

Minutes
13th Meeting of the Ocean Exploration Advisory Board
Consortium for Ocean Leadership, Washington, DC
31 July – 1 August 2019

Notification and Availability of Meeting Materials

The thirteenth meeting of the Ocean Exploration Advisory Board (OEAB) was announced to the public by Federal Register Notification, and on the OEAB website at www.oeab.noaa.gov. Background material and presentations prepared for this meeting are posted on the OEAB website.

Ocean Exploration Advisory Board Members in Attendance

Mr. John Kreider, Consultant (Chair)
Ambassador Cameron Hume, Consultant (Vice Chair)

Dr. Amanda Demopoulos, U.S. Geological Survey
Dr. Jacqueline Dixon, University of South Florida¹
Dr. Christopher German, Woods Hole Oceanographic Institution
Mr. David Lang, Sofar Ocean Technologies
Ms. Nicolette Nye, National Ocean Industries Association
Dr. Dominique Rissolo, University of California at San Diego
Dr. Richard Rikoski, Hadal, Inc.
Mr. Lance Towers, Boeing, Inc.

Mr. David McKinnie, Designated Federal Officer for the OEAB

NOAA Management and Staff in Attendance

Brittany Croll
Brandon Elsner, CEQ

Office of Ocean Exploration and Research

Dr. Alan Leonardi, Director, OER
Mr. Frank Cantelas, Deputy Director, (Acting), OER²
Dr. Jamie Austin, OER
Ms. Rachel Medley, Expeditions Division Lead, OER
Dr. Adrienne Copeland, OER
Ms. Rachel Gulbraa
Ms. Christa Rabenold³

Invited Speakers

RDML Timothy Gallaudet, USN (ret)
Deerin Babb-Brott, OSTP

RADM Jon White, USN (ret), Executive Director,
Lauren Linsmayer, House Science Committee Staff
Aria Kovalovich, House Science Committee Staff

¹ Dr. Dixon participated by telephone

² Mr. Cantelas participated on the second day

³ Ms. Rabenold participated on the first day

Paola Santiago, Educational Partnership Program/Minority Serving Institution Scholar (OER)
Herbert Leavitt, Hollings Scholar (OER)

Observers

A number of individuals from the Consortium for Ocean Leadership, NOAA, and other organizations observed the meeting at various points during the meeting.

Meeting Summary

1. **Meeting Opening.** The Designated Federal Officer (DFO) opened the meeting on July 31, 2019 at the Consortium for Ocean Leadership.
2. **Consortium for Ocean Leadership.** RADM Jon White, President of the Consortium for Ocean Leadership (COL), welcome the OEAB to COL and provided an overview of COL and its priorities as a membership organization with a mission to advance ocean exploration and other ocean issues on behalf of the community. [presentation]
2. **Approval of Minutes.** Ambassador Hume made a motion to approve the minutes from the 12th OEAB meeting, held in Oakland, CA. Dr. German seconded, and the Board approved the minutes (see the [OEAB website](#) for Meeting 12 minutes).
3. **Membership Changes.** Dr. Jamie Austin, who had served as OEAB vice chair and as a board member since it was established, resigned shortly before the meeting to take a position with OER. The chair thanked him for his service as a valued OEAB member and expressed his view that Dr. Austin would continue to make contributions from this new position with OER.
4. **Federal Advisory Committee Act Executive Order and OEAB Membership Updates.** David McKinnie, Designated Federal Officer, briefed the OEAB on Executive Order 13875, Evaluating and Improving the Utility of Federal Advisory Committees. He described the executive order's requirements and the Office of Management and Budget (OMB) guidance received through the Department of Commerce, that required justification of the OEAB despite it being a statutory FACA board. He said that there were no indications the Department would recommend termination of the OEAB to OMB.

The second part of his briefing described OEAB membership status. With Dr. Austin's resignation, OEAB membership fell to 10. Of that number, five term out in June 2020 as they will have served two terms. The DFO noted that although NOAA identifies needs and assesses which candidates best meet them, RDML Gallaudet, Deputy NOAA Administrator, will make the final decision.

5. **OEAB Five Year Self-Assessment.** The chair opened his remarks with comments on relevant activities that had taken place since the last meeting. He noted RDML Gallaudet's request for comments on reauthorization and that they appeared to have been appreciated and used within the Administration. Mr. Kreider referenced the House Committee on Science, Space, and Technology "Ocean Exploration: Diving to New Depths and Discoveries" [hearings](#) held on June 5, 2019 and that witnesses represented ocean exploration well.

