

UNOLS News Exciting updates from UNOLS & the Academic Research Fleet

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Community Updates

NOAA to Decommission some Data Products in May 2025

NOAA will be decommissioning a number of data projects in May 2025. A full list of the products and further information, go to the NOAA page <u>here</u>. A shorter summary of products related to the ARV data is <u>here</u>.

If any of these data products are of interest - the community must act quickly. In some cases, particular communities have stepped forward to take on a decommissioned product, such as SESAR at LDEO taking up IMLGS. The <u>Data Rescue Project</u> has been coordinating efforts to backup federal data. **It is possible to nominate datasets for backup by the Data Rescue Project:** go <u>here</u> and search for the url of the product you care about that is being decommissioned. If it is not already being backed up, you will have the option to nominate it for backup. The goal of this page is to prioritize data rescue based on importance, so multiple votes from real people presumably help.

Congressional Hearing On Bluewater Economy

The House Committee on Science, Space, and Technology, Subcommittee on Environment held a hearing on March 26, 2025, entitled "To the Depths, and Beyond: Examining Blue Economy Technologies". The hearing underscored that the blue economy and its technological advancements are significantly reliant on both public and private funding, with public funding playing a crucial role in driving private industry. Witnesses, including Earl Childress of Oceaneering, Shepard Smith of XOcean, Dr. Margaret Leinen of Scripps Institution of Oceanography, and Dr. Tim Janssen of Sofar Ocean, discussed how federal support, particularly through agencies like NOAA and the National Science Foundation, is essential for basic research and reducing the risks that private investors face in the emerging ocean information economy. This funding fosters innovation, enables the development of new technologies, and creates the market conditions necessary for private companies to scale and commercialize ocean technologies, which ultimately benefits economic growth, national security, and environmental resilience. Watch the recording here.

HOV Alvin Featured in EOS

The abyssal and hadal zones, some of the deepest regions of our oceans, remain one of Earth's least explored frontiers, with depths reaching 4,000 meters or more. These extreme environments— characterized by immense pressures, cold temperatures, and a complete absence of sunlight—are home to unique life-forms that thrive on alternative energy sources. While remotely operated and autonomous vehicles are essential tools for exploration, direct human observation through human-occupied vehicles (HOVs) like the deep submergence vehicle *Alvin* is invaluable. *Alvin*, the world's longest-operating and most productive deep-sea submersible, has recently undergone a significant upgrade, now enabling researchers to access approximately 99% of the ocean floor, down to depths of 6,500 meters. This enhanced capability opens up new possibilities for discovering unique ecosystems, mineral resources, and archaeological sites in these previously unreachable depths. Read the entire EOS article here.

Committee News

Departing Members

Thank you so much to the following individuals for their contributions to the UNOLS community:

- Doug Baird / University of Alaska / RVOC Chair
- Jeff Garrett / Safety Committee Chair

New Committee Members

All of our committees are staffed by volunteers and we are grateful for their contributions of time and experience. We would like to extend a warm welcome to our newest committee members:

- Doug Ricketts / University of Minnesota, Duluth / RVOC Chair
- Jon Swallow / University of Delaware / Safety Committee Chair

FIC Addresses Research Vessel Capacity and

Featured Photo



R/V Sikuliaq arriving in Alaska, following the Cyber Training Transit Cruise, led by Sikuliaq IT Manager Julian Race. Photo credit: Julian Race

Upcoming Events

2025 Spring AMRCC Workshop 23-24 April 2025 Seattle, WA

UNOLS 2025 Safety Committiee Meeting 29 April 2025 University of Delaware, Lewes,

Delaware

UNOLS 2025 RVOC Meeting 30-1 April/May 2025 University of Delaware, Lewes, Delaware

UNOLS 2025 Spring FIC Meeting 28-29 May 2025 Virtual

UNOLS 2025 Summer AICC Meeting 27 June 2025 Virtual

UNOLS 2025 Summer Council

<u>Meeting</u> 10-11 July 2025 Virtual

Did you know...

