)
Subcommittee Report on Recommendations on Ship Lay-Ups and Early Retirements: <ul style="list-style-type: none">• The agency reps will send recommendations regarding 2008 Fleet operations and ship lay-ups to the ad-hoc committee of Mary Jane Perry (Chair), Vernon Asper, and Marcia McNutt.• The subcommittee will prepare their response to the recommendations within 30 days.
2007/2008 UNOLS Council slate – The Council endorsed the slate. <ul style="list-style-type: none">• The Office will finalize the slate information for distribution to the membership.• All nominees will be contacted and thanked for their willingness to serve and to let them know whether or not they are included on the slate.
Form Subcommittee on Data Management Best Practices – The proposed subcommittee membership along with the list of reviewers was approved. <ul style="list-style-type: none">• Marcia McNutt will contact each individual to confirm their willingness to serve.• Marcia will contact Steve Miller and Bob Arko to determine their willingness to serve as co-chairs.• Once the committee is formed, they will be asked to finalize their charge and send it to the Council for approval.• The subcommittee will be asked to provide a status report at the fall Council

<p>meeting.</p> <ul style="list-style-type: none"> • The UNOLS Office will send a thank you note to those volunteers who were not selected for the sub committee.
<p>UNOLS Office RFP – The Council endorsed the suggested revisions to the UNOLS Charter regarding Office host competition and term length as presented by Mike Prince.</p> <ul style="list-style-type: none"> • Committee Chairs have been asked to review their respective annexes for any items that should be updated. • The Office will compile all Charter revisions and circulate a final draft to the Council for endorsement. • The Charter re-adoption and revisions will be included as a ballot measure at the Annual meeting. • Mike Price will contact Dolly Dieter, Bob Houtman, and Beth White regarding issues raised by Linda Goad regarding the process for recompetition and selection of the UNOLS Office.
<p>Crew and Marine Technician Retention and Hiring Issues – The RVTEC and RVOC will brainstorm and present proposed solutions to the Council (Hawkins & Martin)</p>
<p>RVOC Safety Standards – later this year the draft RVSS will be sent to the Council for adoption.</p>
<p>RVTEC/PI Communication Issues – Additional definition on this item is needed by RVTEC for presentation to Council (RVTEC)</p>
<p>Ocean Class SMRs – FIC will review community survey feedback to the Ocean Class SMRs and provide a response to Bob Houtman (ONR). (Hebert)</p>
<p>Model of a Future Fleet Schedule - Mike Prince will continue work on the model of a future fleet schedule. Additional work will include:</p> <ul style="list-style-type: none"> • Finish the model that uses 2006 as the basis. • Create a model that includes seismic work • Include OOI projections (when better known) • Model Fleet operating costs (use cost ratios) • Create another model using a different year as the basis
<p>Global Class Science Mission Requirements – One last call for input has been advertised. The Global SMR committee will review input and finalize SMRs.</p>
<p>UNOLS Brochure:</p> <ul style="list-style-type: none"> • The Council can send any additional changes to the UNOLS Office. • Reposition the airplane image closer to the SCOAR description (Office). • The office will make any final revisions and provide it for a final review before printing on recycled paper.
<p>Frequency Spectrum Management –</p> <ul style="list-style-type: none"> • RVTEC is tasked with preparing a written preliminary status report of the Fleet’s RF spectrum use based on the findings of the subcommittee. Bill Martin is to provide the report in writing to Peter Wiebe. • Peter Wiebe will forward the status report to Dr Otis Brown and seek his advice on the steps that should be taken next.
<p>Continue Review of PCAR - Mike Prince will provide materials to the PCAR committee and resume the review process.</p>

Codes of Conduct - The Impact of Scientific Studies on the Environment – Continue to monitor the activities associated with this issue.
Science Opportunities aboard UNOLS Vessels – The UNOLS Office will activate the web pages for public use.
UNOLS objectives, priorities and goals – The Council should provide input to the Office on objectives, priorities, and goals for the next year. Marcia McNutt will present the material at the Annual Meeting.
SCOAR Chair – Mike Prince will work with the Committee and Agency reps to find a new SCOAR Chair
MLSOC Meeting – Guidance is needed now as to when, where, and what venue to hold the next MLSOC meeting. If the desire is to have it at the Fall AGU, plans need to be made now. Marcia will talk to Steve Holbrook about this.
DESSC Meeting with biologists – It was suggested to hold the winter DESSC Meeting at The Ocean Sciences Meeting on March 2-7, 2008 in Orlando. FL in order to attract biologists. Deb will discuss this with Marcia and others who are interested.
RVTEC – Bill Martin formally invited the UNOLS Chair to the RVTEC meeting on March 6-8, 2007. Marcia might be available on the afternoon of the 6 th . Stewart Lamerdin will send an RVTEC agenda to Marcia as soon as it is available.

