

# **Research Vessel Operators Committee Meeting**

## **May 06 & 7, 2026**

### **Woods Hole Oceanographic Institution**

#### **Day One**

#### **Quick recap**

The meeting was the annual RVOC (Research Vessel Operations Committee) meeting held at the Woods Hole Oceanographic Institution, bringing together marine operations representatives from various institutions and federal agency representatives to discuss challenges and updates in research vessel operations. Key topics included NSF organizational changes, with the Academic Research Facilities (ARF) moving to a new Office of Research Infrastructure, and the need to develop Key Performance Indicators (KPIs) for reporting by July 1st. NSF's Rose Dufour and WHOI's Eric Benway shared lessons learned from a recent incident involving a cocaine seizure near the R/V *Atlantis*, highlighting the need for standardized language in cruise planning documentation to inform scientists about potential law enforcement intercepts. Other updates covered NOAA's new ship deliveries (*Oceanographer* and *Discoverer*), ongoing cybersecurity initiatives, and State Department requirements for foreign research permissions, with Amanda Williams emphasizing the importance of early application submission and proper documentation for international research activities.

#### **NSF Updates – Rose Dufour & Tim McGovern**

- Focused on organizational changes, performance indicators, and operational challenges within the ARF (Academic Research Fleet) and broader research community.
  - Charlotte Roehm – Supervisor
  - Maggie Benoit – Branch Chief
- Key updates included the ARF's reorganization into the Office of Research Infrastructure under a new reporting structure, with ongoing weekly communications with the Ocean Sciences division to align on science priorities and future needs.
- The group discussed the implementation of Key Performance Indicators (KPIs) required by NSF, with plans to develop a standardized approach for measuring facility performance, including metrics on scheduled versus executed days and science accomplishment percentages.
- Fuel cost challenges were highlighted, with the fleet facing a \$5-6 million overbudget situation, leading to discussions about potential biofuel alternatives and funding mechanisms.
- NSF Branding compared to NASA branding. Needs to get better.
- The discussion also addressed recent security incidents, including a drug interdiction event involving R/V *Atlantis*, which prompted discussions about developing standardized onboarding waivers to inform scientists about potential national security disruptions to their research.
- The current contract for NSF Vessel Inspection services is complete at the end of August. NSF is reviewing bids for a new ship inspection contract.
- Added cybersecurity component to inspections.

#### **Office of Naval Research Updates – Rob Sparrock**

- New ONR leadership
- People are the priority and then ship building
- President's budget breaks out my budget into a distinct budget.
- Outcome measurements
- INSURV inspections – AGORS do better than any USN surface warfare ships
- Cybersecurity – Institutions will need to achieve CMC
- No change in AGOR replacement schedule.
- No plans for new Global Class AGORs or mid-life refits for existing Ocean Class AGORs

## **NOAA Marine Operations Updates – LCDR Rachel Pryor**

- Rachel Pryor provided updates on new ships, existing vessels, facilities, and mariners.
- Key points included the delivery dates for new ships, challenges with mariner staffing, and updates on facility repairs and modernization.
- New Class A Ships – *Oceanographer* and *Discoverer* – anticipate deliveries May 2027 and November 2027
- Class Bs – anticipate deliveries of *Surveyor* Oct 2028 and *Navigator* May 2029
- Class Cs – Requesting to accelerate this program
- Target is 475 mariners. That is fully staffed.
- Attrition has gone down from 36% to 6%
- Mariners can now be flown to and from home of record to meet their ships
- New pier and warehouse in Rhode Island should be open in 2028. Savannah pier will be opened in July 2026. Hawaii pier needs technical upgrades. Schedule to start in Q4 of 2026.

## **Department of State – Amanda Williams**

- Amanda Williams from the U.S. Department of State explained the process for obtaining diplomatic clearances for marine scientific research in foreign waters, emphasizing the importance of early application submission and compliance with foreign requirements. Specific challenges with certain countries, such as Mexico and the Bahamas, were highlighted, along with recommendations for planning and documentation.
- All applications go through RATS Portal (Research Application Tracking System)
  - 250 applications a year
  - Submit at least 6.5 months in advance
  - Include a cruise track without maritime boundaries
  - Check guidance on website for each country's requirements
- SOI's Eric King and Amanda discussed challenges with obtaining permits for scientific research in foreign waters, particularly in Brazil, highlighting issues with extended continental shelves and delays in permit processing. They emphasized the importance of understanding these complexities and recommended consulting with relevant authorities for guidance.

