# OBSIC Oversight Committee Report and Update

**MSROC**

**December 8, 2019**

*2018 Alaska Amphibious Community Seismic Experiment*

# Ocean-Bottom Seismograph Instrumentation Center (OBSIC) Oversight Committee

- Third generation of NSF/OCE/MGG-funded facility providing OBS instrumentation for community use

- Cooperative agreement with WHOI for first five years of operation (2018-2023)

- Budget and fleet both downsized compared to previous -> seek same level of operation through increased efficiency

- Award is for operations only – no budget for fleet improvement or evolution

- Committee set up by NSF to provide community guidance and advice to facility operator and NSF on facility operations

- Analogous to committees that guided OBSIP in its first two generations

# OBSIC Oversight Committee Membership

- Jim Gaherty, LDEO/NAU, chair

- Kasey Aderhold, IRIS

- Jackie Caplan-Auerbach, Western Washington Univ.

- Zach Eilon, UC Santa Barbara

- Emilie Hooft Toomey, Univ. of Oregon

- Ross Parnell-Turner, UC San Diego

- Lindsay Worthington, Univ. of New Mexico (MSROC liaison)



*OBSIC OC Facility Tour, Oct 2019 (photos by K. Aderhold)*

# OBSIC OC within MSROC

- Provide input of broader OBS community into MSROC, encourage engagement of the OBS community on MSROC issues, and improve coordination between MSROC and OBSIC activities
- 7 community members + *ex officio* representation from facility
- 3 yr rotations
- At least one member of OBSIC will also sit on MSROC

# Ongoing and Future OBSIC Challenges

- Management of instrument demand with existing heterogeneous fleet
  - Transition of existing SIO and LDEO instruments into operations
  - Upgrading existing instruments to a more standardized platform (esp. datalogger)
- Management of long- and short-duration (natural vs. controlled source) demand for short-period fleet
- Expansion of short-period fleet
  - Build on industry advancements, capabilities?





*OBSIC Facility (photos c/o J. Collins)*

# Ongoing and Future OBSIC Challenges

- Continued improvement and expansion of broadband fleet – integration of new technology
  - Integrate with other seafloor geophysical platforms?
  - Fueled by community needs
- Promoting funding for instrument standardization, fleet expansion
- Developing robust mechanisms for instrument evaluation and testing
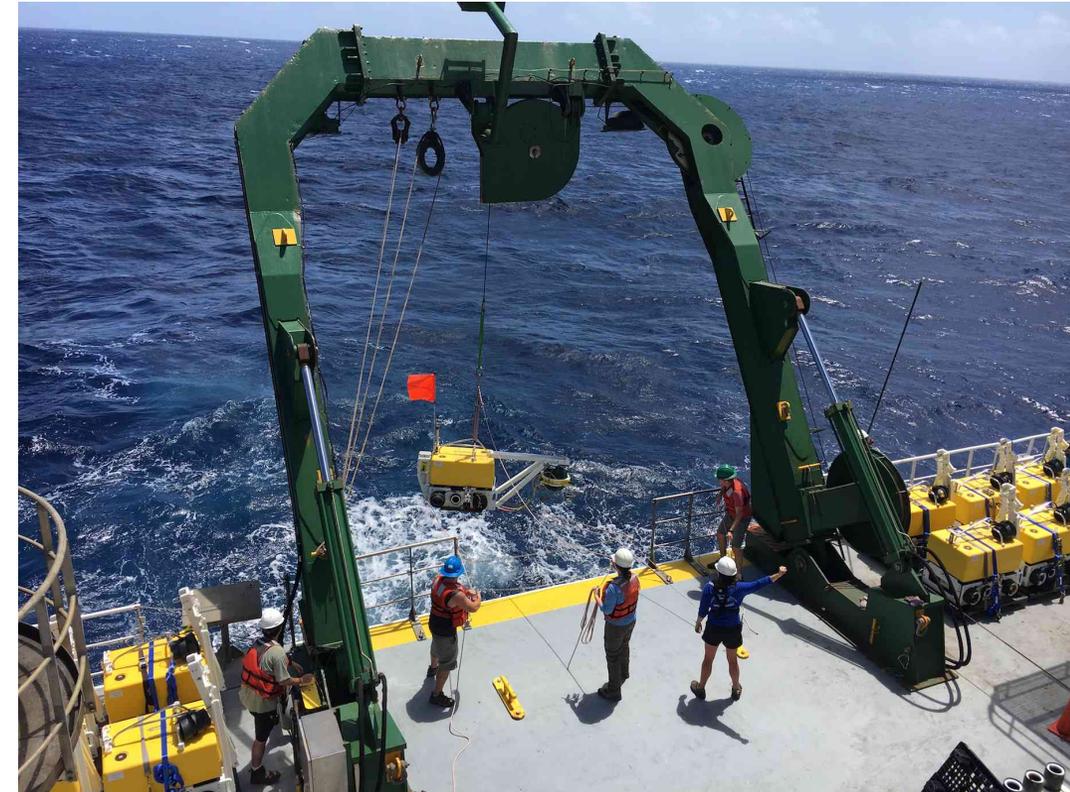