Appendices:

I	Agenda
II	Participant List
III	Ship Scheduling Report
IV	Proposed Membership of the Subcommittee on Data management Best Practices
V	Summary of Comments regarding UNOLS Office host and Proposed Charter Revisions
VI	Draft 2007/2008 UNOLS Council Slate
VII	Letter from M. Hawkins (RVOC Chair) and B. Martin (RVTEC Chair)- Crew and Marine Technician Retention
VIII	Model of Future Fleet Schedule
IX	Summary of UNOLS Activities and Issues
X	UNOLS Committee Reports

Summary Report:

Day 1: Wednesday, July 11th

Marcia McNutt, UNOLS Chair, called the meeting to order at 1400 and provided an opportunity for introductions. The agenda is included as *Appendix I* and the list of participants is included as *Appendix II*.

Marcia asked if there were any revisions to the Minutes from the March 2007 Council Meeting:

- There was one clarification on page four to the text regarding the Alaska Region Research Vessel (ARRV) proposal review based on a question from Carin Ashjian.
- Peter Wiebe asked for more clarity regarding the flashback problems on the NOAA vessels – page 5.
- Peter Wiebe suggested that the reference to “brute stack” in regard to multi-channel seismic data needs clarification – page 10
- There is a typo on page 25 – “cruise” was spelt incorrectly.

The UNOLS Office will edit the minutes to provide clarification to the items identified and to correct the typo.

A motion was made and passed to accept the minutes (Wiebe/Diebold).

UNOLS Fleet schedules, estimated operation costs, and 2008 ship scheduling – Rose Dufour and Mike Prince provided a ship scheduling report. Their slides are included as *Appendix III*.

There are 4126 days for 2007. NSF’s support is \$48,067,583 for 2007. This includes 45 days at sea for R/V *Langseth*. Marcia asked if this same funding level is expected to continue. Linda Goad replied that the 2008 budget will likely be consistent with 2007. Rose added that ONR and NOAA funding levels for next year are unclear.

Charts showing the 2008 ship time requests by ship and ship class were presented. It is clear that many ships have weak schedules.

During the June 27th scheduling meeting, it was estimated (based on the ship days requested and the target dates) that ship lay-ups would be necessary in 2008. During that meeting, Bob Houtman stated that the Navy-owned Global ships should not be laid up. Instead, the requested ship time should be evenly divided among the ships. As a result, large ship schedules will be light; however, Navy has indicated that additional ship time is likely. State days other than those for University of Washington have not been included in the total days requested that are shown on the charts. There are still issues to sort out with the *Langseth* schedule.

Peter Wiebe asked about the *Atlantis* 2008 schedule. Mike replied that there are about 100 days for *Alvin* only, but the West Coast ROV work would likely go on *Atlantis*.

The 2008 ship time requests per vessel class charts indicate light schedules for the East Coast Regional and Intermediate ships; however, there is a lot of work for the *Pelican* that could potentially be moved to an East Coast ship.

In 2007, the *Cape Hatteras* had originally been slated for a lay up, but the *Pelican* had more work than it could accommodate, so *Hatteras* was brought to the Gulf to support

some of this work. One of the projects that was scheduled on *Hatteras* was funded privately, but had to be cancelled because they could not get permits to work in the commercial oil fields. The project would have left about 60 anchors on the seafloor and as a result, MMS denied the permit in an effort to avoid users from leaving trash in the commercial oil fields. The Principal Investigator, Steve Constable, has left anchors on the bottom in the past, and hadn't anticipated the recent permit problem. Sandy Shor commented that if Constable's project had not been industry funded, a permit would not have been required. Marcia mentioned that DARPA was developing a station keeping mooring (with help from MBARI) that doesn't require an anchor. Peter Wiebe asked if it is possible to make an anchor that would biodegrade. Marcia said that MBARI had used gravel in burlap bags as biodegradable anchors whenever small anchors would suffice, with some complaints from geologists about introducing exotic rocks to the environment. Rose Dufour pointed that the PI was required to pay a cruise cancellation penalty fee of \$70K when he cancelled the *Cape Hatteras* cruise. If his cruise had been scheduled on the *Pelican*, he probably would not have had to pay the fee.

