RVOC 2017 Minutes (ver 22 June 2017)

Summary-

The Research Vessel Operators Committee (RVOC) held their annual meeting on April 19-21, 2017 in New Orleans, Louisiana. The meeting was hosted by the Louisiana Marine Consortium (LUMCON) and held in the Tulane University River and Coastal Center, 1380 Port of New Orleans Place.

The meeting was well attended with ~ 65 participants.

Minutes

The meeting was called to order by Tom Glennon, URI-GSO Director of Marine Operations and Chair of the RVOC. Joe Malbrough/LUMCON offered welcome remarks and details on the meeting.

Dr. Craig McClain, Executive Director of Lumcon gave an opening address to welcome all participants. He emphasized the great pride in the United States Academic Research Fleet as the largest research vessel fleet in the world. There has been a rich history of exploration and scientific breakthroughs and despite decreased science funding, the dedication of the UNOLS ships, crews, technicians and shore-support personnel remain strong. Dr. McClain expressed his appreciation and wish us well during our three days of meetings.

Agency Reports

Rose Dufour/NSF Program Director-Ship Operations

Rose presented the report from NSF with slides. The federal government is still working under a continuing resolution until 28 April 2017. NSF is waiting to receive their numbers for 2017 and are expecting a 10 % cut in funding. In the event of a federal government shutdown, NSF will assign a key person for emergencies. With the exception of the local vessels, ship operators have received partial funding for CY 2017.

Through financial efficiencies, the budget between science and infrastructure is now balanced.

Rose then went on to explain the Specialized Services Facilities concept for charging for services.

The calendar year 2017 total projected expenses breakdown was explained with crew costs at 36 % and fuel at 16 %. Other percentages are listed in the slides.

Polar Code- One slide on the Polar Code which went into effect on 1 January 2017 was given.

Marine seismic capability was reported on and NSF is still committed to supporting this.

The update on the RCRV is that the package is with the National Science Board and NSF is waiting to see it is included in the 2017 federal budget.

Tim Schnoor/ONR

Tim reported the 2017 ONR grants for supporting the ONR programs on the UNOLS ships have been sent out to the operators.

The public vessel status issue as it relates to the UNOLS fleet was recently raised again and was discussed in some detail at the end of the Safety Meeting on Tuesday 18 April. Mike Prince has volunteered to lead a group to develop a white paper which will look at all the benefits as well as any drawbacks if UNOLS vessels chose to claim public vessel status.

Specialist services were discussed.

The Department of Defense budget is expected to be strong, however at this time ONR has not been advised as to what impact this would have on the ONR budgets.

CDR Colin Little/NOAA

Colin gave the NOAA report and like the other federal agencies are waiting to see what the NOAA budget will be. NOAA is currently operating 16 ships and in FY 2017, there are 3096 days planned. The *Ron Brown* returned to Charleston, SC on March 25 after a 3.7 year voyage. NOAA continues to work on recapitalization plans and 80 million dollars have been released. NOAA has released 11 million to NAVSEA to begin work on a replacement vessel which will be a variant of AGOR 27/28.

In 2017, NOAA Is planning to support 182 days on UNOLS ships. And Colin announced he will be transferring to his next assignment in Hawaii on September 1st, 2017. His replacement will be named soon.

Allison Reed/U.S. State Department

Allison Reed is the Foreign Affairs Officer within the Office of Ocean and Polar Affairs. Her department is expecting budget cuts, but uncertain as to the level of cuts.

She provided a brief overview of the Marine Scientific Research process and that Article 250 requires that communications concerning MSR projects shall be made through appropriate official channels.

Some of the recent challenges and trends are that some coastal states do not have a system for processing requests. There is an increase in bureaucracy. The time requirement for submitting requests are not always followed. The requirement for how far in advance you must submit requests remains the same at a minimum of 7 months, (one month at the US State Dept. and then 6 months for the requested clearance country to process.

There are disputed EEZ borders in areas such as South China Sea, areas around Greece and in Turkey which can add to the complicated process. Also some embassy staff move every few years and a new person take some time to become familiar with the process.

Of note is when a request comes in to work within the US EEZ, the clearance requirements are based on the nationality of the Chief Scientist. Most countries base this on the flag of the research vessel.

Also, port call clearances are not part of the RATS system, but the State Dept. can help with port clearance process.

An emerging issue to watch closely is the biodiversity of areas beyond national jurisdiction. There is a UN Preparatory Committee that has been formed to make recommendations on conservation and sustainable use of marine resources.