*2018 Pacific Array deployment (photo by Z. Eilon)*

# Ongoing and Future OBSIC Challenges

- Development of new data assessment tools, new community data products, and improved data quality
- Enhanced outreach and support of the community through the website and social media
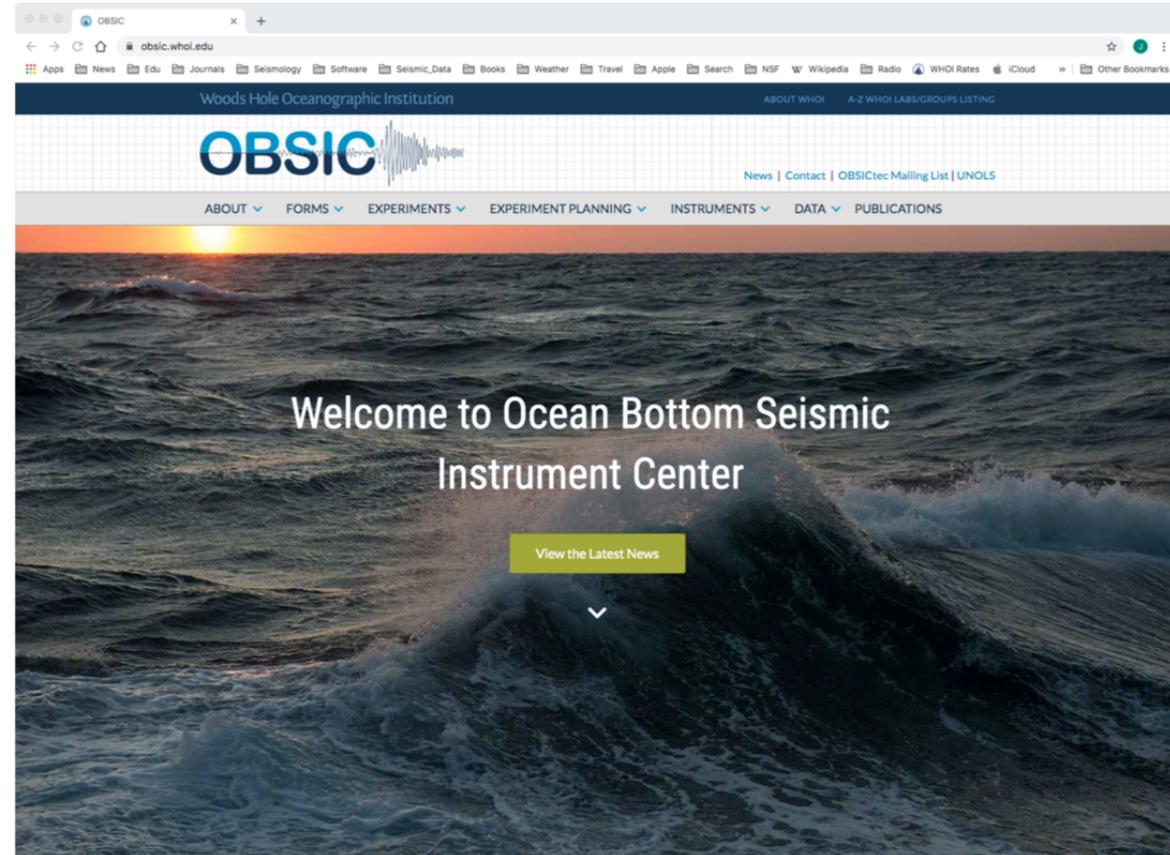


*OBSIC web portal: obsic.whoi.edu*

# OBSIC OC Terms of Reference

- OBSIC OC has developed a draft Terms of Reference (TOR) that lays out overall structure and charge for the committee
- Draft TOR has been forwarded to Doug Russell (UNOLS office) and John Orcutt (MSROC) for comment
- Open for discussion and feedback from MSROC as desired
- Approval by UNOLS council

# Primary areas of OBSIC OC focus outlined in TOR:

- Maintain guidelines for the use of the equipment and services of the OBSIC facility;

- Support facility-performance assessment for experiment planning and operations, and data management and quality;

- Promote and support community outreach and engagement within the marine and terrestrial seismic communities as well as the broader scientific community;

- Monitor the current and future health of the facility, including procurement and management of resources for equipment testing, maintenance, development, and recapitalization;

# Primary areas of OBSIC OC focus outlined in TOR:

- Advocate for technical capacity building and training of future personnel including engineers;

- Facilitate coordination and cooperation with the larger (non-OBS) marine-seismic community through interaction with MSROC;

- Support open distribution, discoverability, and usability of OBSIC data and data products through a national data archive;

- Facilitate coordination and cooperation with the research community to support a broad range of objectives, including global-scale and shoreline-crossing studies;

- Develop and respond to new initiatives to enhance the effectiveness of the OBSIC program.

# Questions/Comments