In 2008 there is about 2 ½ ships worth of work for the four West Coast Regional and Intermediate ships. The current draft schedules include a lot of double bookings of ship time requests on the East Coast ships, but not a lot of double bookings for the West Coast ships.

The 2008 Letters of Intent (LOIs) were created using the new UNOLS ship time system. The new system allows multiple options of a ship schedule.

The status of 2008 agency funding is:

- NSF – waiting to hear about the final funding decisions.
- NOAA – most of the requests are known, but we will need to wait for the NOAA appropriation to know what can be scheduled. There are no ship time requests for Ocean Exploration.
- Navy – The Navy ship time might increase, both for ONR and other Navy groups.

Information about *Jason2* and Ocean Bottom Seismometer (OBS) availability is still needed for consideration in the 2008 large ship schedules. There are a lot of OBS' that need a year long deployment and some of these should have a pass over by R/V *Langseth*. Also, some of the OBS' have been lost. During the Laske cruise, 10 out of 37 of the OBS' were lost. During the East Pacific Rise eruption, some OBS' were buried in lava.

The estimated 2008 ship operating costs are still very rough.

Rose Dufour said that the schedulers have met and will continue to have phone meetings. There are a lot of issues that still need to be addressed. A scheduling meeting is planned for mid-September at NSF.

Rose reported that Liz Tirpac's supervisor at the Department of State (DoS) would like any feedback regarding DoS. Anyone with feedback should contact Liz.

Kendra Daly's cruise off of Venezuela did not get a permit. The science party has come up with an alternative plan for the project.

A lot of the ship time that the Navy is interested in is in the northern portion of the China Sea. Bob Houtman said that the Navy met with the DoS to discuss their project. As a result, the Navy has decided not to pursue a clearance with the People's Republic of China (PRC).

Agency Budget Projections:

Navy - Bob Houtman reported that the Navy budget for UNOLS ship time for 2008 will be about \$10M for the base with another \$1M to \$2M from other Navy sources. There is a plus up request for another \$5M but its status in the appropriations process is unknown.

NOAA - Beth White said that they are optimistic that NOAA will have a budget a lot sooner in 2008 than in 2007. NOAA's use of UNOLS ships looks stable for 2008, with perhaps a small increase in ship time over 2007. They are optimistic for the out-years.

The *Okeanos Explorer* is currently undergoing conversion in Todd shipyard. The ship is expected to be operational in mid-summer 2008. There is concern over the ship's operating funds. Congress has recognized that the Ocean Exploration (OE) will have to support *Okeanos Explorer* out of program funds and they realize that this isn't a good situation. Some improvement is a possibility. The ship's post shipyard shakedown will be in the southern Juan de Fuca. Beth said that UNOLS will probably see some requests for OE work. Sandy Shor asked if there has been a solicitation for OE programs. Reply – No one had seen anything yet.

Deb Kelley asked if there was an update on plans for the merge between NURP and OE. Marcia said that she had heard that OE and NURP will merge and that NURP will morph into advanced technology centers that would be competed. It would be a very different NURP than what we know today. Beth White added that there has been some language on a cooperative institution approach on the East Coast, but NOAA is still very much in initial discussions.

Peter Wiebe asked about the status of the Deep-ocean Assessment and Reporting of Tsunamis (DART) mooring work. Beth replied that they are moving along to getting the moorings in place. Rose added that she has been talking to Shannon McArthur and there might be some UNOLS ship opportunities for maintenance and servicing, but it comes with short lead times. There will likely be work for *New Horizon* and *Seward Johnson*.

Subcommittee Report on Recommendations on Ship Lay-Ups and Early Retirements – A subcommittee of Mary Jane Perry (Chair), Vernon Asper, and Marcia McNutt was formed to evaluate agency recommendations on ship lay-ups in 2008. Marcia explained that Carl Friehe had been on the committee but stepped down. The sub-committee must be made up of representatives from non-ship operator institutions.

