

**RESEARCH VESSELS OPERATORS' COMMITTEE  
SUMMARY REPORT  
OF THE  
2001 ANNUAL MEETING  
Hosted by:  
University of Rhode Island  
Graduate School of Oceanography  
Narragansett, RI  
October 23-25, 2001**

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Minutes of the 2001 Meeting**

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**Minutes of the 2001 Annual RVOC Meeting  
University of Rhode Island  
Graduate School of Oceanography  
Narragansett Bay Campus**

**Tuesday, Oct. 23, 2001  
Corliss Auditorium, Graduate School of Oceanography, URI, Narragansett**

The meeting was called to order by John Freitag, Manager of Marine Technicians, URI and Bill Hahn, Marine Superintendent, URI. John gave a short history of RVTEC, which was formed in 1993. Bill stated that it has been 25 years since URI hosted RVOC.

## **Welcoming Remarks**

Bill Hahn introduced Dr. John Merrill, Associate Dean, URI, Graduate School of Oceanography.

Dean Merrill welcomed all to the campus. He gave a brief overview of the facilities and how important they were to the scientists. He also stated that these meetings were exciting yet difficult and that the enhancement of facilities is very important to the scientific community.

## **RVOC/RVTEC Chair Remarks**

Steve Rabalais gave a short history of RVOC and recognized the significance of a joint meeting (same goals, the need to work together).

Dale Chayes discussed the meeting agenda changes and talked about Show and Tell on Thursday for people who want to talk about new products.

## **Summary of UNOLS Activities (Appendix III)**

Bob Knox, Chair of UNOLS, presented a summary of recent UNOLS activities starting with the events of September 11<sup>th</sup> in New York City and Washington, D.C. and the R/V EWING attack in the Gulf of Aden. Future considerations regarding operating areas and vessel safety will be topics of discussion in this meeting and the Council meeting rescheduled for 15 Nov. Bob also discussed the Federal Oceanographic Facilities Committee (FOFC) plan and the UNOLS response. Additionally, he discussed the ISM July 2002 implementation date and indicated that the impact on science would be minimal. Quality of service and a definition of technician services also need to be addressed.

## **UNOLS Committee Reports**

### **Research Vessel Technical Enhancement Committee (RVTEC)**

Dale Chayes reported that the RVTEC 2000 minutes had been approved via email.

### **Research Vessel Operators Operator's Committee (RVOC)**

Steve Rabalais reported on the very successful 2000 meeting hosted by Fred Jones at Oregon State at their Newport campus where an outstanding demonstration on life-saving techniques was presented by BMCS (Ret.) Tom McAdams.

### **Fleet Improvement Committee (FIC)**

Joe Coburn reported that FIC's activities have been focused on science mission requirements (SMR) for new research vessels, regional and coastal.

### **Arctic Icebreaker Coordinating Committee (AICC)**

Dan Schwartz reported that the HEALY's first year of operations was successful.

Improvements based on HEALY are to be implemented on the Polar Class icebreakers. The AICC-USCG Cruise Assessment Reports will help to correct any problems/deficiencies that were overlooked during the design and construction of the vessel. Schedules for USCG vessels were removed from UNOLS Web Site in response to the potential threat to ships and crew after the 9/11 attack.

## **Deep Submergence Science Committee (DESSC)**

Annette DeSilva reported on several issues including an inventory of Deep Submergence facilities, funding, a special session planned for the AGU-ASLO in Feb. 02.

## **Ship Scheduling Committee**

Dan Schwartz and Joe Coburn reported that there are still various problems with the 2002 schedule including programs that require two ship operations and (that some schedules still include NAVO 300+ days of which only about a third are funded with the remainder being deferred until 03).

### **Agency Reports (Appendix IV)**

## **National Science Foundation (NSF)**

Mike Reeve discussed budgets for 2002 and the effect of the continuing resolution that is currently in effect. He also said that budget requests decreased by 1%.

## **Office of Oceanographer of the Navy (ONR)**

Tim Pfeiffer commented on the ONR budget status. He stated that 30% of DURIP requests will be funded. Tim also discussed the Iridium satellite phone system and the possibility of reduced rates for the fleet if service is requested through NOPP.

