



Updated: 13Oct21

# UNOLS 2021 Annual Meeting

20 October 21

## Pre-meeting Read Ahead

All times are in Eastern Standard Time

**Wednesday, 20 October 2021**

### Facility Updates

**1600 Welcome** - Dennis Hansell

**1605 NSF portable Lab Van Pool Update**

- [East Coast Van Pool Website](#) - Tim Deering/UDel
- [West Coast Van Pool Website](#) - Kaya Johnson/OSU

The NSF/UNOLS Van Pools were developed to support the Oceanographic Research Vessels of the US Academic Research Fleet (ARF). This support is defined as providing portable laboratories that meet specific guidelines that enable these labs to be used on the ARF vessels. There are two pools, one located on the east coast, one on the west coast. Types of vans include but are not limited to General Lab, Wet Lab, Radioisotope, and Cold vans. Vans are rented with a daily rate which varies with the type of van. For more information on the available vans and to contact the Van Pool Operators, please visit their websites. Funding for operating these two pools was supplied mainly from the National Science Foundation.

The Van Pool's 2020 presentation, which provides details of their facility can be found here: [https://www.unols.org/sites/default/files/Van\\_pool.pptx.pdf](https://www.unols.org/sites/default/files/Van_pool.pptx.pdf)

A recording of the presentation can be found here: [2020 Recording](#)

**1615 NSF/UNOLS Winch Pool Update** -

- [West Coast Winch Pool](#)
- [East Coast Winch Pool](#)

The National Science Foundation (NSF) Winch Pools are maintained for the benefit of U.S. ocean scientists. The winch pool is a shared-use facility that procures, maintains, upgrades, and makes available a variety of portable oceanographic winches that are used by scientists aboard a broad range of research vessels. Winches are shared following community-based scheduling methods administered by the University-National Oceanographic Laboratory System (UNOLS).

The Winch Pools also serve as a ready source of technical assistance for UNOLS scientists and institutions. They have licensed engineering staff equipped with state-of-the art analysis tools, and are well versed in the design of oceanographic handling systems, as well as pertinent regulations such as UNOLS Research Vessel Safety Standards (RVSS), including RVSS Appendices A and B.

The West Coast Winch Pool's 2020 presentation, which provides details of their facility can be found here: [West Coast Winch Pool 2020 Presentation](#)

A recording of the presentation can be found here: [2020 Recording](#)





Updated: 13Oct21

# UNOLS 2021 Annual Meeting

20 October 21

## Pre-meeting Read Ahead

The East Coast Winch Pool's 2020 presentation, which provides details of their facility can be found here: [East Coast Winch Pool 2020 Presentation](#)

A recording of the presentation can be found here: [2020 Recording](#)

### 1630 Ocean Bottom Seismometer Instrumentation Center (OBSIC) Update

OBSIC maintains a fleet of more than 90 instruments, which includes both short and long period instruments. Short period instruments are primarily designed for use in experiments involving an active source (e.g. air-guns) or passive listening at frequencies greater than 1 Hz. Long period instruments have been designed for extended-length deployments which record low frequency (<1 Hz) seismic energy from a passive source (e.g. earthquakes). However, instruments within the Center are not confined to a particular type of experiment and, subject to availability, can be used for any field program envisioned.

Additionally, OBSIC has compiled information to aid the science community in planning their experiments - from the proposal phase through request to implementation. This information can be found [here](#).

The OBSIC's 2020 presentation, which provides details of their facility can be found here: [OBSIC 2020 Presentation](#)

A recording of the presentation can be found here: [2020 Recording](#)

### 1650 Marine Sediment Sampling (MarSSAM) Update

MARSSAM is the OSU coring and dredging facility providing marine geologic sampling services for US National Science Foundation (NSF) investigators using the US ARF and the USCG ice breaker R/V Healy, as well as international vessels supporting NSF research. Funding for these services is provided by the Ship Facilities Program at NSF. The OSU coring gear is among the best available in the United States, including large-volume and small-volume piston corers, box corers, kasten corers, and several multicorers and slow corers for undisturbed recovery of the sediment-water interface. Seagoing technicians from the facility have operated coring and dredging gear on most UNOLS vessels. The facility can also be engaged on a contract basis for non-NSF researchers and private entities requiring coring support.

