Research Vessels Operator's Committee

Summary Report
of the
2000 Annual Meeting
Oregon State University
Newport, OR
24-26 October 2000
Sessions held at the
Hatfield Marine Science Center
Contents:

Minutes of the 2000 Annual RVOC Meeting

Oregon State University

Newport, OR

Tuesday, 24 October 2000

Hatfield Marine Science Center

The meeting was called to order by RVOC Chair, Paul Ljunggren, Marine Superintendent at Lamont Doherty Earth Observatory.

WELCOMING REMARKS

Fred Jones, Marine Superintendent, Oregon State University welcomed the RVOC to Newport and introduced Dr. Tim Cowles, Associate Dean.

Dr. Cowles welcomed RVOC to the Hatfield Marine Science Center and gave a brief overview of the Institution and the facilities at the Center. Dr. Cowles discussed new initiatives in UNOLS including ISM and the Academic Fleet Review.

AGENDA

The meeting followed the agenda outlined in ***Appendix I*****.** Registered attendees are listed in ***Appendix II***.

OLD BUSINESS

Minutes of the 1999 Meeting - A motion was made, seconded and passed to accept the minutes of the 1999 meeting.

Small Research Vessels Compendium – The UNOLS Office has the Compendium and it will be placed on the UNOLS homepage as a living document.

RVOC Website – Steve Rabalais reviewed updates to the RVOC web site that will be submitted to the UNOLS office.

NEW BUSINESS

Volume Purchase Review – Over the last year there has been a move toward group purchasing common equipment for the fleet. This year 76 immersion suits were purchased as a single unit for 6 institutions. This brought the cost down to about $240/suit.

An effort is now in place to develop a set of specifications for portable vans. These specifications will be used to make group purchases for all new vans for UNOLS vessels. Five institutions have been identified as needing vans and may participate in the first group purchase.

Wire Study – UNOLS requested that a group consisting of Theo Moniz, Mark Willis, Rich Findley and Tom Althouse look at maximum working loads on wires in the fleet. There are currently uniform policies for maximum working loads on oceanographic wires and cable. The only information available is the ABS guideline for classification for underwater handling systems for ROV's, which says the safe working loads should be 4.7:1. This means that some of the smaller wires in use today should be limited to 2,000 lbs and 6,000 lbs for larger wires. The issue is, should we live with these standards or attempt to have them changed.

A lengthy discussion followed about common loads on oceanographic wires and the impact on oceanography of accepting industry standards for safe working loads. Rochester Wire is waiting for input from UNOLS in their investigation of where to go in designing wire for the oceanographic community. Input from ocean scientists is needed in order to move to resolution of this issue. Deck handling equipment is also a part of this discussion. Vector and Rochester are willing to work with us to meet our needs for cable. Whatever maximum working load is established it has to be subjected to testing and acceptance by class societies in order to be effective.

COMMITTEE AND LIAISON REPORTS

UNOLS – Dr. Bob Knox reported for UNOLS ***Appendix III***. Large NSF and Navy owned ships have had a history of under utilization over the last decade. This has lead to some lay-ups, and pressure towards retirements. However, over the last few years the Navy and NAVO in particular have been instrumental in providing additional support for the whole fleet, including the large ships. Because of this

we have evolved into a mild over booking situation of the large ships, which in turn is affecting the whole fleet. This problem has still not been resolved and some ships still don't have final schedules for next year. It is not clear if over booking will continue into the future. It is important to convey these issues back to the P.I.'s so they may understand the problems faced by schedulers.

Quality control of service to science has been an issue of major concern to UNOLS in the wake of the Academic Fleet Review. To some degree it affects the technical support community more than it does RVOC. There are many definitions of what quality of service is. This makes it difficult to measure and that is what UNOLS is struggling with now. In 4 years NSF will have to go before the National Science Board again and demonstrate that they have made progress in dealing with this issue.

Safety related issues impact all aspects of vessel operations and there is a need for interaction between RVOC and RVTEC in order to guarantee that our vessels are safe platforms. ISM, as an instrument of enhancing safety on our vessels will have to be considered by both groups.

Recruitment and retention is a key issue facing vessel crews and technicians. Success at retention of first class people is also of prime importance to scientists using our ships.

Mike Prince gave a brief overview of several issues facing the UNOLS Office. Mike presented plans for establishing a RVOC "only" site. Mystic Seaport in Mystic Connecticut has constructed a display on UNOLS R/V's. Operators are encouraged to contact Mystic with updates on their vessel's activities. In the future, Annette DeSilva from the University of Rhode Island UNOLS Office will be attending RVTEC and DESSC meetings and Mike Prince will cover RVOC and FIC activities.

Safety Committee – ISM and STCW have been items of concern for the Safety Committee. The Committee has reviewed the CFR's to see if there have been any new changes. Tom Smith and Steve Rabalais will be leaving the Committee and two new members are needed to replace them. A list of internal ISM auditors will be formulated. The training manual will have to be updated so it can be used to meet training requirements for ISM and STCW. The UNOLS Office is currently out of manuals but more will be available in the near future. The R/V PALMER crew had some comments on the RVOC Safety Video.