## **National Oceanographic & Atmospheric Administration (NOAA)**

Beth White reported that Adm. Lautenbacker was a candidate for the new Administrator of NOAA. (He has since been confirmed). She discussed fleet renewal for NOAA/OMAO. The time line to replace the FERREL is 2002 and the FAIRWEATHER, Spring 2003.

## **Naval Oceanographic Office (NAVOCEANO)**

Gordon Wilkes reported that 1,785 days of UNOLS ship time was used in the last 5 years.

## **United States Coast Guard (USCG)**

Jonathan Berkson reported that the HEALY had her 1<sup>st</sup> successful summer conducting AUV (autonomous underwater vehicle) and radar testing. The POLAR SEA was undergoing maintenance in June-Nov. 2001 and the POLAR STAR is on Antarctic deployment for Oct. 2001-April 2002.

## **U.S. State Department**

Liz Tirpak reported that Tom Cocke retired in August and Roberta Barnes 202-647-0240 is helping on clearances since 9/11. Also, Margaret Hayes is the new Director for the Office of Ocean Affairs, which houses the Vessel Clearance Office. Due to the delays with State Dept. mail, Liz requests all clearance requests be submitted by Email. All clearance requirements & forms can be found on [www.state.gov](http://www.state.gov). Additionally, the State Dept. now has a science advisor, Dr. Norman Neureiter.

## **UNOLS Quality of Service (Appendix V)**

Mike Prince, along with a working group including Wif Gardner, TAMU; Tom Shipley, UT; and Steve Rabalais, LUMCON discussed the quality of service in the UNOLS fleet. A program, now in place, to improve the service provided by the fleet is based on Post Cruise Assessments (PCAs). The Committee has developed a new PCA, which is now on-line and available to all participants on UNOLS cruises. The scientific party, along with RV Captains, are encouraged to use the form when evaluating cruises involving UNOLS vessels.

Lunch

### **Winch and Wire Discussion - Science Mission Requirements (Appendix VI)**

## **Next Generation Wire/Establishing Wire SMRs**

Jon Alberts talked about ongoing efforts to establish standard wire sizes for the UNOLS fleet as per the recommendations from the 1999 Winch & Wire Symposium in New Orleans, LA. Specifications for a replacement cable for the standard UNOLS .322" E.M. are being developed. Some UNOLS Institutions, like Scripps, are using .680 fiber optic and Jon indicated that there is a need for larger more capable up links in the future.

## **Safe Working Loads**

Tom Althouse talked about breaking strengths for the various wire sizes utilized by UNOLS vessels. There are two published wire rope safety factor, 4.7:1 (ABS) and 5 (USCG).. Consistent break strength and safe working loads for wire ropes and cables in the UNOLS fleet need to be established. Consideration should be given to utilizing 2:1 as the safe working load for wire ropes and cables under certain conditions when loads are monitored accurately. Outside groups, Rochester, Clossens, McWhite, TMT, etc., should be consulted.

## **New Over the side Handling Gear**

James Stansy, Dynacon, Inc. discussed purpose-built handling systems, the importance of an 80:1 bend ratio on all systems, and telescoping "A" frame launch & recovery systems. Stansy stated that having uniform handling (large bend ratio) systems is necessary in order to establish uniform SWL of wire and cranes. (Most cranes are not designed for ships and need cradles for side loads and a docking delivery latch. Electric vs. hydraulic with hydraulic being the best system for handling system operations.) Mr. Stansy recommended synthetic hydraulic oil <http://www.RoyalPurple.com>.

## **Future Science Needs**

Dr. Peter Wiebe, WHOI discussed future science needs including "next generation" instrumentation and cables, and the need for modern vans outfitted with computers, real time data, displays, etc. Peter talked about his experience with Dynacon-built winch, wire & handling systems. All categories of instrument packages - passive, AUV, active MOCNESS, BIONESS, and multi-net (biomapper, deep tow) were discussed. The future needs include wire with more conductors or greater availability of fiber optic cable, the capability for faster and deeper towing instruments, improvements in wire monitoring and docking systems, and innovative solutions to the slack wire problem.