He set the stage for the self-assessment by noting that each board member should ask whether participating on the board was worth his or her time and whether the OEAB was accomplishing its objectives. A discussion period followed with each OEAB member present providing their own perspective on whether the OEAB had demonstrated value

and effectiveness. All agreed it had. There was agreement that the OEAB's recommendations and messaging had been consistent across two very different Administrations and that as a result OER was more stable and healthier than it had been in 2014. Some noted that the OEAB had anticipated being able to do significantly more than it had, and that while the board had value it had not, for example, significantly increased the OEAB budget. But all agreed the OEAB had been effective in encouraging OER to refine its messaging and the way it thought about ocean exploration with the result that OER was better able to take advantage of the opportunities that presented themselves. All agreed it is important for the OEB to look forward. The consensus was that now is a critical time for the OEAB to support OER to act with urgency to: 1) develop strategy for a national ocean exploration program; 2) commit to and employ partnerships; and 3) assess and make use of new technology in ocean exploration (sensors, UxS, AI, data services).

- 6. OER Overview.** Dr. Leonardi provided the OEAB with an update on OER activities since the last meeting. He described the effects of the government shut down on the program and the disruption that resulted. But he focused on the results achieved four months since, using the discovering the "stumbled upon shipwreck," the first sighting of a giant squid in U.S. waters in the Gulf of Mexico, and a video of sharks feeding on a swordfish fall to illustrate OER's successes.

He reviewed the series of VIP Exploration Command Center visits, including visits by the Department of Commerce CFO Thomas Gilman and OSTP Director Kelvin Droegemeier, follow up briefings at OSTP and the Council on Environmental Quality, briefing visits to the Hill, and other activities that have led to the Administration's strong interest in ocean exploration.

Dr. Leonardi also summarized the status of the new Ocean Exploration Cooperative Institute (OECI) and OER plans for expeditions in 2020, 2021, and 2022, when it is expected the *Okeanos Explorer* will return to the Western and Central Pacific.

- 7. OER Program Review.** Mr. McKinnie briefed the OEAB on the OER program review, scheduled for October 16-18, 2019, in Narragansett, Rhode Island. He included information about the panel members and OER's proposed approach to briefing the panel within the guidelines for the five-year review.
- 8. Administration Priorities for Ocean Exploration.** Assistant Secretary of Commerce for Oceans and Atmosphere Tim Gallaudet and White House Office of Science and Technology Policy's Deerin Babb-Brott joined the OEAB for a discussion of the Administration's priority on ocean exploration. RDML Gallaudet noted that during the White House summit on ocean science and technology planned for the fall, strategies for unmanned systems, artificial intelligence and machine learning, the cloud, and 'omics would be released for comment to drive transformational technologies and so ocean exploration. These programs support White House science and technology initiatives and leverage private sector and NGO partnerships to advance national ocean exploration priorities.

Deerin Babb-Brott described OSTP priorities as ensuring that technology government develops and data government collects is shared widely to leverage economic growth. The various policy mechanisms such as the Ocean Policy Committee (OPC) and the National Oceanographic Partnership Program (NOPP) are important ways to achieve these objectives. He also described the Ocean Decadal Vision the Subcommittee on Ocean Science and Technology (SOST) develop and the five goals that support this vision as immediate opportunities for ocean exploration. The fall summit will focus on partnerships and using mechanisms like NOPP to bring together all of the sectors that

need to be involved in a national program: government, academia, the private sector, NGOs, philanthropy, and others.

An active dialogue followed with OEAB members.

9. **Congressional Perspective on Ocean Exploration.** Lauren Linsmayer and Aria Kovalovich, both with the House Science, Space, and Technology Committee (majority staff), provided an informal overview of the status of ocean exploration issues in Congress. They noted that with the change in Committee leadership there has been an emphasis on a bipartisan approach to issues, an approach that has seen passage of four ocean acidification bills and progress in other areas. They described the hearing and expo organized in conjunction with Capitol Hill Ocean Week (June 2019) and the main themes that resulted of: the opportunities and challenges of working with the federal government; data management and use and the need for machine learning and AI; whether there is a national strategy for ocean exploration; what signals the private sector needs from the federal government; and the challenge of an annual appropriations cycle for science that is necessarily longer term.

Dr. Linsmayer and Ms. Kovalovich also described their work with NOAA and other federal agencies to gather information for legislation to reauthorize NOPP and ocean exploration.

10. **Presentation by Hollings and Educational Partnership Program/MSI Scholars.** OER summer scholars Herbert Leavitt (Hollings) and Paola Santiago (Educational Partnership Program/MSI) gave presentations on their work with OER experts. Ms. Santiago, of the University of Puerto Rico, analyzed data showing the extent of corals in and adjacent to areas of particular concern. Mr. Leavitt analyzed acoustic data to evaluate the effect of OER's remotely operated vehicle on species in the water column. The presentations were well received by the OEAB.
11. **NOAA Administrator's Requests of the OEAB.** Assistant Secretary of Commerce for Oceans and Atmosphere Tim Gallaudet requested that the OEAB provide advice to NOAA leadership on Unmanned Undersea Vehicle systems and a vision for a national ocean exploration strategy.
12. **Next Meeting.** The Board confirmed its next meeting for December 3-4, 2019 in Washington, DC at the Consortium for Ocean Leadership.
13. **Meeting Close.** The DFO closed the meeting at approximately 1700 on August 1, 2019