Ship Scheduling Committee – Dan Schwartz reported on the activities of the Ship Scheduling Committee. The Committee met with program managers from the federal agencies before the UNOLS Annual Meeting. Even though next year looks to be a healthy year, there are still some soft spots, i.e. the EDWIN LINK will be out of service for most of 2001. There is more work in the Pacific than will fit on the available Class I vessels. Therefore, some science will be deferred until out year and some 2-ship operations will be reduced to single ship operations.

Underwater vehicle issues were also discussed in the September meeting. Because of the limited number of underwater facilities, they will continue to drive the scheduling process. Future interaction between the Scheduling Committee and DESSC will be needed in order to resolve some of these issues.

Because scheduling is the point of initial contact between operators and scientists, it is important that these interactions are positive. A special effort toward quality of service should be made during this process.

The LOI, Letter of Intent process and scheduling online is now in its second year and it seems to be a very successful addition to the scheduling process.

Research Vessel Technical Enhancement Committee (RVTEC) – Marc Willis reported on the 2000 RVTEC meeting held at Lamont. Marc reported that INMARTECH 2000, which was held in the

Netherlands this year, was a very good meeting and was attended by many U.S. representatives. Dale Chayes was selected to be the new Chair for RVTEC and Tony Amos will remain as Vice-Chair. RVTEC will meet next year at URI in conjunction with RVOC. There was some discussion at the meeting on the Quality Management issue and they are waiting to see how things develop.

Science testing on the *Healy* is now complete and reports are available in digital form.

There are currently 6 SeaNet installations in the fleet and 3-4 more will be installed in 2001 on vessels that currently have Inmarsat capabilities. SeaNet is looking for a commercial service provider for the SeaNet service.

A long discussion about ISM and the impact on technical support activities followed. The lack of a model to follow is the largest fear among technicians.

Initial tests of the RDI 75 kHz phased array ADCP have been completed by Eric Firing at the University of Hawaii. These will be a direct replacement for the 150 kHz narrow band ADCP in use by most of the vessels in the fleet. The University of Rhode Island will take delivery of a unit in the near future and begin long term testing on the system.

One full day was devoted to hands-on sessions where information was shared on autosals and salinometers, .322 cable terminations, and an in-depth demonstration of SeaNet. This was a very useful session and it will probably be continued in the future.

There was a long discussion of base levels of service on R/V's. What were the techs required to do on UNOLS vessels? What are the expectations of the scientists, techs, and funding agencies? A committee to determine the answers to these questions has been formed.

The usual subcommittee reports were given. The Training and Tech Exchange Subcommittee is establishing an addition to the RVTEC Web site, which will consolidate training opportunities for technicians. Bill Martin at University of Washington will be putting this page together.

A brief outline of the University of Miami project with Royal Caribbean Cruise Line was provided.

Arctic Icebreaker Coordinating Committee (AICC) - Joe Coburn, RVOC's representative to FIC and AICC reported on the activities of these two committees. A change in management and attitude in the U.S Coast Guard has encouraged the vitalization of AICC. The Coast Guard is funding a fair share of the activities of this committee. The last couple of years have been dedicated to the design of the USCGC HEALY. A delay in the construction of the ship allowed for the completion of a number of scientific modifications to the design of the vessel. The ship sailed last spring on warm water trails and RVTEC was there to test scientific components of the vessel. Ice breaking trials are now complete.

The control/monitoring systems on the vessel are extremely sophisticated. This has resulted in a significant reduction in manning on the vessel. The plan is to operate it with about 70 people compared to the Polar Class vessels that have 130 men. There are no paper logs on the vessels; all logs are kept on computers.

The hull and propulsion gear were instrumented during tests to determine stresses on the vessel while breaking ice. At maximum power the vessel goes 5.5-kts through 4.5 ft of ice.

Coordination of the science instrument testing was overseen by John Frietag. Numerous tests were conducted, including coring and dredging and towing a MocNess in ice.

The ship is in the shipyard for post shake down availability and warranty work. Some changes suggested by the scientists are being completed in the shipyard.

Joe volunteered to step down as the RVOC representative to AICC.

Fleet Improvement Committee (FIC) - An assessment of the fleet is available on the FIC Web site. The assessment is a work in progress. The committee is moving toward developing a fleet renewal plan to replace the fleet replacement plan. This reflects the fact that the fleet will be renewed but as ships go off line they will not be replaced on a one for one basis.

AGENCY REPORTS

National Science Foundation (NSF) –Dolly Dieter gave a summary of NSF activities. There is no budget for 2001 and NSF is still on a continuing resolution. NSF was recommended to receive a 13.4% increase for 2001. This does not mean that Ship Opswill see a 13.4% increase because most of the new money will be used to fund new special projects. Ship Ops will require a 10-11% increase ($4 million) next year in order to fund the requested number of ship days. If this happens it will be the largest increase to Dolly's budget in a number of years.

