UNOLS COUNCIL Phone / Web Conference

July 13 & 14, 2005

Committee Reports

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Fleet Improvement Committee (FIC) – FIC activities will be covered in the Council meeting agenda.

RVTEC Report to UNOLS – July 2005

Submitted by Bill Martin, RVTEC Chair

Ongoing issues and topics of discussion included:

- RVTEC community involvement with the upcoming INMARTECH 2006 conference. Barrie Walden of WHOI will host the conference in the fall of 2006.
- We continue to work through the "Defined Level of Service". Currently the subcommittee is creating a standard web-based structure for presenting institutional information. It is hoped that a standard structure, used by all institutions, will make it easier for science users to find proposal writing and cruise planning information.
- The RVTEC representative to the RVOC Safety Committee is working with the committee to rewrite the Research Vessel Safety Standards Manual (RVSS). Individual chapters were assigned to committee members to begin the rewriting process. Each member submitted his chapter revision on January 15, 2005.
- The HiSeasNet Earth Station has a link operating through a Pacific satellite (IntelSat IS-701) out to *R/V Revelle, R/V Melville, R/V Thompson, R/V Atlantis* and *R/V Kilo Moana*. Shore-to-ship bandwidth is 160 kbps and each ship has 96 kbps bandwidth ship-to-shore. The earth station also has its Atlantic satellite antenna built and certified on IntelSat IS-707 and is expected to bring the *R/V Knorr* online this April. Bandwidth will be 64 kbps shore-to-ship and 96 kbps ship-to-shore. *Atlantis* will move to the Atlantic satellite later this year. A Ku-Band antenna is partially built and is expected to go into service in he next 3-6 months. *R/V New Horizon* and *R/V Endeavor* will be connected through this antenna. Bandwidth will be 128 kbps shore-to-ship and 64 kbps ship-to-shore (each ship)
- During the RVTEC meeting the issue regarding safe working loads was debated. RVTEC believes this issue should be discussed and guidelines determined by the RVOC Safety Committee. A letter was written by the outgoing RVTEC Chair (Dale Chayes) to the RVOC Safety Committee Chair (Captain Tom Althouse) expressing our belief that the safety committee should take the lead in resolving this issue. I believe the safety committee will not address this issue because their priority is to complete the rewriting of the RVSS manual. If the UNOLS council believes this to be an issue the safety committee should address it may be helpful for the Council to send a letter to RVOC and the RVOC Safety Committee chair expressing the importance in addressing this issue and that the RVOC Safety Committee should take the lead. This topic directly impacts other current projects such as new cable specifications and load handling systems. (A copy of Dale Chayes' letter to Tom Althouse is included in this report as Attachment 1)

Marc Willis of Oregon State University will host the 2005 RVTEC Meeting on November 8-10. In addition the 2006 RVTEC Meeting will be hosted by Barrie Walden at the Woods Hole Oceanographic Institution in conjunction with the INMARTECH 2006 conference.

Attachment 1 to RVTEC Report

Date: Sun, 02 Jan 2005 20:31:42 -0500
From: Dale Chayes <dale@ldeo.columbia.edu
Subject:
To: Thomas Althouse <talthouse@ucsd.edu
Cc: Marc Willis <willis@coas.oregonstate.edu, Tim Askew
<TAskew@hboi.edu,
Richard Findley <Findley@hboi.edu, Annette UNOLS Office
<office@unols.org,
Bill Martin <bmartin@ocean.washington.edu

Tom (in your role as chair of the Safety Committee):

The general question of safe working loads and safety factors has been raised at RVTEC in conjunction with the work of the UNOLS Subcommittee on Wire and Cable Specifications. In the current regulatory and legal environment, what is the current guidance on safety factors for overboarding cables? That is, for a cable with a given breaking strength, what is the derating factor to be applied to arrive at safe working load? The answer to this question bears directly on the specifications for new cables, which generally consider package weight or operating load rather than breaking strength.

It seems to us that it would be appropriate for the Safety Committee to take the lead in resolving this important issue.

Regards,
-Dale

RVOC Report to UNOLS – July 2005
Submitted by Tim Askew

The RVOC membership is currently fairly quiet as it is in between annual meetings and most of the operators are busy with summer cruises. The OCEAN Class vessels now have their approved Vessel Security Plans and Facility Security Plans (FSP), where required, in place now. This was a major accomplishment due to the short notice that the ships couldn't go foreign until the VSP was approved.

The Safety Committee, chaired by Tom Althouse, SIO, has lost two members due to the recent retirements of Fred Jones, OSU, and Bill Hahn; URI. The committee will be soliciting new members prior to the next annual meeting. Big thanks to Fred and Bill for their years of service on the Safety Committee and participation with the RVOC.