Marcia volunteered to take the open position on the subcommittee. The agency representatives expect to have their recommendations for the subcommittee in late July after the East coast and West coast scheduling phone meetings. There has already been one recommendation from Navy to keep all of the Navy-owned Global ships operating in 2008.

Linda Goad stated that NSF cannot make an award to any one ship that would exceed approximately \$6.9M without prior authorization from the National Science Board. It would take a huge effort to get permission. The Global ships each cost about \$7.5M annually to operate. If a ship was to be solely funded by NSF in one particular year, the ship support cannot exceed \$6.9M (this would not include technical support costs). This presents a potential problem for *Langseth* operations which are heavily supported by NSF. A budget of \$6.9M translates to about 200 ship days for *Langseth*. The agencies would need to make some funding decisions regarding which research programs would be supported. Julie Morris is considering whether or not to pursue a fleet-wide waiver to exceed \$6.9M for operations in 2009. The technical support funds would not be included in the \$6.9M.

Form Ad-hoc Committee on Data Management Best Practices – During the last Council meeting, it was decided to create an ad-hoc committee to inventory best practices for capturing and archiving data and meta-data. Marcia reported that a call for volunteers was sent from the UNOLS Office and many people responded. *Appendix IV* lists the key factors applied in the committee selection process. Marcia decided that it was important to have diversity of institutions represented on the Committee. The proposed membership is listed in *Appendix IV*. NOAA and ONR have been included as reviewers to the ad-hoc committee. NSF is also welcome to have representation on this review and comment group.

Rob Pinkel stated that it is important to get input from the scientists who actually develop sensors. He added that the charge of the committee should be clearly spelled out and well defined. He emphasized the importance of allowing new technology development efforts to have flexibility, so as to not hamper new development. Marcia said that once the committee is formed, they will be asked to fine tune their charge and present it to the Council.

A motion to approve the committee was passed (Wiebe/Perry). Marcia will contact each of the Committee members. She will also send messages to each volunteer who was not selected to serve on the ad-hoc committee. The Council agreed that Steve Miller and Bob Arko should be contacted to determine their willingness to serve as co-chairs.

UNOLS Office RFP – Mike Prince provided background information on two UNOLS charter issues:

- 1) Opening the Office host to all UNOLS Institutions (extend beyond operators).
- 2) Changing the term from 3-year to 5-year to conform to NSF timelines.

The Office has been at Moss landing Marine Laboratories (MLML) since 2000. It has operated under three-year cooperative agreements with NSF. The Office has traditionally been up for renewal every three years. Peter did a formal review of the Office in 2005.

Mike sent a survey to the UNOLS membership with three questions:

1. Five-year increments: Should the charter be changed to reflect five-year terms with an opportunity for competition or re-competition every five years?
2. Limit on tenure at one institution: Should the charter be changed to allow an institution to compete for a second term with a limit of ten years total, except under extraordinary circumstances? Or, should we just provide for competition every five years and let the competition determine the ultimate length of an institution's tenure?
3. Non-operator Host Institution: Should UNOLS open competition up to all UNOLS institutions to host the UNOLS Office?

Mike reviewed the feedback received. The questions and feedback are included as *Appendix V*. In summary:

1. Term – everyone seems to agree with the five-year terms.
2. Limit on tenure/competition – Most seem to agree that ten-year max is enough. Some are in favor of a renewable second term after a thorough review. Others felt that in addition to allowing renewal after five years, competition should also be allowed in addition to review.
3. Non-Operator Institution Host – Some felt that the host institution should be limited to operator institutions and others felt that the nominated Executive Secretary was the most important factor. Several pointed out that the Charter does not preclude a non-operator from competing and could be left that way, however, invitations to submit proposals should not be limited to Operator institutions.

Mike drafted strawman changes to the Charter based on the input received. The Charter revisions are included in *Appendix V*.

Discussion followed:

- Marcia – It is important that the Executive Secretary have a strong background in ship operations and scheduling.
- Peter Wiebe – It is beneficial to rotate the Office among the academic institutions. The Office should not become a bureaucratic position.
- Mike Prince – He agrees that having the Office at a ship operating institution gives access to people and views. Back in 1999, some people felt that the Office should be closer to DC. There are advantages and disadvantages.

