

Research Vessel Operators Committee

Meeting Minutes

24 - 27 April 2019

Scripps Oceanographic Institution – La Jolla, CA

Opening:

Dr. Bruce Appelgate introduced the Scripps Institution of Oceanography.

Thomas Glennon, Chair of the RVOC, opened the meeting. He provided conference safety instructions.

Present:

Captain Quentin Lewis

Dr. Sean Higgins

Mr. Joe Malbrough

Mr. Chris Volkle

Mr. John Bichy

CAPT Doug Baird, NOAA (Ret)

CAPT Stephen Zoltan Kelety, USN (Ret)

CAPT Jon Swallow, NOAA (Ret) (attended via phone)

Captain Ross Barnes

Mr. Miguel McKinney

Dr. Doug Ricketts

Mr. Tom Glennon

CAPT Robert Kamphaus, NOAA (Ret)

Mr. Timothy Twomey

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(Federal sponsors, the incoming & out-going UNOLS Offices, IRSO participants, participants from UNOLS member institutions, representatives of marine industry and other interested parties attended as well.)

The agenda of the meeting was approved.

The minutes of the prior RVOC meeting was approved by voice vote.

New Business:

1. Doug Russell provided an update on the shift of the UNOLS Office to the University of Washington (UW) on 1 May 2019. He noted new travel claim guidance, no change to telemedicine contract, forwarding of social media to UW, continuation of hosting IRSO website, approaching UNOLS 50th anniversary. Jon Albers noted competition for RCRV#3 open, NSF hosted three-day workshop to provide marine seismics post MARCUS G. LANGSETH, new post cruise assessment forms, IRSO in Hobart 7-10 October 2019, outlook for 2020 US Academic Fleet operations, and ALVIN refitting Fall 2019.
2. Brandi Murphy provided an update on MERAS / Maintaining an Environment of Respect at Sea. She noted sub-committee has been meeting for two years, but have not made much progress on policies related to several important topics. She noted joint effort with NOAA has resulted in two videos on respect at sea suitable for US Academic Fleet training. She noted MERAS has developed a white paper on milestone ceremonies at sea. She noted MERAS has not addressed transgender policies. It was noted that MERAS is not connected to RVSS Section 6. Dennis Nixon noted that problems have arisen from milestone ceremonies and this is a difficult course to navigate. Rose Dufour said there were common threads across the fleet in this regard. Civility at Sea video was presented to the committee. It was noted that no one tracks statistics related to harassment.
3. Rose Dufour provided an update on NSF Ship Operations. She indicated that the 35-day furlough and three-week continuing resolution made her job difficult, but she has now provided funding to nearly all institutions for ship operations. She noted that NSF has developed a plan if another shutdown should occur. She presented the division of costs within the US Academic Fleet. She noted the solicitation for the Operator of RCRV#3 has been released. She noted the 2020 Presidential Budget would hit ocean sciences, and the debt ceiling could also have an effect. She stated the NSF IG has MOSA as a target. All use of MOSA must have concurrence from NSF. All fixed price contracts must have terms and conditions describing how excess funds will be used. She indicated a desire for a webinar for new marine superintendents on annual reports.
4. Rob Sparrock provided an update on ONR Code 32. He noted an increase in his basic budget. He noted that DURIPs should include ship time for calibrations if appropriate. He noted ONR has 150 more days in 2019 than 2018. He noted he has more funds for midlife refits and refit of KILO MOANA. He stated ONR will do Arctic research aboard USCGC HEALY in the future.
5. CDR Stephen Barry, NOAA, provided an update on NOAA ship operations. He noted a number of cruises were cancelled due to government shutdown. He indicated NOAA has an 84% execution rate, slightly below 85% rate for last five years. He noted crew retention rates steady despite shutdown. He discussed at length the steel wastage found on NOAA ship Hi'ialakai, and repairs projected at five times budgeted. He discussed fleet recapitalization efforts. He noted three shipyards bidding for design specification for AGOR Class A to be finished in 2023 and operational in 2024. Dave Forcucci gave a USCG update. He noted the HEALY dry-docking in Vigor Seattle and finding boiler corrosion. He concluding with a discussion of Arctic activity and the future Polar Security Cutter.
6. Amanda Williams and Gabriella David provided an update on Marine Scientific Research from the US Department of State prospective. They noted that MSR receiving more scrutiny, more bureaucracy and more required forms. Mentioned that RV THOMPSON received interest for a recent Kaohsiung port call. They presented a consent required update and best practices. They discussed the exploitation of high seas resources. They mentioned the Svalbard Treaty of 1920, which recognized Norwegian sovereignty over the territory, and designated the area as demilitarized.
7. Phil Harwood and Stuart Younghusband provided an update on United Kingdom research vessel operations (NOC-NERC). He noted the RRS Discovery working in the South Atlantic, caused

challenging logistics and crew swap. RRS James Cook working worldwide. He noted polar compliance is costly. He related that a 21-day shipyard in Durban SA became three-month fiasco. He noted RRS James Cook would make a Port Everglades port call in April 2020.

8. Erica Koning provided an update on Netherland research vessel operations (NIOZ). She noted the Netherlands would be building two new research vessels, a 75m with 30 scientists and 36m with 12 scientists. She was pleased to report funding for additional crew, support personnel and marine technicians. She presented their Marine Facility Planning software tool.