### **ISM (Appendix VII)**

## **US Class I&II Operators**

Morgan Terrell, University of Washington discussed ISM requirements based on the implementation of ISM on the R/V THOMPSON. ISM applies to vessels over 500 International tons/300 Regulatory Tons.

The procedures cover 13 elements. Class I implementation must be in place by July 2002. Refer to info provided in , "International Management Code for the Safe Operation of Ship and for Pollution Prevention", also known as the "International Safety Management Code" or "ISM" Code.

## Foreign Operators

Paul Stone, Southampton Oceanography Centre stated that the Southampton Lab is already meeting ISO 9002 standards which made implementing ISM much easier. The common components of ISO 9002 & ISM include responsibility, written procedures, and instructions.

## NOAA

Doug Friske, NOAA indicated that their goal is to get 7 large NOAA vessels ISM compliant. All others will be enrolled in the voluntary compliance program.

**RVOC/RVTEC Joint Social - The Museum of Yachting, Newport, RI  
Wednesday, 24 October 2001  
The Hotel Viking, Conference Room C, Newport, RI**

### Old Business

**Minutes of the 2001 meeting** - A motion was made, seconded and passed to accept the minutes of the 2000 meeting.

## Mystic Seaport Display

The original intent of the display was to have a working map with vessel positions updated daily. Real time video of each vessel during operations and interviews with PI's proved to be difficult to achieve.

Presently there are 8-10 videos of UNOLS ships. Weekly ship position updates are obtained from the UNOLS web site.

The issue of post 9/11 security in connection with vessel position updates, has been raised and will be discussed at a future date.

## Accident Statistics

Mike Prince reported on the latest accident statistics for the UNOLS fleet. The 2001 YTD lost time accidents averaged 5 lost days per 200,000 hours. Overall the UNOLS fleet statistics are extremely good in comparison with the rest of the maritime industry. Mike clarified that the reports he gets from operators are not the same as those required under the NSF Cooperative Agreement.

## Safety Committee

Tom Althouse reported that the Committee members would begin a review of the Research Vessel Safety Standards. This process takes place every 3 years. Tom will assign chapters to the individual members for review and the results will go to the UNOLS office for completion. Tom also stated that there was a need for a small vessel operator to be on the Committee and that he was looking for volunteers. The current members are Tom Althouse (SIO), Joe Coburn (WHOI), Bill Hahn (URI), Paul Ljunggren (Lamont-Doherty), and Tim Askew (HBOI).

Safety Video - the Arctic Program (R/V PALMER) noted several discrepancies in the recently completed

safety video. The Committee agrees with some but not all of the suggestions made by the Arctic Program and it was decided to have all operators review the safety video once more and comment. Also, it was decided to get quotes to correct the areas that convey the wrong impression either by removing them or changing the dialog to indicate that the procedure is wrong. Jamestown Marine should be considered for a quote to correct the video since they produced it. Other institutions can submit a quote also since several have professional video production groups that could possibly provide their services. Tom will follow up via email with the Marine Superintendents regarding the second review of the video.

Tom also noted that the hazardous materials that accumulate on board vessels with long deployments away from homeport are a concern. Chapter 9 of the Research Vessel Safety Standards states that it is the PI's responsibility to remove hazardous material after every cruise. This is becoming a major issue among the fleet.

The RVOC Safety Training Manual may need a review. With SOLAS and ISM regulations, it's apparent that the RVOC Safety Training Manual does not address all the necessary areas. Tom will be soliciting help with regard to reviewing the manual.

## **Pay Compensation (See Appendix VIII)**

Matt Hawkins presented the UNOLS "Regional" ship salary survey. Six of the nine "regional" ships were surveyed which provided a broad geographic range for cost of living, pay systems and manning requirements. The results were based on pay only, not benefits. One hundred eighty days at sea was used as a base.