## **UNOLS Updates – Doug Russell**

- Doug provided an update on UNOLS activities, introducing a new quarterly reporting to enhance transparency and accountability within the community.

- He also outlined recent developments in scheduling, funding, and initiatives, including the integration of NOAA and USGS in the scheduling process to optimize seabed mapping efforts.
- Updated RCRV Delivery Schedule
  - *R/V Taani* 15 Mar 2027
  - *R/V Narragansett Dawn* 28 July 2027
  - *R/V Gilbert Mason* 3 Jan 2028

## Research Communication

The group discussed the importance of communicating research successes to Congress and the public, highlighting the need for better metrics and media outreach to demonstrate the value of ARF ships to taxpayers. He emphasized the need to connect funding agencies with research outcomes and suggested exploring online forums, webinars, and articles to increase visibility.

## Research Vessel Operator Updates

The meeting participants discussed operational updates and challenges across multiple research vessels and facilities. The meeting also covered challenges with crew recruitment and retention across multiple programs, with participants noting the need for creative staffing solutions including independent contractor relationships and rotational staffing models.

- Greg Higgins/UW shared challenges related to the implementation of Workday, including increased administrative burden and resource requirements due to centralized services and complex system management across federal, calendar, and state fiscal years.
- Bruce Applegate /Scripps suggested collaboration between business offices from different institutions to address shared challenges in financial systems migration.
- Joost van der Zwaag/Scripps provided updates on the *R/V Roger Revelle*, including repairs, crew challenges, and regulatory issues including the ongoing USCG requirement for using pilots to enter & exit port.
- Eric Benway/WHOI highlighted the ongoing revamp of safety management systems and challenges in crewing and cybersecurity. He also highlighted *R/V Atlantis's* extensive use of Scripps facilities in 2025 and successful SMS system improvements, scoring well on recent inspections.
- Doug Baird/UAF described challenges transitioning between polar environments and dealing with Chilean regulatory requirements.
- Sean Higgins/LDEO outlined office staffing challenges at Lamont following administrative changes at Columbia University.
- Paul Mospens/UH provided updates on the *Kilo Moana's* recent activities and facility operations in Honolulu, emphasizing the complexity of international operations.
- Don Cucchiara/UMiami discussed the *R/V Walton Smith's* repowering challenges with new engines and reduced NOAA funding.
- BJ Aune/BIOS highlighted the *R/V Atlantis Explorer's* personnel transitions and upcoming dry dock requirements.
- Dave Walter/UDel reviewed *R/V Sharp* operations and plans for the next phase of the ship's midlife refit.

- Joe Malbrough/LUMCON provided updates on *R/V Pelican's* operations, including their new 205-foot dock in Houma and plans for a 30,000 square foot metal building.
- John Bichy/SkIO shared details about the *R/V Savannah's* refit and current ship time challenges, noting they have 109 funded days for 2026. John also highlighted that they have developed and implemented a lithium battery temperature monitoring system onboard *Savannah*.
- Ash Hayden/URI discussed the successful scrapping of the *R/V Endeavor* and ongoing crew exchange challenges.
- Lindsay Kurelja/OSU reviewed recent organizational changes to OSU's ship operations. She also noted that Emily Shimada was recently hired as the *Taani* ETO and is in the process of hiring a Chief Engineer for *Taani*. Additionally, Lindsay noted that OSU is developing a rotational staffing model for *Taani*.

## Harassment Reporting Best Practices – Tara Clemente

Tara presented updates to harassment reporting best practices for research vessels, highlighting the need for clearer, safer, and more consistent processes across the fleet.

- She outlined two reporting tracks—federal reporting to the U.S. Coast Guard under the Safer Seas Act and institutional reporting to home institutions—and emphasized the importance of immediate reporting and coordination among multiple parties, especially in multi-institutional cruises.
- Tara also discussed challenges around shipboard dynamics and power structures, stress the need for alternative reporting pathways, and acknowledged gaps in victim care, inviting feedback to improve the guidance document.
- Participants raised questions about reporting timelines, responsibilities during different phases of a cruise, and the complexities of handling reports involving non-participating researchers or those off the vessel but still part of the science team, with Tara acknowledging these ambiguities and encouraging continued dialogue to refine the framework.

## Special Reports

### East Coast Winch Pool

- Sean Whelan/WHOI presented on the East Coast Winch Pool, highlighting new features and equipment including winches, turntables, and motion reference units. He discussed ongoing maintenance efforts, particularly for the Pine Hill machine, and mentioned plans to explore commercialization opportunities for a padded winch developed in partnership with Brown University.