- Bob Collier – The science community benefits by having the UNOLS Office at an academic institution rather than at JOI/CORE.
- Marcia – There is always an option at some later time for a closer relationship between JOI/CORE and UNOLS that would allow the UNOLS Office to continue to rotate and not be located in Washington, DC.
- Marcia asked the Council if the charter should be changed to state that the Office doesn't have to be hosted by a ship operator, but that the Executive Secretary must be very knowledgeable in ship operations. Peter Wiebe replied that the Charter, as currently written, does not state that non-operator institutions are excluded.
- There was a lively discussion on the UNOLS Office selection process. There was disagreement over who makes the selection of the host institution. In the past, UNOLS has made the recommendation of who should serve as host.
- Peter Wiebe asked the question: if UNOLS makes a recommendation to the agencies for a host Office and NSF funds another group to host the Office, is UNOLS required to have them as our host?
- Peter Wiebe stated that the review process that he used in 2005 to review the MLML UNOLS Office wasn't included in the Charter, but the model worked well and it should be in the Charter.
- Mike will check with all agency representatives on the recompetition host selection issues raised.
- Mike Prince expressed that his draft Charter revisions give flexibility for any institution to bid on hosting the UNOLS Office and represents the cooperative agreement. The issue on who selects the UNOLS Office is a fundamental change to UNOLS. He feels that the Council can take action on the draft Charter revisions as presented. The final revision must be endorsed by the membership at the Annual meeting.

A motion was made and passed to accept the Charter revisions as presented (Wiebe/Dufour). Mike will circulate the final proposed revisions to the Council for endorsement.

Nominating Committee Report – The Nominating Committee of Peter Ortner (Chair), Bruce Corliss, and Eileen Hofmann have formed a draft 2007/2008 UNOLS Council slate. The Slate is included as *Appendix VI*. There are three candidates for each of the two positions opening on the Council. A motion was made and passed to endorse the slate as presented. (McNutt/Wiebe)

Adjourn for the day – 4:15

Day 2: Thursday, July 12th

Opening Remarks – Marcia McNutt opened the phone meeting for Day 2. Annette DeSilva reviewed the action items from Day one.

Crew and Marine Technician Retention and Hiring Issues –Matt Hawkins (RVOC Chair) and Bill Martin (RVTEC Chair) have sent a letter to the UNOLS Council regarding crew and marine technician retention and hiring issues that are facing the UNOLS Ship operators. The letter was provided prior the meeting and is included as *Appendix VII*.

Marcia asked how salaries are set for UNOLS vessels. Matt explained that salaries are established by the individual institutions; however salary comparisons have been done in the past to attempt some level of consistency.

Matt explained that training and licensing requirements for crew have become more demanding and expensive and this has improved capabilities of the crew but has made the pool of available people smaller. At the same time, the demand for crew is high. The boom in the off-shore industry has made the problems more severe.

Stewart mentioned that one of the intents of their effort is to find the best practices that might help with retention of good personnel.

Beth White said that within the NOAA fleet, these issues present major challenges. Often NOAA benefits and shore leave are not even comparable to those of the UNOLS institutions. NOAA now has a Human Resource person dedicated to marine operations. When funds are available, NOAA has hired the Patriot Service as a crewing source. NOAA has had to delay ship operations while waiting for an engineer and crew from Patriot. They have an augmentation pool, but because of the number of vacancies, the augmentation pool often becomes part of the permanent crew. NOAA keeps trying different approaches, including training incentives.

Matt said that the RVTEC and RVOC will brainstorm on some possible solutions and present these to the Council.

There was discussion on the possibilities of sharing personnel between ships. Having a pool of relief crew would be helpful, particularly as ship lay-ups are considered. Sandy Shor added that marine technicians have been shared between ship operations, but it is not a trivial task. Matt suggested that perhaps a pool of permanent people could be established that can be used and floated among institutions. A formalized mechanism would help.

Rose Dufour stated that Scripps Institution of Oceanography has had to turn ship time away because they did not have crew or technicians to support the cruise. Also, because of personnel shortages, they were unable to respond quickly to an event.