Ocean Science is moving to a new 3-section system. Biological, Chemical, Physical Oceanography will be in one section, MG&G and ODP will be in another section and all other operations including Ship Ops will be in the third section. Mike Purdy will leave NSF on Dec. 1. He is going to Lamont. Dr. Linda Goad has been selected to replace Dolly as the new Ship Ops Program Manager. She will start in mid January. Dolly will be in charge of SSSE, Inspections, and Charter Party Agreements. Fred Rossmann will be on loan from NOAA to NSF for 2 days/week for the remainder of the year.

The Inspection Program is still in internal review at NSF. The program may start up again in the spring. Mike Reeve and Holly Smith have been working on the Fleet Plan. It is anticipated that it will be distributed in the spring. Ocean Sciences wants to convince the NSF Administration to put the Foundation back into the ship building business. The Charter party Agreements will be upgraded as recommended by the Academic Fleet Review and the Ford Report. Evaluation of the Charter Party Agreements will be done in conjunction with ONR.

Office of Naval Research (ONR) - Tim Pfeiffer submitted the report for the Navy. Pat Dennis is now at CORE working as the Chief of Staff and Tim Pfeiffer has signed on for another two years as the Ship Ops Program Manager at ONR. Tim has $10 million of ship time requests not including NAVO, which has about $5 million. The Naval Research Lab is spending close to $5 million. Equipment funding for next year is about $1.7 million.

All Navy ships are required to be ISM compliant. Tim felt that the Technician groups on UNOLS vessels should also embrace ISM. He warned that ABS and the Coast Guard will probably experience a backlog of certification requests, so operators should plan to submit early.

LUNCH

Naval Oceanographic Office (NAVOCEANO) – Gordon Wilkes represented NAVO, ***Appendix IV***. Through 1999 NAVO has used 1,250 days on UNOLS vessels. This equates to about 5 ship years on Navy vessels. They used 15 UNOLS ships. Data gathered and entered into the NAVO database includes XBT, CTD, ADCP, grabs, and cores. In 2000, NAVO will use 205 days on both coasts and in the Gulf of Mexico. In 2001 the budget is up $2 million to $5 million. This will fund about 310 ship days. According to CORE they will be funded again in 2002.

National Oceanographic and Atmospheric Administration (NOAA) – Bill O'Clock represented NOAA ***Appendix V***. They operate 15 ships from the 90' RUDE to the 274' RON BROWN. The ships are located in 7 regional ports, 8 are on the east coast and the Gulf of Mexico and 7 are on the west coast and Hawaii. In 2001 the budget is broken down into 2 sources, 60% will go to the NOAA Fleet and 40% will go to charter operations. Of the 40% for charter operation, 5% will be used to contract for hydrographic services in Alaska, 15% will be used on the UNOLS fleet, and 20% will go to non-UNOLS fisheries activities.

In Dec. 2000 the contract will be awarded for the first Fisheries Research Vessel (FRV). It will be delivered to the Alaska Fisheries Center in 2003. In 2004 Woods Hole, MA will get a vessel followed by Newport, OR in 2005 and Pascagoula, MS in 2006.

The ADVENTUROUS will be upgraded to replace the TOWNSEND CROMWELL. The McARTHUR and the ALBATROSS IV will under go some major repairs to extend their life and the GORDON GUNTER will undergo operational upgrades. A push is on to reactivate the FAIRWEATHER, a sister ship of the RAINIER. It will go to Alaska to do hydrographic backlog work. The YTT (Yard Torpedo Testing vessel) is planned to replace the FERREL.

During the inspection of the labs small boats it was determined that the material condition of these vessels, for the most part, were unsafe. The Office of Marine and Aviation and Operations have been instructed to get more involved in improving safety on these vessels. They are developing an inventory of these vessels toward the end of developing safety standards. NOAA is working toward ISM compliance of their fleet. They have a training database, which is managed by the Norfolk Marine Operation Center. John Rix is on the working team for ISM compliance. They are developing a quarterly Newsletter on ISM issues.

U.S. Coast Guard - CDR George Dupree, reported on the status of the HEALY, and other Coast Guard issues. The AICC has been very valuable in the outfitting, etc. of the HEALY. The ship will be fully funded in 2002. A bubble flow test was conducted in the South Florida range. He offered a video of the ship breaking ice and underwater footage of the South Florida Range testing.

U.S. State Department – Liz Maruschak-Tirpak reported that the new software she developed is working. In 1999 they had 133 cruises and already this year, they have had slightly higher than 100 cruises. They have processed 257 foreign clearances. The number of foreign vessels operating in U.S. waters has increased. They are working on the issue of drifter buoy projects to determine if they require clearance for this type of equipment. They are also working with the LWAD issue and the public vs. private status of NOAA vessels

Special Reports

SACLANT Undersea Research Center - Chris Gobey reported on the activities of SACLANT and their research vessels, the ALLIANCE, and a 60' Army T-boat. The ALLIANCE carries a German, British, and Italian crew and the smaller vessel has an all- Italian crew. The ALLIANCE is acoustically silent and ISM compliant.