The RATS (Research Application Tracking System) is being redesigned now and RATS 2.0 is coming out soon. It will take ~ 6 months and volunteers to test the system are needed.

Foreign Country Reports

Phil Harwood/NOC-NERC gave the report from NOC-NERC.

The National Oceanography Centre operates on behalf of the Natural Environment Research Council the global research vessels *RRS James Cook* and *RRS Discovery*. An overview of the ship's operations in 2016/2017 was presented. They did operate in the Gulf of Guinea which required some added security measures due to recent piracy activities. In 2017/2018, the *James Cook* will be working within the EEZ of Brazil and will use Rio de Janeiro as a port while working in the South Atlantic and the *Discovery* will be working around the Falklands. There is some restructuring happening within the National Marine Facilities which may lead to some changes.

Erica Koning/NIOZ & OFEG reported on activities within the Nederlands Instituut voor Zeeonderzoek,

(Royal Netherlands Institute of Sea Research). There have been some changes within the DWO, which is the Dutch organization for scientific research, which will impact NIOZ. An increase

interest in science is a good sign and a new research vessel is now on the roadmap for large infrastructure. Although funding continues to be a challenge, there has been a recent call for proposals, (first time since 2012.)

Erica reported at RVOC 2016 that the *R/V Pelagia* was planning a round the world expedition. Due to some cancelled charters, this voyage did not happen. Highlights of 2016 were shared which included the testing of a new synthetic cable. Some of the challenges of working with this cable were discussed.

Erica reported on the Ocean Facilities Exchange Group, (OFEG) barters that have taken place in recent years. There are two main areas of interest now. One is the insurance of equipment and the second is the Marine Facilities Planning Program. The planning program is now operational at NIOZ and NERC, with Norway, Spain, and Germany joining in soon. This cruise planning portal is an impressive tool which will show where the ships are working as well as a database of all cruise related information.

lan Sage/reported on the Centre for Maritime Research and Experimentation, (CMRE). The transition to the Italian Navy crews has been very successful due in large part by a commitment from all stakeholders to make it work. One key lesson learned has been the importance of good communications. Although the processes have been different, through frequent communication, things are going well. Ian stressed the importance of some of the small things that matter, such as good coffee machines, food, cleanliness of the ship and staterooms. The number of days in port has been agreed upon and buy in from Italian Navy has been excellent.

They have recently gone to a new Maintenance Management concept. With good planning and record keeping, they have been able to reduce the financial risk of maintaining the ships. On May 1st, they will sign a contract for a fixed price maintenance contract. This will include an iron clad documented system of who is responsible for what.

Ian reported that they will be hosting a Polar Code Workshop in late April 2017 to bring together operators who will be affected by the Polar Code. The Alliance is ice-classed and the Polar Code will affect this ship. The *Alliance* is a public vessel and they always make an effort to abide by high standards. The public vessel status can help in areas that a ship cannot comply with in the as-built design of the ship.

Special Reports

Ship Inspections

Blake Powell/JMS gave his annual report on the ship inspection program. The purpose of the inspection program remains to confirm that the ships meet the scientific community standards and expectations, confirm seaworthiness and safety of the ships and science equipment, meet

the UNOLS Research Vessel Safety Standards and that NSF owned ships are adequately maintained.

An overview of the recent inspections and upcoming inspections was covered, highlights of some of the best practices as well as areas for improvement were discussed and shared. The importance of safety briefings and the benefits of conducting these even before the science party arrives at the ship was stressed. The recent National Transportation Safety Board bulletin on the importance of realistic drills was emphasized. Mitigating fatigue continues to be of concern as sleep deprivation is still an issue.

The U.S. Coast Guard is still working on lithium battery best practices.

On Appendix A, and dealing with extenuating circumstances, procedures need to be in place when things go wrong.

On Environmentally acceptable lubricants, the older vessels in the UNOLS fleet are still getting into compliance. Overboard Handling systems still need work.

UNOLS Wire Pool

Rick Trask/WHOI and Ruthanne Mullineaux/WHOI continue to serve as the managers of the UNOLS wire pool housed at Woods Hole Oceanographic Institution. Rick's report covered three main topics:

- Wire Pool Database
- Efforts to extend the life of the wires in the pool
- Evaluation of synthetic rope

On the database, they have made improvements to make the database faster to respond. They added a "read only" level so that the information is available to all. And improvements to the central repository for all the information on a particular spool of wire was added.