9. Ian Sage provided an update on CMRE / NATO Science and Technology. He noted 2018 was a year of mixed fortunes. RV Alliance scheduled 700K Euro drydocking became a 1.46M Euro drydocking due to asbestos and other issues. Later, engine controls experienced random blackouts. Requiring an extended port call in Tromso, Norway. An engine over speed condition caused extensive engine damage and the ship's gas turbine failed as well. Two major repairs costing \$1.5M. Looking towards a \$150M Euro replacement vessel.

10. Eric King provided an update on Schmidt Ocean Institute research vessel operations. Forty-six crewmembers work two months on, two months off. Discussed working technology development, particularly with Saildrones. Indicated no plans for new ship. Presented a welcome aboard by Wendy Schmidt. Noted that an Executive Director would soon start. Discussed investments in people including ROV training, advanced first aid, engineering and culinary schools, and remote medicine.

11. Damien Bailey provided a status report of construction of RCRVs. He noted that with respect to RCRV, OSU would "be more like NASA with outreach", and will highlight Facebook and Instagram. He noted funding for all three RCRVs, and these will be great ships. The ships will come with sparing packages to reduce annual operating costs. He stated there are no "Buy American" provisions in RCRV funding, and there have been no procurement protects. With the addition of 6 feet in length, weight and stability looks 'really good'. There are some engineering issues, which have used four months of schedule contingency as a "strategic slowdown". He noted that gross tonnage ITC is 1549 tons, and will not go over 1600 tons.

12. Lee Ellet provided a review of the US Academic Fleet cybersecurity issues. He noted UNOLS cybersecurity will be guided by IMO, NSF trusted CI, NIST and DFAR 252.204.7012. He pointed out that IMO requires on 1 January 2021 that all inspected ships comply with cybersecurity regulations. He noted that SIO has pressure from UCSD to comply with university requirements, and federal funding means compliance with DFAR 7012. He stated SIO is installing computing clusters to move burdens from ship to shore. He noted that SEATEL antennas has a nine-year service life and most UNOLS ships are beyond this.

13. Dave Wolfe of Peregrine Technical Solutions LLC provided a guest speaker review of maritime cybersecurity issues. He discussed performance of risk assessments based on mapping out topology of networks. He noted means of protection from threat vectors and access controls. He noted means for detecting a cyber-event and the need to respond, particularly with external communication channels. He discussed in general terms recover actions and the need to test backups. He alluded to the \$10B ransomware attack on Maersk.

14. Dennis Nixon presented an overview of marine insurance. His talk was wide ranging. Important issues raised were a need for cell phone use by bridge watchstanders, and that oceanographic vessels masters and mates should probably have an endorsement for towing, as damage caused by a "towfish" was increased because operator did not have towing endorsement.

14. Rick Trask presented an overview of UNOLS Wire Pool issues. He led a significant discussion on the performance of synthetic cable for oceanographic overboarding, recent results, and future synthetic cable endeavors by his office.

15. Ken Feldman presented the status of SATNAG. He fielded questions on expansion of individual bandwidth with credit cards, which he discouraged due to establishing multiple classes of people onboard. He noted his group's efforts to establish metrics and make better decisions based on those metrics. He presented that security of part of the process. He noted examples of worms and viruses coming aboard in individual equipment.

16. Aaron Davis presented the status of the UNOLS West Coast Winch Pool. This was a straightforward presentation, which covered all bases, and no questions came from the audience.

17. Joshua Eaton presented the status of the UNOLS East Winch Pool. His presentation highlighted new equipment in inventory and possible future work.

18. Zoltan Kelety presented the status of the UNOLS Fleet Improvement Committee. He noted the Fleet Improvement Plan should be released in 2019. He noted changes in US Academic Fleet since 2014. He noted committee work on GLOBAL Class Science Mission Requirements (SMRs) including sending out a survey for marine superintendents, masters chief engineers and technicians.

19. Jon Meyer presented the status of US Academic Fleet / Fleet Broadband issues. He led a discussion of using individual day-rate chargers versus annual program charge. Jim Holik joined the discussion. He also discussed the effort to create network models which show university interface.

20. Derek Andresen presented the status of the George Washington University Maritime Medical Advisory Service. He noted call volume is up, which is good. There were 75 cases and 195 encounters in 2018, which resulted in two diversions. He indicated that training calls are encouraged. He noted his cell phone # 804-292-0577 and stated he desires feedback on problems. He noted it is less costly to go to their sub-vendor for medical supply than engaging GWU. He noted prices for a number of medical training courses which they can provide. He provided a review of HIPAA and stressed this should not interfere with providing information for treatment.

20. Zoltan Kelety presented the status of the ROGER REVELLE midlife refit overhaul and ROBERT GORDON SPROUL replacement. He noted the possible effects of USN shipbuilding and need to increase STEM efforts for additional female mariners at sea.

21. Tim Twomey presented the status of the ATLANTIS midlife refit overhaul. He noted items common to ROGER REVELLE midlife and WHOI's purchase of owner furnished equipment. He noted WHOI considered an EM 712, but decided not to go in that direction.

22. Jeff Garrett presented a recap report from the RVOC Safety Committee.

23. RVOC took for action: increased tele-medics on Ocean Class and Regional Class vessels, examining need for man overboard dummies for training, and assessment of NIOZ marine facilities planning module.

Closing:

Thomas Glennon closed the meeting.

Minutes submitted by Stephen Zoltan Kelety, RVOC Chair-elect.