The replacement for the T-boat will also be acoustically quiet and will be designed for use in inshore waters ***Appendix VI***.

In order to interface ISM into the science component on their vessels, they have been advised to go through formal procedures for all science equipment on their ships. The process will take about 6 months and will involve the development of a Safe Operating Procedure (SOP) for the operation of equipment before it comes on the ship. All ship personnel including techs have gone through Risk Assessment

Training. Prior to each cruise the SOP and Risk Assessment is reviewed and the Captain signs on to the risk associated with equipment before the ship goes to sea. This is all quite an exercise and takes a long time. Scientists are not required to receive formal safety training.

The European Union developed a composite propeller that was tested on a contract vessel this year. The port propeller on the vessel was changed to a composite and the vessel went to sea for 24 hrs of sea trials and testing with ABS inspectors on board. The vessel performed several trials including crash stops and a full range of at-sea tests. The vessel then proceeded back to the shipyard to remove the propeller. While maneuvering to go onto the dock, all of the blades sheared off the composite propeller. In the yard it was determined that the copper nickel hub was the site where the blade failed. Estimates show that the composite propeller could provide a 7-10% fuel savings.

In July, bid packages went out to shipyards for the replacement for the SACLANT 60' T boat. All bids were over the $6.3 million budgeted for the vessel. Delivery date is set for 2002. The new vessel is 90'long. It will be acoustically quiet, have twin azimuthing tractors, a Schottel pump jet bow thruster, dynamic positioning, and be ABS Class. Focus groups were formed to set specifics for noise on the vessel. The type of work done on the vessel will dictate the noise limits in various frequencies. Five yards placed bids for the construction of the vessel. None of these were U.S. yards.

NERC/Southampton Oceanography Centre (SOC) – Edward Cooper provided an update on the Southampton Oceanography Centre and NERC Research Ship Unit. A complete text of his presentation with viewgraphs is included in ***Appendix VII***. Edward reviewed numerous personnel changes that have occurred over the past year. The main assets of the Research Unit are the RRS DISCOVERY, and the RRS CHARLES DARWIN. The RRS CHALLENGER was sold this summer. The National Marine Equipment Pool has been formed by an amalgamation of various entities within SOC and the survey team of the George Deacon Division. The 2000 activities of both research vessels were presented. The DISCOVERY was used for 30 days on a WHOI/NSF program. Plans are for the DISCOVERY to operate in NE Atlantic and the DARWIN to be in the Indian Ocean in 2001.

Netherlands Institute for Sea Research (NIOZ) - Dr. Marieke Rietveld spoke about the INMARTECH 2000 meeting ***Appendix VIII***. The meeting was held at the Netherlands Institute for Sea Research in Texel, The Netherlands on 20-22 September 2000. It was organized to facilitate the best possible interaction between technicians. The total number of participants was about 110 including speakers. There was a poster session, demonstrations of equipment and container lab applications. A tour of the NIOZ Technical facilities and a visit to the NIOZ harbor facilities and the R/V PELAGIA.

Of 85 appraisal forms distributed 45 were returned. The results of the appraisals are included in the appendix. General comments for future INMARTECH meetings were presented. INMARTECH will be hosted by Japan Marine Science and Technology Center (JAMSTEC) in 2002 and British Antarctic Survey and SOC in 2004.

Commonwealth Scientific & Industrial Research Organisation (CSIRO) - Dr. Andrew Forbes represented CSIRO ***Appendix IX***. The R/V FRANKLIN and SOUTHERN SURVEYOR are owned by CSIRO and operated by a private company, P&O Services. CSIRO is responsible for scientific operation of the vessels, maintenance and calibration of scientific equipment, technical support staff, and data processing. The FRANKLIN is a 55m and operates about 180 days/yr. The SOUTHERN SURVEYOR is 66m and was purchased and refitted as an R/V in 1988. It carries a crew of 18. A third vessel the AURORA AUSTRALIS is on full time charter from P&O. All ships are available for outside charter.

The Marine Technology & Information Cluster is responsible for marine instrumentation, ocean engineering and scientific diving and hydrochemistry service. They also support a data center, library,

and communication facilities.

Canadian Defense Research Establishment, Atlantic – Major Michel Caron presented information on their 250' CFAV QUEST ***Appendix X.*** The vessel is acoustically very quiet. The crew is civilian, in public service and the vessel is maintained by MARLANT, the equivalent of the east coast Navy. It is maintained to naval vessel standards and is specially equipped to accommodate ASW trials.

The vessel will be at sea for about 120 days from Apr 2000-Mar 2001.