On extending the life span, they have increased efforts to make the shorter lengths available to smaller winches. They are also loaning out short sections of wire for a one-time use.

The distribution model is still comprised of a new reel of wire being assigned for long term use on a UNOLS ship, followed by the loan of a wire for a single short term use.

Synthetic Rope Evaluation- IN 2016 they conducted a test of a synthetic on the Endeavor traction winch. Since April 2016, they have conducted more winch and lab/bench testing. I new WHOI built piston coring system is being constructed and synthetics are being evaluated for this application. Cyclic load testing has been conducted and this testing will continue.

East Coast Winch Pool/WHOI

Josh Eaton/WHOI presented the report on the winch pool located at Woods Hole. See this web site:

http://winchpool.whoi.edu/

The staff of the pool remains the same with Brian Guest, Jamie Haley, and Josh Eaton. A review of the assets available was presented which includes winches, sheaves, turn tables, load cells, as well as engineering advice. They continue to provide the following services:

- Testing winches
- Acquisition assistance
- LC90i oversight
- Overboard Handling Systems consultation
- Technical assistance

Upcoming projects include upgrades and repairs, design for a new multipurpose winch, next generation level wind, an improved website and a document repository, etc.

West Coast Winch Pool/SIO

Aaron Davis/SIO presented the overview of the West Coast Winch Pool which is located at Scripps Institution of Oceanography. Scripps Institution of Oceanography maintains the National Science Foundation (NSF) West Coast Winch Pool for the benefit of U.S. ocean scientists. The winch pool is a shared-use facility that procures, maintains, upgrades, and makes available a variety of portable oceanographic winches that are used by scientists aboard a broad range of research vessels. Winches are shared following community-based scheduling methods administered by the University-National Oceanographic Laboratory System (UNOLS).

The web site URL is:

https://scripps.ucsd.edu/ships/national-science-foundation-west-coast-winch-pool

The manager of the winch pool at Scripps is Eric Buck and Aaron Davis serves as the winch and wire engineer. Aaron Davis presented details regarding the winch pool on the following topics:

- Mission
- How to request a winch
- Funding
- Costs

- Inventory
- Current Projects
- Challenges
- Contacts for personnel to access these

Fleet Broad Band- Al Suchy/WHOI

Al Suchy/WHOI manages the Fleet Broad Band contract for the UNOLS fleet and he presented slides to update RVOC on current situation.

In November 2016, they reduced the fleet broad band pool purchase from 200 GB down to 150 GB per month. The utilization from November 2016 up through March 2017 was graphically showed. The availability and the usage are running closely in synch as of March 2017. With a shift to Fleet Express System, the rate is down to .70 cents/MB. At present there are (6) INMARSAT Fleet Express Systems on line. Pl

Satellite Communications

Jim Holik/NSF discussed the NSF Dear Colleague Letter which requested community input on cyberinfrastructure of the UNOLS fleet. The Satellite Network Advisory Group, responded to the request with a written document written by Ken Feldman/UW, John Haverlack/UAF, Jon Meyer/SIIO & Lara Stolp/WHOI. Challenges continue in balancing the demand for increased bandwidth versus the budget realities of today

Schmidt Ocean Institute

Eric King/SOI gave an annual report on the activities aboard the *R/V Falkor* for the Schmidt Ocean Institute. Eric's report covered, operating days, shipyard period and work completed in the yard.

Florida Institute of Oceanography

Rob Walker/USF presented the report on the Florida Institute of Oceanography which provides a state-wide forum to address problems and concerns in coastal oceanography, leverage resources within the State Univ. System, plan for new infrastructure, promote collaborations and strengthen networks. There are 30 members and the institute is hosted by the University of South Florida. They have the *R/V Weatherbird*, *R/V Bellows*, and plans are underway to build a new research vessel. The *R/V Bellows* will soon be retired. The details on the funding and pictures from the shipyard were shared.

Special Service Facility

Elizabeth Brenner/SIO presented

Scripps Institution of Oceanography has been working to reorganize the costing practices within the marine operations department. A recent audit discovered that the assessment of F & A on the MOSA account was not an allowable charge. The federal govt. requested UC san Diego reorganize under an Office of Management & Budget circular 2 CFR 200.468, as a specialized service facility, (SSF). Under this MOSA could be preserved. There are some changes in accounting practices which will be required and Scripps is working through these now.