Mike Prince has done an amazing job of putting together the Oil Spill Response Plan and response contractor packages for all the Non - Tank Vessels over 400 gross tons that are now required by the U S Coast Guard and the Marine Transportation Act of 2004 for Non -Tank Vessels. The plans need to be submitted to the USCG by 9 July so that approval will be in place by the implementation date of 8 August 2005. This is being funded by the National Science Foundation and Office of Naval Research for year one.

There are several group purchases in the works, Fred Jones is handling the Furuno Radars and associated equipment purchase through OSU for the *R/Vs Knorr, Pelican, Cape Hatteras, Point Sur, Savannah, Longhorn,* and the *Seward Johnson*. Al Suchy, WHOI, is handling the purchase of Furuno Doppler Speed Logs for the *R/Vs Knorr, Oceanus, Endeavor, Wecoma, Seward Johnson, Cape Hatteras*, *Pelican*, and *Blue Heron*. Al is also doing a group purchase of Life Rafts for WHOI, OSU, UW, and Duke. Lastly Tom Althouse is working on a group buy to have Stability Reviews for all the vessels that have not had one in recent years. A number of the ships have not had Stability Tests for as much as 10 years or more and are being recommended for a current review.

Van construction efforts continue. Construction of a pooled Aluminum Isotope Van for the east coast pool is nearing completion. Construction of an aluminum isotope van for a URI scientist and a steel general-purpose van for a University of Delaware scientist have been completed. Work is beginning on an aluminum "hydro" van for WHOI. A 10-foot isotope van for Minnesota/BLUE HERON is planned for this year.

The preliminary findings of the Load Handling System Workshop, chaired by Matt Hawkins, are now available on the UNOLS website at <http://www.unols.org/publications/reports/lhsworkshop/index.html>. - The University of Delaware and University of Hawaii have cut Purchase Orders with Caley Ocean Systems for two new systems in accordance with the "Functional Requirements" developed by the workshop. Delivery of the systems is planned for early January 2006.

The University of Washington in Seattle will host the next RVOC annual meeting. The meeting is tentatively scheduled to take place either the third or forth week in April 2006.Dan Schwartz is hoping to set hard dates by the end of July so that arrangements for facilities and hotels can be made well in advance.

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Marine Geology and Geophysics
School of Oceanography

July 11, 2005

RE: UPDATE ON DESSC ACTIVITIES

The Spring DESSC meeting was held on June 13-14, 2005 at Woods Hole Oceanographic Institution. The first day included agency reports, an overview of upgrades to the NDSF, a discussion of scheduling issues, the status of the replacement HOV, significant discussion on establishing safety standards for the use of HOV's, and the status of AUV's at WHOI. The first afternoon ended in a closed session focused on establishing criteria for bringing new assets into the NDSF and day rates for NDSF vehicles. During this closed session, a draft of criteria for bringing in assets to the facility was completed and several recommendations regarding NDSF issues were discussed by DESSC. The committee is currently reviewing the action items (summarized below) and recommendations.

Included in first day was a discussion regarding the status of the MBARI drill. After several years of working towards bringing a rock drill into the facility, this spring saw the successful funding of a proposal for transitioning the MBARI rock drill to WHOI as a Third Party Tool. The drill will be transitioned for use on *Jason 2*, with its first use occurring in September 2005. Special thanks to Maurice Tivey and Dan Fornari for submission of the proposal and for getting the drill funded.

The morning of the second day included an overview of the HROV, a discussion about long-range planning issues and where/when a follow-on Fall 2005 DESSC meeting should occur, an overview of education/outreach/archeology programs, ending with presentations regarding other deep submergence activities.

Action Items Resulting From the June 13-14 Meeting Include:

- **Establishing Criteria for bringing New Assets into the NDSF** – DESSC will review and comment on the latest revision of the criteria. Once the draft has been finalized, it will be circulated to the agencies, then the NDSF operator for comment. Pending revision, the draft criteria will be sent to the UNOLS Council for approval.

- **Liaison to RHOC** – Identify a DESSC member who is willing to serve as a liaison to the Replacement HOV Oversight Committee. Provide the recommendation to Dolly Dieter

- **Establishing Safety Standards for the use of Human Occupied Vehicles** - NSF will send a letter to DESSC with a charge to establish safety standards for HOVs. At the

summer Council meeting Debbie Kelley and Peter Wiebe will inform the Council about the charge. The safety standards will address certification of the vehicle, certification of the ship, and training (vehicle and ship crew). In response to NSF's charge a subcommittee will be formed. Potential members include RVOC Safety Committee representative, HOV operators from WHOI, HBOI, and HURL, and science users (DESSC). Input from the Navy and legal council would likely be required. This effort might span 2 years.