Marcia tasked the RVTEC and RVOC to present possible solutions to the Council that can be considered for implementation. If there is a way to more easily move crews from ship to ship, this would be a potential solution.

The Status of UNOLS On-Going Activities and Issue: A brief written summary of many of the following items were distributed prior to the meeting (*Appendix IX*).

UNOLS Representation at JOI/CORE Board meetings - Marcia McNutt reported that ideas for UNOLS representation at future Consortium for Ocean Leadership (COL) meetings were discussed by the JOI Board. One idea is to invite the UNOLS Chair to be a non-voting ex-officio member of the Board of Trustees. This will be readdressed during the fall COL meeting. Immediate action isn't needed since Marcia is a JOI trustee and she is the UNOLS Chair. Any other thoughts on this can be sent to Marcia. Peter Wiebe added that he thinks that the increased communications between our two groups is a good idea because it gives UNOLS more visibility within the COL and oceanographic community. There are many items are of common interest.

Gender Climate at Sea –Matt Hawkins reported that this topic has been discussed by RVOC over the last couple of years. Gender Climate will now be included in Chapter 18, Personnel Safety, of the updated Research Vessel Safety Standards (RVSS). There will also be an Appendix in the RVSS that can be used by ship operators and institutions as a template for a brochure on sexual harassment.

Mike Prince added that later this year, the Council will receive the entire updated RVSS for adoption.

RVOC Safety Committee Activities – The RVOC Safety Committee activities are included in the RVOC written Committee Report provided by Matt Hawkins (*Appendix X*).

RVTEC/PI Communications – This item will be further developed by RVTEC for presentation to Council at a future meeting.

Academic Fleet Renewal Activities and Plans:

Ocean Class SMRs – Community Survey Feedback - Dave Hebert explained that the Office of Naval Research (ONR) met with the Navy's PEO-Ships to start work on the Ocean Class Requirements Document. The Ocean Class Science Mission Requirements (SMRs) will be a basis for the Requirements Document. Bob Houtman has asked the Fleet Improvement Committee if the Ocean Class SMRs (Version One, dated March 2003) still represent the Ocean Class requirements.. In turn, FIC asked the community to revisit the SMRs to determine if an update was needed. There were six responses. Dave summarized the responses that included suggestions for an over-side-handling system

that would keep free gear from entanglement, a separate and secure area for the ship's science server, and multiple water sampling intake depths. The FIC will have a phone meeting to determine if there are any additional items. ADA guidelines will be incorporated into the Ocean Class SMRs. The SMR update will be sent to Bob Houtman in mid August.

Model of a future fleet schedule - Mike Prince presented his first draft of the model of a future fleet schedule (*Appendix VIII*). He explained the assumptions that were applied in developing the model.

The model is based on 2006 ship time and schedules. The 2006 ship time is scheduled on the Fleet of 2017. The Fleet in 2017 includes the ships currently included in renewal plans. The ships that are slated for retirement before 2017 are not included in the model. However, Mike noted that there are some differences between the model and the draft FIC Fleet Improvement Plan update. The FIC plan has *Sproul* and *Pelican* retiring without replacement before 2017. The model assumes that these ships will be replaced. Since there was no seismic work scheduled in 2006, it hasn't been included in the model. In this first step, Mike did not include *Langseth* in 2006 or 2017. The model outcome does not consider ocean observatory facility projections or the estimated cost for operations.

To accomplish the 2017 scheduling, the model had to schedule some of the 2006 work on larger ships than they were actually scheduled on in 2006 because these ships were no longer in service. The model project is still a work in progress.

Discussion followed:

- Sandy asked if one of the model assumptions considered that the new ships would be more capable and could be utilized more efficiently. Mike explained that he is aware of this, but it hasn't been factored into the model. He is struggling to figure out how to handle it. The other fuzzy part of the model is that people submit ship time proposals based on what is available. As an example, requests for the ARRV don't exist because the ship is not in service.
- The Fleet of 2006 includes 23 ships, while in 2017; it will be reduced to 17 ships. In 2006 there were 3,998.5 final operational days. It was one of the weaker utilization years. In the 2017 model year, there is a total of 4024 ship days. The added days are necessary to accommodate transits. However, the model shows about 200 days unscheduled in the *Atlantic* because no ships are available.
- Peter Wiebe asked what would be the conservative estimate of OOI use. Mike reported that Kendra Daly showed a chart with the OOI Operation and Maintenance projections of about 259 days. This is still in flux and may be reduced further.
- Marcia stated that the model is a good exercise and shows how the ship time could be distributed among the future fleet.
- Matt Hawkins asked if the cost for operations would be added to the model. Mike – yes.