Insurance and Admiralty Review – Mr. H. W. Andrew, Vice President of Marsh Marine and Energy gave an update on the current status of the marine insurance industry. His role as a broker is to represent the buyer. This is a time period during which there has been considerable change. In the past 5 years underwriters have lost millions of dollars. The years of automatic premium reductions are over. Commercial Primary P&I had a 168% loss ratio in 1999.

Across the entire U.S. market, underwriters are paying out $1.08 for every $1.00 earned. Lloyds reports a $1.40: $1.00 loss/earned ratio. This has been caused by a lack of equity investment income. Professional shareholders are now demanding a return to profitability. An increase in mergers in the insurance industry means that a smaller number of organizations will be making major decisions in setting the market in the future. In 1995 there were 88 Lloyds insurance syndicates in the world, Lloyds and the U.S. market were responsible for about $2 billion in premiums last year. There are about 28 Lloyds syndicates and about 12 U.S. syndicates and even fewer willing to write P.I. policies.

Underwriters are depending on STCW and ISM to bring profitability back into the market. It is important that you articulate to your broker how ISM is going to make you a reasonable risk. Today the broker's job is to know the risks.

No loss accounts will be more favorable to underwriters.

Marine insurance is un-regulated which leads to a very pure supply and demand market. Because of this, premiums will depend on loss history, areas of operation, number of days at sea, type of vessel, number of crew and scientists, nationality, and legal jurisdiction. The overall account premium is important along with the perceived safety attitude of the buyer's institution. Underwriters want to see training and safety programs. It will help to work with professional brokers with knowledge in your particular field. Buyers should provide complete information to the broker prior to renewal and work with the broker in terms of establishing strategic milestones for safety plans.

In the non-marine property world some buyers are seeing a 40% rise next year. How much more the marine industry will see will depend our past history.

Dennis Nixon provided an overview of insurance in the UNOLS fleet. The large vessels are responsible for 47% of the premiums paid. The addition of the THOMPSON into the fleet was responsible for a significant historical increase in premiums. If the total number of people at sea is taken into account, the large ships are cheaper than most of the smaller ships.

Dennis reviewed significant and unique Admiralty Law cases.

DINNER AT MO'S ANNEX, NEWPORT BAY FRONT

Wednesday, 25 October 2000

Hatfield Marine Center

Special Reports cont'd

University of Hawaii - Robert Hinton gave a status report on the SWATH AGOR 26 ***Appendix XI.*** Robert listed a number of milestones and stumbling blocks, which included the approval of $2.8 million in options in January 2000 and final approval of the hull lines in May 2000. The late issuance of ABS guides for SWATH's contributed to a 4- month delay in the construction of the vessel. An additional 3-month delay were caused by the regulatory approval process, the lack of technical competence and quoted price of the HVAC vendor and the complexity of the electrical system design.

Some changes in the design that have occurred in the last year include moving the switchboard suite into the switchboard room where it is now air-conditioned, and a 33% increase in the size of the computer room.

The stern is 88' wide but there is a large open space about 44' under the transom. The ship will be made of 33 modules. All of the lower hull will be rolled plate. The first module will be completed the beginning of next year. All modules are scheduled to be complete in August 2001. The weight of the vessel is well within the design limits.

The ship will be launched September 2001. Final acceptance is scheduled for June 2002. The web site for the ship is http://www.soest.hawaii.edu/agor26/.

The ship has been named the KILO MOANA. The ship will be a general ocean research vessel.

University of Miami – David Powell reported on the University's new R/V WALTON SMITH. The vessel was delivered in January 2000. It is 96'long, 40' wide, and has a draft of 5.5-6 feet, and a top speed of 12kts. The stern A frame is 20' x 20'. There were 3 days of D.P. trials after delivery. There were tight specifications for noise inside of the vessel and all of the specifications were accepted. Eastern Shipyard in Panama City FL. built the vessel.

The ship burns 50 gal/hr at cruise speed of 10-kts. The Mains are Cummins QSK 19, which meet the IMO NOX standards. The vessel is built to Subchapter T standards but will not be maintained as an inspected vessel.

University of Alaska – Tom Smith provided an update on the replacement vessel for the ALPHA HELIX ***Appendix XII*** . The new vessel will be an acoustically quiet, seasonal ice capable, general oceanographic/fisheries vessel. The SMR's for the vessel has been completed. Funds are available to complete the conceptual design phase. A project Team Committee consisting of University of Alaska, WHOI, and NSF has been formed

National Marine Fisheries R/V Update –Jim Meehan reviewed progress with the planned vessels. The RFP's went out in June, and contract award is expected for Dec. 2000. The first vessel will be complete in 3 years. The contract will be for the construction of 1 vessel with an option of 3 more. The Gulf of Mexico may be smaller with a shallower draft.