The UNOLS.org home page and theme has been updated to give it a more modern look, feel, and more importantly to help our stakeholders find key information more easily. Take a look at it here!



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NOAA Class B Vessel Suitability

The UNOLS Fleet Improvement Committee (FIC) has recently released two important memos addressing critical issues related to the U.S. Academic Research Fleet (ARF). The first memo expresses deep concern about the diminishing capacity of Global Class Research Vessels (GCRVs). The FIC highlights that the retirement of vessels like *Knorr* and *Melville* has led to a substantial loss in capabilities, including berths, lab space, deck space, and endurance, which are crucial for large-scale, interdisciplinary research. With the impending end of service life for several more GCRVs and Ocean Class Research Vessels (OCRVs), the committee urgently advocates for the procurement of new GCRVs to ensure the U.S. maintains its leadership in oceanographic research.

In a second memo, the FIC evaluated the suitability of the NOAA Class B vessel as a potential replacement for the Ocean Class Research Vessel (OCRV) R/V *Kilo Moana* and the Global Class Research Vessel (GCRV) R/V *Thomas G. Thompson*. While the NOAA Class B vessel shows potential as a replacement for an OCRV with modifications, including deck reconfiguration and enhanced endurance, the FIC concluded that it is inadequate for GCRV missions. The committee strongly recommends prioritizing the construction of four new Global Class AGORs to meet the needs of the oceanographic research community.

SCOAR Meeting Facilitates Key Discussions on Oceanographic Aircraft Developments

The 2025 SCOAR meeting was a productive gathering focused on advancing the use of aircraft in oceanographic research. Held at NASA Ames, the two-day meeting featured a dynamic agenda that included agency and UNOLS reports, updates on crewed and uncrewed oceanographic aircraft developments, and discussions on the future of UAS facilities. Participants actively engaged in sessions covering topics such as NASA's airborne calibration/validation capabilities, science operations with UAS at NOAA, and the development of a UAS Handbook. The meeting successfully fostered collaboration and strategic planning, with attendees working together to brainstorm how SCOAR can maximize its impact and engage with other relevant parties.

Fleet Highlights

RCRV Update

The deliveries of the three Regional Class Research Vessels (RCRVs) from Bollinger Shipyards to Oregon State University for final ownership by the National Science Foundation are forecast to occur in 2026 and early 2027.

Schedule delays are being driven largely by construction challenges and rework affecting, R/V *Taani*, the first in class. Electrical cable installation is requiring the pulling, termination and testing of over 6000 cables totaling more than 150 km in length to connect systems throughout the tightly equipped vessel. However, as the electrical work proceeds, recent joiner work and installations of deck equipment are giving the vessel a more finished look inside and out. The staggered construction of the second and third vessels, R/Vs *Narragansett Dawn* and *Gilbert R. Mason* is benefiting from lessons learned from *Taani* and proceeding well.

The Science Trials plan for each RCRV includes eight principal cruises starting with deep-water tests of sonar equipment and over-the-side handling systems. These trials cruises will build in complexity over an 8month period post-delivery with expert support from the operating institutions and broader UNOLS community. To fully prepare the ships for funded multi-disciplinary science, trials goals are to achieve:

- Progressive crew and marine technician familiarization with ship systems so each vessel may enter the Academic Research Fleet.
- Complete testing and verification/reporting of all vessel systems, science mission equipment, communications and sensors.

For more information on RCRV Science Trials, please reach out to RCRV Project Scientist Clare Reimers, <u>clare.reimers@oregonstate.edu</u> or Transitions to Operations Coordinator Daryl Swensen, <u>daryl.swensen@oregonstate.edu</u>.



View of R/V Taani at Bollinger Houma Shipyard during a fit-up of the port side-A-frame.