- Peter Wiebe asked Mike if there were any conclusions. Mike – It will be more expensive to operate the fewer ships because more transits would be required.
- Sandy commented that there are a lot of cruises on ships like the *Point Sur* and *Barnes*, etc. that are short and need flexibility. How will these be accommodated in the future?
- Mike discussed the nature of some of the unscheduled work. The 2006 cruises that used the *Johnson Sea Link* submersible could not be scheduled because its support ship, *Seward Johnson* would be retired by 2017. Also some of the programs that required multi-ship operations went unscheduled because of too few ships. Some of the short 2006 cruises on *Hatteras* could not be accommodated because the ship would be retired.
- Comment - The model shows that the 2017 ships aren't fully scheduled. Reply – The OOI support needs have not been factored into the model.
- The 2017 day rates will be a challenge to estimate. Linda Goad pointed out that *Langseth* is a lot more expensive to operate than *Ewing*.
- Mike asked the Council if he should continue work on the model. Dave Hebert replied “yes” and that it would be useful for the Fleet Improvement Plan.
- Marcia suggested that Mike consider an alternate year, as an example, model the 2008 schedules on a 2017 fleet. Also estimated cost projections would be very interesting and that seismic work should be included.
- Mike indicated that he would finish work on the 2006/2017 model. He would like to wait for the OOI projections before modeling another year. He will work on the cost estimate and will probably use a ratio formula for a cost estimate.

Interagency Working Group on Facilities (IWGF) Fleet Status Report – Bob Houtman reported that the IWGF Federal Fleet Status report is almost ready for submittal to the Interagency Committee on Ocean Science and Resource Management Integration (ICOSRMI). Some membership name changes are needed and it will then be sent.

FIC Fleet Improvement Plan Update – Dave Hebert reported that not much work has been done on the Plan since their last meeting. The committee would like to look over Mike's future scheduling model so that it can be considered as recommendations are formulated.

Renewal Implementation:

- Regional Class Acquisition Process – Design of the Regional Class ships continue. Preliminary design reviews for each team are planned for late July and August. The designs are expected to be complete in March 2008.
- Ocean Class Acquisition Status – Bob reported that they are drafting the requirement document for the Ocean Class. ONR has met with PEO-ships for assistance with the document. They will send the document to FIC when available. The Requirements Document will be the basis for the ship design.

- Global Class Science Mission Requirements – A Global Class SMR community questionnaire has been available on the UNOLS website for some time. There have been 19 responses. One final call for feedback will be sent to the community.
- *Marcus Langseth* Conversion Status - John Diebold reported on the conversion effort and explained that the ship still needs to complete its reflagging and stability tests with the USCG. After these issues are resolved, calibration cruises will be carried out. The timing of the shakedown cruise is a bit unclear. The first science cruise is expected in January 2008, but there is the possibility of November/December 2007 cruise to support McGuire. In 2008, The ship has a lot of ship time spread out in the Pacific Basin

UNOLS Ship Time Request and Scheduling Database Status - Mike Prince reviewed the new ship time request and scheduling database system http://unolsweb.cms.udel.edu/STRS/Public/diu_login.aspx. He has imported all of the ship time requests that were in the old system into the new system. We will begin to encourage the users to move to the new system to submit ship time requests in the near future. Some researchers have tried the new system.

The ship schedulers all have used the new system to review schedules and create LOIs. The basic scheduling feature is working well. Rose Dufour added that it makes the scheduling process a lot simpler.

Deb Kelley asked if there was an international ship scheduling arena. There is growing concern about multiple ships operating in the same area. The Neptune Canada (Pacific Northwest area) is an example. As observatory work ramps up, ships from both the U.S. and Canada are likely to be working in the same geographic area. Coordination will be needed in order to avoid conflicts.

UNOLS Brochure - Mike Prince reported that the brochure has been revised with comments received. If there are any additional specific comments please send them to the Office. Rose Dufour asked that the image of the airplane be moved down, away from the Ship Scheduling Committee text. The brochure will be printed on Recycled Paper and we will most likely have 1000 copies printed.