Oregon State University Safety/Survival Training Program – Fred Jones introduced a new training program offered to scientists using OSU vessels. Because of Fred's concern about safety training on their small, 37' R/V, a training program for scientists using these vessels was initiated. OSU teamed with the NOAA Fisheries Lab to send 3 groups of 14 people through a general basic sea safety and survival training program.

Ginny Gobrlisch, President of the Newport Fishermen's Wives, a USCG certified basic safety trainer, and

Oregon State Sea Grant Marine Extension Agent conducted the training sessions. About 900 people have been trained by her group in the last 7 years. Theirs is the first USCG approved safety class for commercial fishermen in the U.S. It is a three-day course. The course was distilled down into one day for OSU. It included preparation for emergencies, cold-water survival, drills, and emergency equipment including life rafts, immersion suits, PFD's, and flares.

The morning session was spent in the classroom and the afternoon consisted of drills and practicals. They reviewed the 7 steps to survival, worked with fire extinguishers, de-watering pumps, retrieving personnel from the water, issuing May Days, and donning immersion suits.

Each participant in the program received a certificate confirming that they had completed the course. The course cost $50/person.

Tom McAdams, retired Coast Guard Chief Petty Officer and an expert in safety training, search and rescue, reviewed the training topics covered in the one-day course.

U.S. State Department – Liz Maruschak-Tirpak presented an overview of the recently implemented State Department computer program for processing and tracking of foreign clearances. The new program allows the office to do in 5 minutes what used to take 35 minutes. The old computer system was DOS based and extremely inefficient. Two applications were needed, one to track foreign vessels and one to track domestic vessels. It cost $6,000 to implement the new program. Plans are to make the program Web based and make the cruise prospectus and post cruise preliminary forms online submission documents. Because the program uses Access it may not be possible to export this information to the UNOLS Web site.

The preliminary cruise report form and the cruise prospectus forms are available as PDF's on the State Department Web site. Monthly reminders are going out to scientists that are delinquent in submitting final reports. Since the new system started, the number of late reports has reduced.

Glosten Ship Stability Program – Bill Hurley gave an overview of Glosten Associates located in Seattle WA. They have over 40 people employed in a full range of disciplines of marine design and marine engineering.

The Glosten stability program was first presented to RVOC at the 1986 RVOC meeting in Vera Cruz, Mexico. The new version, which was funded by NSF and managed by SIO, is now in a Windows based environment and has a number of upgrades and improvements. It has been installed on 8 UNOLS vessels and 3 NOAA ships. Working copies are now on the 8 UNOLS vessels and they are working on a copy for the RON BROWN. Justin Morgan, Senior Engineer for Glosten presented his work on the program.

They have complied a list of desired features that, if the money exists, will be incorporated into the final version. Some features include interactive ship traffic, a solid data entry sheet, and an icing manager for vessels working in the Arctic or Antarctic. The program has 5 main condition screens for monitoring and selecting files.

Other parts of the program check requirements of the stability booklet. The program will give you a warning if you are not meeting the requirements of the T&S booklet. The stability letter can also be included in the program. Blue prints of the ship can be included in the program but the drawings must be in Auto Cad, which costs about $300-400/sheet to convert if they don't already exist.

The funding that was provided was used to upgrade all of the existing programs. The program is available for purchase by other vessels. For UNOLS vessels there are no licensing fees, the only costs will be the price for customizing the program to fit the particular vessel.

Chartering of Private Vessels – Joe Coburn gave an overview of the status of chartering private vessels for use by UNOLS institutions. The RVSS has a section on the chartering of vessels. They require that the vessel being chartered must be a USCG designated ORV. Joe gave an example of a good experience they had chartering a commercial fishing vessel near Woods Hole. The WHOI staff worked with the owner of the vessel to request a letter of designation that was then submitted to the Coast Guard ***Appendix XIII***. The letter was issued for only the period that the charter took place.

Lunch

Workshops: Attendees broke into 3 workshop groups. The following are the results of these workshops as recorded by the chair of each group.

ISM Work Shop **Chair, Tom Smith, University of Alaska**

SUMMARY:

Seventeen persons attended this workshop. Attendees who are implementing ISM discussed their progress. All had an ISM Assessment Audit done by ABS prior to commencing implementation. Tom Althouse from Scripps Institution discussed their progress and provided some handouts on their format and status. The UNOLS Chair plus the ONR and NSF representatives were asked for their agencies position on ISM. Each felt that ISM would eventually be required of all our vessels but were willing to abide by the RVOC recommendation concerning implementation for vessels not required to do so under current regulation. A discussion was centered on who is responsible for ISM implementation, the owner, or the designated person ashore or the institution. A consensus felt that it belonged with the designated person ashore. The need for scientists to be aware of the impact of ISM on their projects and the need for the RVTEC to be included in the development of ISM scientific procedures and standards were both addressed. A recommended position was developed for presentation to the RVOC as a motion during its business meeting.

Recommendations:

- All operators should implement ISM but no time limit should be set for small operator implementation.