### West Coast Winch Pool

- Aaron Davis/Scripps discussed the West Coast Winch Pool operations, including recent work on Dynacon traction winch power requirements and mooring winch spare parts procurement.

### Wire Pool

- Eric Trotto/WHOI presented on the NSF Wire Pool, explaining their tension member inventory and testing capabilities.

## **East Coast Van Pool**

- Dave Walter/UDel provided an update on the East Coast Van Pool, reporting 116 van deployments totaling 562 days in the previous year.

## **West Coast Van Pool**

- Christine Golden/OSU represented the West Coast Van Pool, noting their reorganization under a single marine operations office and reporting 595 operating days supported by NSF in the previous year.

## **Cybersecurity Updates – Will Drake**

- Will Drake from ARFSEC provided an update on cybersecurity services, explaining the transition to a joint project between OmniSOC and Indiana University's Center for Applied Cybersecurity Research, funded by NSF.
- He outlined three service categories: technical cybersecurity, organizational resilience, and governance risk and compliance, emphasizing the importance of cybersecurity in the maritime research context.
- The team discussed recent cybersecurity threats including ransomware attacks on maritime vessels and the implementation of cyber resilience requirements in new ship construction.

## **ABS – Ben Komar**

### **GW Marine Medical Services – Dr. Adam Rutenberg**

- Dr. Rutenberg provided updates on maritime health issues and telemedicine devices.
- He noted a new seasickness medication called Nereus, which is the first FDA-approved treatment for motion sickness-induced vomiting in 40 years.
  - Tradipitant-Nereus
- Discussed trends in medical cases and diversions, highlighting that falls are the primary cause of trauma-related diversions. He emphasized the importance of pre-cruise medical clearance and fall safety.
  - Trauma: 7 (26%)
  - Non-Trauma: 20 (74%)
- Advised considering utility, usability, uniformity, reliability, and affordability when evaluating options for telemedicine devices. He also mentioned future possibilities for augmented reality in medical training and diagnostics, enabled by high-speed internet.

### **Safety Committee Recap – Jon Swallow**

- Provided a recap of the Safety Committee meeting.
- Key topics included high voltage safety for autonomous systems and ROVs, and harassment prevention policies.
- Dive Safety Subcommittee update
- Communicating Near Miss lessons learned to the fleet
- Review 2025 Safety Reports
- Continuing Updates to RVSS Appendix A & B

## **Ship Inspection Programs – Blake Powell**

### Most Common Findings

- 75% had completed Appendix A& B self-assessments – huge improvements
- 50% of ships have completed overboard handling plans
- Extenuating Circumstance Plan
- Keeping up to date with wire and cable lubrication – 50 % in compliance

## **R/V Roger Revelle Fire – lessons learned**

Joost presented details of the Revelle incident, explaining that a catastrophic failure of a diesel generator's hold-down bolt led to a fire that was quickly contained due to proper emergency procedures.

## **Shipboard Fire Experiences – Julie Wagner**

### *NOAA Ships Rainer and Ron Brown*

- Causes - Rainer – Fire in fiddley space.
  - Likely source: blower fan, only circuit that trips
  - The space had become storage. Fire would not have been as bad if not for the items being stored in the space.
- Causes - Ron Brown – fire in engine room, mostly upper generator room
  - Believe that a tube with lube oil burst. We think oil sprayed for 8-10 minutes.
  - E-stops hit in main control by engineers
- The discussion highlighted key takeaways including the need for better tracking of personnel during emergencies, improved fire pump capacity assessments, and the importance of following manufacturer guidelines for equipment maintenance.
- Corrective actions were outlined, including standardizing firefighting equipment, implementing better communication strategies, and enhancing damage control training.

## **Keynote Speaker – Julie Huber - *The Deep-Sea Around Us: The Urgent Need to Bring the Seafloor into Sight***

Julie Huber, a senior scientist at Woods Hole Oceanographic Institution, delivered a keynote address about deep-sea research and its importance to understanding microbial life in ocean habitats. She discussed her research on crustal ocean biosphere ecosystems, including hydrothermal vents and seamounts, emphasizing how microbial life serves essential ecosystem services that need to be considered as human activities like deep-sea mining expand. Julie highlighted the COBRA network's efforts to train the next generation of chief scientists and provide scientific guidance to federal agencies regarding deep-sea mining regulations. The discussion concluded with questions about potential partnerships between academic research fleets and industry, where Julie advised that baseline environmental surveys should be prioritized before any mining activities, and any data generated should be shared in open access databases.