- **Winter Meeting Strategies -** A subcommittee of Craig Young, Jennifer Reynolds, and KT Scott will recommend a strategy (forum(s) and format) for the winter DESSC meeting that will better engage the deep submergence biologists. They will also consider including a training session as part of the meeting.

- **DESSC/NDSF Booth** – DESSC proposes that there be a DESSC booth at the Fall AGU meeting that would highlight the NDSF vehicles. WHOI offered to help provide the graphic displays for the booth. DESSC members would staff the booth. A proposal requesting agency approval and funds to support the booth is required.

- **DESSC Membership -** Dave Mindell completes his 2nd term in 9/05. Nominations are needed to fill his position. Individuals associated with Margins or Archeology research is desired.

- **Replacement HOV Sensors/equipment** – DESSC will poll the community on scientific equipment requirements for the replacement HOV. Input on new and emerging technologies is needed. This input is needed so that it can be included in WHOI's RFP for the new vehicle. Deadline information is needed from WHOI.

- **Navigation** – DESSC will consider to what level navigation data should be the responsibility of the NDSF Operator.

Deborah S. Kelley

SCOAR Report

By John Bane, SCOAR Chair

July 2005

The Scientific Committee on Oceanographic Aircraft Research met on April 6, 2005 at the Research Aviation Facility of National Center for Atmospheric Research, located in Broomfield, CO. The meeting was held in conjunction with the one-day meeting on April 5, of the ICCAGRA (Interagency Coordinating Committee for Aircraft Geosciences Research and Activities).

At the meeting SCOAR welcomed its newest regular member, Dick Zimmerman. Dick is a marine biologist who, among other activities, uses aircraft remote sensing to study coastal kelp communities. He is presently Chair of the Department of Ocean, Earth and Atmospheric Sciences at Old Dominion University in Norfolk, VA. UNOLS and SCOAR welcome Dick. Also welcomed was Steve Hartz, a new ex officio member who will be the liaison between SCOAR and RVTEC. Steve is the senior marine technician for the Alpha Helix, a UNOLS vessel operated by the University of Alaska.

Reports from NOAA (Beth White and Jim McFadden), NASA (Cheryl Yuhas), NSF (Jim Huning), ONR (Ron Ferek), UNOLS (Mike Prince) and CIRPAS (Haf Jonsson) were delivered.

The process of how to best update information on CIRPAS and SCOAR web pages was revisited, as some progress had been made since the previous SCOAR meeting. The following actions for the UNOLS Office were agreed upon, and they have been implemented since the April meeting:

- Put aircraft (Twin Otter) into rotating ships; add other quick links to aircraft on home and scheduling pages.
- Update the presentation of information on other university and agency aircraft and update links, pages with pictures, and contact information.
- Develop a method for keeping the CIRPAS schedule and request information up to date.
- Link to new CIRPAS pages as appropriate.

SCOAR remains interested in determining a set of safety standards for UNOLS-designated national aircraft facilities and platforms, similar to what is done for ships. At present there is a set of such standards for federal aircraft used by GSA and the members of the Interagency Committee for Aviation Policy (ICAP). They have implemented a number of programs to share, influence, and monitor the best aviation safety practices in the federal community. The ICAP has established the Safety Standards and Training Subcommittee to oversee these

programs and address emerging issues related to aviation safety. SCOAR will follow these developments and determine what needs to be done beyond what ICAP will do in setting safety standards (*e.g.* is there anything further that has to be done to assure safety of science party members who are aboard research aircraft that fly further than some specified distance from shore?).

SCOAR is interested in fostering better and more pro-active interactions with the ocean science community. In an effort to make progress, and to obtain feedback on aircraft desires and needs within the community, the following items were decided upon:

- Draft a white paper on how aircraft can or should support ocean sciences and what they can do.
- Draft a letter to the ocean science community asking for feedback on aircraft requirements and current and future uses of them.
- Create a feedback questionnaire as a companion to the letter.
- Develop plans for a workshop with aircraft operators and ocean science users (and perhaps other science users) and funding agencies.

The place and format for the next meeting were discussed. It was asked whether or not the meeting should be a phone/web conference, as was done for the November 2004 SCOAR meeting. It was decided that it depends on the agenda and length of time needed. A suggestion was made to meet at a ship-operating institution such as Scripps in November 2005 and include a half-day open session for local ocean scientists. Such a meeting place would allow atmospheric scientists a chance to tour a research vessel.