- Formal standards should not be developed, however, the large RVOC Institutes should make their ISM documentation, etc. available for use by other Institutes. It was felt that good cooperation and communications between all RVOC members during ISM implementation would produce a close de facto standard.

- Institutes involved in developing ISM believe consultants would not be effective in producing a usable ISM but all felt that conducting an assessment audit by ABS was a very useful first step toward ISM implementation.

- RVOC should keep in touch with RVTEC concerning ISM implementation. Tom Smith was tasked with contacting the RVTEC committee on this matter.

- UNOLS should develop a home page for ISM to ease the intra-Institute communications concerning their implementation progress

- Any quality management system implemented by UNOLS should reinforce and not be separate from ISM. A separate QM system is not wanted.

➢ An effort needs to occur to impress on scientists that ISM will affect them. A short message in the UNOLS newsletter was suggested as an initial effort.

➢ The following position was developed for presentation at the RVOC business meeting, " The RVOC recommends and supports the goals of the ISM code and accordingly urges its adoption by all UNOLS operators as soon as practical."

Personnel Recruitment and Retention Chair, Paul Ljunggren, Lamont Doherty Earth Observatory

I. The Problem

A. Declining personnel pool

B. Higher salary/benefits, cost to stay competitive in strong economy

C. Aging pool of mariners and the inability of the industry to attract young replacements

D. STCW training costs cause loss of entry level personnel and restrict promotional routes

E. Job "burnout" affects quality of service

II. Solutions

A. Make conditions more attractive by providing better accommodations, higher wages, better benefits, better rotational schedules, and more educational opportunities.

B. Apprenticeships like the MATE model, and the establishment of a cadet program

C. Recruiting outreach programs

D. Provide an improved data base of applicants, employed crew, and past employees

E. Interact with industry for possible solutions

F. Create a work group to address the issue.

Quality Chair, Steve Rabalais, LUMCON

- The Academic Fleet Review tasked UNOLS to address quality of service issues within the fleet
- UNOLS is a quality assurance program
- The existing mechanisms within UNOLS to assure quality within the fleet are:
- Cruise Assessment forms
- Various UNOLS subcommittees, RVOC, RVTEC, AICC, etc.
- How do we measure UNOLS success as a Quality Assurance Program?
- How do we build and improve on the existing Program?
- The logical next step is to develop a survey that is all-inclusive, and that defines the most important

factors that impact the infusion of quality into the UNOLS fleet.

- The survey has to include a broad group, which includes chief scientists, crew, techs, etc. One major aspect of any quality program is making all participants feel as though they are a partner.

- Expectations of the scientists should be better defined and the crew should be told what is expected of them

- A successful Quality Program will affect crew retention and have a positive impact on operating costs

- It is important that everyone in the organization, from the top down, buy into the program and that customer satisfaction be viewed by all as a very important component of the program.

- Suggestions for improvements to Cruise Assessment Form

- Include a brief description of how the information on the form will be used.

- Make sure that all scientists on the ship, not just the chief scientists, have access to the form.

- Feed back to the science community on what UNOLS is doing to improve

quality is needed.

Tour of R/V ELAKHA
Visit to Oregon State University Ship Operations Center

Thursday, 26 October 2000
Hatfield Marine Center

Unfinished Business:

New Research Vessel for Sea Education Association – Phil Sacks reported on progress with the construction of their new sail research vessel www.seaeducation.org. The new vessel is a replacement for WESTWARD, which has been at Sea Education for 30 years. The new ship is 135' long including the bowsprit, which is 19' longer than the CORWITH CRAMER. It is U.S. Coast Guard inspected as a school vessel. The ship will cost $5.7 million with another $1 million in owner supplied equipment. J.N. Martin in Tacoma, WA is building the vessel. Sea Education is supplying riggers and other consultants for fitting out the vessel. Markey is designing 2 winches for the ship, one is a Dush 4 and the other is a custom built Com 5. A 75 kHz ADCP and Benthos 9-320 kHz Chirp system will be installed. The transducers are located in the box keel on the vessel. The hull was started in February and is complete except for the bulwarks and bow. The hull will be launched in March and delivery is scheduled for June 7, 2001. After completion, the vessel will work in the Pacific for 2 years supporting educational trips from Tahiti to Hawaii.

New Vessel for Florida Institute of Oceanography (FIO) – Gene Olsen gave an update on plans for a new vessel for FIO ***Appendix XIV***. Preliminary design work has begun on the 135' vessel. FIO is circulating an RFP for an information package for preliminary conceptual design of the vessel. They have money for the planning phase of the project.

New Vessel for the University of Delaware – Matt Hawkins gave an overview of their plans for a replacement for the CAPE HENLOPEN. The SMR's for the vessel have been finalized. Bay Marine has been identified as the principal naval architect. The draft concept design will be finished in April and final

concept design will be completed in July.