# Research Vessel Operators Committee Meeting

## May 06 & 7, 2026

### Woods Hole Oceanographic Institution

### Day Two

#### Quick recap

The meeting focused on updates and discussions from various marine research vessel operators and organizations, including legal issues, vessel operations, and system implementations. John Guttoff presented on current legal topics, including challenges with mifepristone prescriptions on vessels and recent changes in marine insurance law. Anthony provided updates on Canadian science fleet developments, including the new *Naalak Nappaaluk* vessel and upcoming polar icebreakers. Zeynep shared details about the Netherlands' new research vessel *Anna Weber-van Bosse*, which was recently delivered and features increased capacity and capabilities. Guy and Fiona from NOC discussed their operations, challenges with crewing and science delivery, and their engagement with the Foreign and Commonwealth Office. Alice presented on the implementation of a new Project Support Review and Project Support Plan process within MFP to better manage cruise planning and equipment requirements. The conversation ended with a group photo opportunity and recognition of John Alberts, the UNOLS Executive Secretary Emeritus who was able to attend the meeting.

#### Legal / Risk – Jonathon Guttoff

- Legal update focusing on current issues, particularly the nationwide injunction against remote prescription of mifepristone, which could affect treatment on UNOLS vessels.
  - The discussion highlighted uncertainty around FDA regulatory authority over U.S. flag vessels and potential risks of medical complications at sea.
- The conversation ended with positive news about softening in the marine insurance market, particularly for low-risk vessels, with potential rate decreases expected.
- Separation of specialized risks – cyber, lithium battery fires, war, infectious disease
- Cyber Threats – GPS spoofing, vessel ran aground
- War Risk Limitations- Entry into a listed area without prior notice will void coverage
- JWLA.ai – Joint War Listed Areas Lloyds website showing listed war areas

#### Other Operators:

##### Fisheries and Oceans Canada - Anthony Redican

- Provided an update on Canada's science fleet, highlighting the delivery and trials of the new offshore oceanographic vessel *Naalak Nappaaluk*, as well as updates on other vessel builds and policy changes regarding marine scientific research.

##### NIOZ operations – Zeynep Erdem

- Presented an update on the Netherlands' new research vessel *Anna Weber-van Bosse*, which was delivered in February and features increased capacity and capabilities, including the ability to operate in high latitudes and the potential for methanol-powered operations.
- The discussion also touched on the integration of autonomous systems into vessel operations and the establishment of a new Robotics and Autonomy team.

- Discussed challenges with operating new vessels, including issues with the *Anna Weber-wan Bosse* and manpower constraints affecting both ROV and vessel operations.
  - She noted that while they aim to operate ROVs from land, they currently face staffing limitations that restrict 24-hour operations.

## **Update on United Kingdom Operations – Guy Dale-Smith & Fiona Stuart**

- Presented on NOC's activities over the past year, highlighting challenges with crewing and science delivery.
- Discussions about the future of their ship operations, including potential changes to the number of ships and the integration of autonomous systems.
- The group also discussed safety management systems, public outreach efforts, and processes for handling potential incidents at sea.

## **MFP Updates – Alice Doyle**

- MFP system updates, the team reviewed progress on various modules including inventory management, equipment facilities, and personnel planning, with particular attention to challenges around day tracking and reporting accuracy that were raised by Bruce from Scripps Institution of Oceanography.
- The team acknowledged ongoing issues with day counting reliability in MFP and committed to addressing these concerns with system developers.
- For the project support agreement, Rose Dufour presented a proposed two-phase process to be implemented before cruise scheduling, including a preliminary review and a support plan documentation.
- The team discussed timing for implementation, with January 1, 2027 proposed as a potential start date, and addressed concerns about managing additional sub-projects that Pls might bring aboard.

## **Tours of R/V Atlantis and HOV ALVIN**

- WHOI provided tours of R/V *Atlantis* and HOV ALVIN major overhaul to the RVOC meeting participants.

## **Schmidt Ocean Institute – Eric King**

- Schmidt Ocean Institute's research vessel, *Falkor (Too)* including its capabilities and recent operations in the South Atlantic.
- Discussions about the vessel's ROV systems and future research plans, including a potential dry dock for modifications.