## **Computer Maintenance Management Software (CMMS)**

Bill Hahn, URI discussed the current status of CMMS. The committee is conducting site visits of potential suppliers of CMMS programs. Bill Hahn, URI; Scott Olson, HBOI, Dave Powell, UM, and Al Walsh, Lamont-Doherty participated in these visits. Ten Institutions are interested in implementing a maintenance system at the present time therefore a group purchase would reduce the overall cost. The cost of the ABS software is approximately \$25,000/each ship, however implementation can be costly depending on various factors (such as multiple vessels) and there are additional costs including an annual software fee. NSF (Dolly Dieter) will entertain a proposal for the group purchase of the software under the SSSE budget.

### **New Business**

## **Buyers Conference Report (See Appendix IX)**

Dennis Fox, WHOI and Doug Brusa, Lamont-Doherty gave a presentation on purchasing for ocean sciences. Twelve UNOLS institutions attended the Ocean Buyers Conference in the Spring of 2001 in Seattle, Wa. Plans are to continue once a year meetings, gain UNOLS support, and expand meeting attendance. Some small operators don't have a purchasing department and the ability to share information is of great benefit to them.

## **Group Purchase Update**

Steve Rabalais and Matt Hawkins talked about group purchases including vans and Nera Inmarsat B's. The group purchase price for the Inmarsat B units would be \$18,000/each vs. \$27,000 when purchased individually. Getting the information together is the most difficult aspect of determining which unit to purchase but it is definitely worth the effort.

Van Purchase - The cost of vans in the future may be less because the engineering details are complete. Cost estimate for a steel van is \$70,000 and \$80,000 for aluminum vans

Steve Rabalais covered the group purchase of Safe Boats (foam collar rigid inflatable boats). A UNOLS group purchase cost estimate for 4boats through LUMCON (LUMCON, UDEL, and Scripps), is \$30,000 average as compared to \$57,000 for Zodiacs with engines.

## **NSF Inspection Program/SSSE Update (Appendix X)**

Dolly Dieter covered the NSF Inspection Program. She stated that is was a joint effort between NSF and NOAA. Lt. Cdr. Fred Rossman, NOAA spent considerable time and effort on the inspection program, which had to be contracted through NSF, not UNOLS. Four proposals were received. A two-year contract (July 2001-2003) was awarded to Jamestown Marine (JMS). The first inspection is scheduled for Nov 2001. The contract calls for a total of 20 ships (10 per year) to be inspected during the life of the contract. The purpose of the Inspection Program is to improve science capability, safety standards, and maintenance. The inspection process must be objective and the contractor must not have a conflict of interest.

## **Personnel Conference in New York/Ad Hock Personnel Committee (Appendix XI)**

Lee Black presented information gathered during a Maritime Marine Careers Conference held at Mass Maritime Academy. Approximately 150 attendees were there from all areas of ship operations. Some issues discussed included an action plan for recruiting and retaining American mariners and the lack of entry-level jobs.

### **Special Reports**

## **SACLANT Undersea Research Center (Appendix XII)**

Chris Gobey reported that SACLANT is currently constructing a low noise, ISM compliant, small vessel (95' LOA x 28' beam). The NATO Coastal Research Vessel LEONARDO will be ABS classed with a delivery date of June 2002 in the U.K. and commissioned in Italy in Sept. 2002.

## **Natural Environment Research Council/Research Ship Unit , UK Ocean Research Services (NERC/RSU UKORS) (Appendix XIII)**

Edward Cooper reported on fleet activities and changes in major facilities at NERC. .

## **Canadian Defense Research Establishment (Appendix XIV)**

Ric Hattin reported on the CFAV QUEST. The vessel is acoustically quiet and when operating on batteries will run at noise levels less than the ambient noise level in the ocean. They will be looking for opportunities to collaborate with UNOLS

## **Netherlands Institute of Sea Research (NIOZ) (Appendix XV)**

Marieke Rietveld reported on NIOZ activities for 2001. She stated that R/V PELAGIA sailed 22,000 nm around Africa in the first 6 months of 2001 and spent the remainder of the year in the North Atlantic. She also discussed major equipment changes on the PELAGIA, one of which is the addition of a deep-sea winch and cable (fiber with conductor). Equipment testing is scheduled for Nov. 2001.