Frequency Spectrum Management – The task description, scope, and results of the RVTEC subcommittee efforts to survey the ship operators on frequency spectrum uses is provided in *Appendix X*. Fewer than ten respondents replied to the survey. Marcia requested the following action items:

- RVTEC is tasked with preparing a written preliminary status report of the Fleet's RF spectrum use based on the findings of the subcommittee. Bill Martin is to provide the report in writing to Peter Wiebe.
- Peter Wiebe will forward the status report to Dr. Otis Brown and seek his advice on the steps that should be taken next.

Continue Review of the Post Cruise Assessment Reports (PCAR) - Mike Prince reported that the new members (Bob Collier, Mary Jane Perry, and Matt Hawkins) have

been added to the subcommittee to replace Council members who have rotated off and Tim Askew who completed his term as RVOC Chair. There are some recommendations from the previous committee about potential changes. The PCAR Subcommittee will need to decide if the recommended changes should be incorporated into the form. Mike Prince will provide the subcommittee with additional review material.

Codes of Conduct - The Impact of Scientific Studies on the Environment – Marcia said that this is a topic of growing importance. She has been dealing with associated issues with the Monterey Accelerated Research System (MARS) cabled observatory. The MARS observatory will be required to have zones, and in some zones, only passive observations will be allowed. Some zones will allow active observations, and some will allow sampling. All of these operations and zones will have to be managed. RIDGE has also had to deal with similar issues. UNOLS will work to stay current on these activities.

American's with Disabilities Act (ADA) Guidelines – Annette reported that Terry Whitlege is finalizing the ADA Guidelines document for FIC/Council review. The ADA Procedural recommendations are being incorporated into the Research Vessel Safety Standard update.

Safety Standards for Human Occupied Vehicles (HOV) – Annette reported that the HOV Safety Committee has completed drafts for each of the HOV Safety Standard chapters. Their next phone meeting is scheduled for late August to review the document.

Science Opportunities aboard UNOLS Vessels – A UNOLS website has been drafted that will offer a way to announce science opportunities aboard UNOLS vessels and also allow individuals who are looking for opportunities to volunteer. Annette asked if there were any objections to making the site active. There were no objections.

UNOLS Annual Meeting Plans- October 11-12, 2007 – Mike Prince announced that this year's Keynote Speaker is Dr. Arden Bement, NSF Director. Mike thanked Linda and Dolly for their help in making the arrangements. This year a new format is planned for the meeting in the attempt to reduce redundancy. The Annual Meeting will begin on Thursday afternoon, October 11th, and continue until midday on Friday. There will be an abbreviated Council meeting on Thursday morning.

UNOLS objectives, priorities and goals –Mike Prince explained that at the Annual Meeting our objectives for the coming year should be formally stated. Input from the Council is needed so that everyone will know what is important to UNOLS.

Committee Reports – Committee Chairs provided written reports prior to the meeting. These are included as *Appendix X*.

Calendar of 2007 UNOLS Meetings:

- SCOAR - Mike Prince reported that Carl Friehe had stepped down as Chair of SCOAR and the committee will need a new Chair. They will schedule a meeting once a new Chair has been appointed.
- AGU - There will be a UNOLS booth at the fall AGU meeting. The brochure will be available at the booth. The booth offers a setting to communicate with the community.
- MLSOC – Mike reported that they are still trying to work out the timing for the next meeting. Marcia offered talk to Steve Holbrook about this and try to move things forward.
- DESSC – The DESSC have been trying to determine which Biology meeting would be the best to hold their winter meeting at every other year. Peter Wiebe suggested the Ocean Sciences meeting in Florida. Mary Jane recommended the Ocean Sciences meeting which meets every other year. Deb offered to discuss this further with Marcia and others who are interested in.
- RVTEC – RVTEC formally invited the UNOLS Chair to the 2007 RVTEC Annual Meeting in Moss Landing, CA on November 6-8. Marcia replied that she may be available on the afternoon of the 6th. Stewart said that an agenda for the meeting will be sent to Marcia as soon as it is ready.

A motion was made and passed (Dufour/Pinkel) to adjourn. The meeting ended at 1635 EDT.