Arctic Icebreaker Coordinating Committee Report
July 2005

Report submitted by M. Edwards

USCGC HEALY is currently participating in leg 02 of a three-leg field season for 2005, a NOAA-funded Ocean Exploration project. HEALY successfully completed the first 2005 leg, mapping and coring along the Alaska-Beaufort Margin, although ice conditions were not ideal and the ship was beset for four days of that program. HEALY remains scheduled to participate in a joint operation with the Swedish icebreaker ODEN beginning in August 2005; the Russian icebreaker FEDEROV has recently been added to this program.

As reported at the March UNOLS Council meeting, the POLAR STAR successfully supported Deep Freeze 2005 without the assistance of her sister ship, POLAR SEA, but with participation from the Russian icebreaker KRASNIN. POLAR STAR had a casualty on one propeller during the operation, but this damage should not preclude participation in Deep Freeze 2006. Funds have recently been reallocated at NSF and the USCG to fund some of the necessary repairs for POLAR SEA, and it is likely that she will be sailing to support Deep Freeze operations again soon. In the meantime, the National Academy of Sciences Polar Research Board has convened a panel for "Assessment of US Coast Guard Polar Icebreaker Roles and Future Needs," which provisionally includes both former AICC chair Dr. James Swift and former NSF director Dr. Rita Colwell.

The March meeting of AICC followed on the heels of the UNOLS Council meeting, March 30th and 31st at the National Science Foundation in Arlington. Two of the action items from that meeting have taken priority since the spring meeting. At the request of NSF's Simon Stephenson, AICC has prioritized recommendations from the 2004 HEALY program debriefs and submitted this list of recommended changes to HEALY's commanding officer, USCG Headquarters and NSF for consideration. A new task for the AICC will include following up on these debrief recommendations to monitor how scientists' input is contributing to improvements in HEALY's performance. Due to the over-the-pole operations scheduled for this field season, the other priority item from the March AICC meeting has been developing a short-term solution for providing high-resolution satellite information on ice conditions to the ship on a timely basis. At present, National Ice Center personnel are supporting this effort.

The next AICC meeting is presently planned for the week immediately following the American Geophysical Meeting in San Francisco. It is tentatively scheduled to take place in Seattle, Washington on December 12th and 13th. No personnel changes within AICC or the USCG have taken place since the last report.

The AICC can be reached by writing to the Chair (margo@soest.hawaii.edu) or to the UNOLS Office (office@unols.org).

Summer UNOLS Council Meeting

Ship Scheduling Committee Report

July 2005

Spring of 05

- March 31 (the day after the March UNOLS council meeting) we started the accelerated scheduling process by calling for early LOIs. Our goal was to have LOIs posted, double bookings accounted for, and agency budgets known before turning this over to the newly formed UNOLS Council subcommittee (McNutt, Wiesenburg, Hofmann) by early June.

Letters of Intent

- We held several large ships, West Coast ships, and East Coast ships, conference calls to go over every LOI.
- We held an agency conference call in order to go over the posted LOIs and ask for a list of seagoing priorities from the agencies. We asked them to identify funding and scheduling issues, such multi-ship needs.
- Specifically for NSF, a list of prioritize cruises was necessary because it was clearly evident the estimated budget to cover the NSF 06 cruises were approximately $4.5M (equivalent to 180 days of Global Class ship time) over the anticipated budget of $37M. Once lay-up costs are accounted for, the deferred numbers days will need to be increased to stay within this budget.

NOAA's Role in DART

- Received and reviewed a draft Statement of Work for NOAA's DART program.

- While we had hoped that UNOLS could play a major role in NOAA's DART program it now appears dubious that our ships will be able to schedule any of the DART cruises in 2006. NWS envisions maximum scheduling flexibility, mooring deployment capability with mooring personnel and manager, and low daily rates. The ideal sceinero would be to assign one ship to cater to NOAA's DART program, which will not enable UNOLS ship operators to effectively respond. While we have projects (some NOAA funded) for 2006 in many of the same areas shown as high priority mooring deployments, it does not appear likely that we can meet the "total solution package" that the DART program outlined even though this could offer cost-effective solutions.

ONR’s plus-up

- $5M of plus-up money has been included in the House Defense Appropriations bill for "Navy use of UNOLS ships" in 2006. It remains to pass the Senate or conference and be signed into law, but we will not know for certain until well beyond the July scheduling meeting. More UNOLS institutions are actively supporting this addition than in previous years, so chances of eventual funding seem reasonably good. No specific scientific programs have been identified for this money; the above quote is the extent of the language thus far. It is largely up to ONR (and UNOLS) to define specifics. However ONR program managers do have preliminary ideas of seagoing programs that could benefit from the infusion of this new Navy money.