Academic Research Fleet Ship Scheduling Update

The ARF ship schedulers have been working for months to develop possible 2026 ship scheduling scenarios with an original intent of publishing ship schedules during this coming summer. The funding agencies have long provided guidance on priorities: in general, they are: 1) long-term time series; 2) must-do equipment recoveries; and 3) deferred programs. However, with so many unknowns regarding the current and future funding environment of federal science grants there is little clarity on what new science programs can be scheduled for CY 2026. In addition, a reevaluation of risky projects that are currently scheduled for the last quarter of CY 2025 may be needed. We are already seeing impacts to projects that were funded by other (non-NSF) federal agencies which have rescinded projects resulting in cancellation of scheduled cruises. Once we have a better understanding of the funding picture from the different federal agencies, as well as the President's budget and pass back information, we can better access options, working with the agencies and principal investigators to ensure the proposed schedules are viable.

2025 UNOLS-MATE Marine Technical Internship



Photo: the Winter 2025 R/V Langseth Interns (from left to right): Ethan Wadsworth, Will Eltringham, and Theo Lafontant Kagan.

Congratulations to the three Interns who completed internships on the R/V Marcus G. Langseth hosted by the Lamont-Doherty Earth Observatory at Columbia University. They provided essential technical support during a transit from Savannah, GA to the island of Sao Vicente, part of the Cape Verde Archipelago. Read all about their internship experiences on the new MATE Internship Blog!

Ethan Wadsworth wrote in his final post: "Overall, this experience has been a fantastic blend of technical work and practical skills, giving me the chance to work with cutting-edge equipment and learn valuable hands-on techniques."

Will Eltringham expressed that "while [his] time aboard the Langseth has been relatively short, it has been nothing short of an amazing and worthwhile experience that [he] would heavily recommend participating in should you have the opportunity!"

At the end of his internship, <u>Theo Lafontant Kagan</u> shared "If I've learned anything from this experience, understanding the fundamentals of how something works is a great substitute to deploying an instrument in the field. [...] I am leaving feeling very confident in my ability to perform technical duties aboard a scientific vessel, [and] look forward to applying the skills I learned to future projects."



Photo: Will Eltringham and Theo Lafontant Kagan learned about the inner workings of outboard motors while taking the workboat to be refueled.

Featured Ship

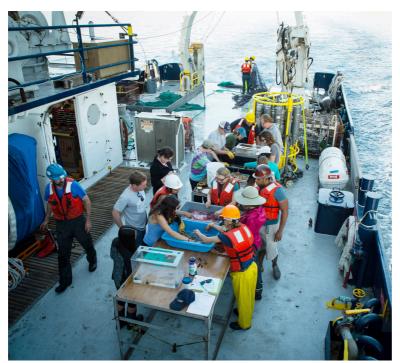


R/V ROBERT GORDON SPROUL

Name: R/V ROBERT GORDON SPROUL Year Built: 1981 Place Built: Bayou La Batre, Alabama by Steiner Fabricators Science Berthing: 12 Crew Berthing: 5 Owner: University of California Operator: University of California Class of Vessel: Coastal / Local

The R/V ROBERT GORDON SPROUL is a venerable workhorse, and is equally adept conducting one-day experiential learning missions for Scripps classes as it is supporting multi-day projects far offshore conducting every kind of science a general-purpose research vessel needs to do.

Over the past five non-COVID years, R/V ROBERT GORDON SPROUL has introduced 1,652 Scripps students to seagoing oceanography under the careful guidance of our marine technicians and faculty mentors.



R/V ROBERT GORDON SPROUL - Students in Professor Lisa Levin's Biological Oceanography class sort trawl samples aboard *Robert Gordon Sproul* during a class cruise. This ship plays a vital role in Scripps education programs, providing access to the sea for more than 300 students each year on class cruises like this, or as part of independent research projects that are competitively awarded to student researchers through the **UC Ship Funds Program**.



R/V ROBERT GORDON SPROUL is an especially versatile generalpurpose research vessel, with a large work deck, capable overboard handling equipment and huge payload that enables it to support a broad range of activities. Here, a containerized Autonomous Underwater Vehicle and its control van are mobilized aboard.



PDF versions of the Newsletter can be found <u>here</u>. To unsubscribe from UNOLS News, please reply to this email with the word "unsubscribe" in the body. Thank you!