## **Research Vessel Updates:**

**AGOR 26 (Appendix XVI)** - Robert Hinton reported on the progress of the new AGOR 26, R/V KILO MOANA. She is being built by Atlantic Marine in Jacksonville, FL.

<http://mina.soest.hawaii.edu/agor26>



## **R/V HATTERAS Mid-Life (Appendix XVII)**

Quinten Lewis reported on Duke University's proposal to conduct a mid-life refit on the R/V CAPE HATTERAS. She is 20 years old. The yard work is planned for 2002.

## **R/V ASTERIAS Replacement**

Joe Coburn discussed plans for replacement of the R/V ASTERIAS. A SWATH design is currently out for bids. Specifications include: 20 kts vs 9 kts cruising speed, 55' LOA x 17' beam x 5' draft, 350 nm range with "A" frame rated for 8,000 lbs, and scuba diving support facilities. Estimated cost is \$1.5 million to build. Estimated day rate \$1500. She will be used for short 1-2 day cruises.

## **R/V ALPHA HELIX Replacement**

Tom Smith reported on the current status of the R/V ALPHA HELIX replacement. The concept design was completed Aug. 1, 2001 with preliminary and model design to be completed in 2002 and contract design completed by the end of 2002. She will be 226' LOA (vs <200' as originally planned) in order to meet SMR and regulatory Ice Class requirements .

## **New National Marine Fisheries (NMF) Vessel**

Jim Meehan reported that a contract was signed with Halter Marine for a new NMFS vessel. At 208', the first ship is slated to go to Alaska. She will meet Ice Class requirements and will be a quiet ship. The vessel's primary mission will be fisheries stock assessment.

## **Z drive Problems**

Box Knox discussed UNOLS AGOR Z Drive problems. He stated that the manufacturer of the drives is willing to address problems with AGOR's operators.

## **California Oil Spill Regulations**

Tom Althouse discussed new California Oil Spill Regulations. Information can be obtained on <http://www.coastal.ca.gov/web/oilspill/ospndx.html>. This site has links to oil spill regulations, and various state and federal agencies involved with oil spill control.

Lunch

**Medical Services Contract Update on MAS Activities and Comments on New Contract (Appendix XVIII)** - Dale Hutchinson reported that MAS handles an average of 2-3 new cases/day and that 450-500 vessels use MAS. He emphasized the importance of having the Medical History Questionnaires completed and on file. There was also a discussion of past problems with MAS.

**New Drug Testing Policies (See Appendix XIX)** - Lt. JG. Josh Pennington gave a presentation on the USCG Drug and Alcohol Policies. The areas covered were: DOT recognized illegal drugs (marijuana, coke, and opiates); reasons for testing which include pre-employment, random, periodic, serious incident, probable cause; annual random testing of 50% of a companies employees required; new changes to 46 CFR 16 & 40. Employers are required to take a split specimen (49 CFR 40.71) and can do a record check for up to 2 years by contacting DOT. If contact with past employers is attempted, this qualifies as a valid attempt to verify the status of the employee (49 CFR 40.25). The MRO/SAP training requirements can be found in 49 CFR 40. Additional information can be obtained from [www.uscg.mil/hq/g-m/moa/dapip.htm](http://www.uscg.mil/hq/g-m/moa/dapip.htm).

**Fuel Cells (See Appendix XX)** - Jack Bash gave a presentation on alternate fuel sources.

**Insurance and Admiralty Law Review** - Dennis Nixon reported on the insurance impacts since the



events of Sept. 11, 2001. Estimated loss, from the 9/11 tragedy is \$15 billion for buildings & aircraft, with an approximate total loss >\$50 billion. New market rates including rates for war risk insurance are to be established in February 2002. War risk zones will also be established at this time.

**RVOC Dinner at Officers Club, Newport Navy Base  
Thursday, 25 October 2001  
Coastal Institute Building Auditorium, Narragansett**

**RVTEC/RVOC Joint Session on Van Replacement (Appendix XXI)**

Matt Hawkins summarized the efforts to standardize science vans in the fleet. The basic materials for science vans are steel and aluminum. He has obtained a formal letter from USCG stating that if it is a non-accommodation van, it will not be required to be inspected. Sheltered locations on the deck of the ship are desirable for the placement of the vans. Van specs are on RVOC web page.