Guest Speaker- Restoration of PT 305

Mark Masor/Gibbs and Cox and a naval architect presented this year's guest talk highlighting the restoration and reconstruction of a Patrol Torpedo Boat, PT 305. The talk was well received and Mark's slides are in the appendix.

Thursday 20 April 2017

Ship Happens

Dennis Nixon, URI and the UNOLS Risk Manager gave his annual address on marine insurance, UNOLS vessel insurance rates, recent rulings, accidents, and collisions. He also provided an in depth lecture on the Jones Act and Public Vessels.

Dennis reemphasized his service to the marine superintendents in all legal matters regarding their operations. He encouraged the operators and funding agencies to contact him at any time.

Value of World Shipping-

The value of the world's shipping has increased with an increase of high value ships. When a loss occurs, it increases the premiums for all vessels to cover these losses. As the government self-insures their ships, they do not typically purchase hull insurance. Our ships do carry P & I insurance. Institutionally-owned over the side equipment can be insured, but we are not allowed to purchase over-the side insurance for federally owned equipment.

Insurance Market-

Global Rates for the UNOLS vessels is approximately 2% of the total fleet cost. The value of the ship is determined as the agreed value, which can be defined as what you could sell the ship for on today's market. You can start with the construction cost and then depreciate it for age and condition to come up with value.

Hull Insurance question- In the past we have charged non U.S. agencies and institutions the cost of hull insurance. For example, when a Canadian researcher with Canada funds uses a UNOLS ship, we charge them the cost of hull insurance. This issue needs more discussion.

UNOLS Vessel values:

Historically, we have used the following values for determining the P & I insurance on UNOLS vessels:

15 Million for small vessels

25 Million for intermediates, ocean class, and global

With the *Sikuliaq, Armstrong* and *Sally Ride* joining the fleet, we need to reassign values for these new, highly technologically advanced vessels. The reason is that a salvage award is based on the value of the vessel, and the federal agencies do require the operator to maintain salvage coverage.

Jones Act-

Oceanographic Research Vessel Act of 1965 (ORVA)- This oceanographic act, passed by Congress in 1965 provided a means by which members of the science party could be termed scientists, as they are not members of the crew. It is a temporal requirement and scientists cannot claim coverage under the Jones Act. Therefore, as operators, we need to make sure a scientist has insurance to cover any accident.

If a contractor or a vendor is working aboard a ship, a legal agreement knows as a Knock for Knock agreement comes into play. This is defined as:

"A knock-for-knock agreement is an agreement between two insurance companies whereby, when both companies' policy-holders incur losses in the same insured event each insurer pays the losses sustained by its own policy-holder regardless of who was responsible."

In other words, each party won't hold the other liable.

Crew members under the Jones Act are covered for maintenance and cure. If you are injured while serving in the capacity of a crew member, the employer is legally responsible to provide for that person's maintenance and cure. The insurance company can pay for maintenance and cure.

Under the Jones Act of 1920, a seaman can sue a ship operator if the injury is caused by negligence.

Doctrine of Unseaworthiness provides for strict liability in personal injury cases.

Dual Coverage: There are cases when a technician may be at sea at least 30 % of the year. In this case, the tech would be considered a seaman. But if that tech is transferred ashore and they are injured, then workman's compensation would cover this.

Jones Act does apply to vessels in public vessel status.

Age of Scientists aboard UNOLS ships. – This question seems to come up every year. Under the ORVA of 1965, the minimum age is not clearly defined. Each Coast Guard Officer in Charge of Marine Inspection may interpret this differently in regions of the US. For example, the Coast Guard OCMI in California requires scientists to at least be a graduate student on an assistantship. When the ORVA was written in 1965, oceanography was only taught at the college level. Now seniors in high school in advanced placement courses may take college level oceanographic courses for credit. While UNOLS doesn't have a UNOLS wide policy on this, to be following the intent of the law, our UNOLS Risk Manager recommends at least a senior in high school taking a college level course. It is also recommended that each operator consult with your local Coast Guard Captain of the Port.

Action item: Consider adding a minimum age requirement to the UNOLS Research Vessel Safety Standards.

Public Vessel Act of 1925-

Historically UNOLS ships have not claimed public vessel status. However, in recent years, the fleet has not been operating independently from the government agencies. The day to day operation is much more closely tied between the operator and the owners. The UNOLS vessels are operating in the public service of the US Government. If UNOLS decided as a fleet to claim public vessel status, there are some advantages which would be gained. One example is the cost savings of insurance. While the fleet would continue to operate in a safe manner and continue to be careful to protect the environment, we would be excluded from mandatory compliance with the Oil Pollution Act- OPA 90.