Services are customized to fit the science needs, and can include use of hardware, personnel, deck handling gear, refrigerated shipping vans, sample describing materials, and permanent archival in the OSU Marine Geology Repository. Please see their website for more information.

The MarSSAM's 2020 presentation, which provides details of their facility can be found here: [MARine Sediment SAMpling Group \(MARSSAM\) 2020 Presentation](#)





Updated: 13Oct21

# UNOLS 2021 Annual Meeting

20 October 21

## Pre-meeting Read Ahead

A recording of the presentation can be found here: [2020 Recording](#)

### 1700 Potential Fields Pool Equipment (PFPE) Update

[Potential Fields Pool Equipment \(PFPE\) Facility](#)

PFPE originated over two decades ago in response to an identified need for the UNOLS community to have a centralized repository for shipboard gravimeter systems' technical support, and to reduce the overall gravimeter operational and support costs to the federal funding agencies. This effort was formalized in the mid-1990s through a memorandum of understanding between the US Navy Office of Naval Research, NAVOCEANO and the NSF, that was coordinated by Dan Fornari in the Geology & Geophysics Dept. at The Woods Hole Oceanographic Institution (WHOI). In ~2004, Fornari was successful in acquiring NSF funding to purchase used, industry BGM-3 equipment that has served as the backbone of the inventory used to support increased gravity data collection on US ARF Vessels— to the point where PFPE now supports gravity equipment and data collection on 9 academic research vessels (Atlantis, Armstrong, Revelle, Sally Ride, Thompson, Siguliaq, Palmer, Healy, Kilo Moana), and has one BGM-3 sensor as a resource for use on other vessels or as a spare for those installed. Since 2018, the PFPE Facility has been a component of WHOI's Shipboard Scientific Services Group (SSSG). PFPE supports permanently installed BGM-3, gyro-stabilized gravimeter equipment on all US ARF vessels. PFPE actively supports the technicians on US ARF Vessels, the USAP vessels as well as the USCGC HEALY.

The PFPE's 2020 presentation, which provides details of their facility can be found here: [PFPE & MISO 2020 Presentation](#)

A recording of the presentation can be found here: [2020 Recording](#)

### 1710 Portable Seismic System Update

Scripps Institution of Oceanography (SIO) Shipboard Geophysical Group (SGG) operates a complete portable seismic system that is available for use on the vessels of the US ARF. The system is complete with streamers, sound source, data acquisition as well as capabilities for environmental compliance. Experienced technical personnel accompany the equipment to troubleshoot issues as well as ensure quality data. Compressors are rented on a per cruise basis.

Information on the available equipment is [here](#). Contact the SIO SGG for details on available equipment and requesting the system.

### 1720 Multidisciplinary Instrumentation in Support of Oceanography (MISO) Update

[Multidisciplinary Instrumentation in Support of Oceanography \(MISO\) Facility](#)

Since 2018, the MISO Facility has been a component of WHOI's Shipboard Scientific Services Group (SSSG). The intent of MISO is to support US investigators requiring deep-sea digital imaging and sampling capabilities for seafloor experiments and surveys. MISO provides a pool of commonly used and essential digital imaging equipment and associated sensors for various large-scale experiments and programs in the ocean sciences. It benefits research vessel and

3



Follow us on [Facebook](#) and [Twitter](#) @unols and on [Instagram](#) @unols\_org



Updated: 13Oct21

## UNOLS 2021 Annual Meeting

20 October 21

### Pre-meeting Read Ahead

vehicle operators and scientists by having routine access to state-of-the-art deep-sea imaging and oceanographic sensors and tools that are well-documented and supported. Over the past decade, MISO equipment has been used to support research on a wide range of US ARF vessels and deep submergence vehicles, as well as international programs. Over 70 cruises, many funded by NSF, as well as NOAA and ONR, and international programs funded by New Zealand, Taiwan, Norway, Iceland and France, have benefited from the use of high-resolution MISO deep-sea imaging systems and sensors.

The MISO's 2020 presentation, which provides details of their facility can be found here: [PFPE & MISO 2020 Presentation](#)

A recording of the presentation can be found here: [2020 Recording](#)