R/V SAVANNAH Update – Braxton Tesh provided information on the new R/V for Skidaway. The hull is complete and the ship will be launched in June or May. They will cross deck equipment from the BLUE FIN and complete the interior of the vessel using Skidaway personnel. The ship will be ready in the fall of 2001.

New R/V Swath for Woods Hole - Joe Coburn discussed progress with the building of a coastal Swath vessel for Woods Hole. A $5 million donation has been received and solicitations for shipyard bids will go out the end of October. Contract award is scheduled for around the first of the year.

Update on California Oil Spill Regulations – Tom Althouse provided the update ***Appendix XV***. In January 1999 the state of California passed an omnibus oil spill contingency plan for non-tank vessels. There are two parts to the law, an oil spill contingency plan, and certificate of financial responsibility, which was set at $300 million for any non-tank vessel over 300 gross registered tons. SIO appealed to the state for relief from the $300 million responsibility. To support this level of coverage it would cost SIO $100 K/year. In the fall of 1999 it was decided to change the law. If the ship has a fuel capacity of less than 6,500 bbls, the state can establish a lower requirement for financial responsibility. Most of the large vessels in the fleet except the THOMPSON are under this limit.

The Pacific Merchant Ship Association in San Francisco, CA will cover ships under 300 gross tons for all contingency plans. This costs is $160 on a per trip basis. Ships over 300 gross tons must have their own contingency plan.

Class IV Vessel Refit Group – Lee Black heads this group and reported on their activities ***Appendix XVI***. Seven of the 9 operators of these vessels met in Baltimore last year to discuss this issue. At the meeting the CFRs for this class were reviewed. The SEA DIVER is the oldest vessel in the fleet and 5 are less than 20 years old. The last SMR's for this class of vessel were written in 1988. The scope of work was divided into two sections; work to extend the life, and scientific/capability enhancements. About 50% of the use of these vessels has been through NSF. About $6.5 million will be spent on 4 vessels in the next 3 years. About $1.5 million is in place. The POINT SUR is the only vessel that has no plan for refit. The individual ships will prepare proposals for funds.

Portable Van/Container Specifications – Matt Hawkins discussed the progress on the group purchase of vans and the formulation of specifications for UNOLS vans ***Appendix XVII***. Funds are available to build 5 vans. Perhaps more can be built depending on the construction costs of the 5 funded containers. The goals of the process were: 1.) Standardize an arrangement of the vans so they could go from ship-to-ship. 2.) Standardize quality and overall level of design. 3.) Facilitate group purchase. 4.) Make them transportable as standard cargo. The most difficult aspect was specifying how to build the box. There is a general specification for the box including electrical, sheathing, insulation, etc. There are separate specs for the different interior configurations.

A package has been submitted to the Coast Guard for conceptual approval of the design assumptions for construction of the box. The requirements for inspected vans include specifications for panel stiffness, and structural fire protection. Based on the architects ruling an ISO van should be useable. The contract will be out for bidding in Dec. and the contracts for construction will be let in January, with delivery in April and May.

ABS was contacted and they didn't want to be involved with the certification of the vans. IMO doesn't have any standards for vans. All agencies refer back to the Coast Guard. If the vans can pass Coast Guard standards then they can go on any ship.

Some types of vans require "A" rated bulkheads. Building to "A" rated bulkhead standards makes the van heavier and more expensive. It was decided that our vans should not be built to these standards. Panel stiffness standards were adopted that meet those outlined in NVIC 11-80, which are the standards for small aluminum passenger vessels. To meet fire rating standards there must be a steel deck in the van.

It was pointed out that most of the problem comes from the scientists that bring their vans on the vessels. In the future all vans funded through NSF must meet the new van standards.

Medical Services Contract – Mike Prince reviewed the status of the medical service contract. Specifications for a bid proposal should be completed by the middle of January.

ROUND TABLE DISCUSSION

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

-Contractors providing maritime emergency medical advice

-Volume/Group purchases

-Ship's crew, shore staff, training facilities, lesson's learned.

-Hiring qualified crew, limited personnel wanting a marine career

-Policies regarding mixed gender berthing

-Recent foreign clearance experiences

-CMMS

-Quarterly reports e.g. safety

-Safety Video comments from PALMER

-Accident Statistics

-Mystic Seaport display

BUSINESS MEETING

Action items

-Steve Rabalais was elected Chair and Tim Askew was elected Vice-Chair

-Tom Althouse will replace Tom Smith as Chair of the Safety Committee and

Dan Schwartz will replace Joe Coburn as our AICC liaison.

-An Ad Hoc Personnel Committee was appointed consisting of Lee Black,

Chair, Morgan Turrell, U.W., Larry Eastman, SIO, Matt Hawkins, U of

Delaware, and Mike Brennan, WHOI

-Suggestions for the 2001 Agenda and meeting format

-MBARI was chosen as the location for the 2002 meeting

Adjournment

The RVOC wishes to express its' thanks to Tim Cowles, Fred Jones and the Marine Operations staff at Oregon State University for hosting this year's meeting.