There are no statutes which define public vessels. Some define it as being *owned or operated* by the U.S. Government and some define it as *owned and operated by the U.S. Government*.

One disadvantage may be a law in Mexico that only allows one US government vessel in a Mexican port at any one time.

White Paper- Mike Prince/ONR has volunteered to lead a group to research the pros & cons for the UNOLS fleet to consider going to a public vessel status. Dennis Nixon will assist in this effort.

Important Legal Case.

There was one very important case this past year which warrants a close watch. In the case of the sinking of the *M/V El Faro*, one of the issues raised was whether the vessel was unseaworthy, simply based on the age of the vessel. It was settled out of court and the limitation of liability may have been a reason the ship owner went this way.

Another area of concern is the automation of the bridge equipment which may lead to a reduced environmental awareness. Over reliance on bridge electronics may lead to a lack of watch officers taking the time to look out the bridge windows. This is something to watch and be aware of.

UNOLS Report

Jon Alberts/UNOLS Executive Secretary gave the UNOLS report. A few of the highlights of the past year include Ocean Observatory Workshops in Arlington and Portland, OR. In 2016 there were (7) Chief Scientist training workshop cruises. The UNOLS Office helped facilitate (3) STEM-SEAS transit cruises.

And UNOLS continue to maintain the International Research Ship Operators' IRSO web site as well as attend annual meetings. The UNOLS staff remains constant and we will start Year 9 on May 1, 2017.

Oher efforts include the development of a new Positive Work Environment video which will be released later in 2017. Annette De Silva/UNOLS is on the team working on this. UNOLS is also working on a white paper which will share information on cruise planning, research clearances, scientific cargo shipments and ship agents. This is being led by Alice Doyle/UNOLS.

Safety Committee Report

Admiral Jeff Garrett/Chair of the UNOLS Safety Committee provided aa recap of the safety committee meeting which was held on Tuesday 18 April. The terms of reference for the Safety Committee were reviewed, followed by the past accomplishments since 2016. At this Safety meeting, the committee worked on additional details for the safe handling of lithium batteries. A slight revision is being drafted by committee member, Bill Fanning/URI, and then this will be incorporated into the RVSS. The committee spent considerable time on the path forward for Appendix B. We are looking to 46 CFR 189.35, Wet Weight Handling requirements which will form the basis for a revised Appendix B. Finally, the committee is re-writing Chapter 18 and Appendix D, which covers the chartering of Non-UNOLS vessels as well as Chapter 6 and Appendix E on Personal Behavior and harassment prevention.

The committee currently has a vacancy for a new member.

RVTEC Report

The RVTEC report was prepared by Bill Fanning/URI as the representative from the RVTEC group to the RVOC. Due to a necessary rearrangement of the agenda, Jon Alberts/UNOLS gave the report. This covered an explanation of what is RVTEC and how to they work. Recent focus areas were described which included LCI-90i winch displays, RVSS Appendix A & B training, satellite communications, antifouling coatings for transducers and lithium battery safe handling practices. The technicians are always busy keeping various ship board as well as science equipment in good repair as needed.

Ship Scheduling Committee Report

Doug Ricketts/UMN and chair of the UNOLS Ship Scheduling Committee reported on the 2016 operating days, current cruise schedules for 2017 and the process planned for developing 2018 schedules. utilization charts, historical fleet operating days, and the number of days requested and funded were all part of the report. The Ship Time Request System (STRS) is currently being redesigned by the UNOLS programmer, Sandy Fontana/UNOLS. This will allow an accounting of all 365 days of the year, as well as the enhancement of the cruise search database in order to more efficiently answer data calls. And finally, the new published UNOLS transit policy has been developed and is now posted on the UNOLS web page.

FIC Report

Al Suchy/WHOI gave the report on the UNOLS Fleet Improvement Committee activities. The FIC has been working on cruise debriefs from science verification cruises of the new UNOLS vessels to collect lessons learned and areas for improvement. They are working on a revised set of science mission requirements for global class vessels.