**RVTEC/RVOC Joint Session, INMARTEC 2002 Plans (Appendix XXII)**

Marieke Rietveld (NIOZ). INMARTEC 2002 will be held at JAMSTEC in Yokohana, Japan. The main theme will be Data Acquisition. The first announcement will be distributed Nov 2001. USA participation is encouraged.

**Security Aboard Vessels Working in High Risk Areas (See Appendix XXIII)**

Joe Coburn and Paul Ljunggren discussed the Gulf of Aden incident on the R/V EWING. Piracy, worldwide, is a major problem for shipping interests especially R/Vs that are working and not just passing through high-risk areas. The EWING's crew was not armed, however the vessel carried a security advisor. Various web sites <http://www.maritimesecurity.org> have information on security risks worldwide and the UNOLS office provides current information to operators. Many questions were raised about ops in high-risk areas. Information needs to be disseminated and a security committee should be formed.

**Deep Coring** - Joe Coburn discussed non-traditional projects such as LBVDS (lightweight, broadband, variable-depth sonar), and the Navy's next generation sonar which includes a large, heavy tow fish. A major consideration for ships deploying this gear is the cable break strength of 125k lbs (with a weak link of 65k lbs). Structural loads will be a major consideration of the ship.

Another non-traditional project is the Glad 800 Rotary drilling rig, which consists of long coring to 50 meters, with 60k lb pull out. The system uses plasma synthetic rope with a 221k lb break strength.

Research Vessel Updates continued:

**Sea Education Association**

Phil Sacks gave a presentation on their new sailing vessel R/V ROBERT C. SEAMANS, built J.M. Martinal, Tacoma, WA.

**R/V Suncoaster Replacement**

Gene Olson discussed the design for a new coastal research vessel to replace the R/V SUNCOASTER. The vessel will have diesel electric propulsion, a bulbous bow, and 11 kts cruising speed.

**Univ of Delaware (Appendix XXIV)**

Matt Hawkins discussed the conceptual design for the R/V CAPE HENLOPEN replacement. The 2001 design incorporated diesel electric/azimuthing drive main propulsion and a bow thruster coupled to a dynamic positioning system. She is 138' LOA with a 33' beam, a bulbous bow, and the estimated cost to build is \$10 million.

## **R/V SAVANNAH**

Baxton Tesh reports that the R/V SAVANNAH was commissioned 9/15/01 and is now operational.

## **R/V PELICAN Mid-life**

Steve Rabalais reported that the funds are in place to complete the PELICAN refit which will include a 10' stern extension. A four to six month time frame is anticipated for modifications to be completed.

**SOCP** - Steve Rabalais gave an overview of the Ship Operations Cooperative Program, which is open to all U.S. based vessel operators. The purpose of the SOCP is to address and promote commercial operations through the identification, development, and application of new methods, procedures, and technologies. SOCP's overall objective is to improve the competitiveness, productivity, efficiency, safety, and environmental responsiveness of U.S. vessel operations. All U.S. based vessel operators and organizations that support vessel operations are eligible to participate in the program. NOAA and the USCG are members.

## **Round Table Discussion**

Marine Superintendent or their equivalents from member and guest organizations met to discuss issues of mutual interest. A summary of the topics discussed included:

- Proposal Sharing
- Group Purchase
- CMMS
- Van Standards and Inventory
- Salary Survey, Large Ships
- NSF Inspections
- Unique Operational Situations by Class III & IV
- Crosby Training
- Mail List
- Joint Meeting

Lunch

## **Business Meeting**

**Assignment to Committees:** Security Committee - Dan Schwartz to chair. Joe Coburn and Paul Ljunggren were assigned to be on committee.

Actions Items:

- 2002 Meeting will be hosted by Moss Landing Marine Lab
- 2003 Meeting (proposed but not voted on). Candidates are:

University of Texas - Port Aransas

Great Lakes Water Inst. - Milwaukee, WI

University of Minnesota - Duluth, MN

Duke University - Beaufort, NC

**Adjournment**

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**APPENDIX XX**

**APPENDIX XXI**

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