## **Obsolescence of Telemedicine devices**

- Telemedicine devices currently used in the ARF are approaching obsolescence will not be supportable in the future (2027) particularly for the Tempus IC2 units. Replacement of the units should be initiated soon.
- Is there a preference to procure integrated systems (i.e. like the Tempus IC2 and Digigone systems currently used in the fleet) or a preference to procure individual devices that can be used for telemedicine support (such as was discussed during Dr. Rutenburg's presentation)?
- How much to replace the systems in the fleet

- Doug Russell has been investigating what options are and has info from Digigone for new integrated systems – will provide to NSF

### **Advise Science Party of potential cruise changes**

- Does the ARF need to develop / modify current notification language to a unified pre-cruise boarding language.
- WHOI is going to share their form. Will add to MFP.
- Ben Alsip discussed the increasing likelihood of being diverted for national security purposes, particularly with Coast Guard ships, and emphasized the need for flexibility in planning.

### **Scheduling planning STEMSEAS Cruises**

- Regarding STEMSEAS, Rose Dufour raised concerns about the program potentially becoming a driver for science cruises rather than just transit opportunities, leading to a discussion about costs, coordination, and resource allocation.
- The group also reviewed a utilization metric for fleet operations, discussing how to accurately reflect available service days, maintenance periods, and weather-related standby time in the data.
- STEMSEAS has been around for 10 years. Great program. Brian Midson is the new program manager. Need to share the cruises among all the classes of ships.
- STEMSEAS needs to communicate with the ships before they are selected.
- Doug Russell will work with STEMSEAs on this topic as part of scheduling process

### **Full Optimal Year & Key Performance Indicators Definition**

- KPIs should have a clear, single purpose and not be based on opinions, suggesting they should measure either contractor performance or government program performance rather than individual operator performance.
- The group discussed challenges in measuring science mission success, including accounting for weather delays, staffing issues, and unscheduled maintenance.
- They explored the possibility of implementing a two-part system where scientists would report initial success percentages immediately after cruises, followed by more detailed reports later.
- Get PCARs finished before they leave the ships. What percentage of science is completed?
- Do we separate it out as a separate questions? Program that into MFP. Two part PCAR.
  - Name separate question something other than PCAR.

### **New Legislative Language to classify ARF Ships**

- The discussion also touched on legislative efforts to better define academic research vessel relationships and potential benefits of classifying ARF ships as public vessels.
- Government relations teams at major institutions. WHOI is willing to take this one.
- Define what the ARF is.
- Do we want ARF vessels to be public vessels of the US?
- Doug Russell will facilitate receiving MarSup's input and work with Government relations reps.

### **Medical evaluations for scientist and students?**

- Addressed medical evaluation processes for science party members, considering the possibility of third-party medical assessments to ensure safety and compliance.
- George Washington could do risk assessments, and they could bring them to their personal doctor.
- PI is responsible for health of scientists and students.
- Follow up with STEMSEAS and GW.

## **Sexual Assault and Sexual Harassment (SASH) Reporting to CG**

- Participants discussed the implementation of SASH reporting requirements, particularly regarding sexual harassment and assault incidents involving mariners, with concerns raised about whether the Coast Guard should investigate science-on-science incidents.
- The group also addressed the installation of video recording systems on vessels and clarified that these systems are intended to support investigations by competent authorities, not just law enforcement.

## **MarSup Boot Camp at next check in meeting**

- Discuss the possibility of holding a boot camp for new marine superintendents

## **Action Items:**

- UNOLS: Follow up with Brian about STEMSEAs focus and ensure operators are included earlier in scheduling discussions
- UNOLS: Research options and costs for telemedicine device replacements
- UNOLS: Check with GW about possibilities for third-party medical evaluations of science party members
- UNOLS: Organize marine superintendent "boot camp" training/check-in meetings
- Reach out to potential host institutions (USM, UNH, others) about hosting next year's meeting
- UNOLS: Get NOAA's Julie Wagner's reports / safety bulletins / corrective actions that resulted from the *Rainier* fire
- UNOLS: Circulate information about new legislative language for classifying ARF ships
- Eric Benway: Draft and share revised language advising science parties of potential cruise changes (e.g. national security diversions)
- UNOLS / Doug: Circulate Jon Guttoff's memo on proposed legislative language for ARF vessel classification and collect input
- UNOLS: Get MarSup's input and work with Government relations reps to classify ARF vessels.
- UNOLS: Work on separating out science completion metrics from PCAR forms
- UNOLS: Follow up with STEMSEAS and GW on medical assessments for students & scientists.
- UNOLS: follow up on insurance requirements for vessel operations
- UNOLS: Separating science completion from PCAR processes
- UNOLS: Plan for the 2027 meetings, with suggestions to potentially host the next meeting in the Gulf Coast region.