Medical Service Update

Kai Neander/George Washington Maritime Medical Access joined the meeting to provide an overview of the first year of service. They became the medical service provider on July 1, 2016. The presentation provided history of GW Maritime Medical Access group and details on the lead physicians, including their backgrounds. The set-up of the Worldwide Emergency Communications Center was described in detail. The presentation then focused on the UNOLS fleet with statistics and the numbers and types of cases handled as well as the numbers of cases by each UNOLS vessel was given.

Group Purchases for the Fleet

Doug Ricketts reported on the man-overboard beacons

Interest in a new item? Wire cutters

New Builds and Mid-Life Refits

NSF Update on Regional Class Vessels- See NSF report above

R/V Kilo Moana Engine Control Refit

Ross Barnes/UH presented on this topic. The engine control systems were replaced in 2016. They did have issues with line notching, but systems are working better.

Transition to Operations-

Zoltan Kelety shared his experience with bringing the *R/V Sally Ride* online. Since Scripps received the second ship, after the *R/V Neil Armstrong* was delivered to Woods Hole Oceanographic Institution, there were some benefits. Lesson learned on the *Armstrong* build were shared with Scripps. There is a public relations aspect to keep in mind.

R/V Sproul Replacement

Zoltan Kelety reported on the progress of a new vessel to replace the *Sproul* which is nearing the end of its service life. With the retirement of the New Horizon and the *Point Sur*, there is only one local/coastal UNOLS vessel on the West coast. There is a growing need for instruction in oceanography for undergraduate and graduate education within California.

Scripps is partnering with Moss Landing Marine Laboratories on this vessel replacement and they will build upon a study done with Sandia National Labs for a zero-emission research vessel.

Over the next year, the effort will be on developing the science mission requirements, a management plan for operating the ship, increasing the support on the state and local government level, and further the vessel design. Bruce Appelgate/SIO and Mike Prince/MLML are the two contacts.

Thomas G. Thompson- Midlife Refit

Doug Russell gave this update and opened with stressing the fact that midlife refits are a challenging project. The extent of the project doesn't really become known until all the various ship systems are opened up to reveal internal issues. Doug gave a slide show of the work completed while pointing out some of the lessons learned along the way.

Barnes Replacement-

Doug Russell/UW reported that the Univ. of Washington has located an existing fisheries research vessel which is for sale in the UK. The *R/V Aora* is a 13-year-old vessel, 22 meters in length, (73ft) and has 9 berths. The Univ. of WA has inspected the vessel and plans are underway to proceed with a purchase agreement. Please see slides in the appendices.

Unmanned Aerial Systems

Luc Lenain/SIO and Chair of the UNOLS Scientific Committee for Oceanographic Aircraft Research, (SCOAR) provided an update on this committee via a webex presentation. One of the significant goals for SCOAR is to develop a UAS Policy and guidance documents for Shipboard Operations on UNOLS ships

The UAS Policy (endorsed by the UNOLS Council in summer 2016).

SCOAR is compiling guidance documents and information to the research community who are interested in using airborne assets in support of their research (e.g. FAA POC per region, aircraft operators with contact information, recent field deployments summary with POCs etc.)

- Developing pilot training for UAS operations from ships
- Draft guidance document for PIs who are planning UAS operations from ships
- Discussing policy on use of UAS for non-research purposes from ships

In 2016 the SCOAR conducted a survey on the UAS operations from UNOLS vessels to better understand the needs of the research community. The survey results were very helpful and SCOAR thanks for the response. We would like to once again conduct a survey of UAS operations from your ship(s) that took place in the calendar year 2016 through March 2017.

Meeting Adjourned

The RVOC meeting adjourned at 5 pm on Thursday 20 April and was followed by an RVOC dinner hosted aboard the *R/V Pelican*. Our thanks go out to Joe Malbrough, Marine Superintendent-LUMCON as well the LUMCON port office, crew and technicians of the *R/V Pelican* for hosting an enjoyable traditional Louisiana Crawfish Boil.

Friday 21 April 2017

On Friday, a UNOLS Marine Superintendents Round Table meeting was held as a closed door session.

Several items were discussed including the importance of checking the expiration date on the ship's alcohol testing kits, vessel operations in foreign ports, managing the costs while in a shipyard period, ballast water treatment rules and systems, harassment of personnel, managing vessel crews during an extended midlife refit, cruise contracts, charge days for mobilizing and demobilizing and weather days.

RVOC 2018- RVOC will be hosted by URI/GSO in Narragansett, Rhode Island on April 17-20, 2018. Check the UNOLS web site for meeting details.