

# Committee Updates

# Ship Scheduling Committee

- Doug Russell / UNOLS

# Fleet Improvement Committee

Kipp Shearman

## Membership

Dr. Kathryn Schreiner, U.Minn. Duluth *ex officio*

## Activities

Feb 2024 DSOS Panel: Future of ARF

Mar 2024 Virtual Meeting

Apr 2024 Virtual Meeting

## Focus Areas

Global Class Fleet Capacity

Regional/Coastal/Local Class Struggles

Fleet Improvement Plan Update

RVOC

- Doug Baird / UAF

# RVTEC

## Research Vessel Technical Enhancement Committee

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- SatNAG - Satellite Network Advisory Group  
Training subcommittee “What Went Wrong” Wednesdays
- 
- MAC - Multibeam Advisory Committee
- 
- DEIWG - Diversity Equity and Inclusion Working Group
- 
- CIWG - Cyber Infrastructure Working Group
- presented earlier today

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# SatNAG

## Satellite Network Advisory Group

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- Cyber Security/Cyber Infrastructure summit/training cruise
  - FortiGate firewall hands-on training Backup systems and disaster recovery Legacy systems support and risk mitigation
  - Conduct a Cyber Incident response drill
  - Roundtable discussions on new Cyber Infrastructure/Cyber Security regulations coming into effect for maritime
  - Cross-examine Cyber Risk Management Plans on the various vessels represented

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# Tech Training Subcommittee

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- Discuss the training needs of the marine technicians in the UNOLS community.
- Provided feedback to UNOLS office on recommendations for upcoming training video series on Wire and Tension Members- Appendix A & Appendix B
- Information.

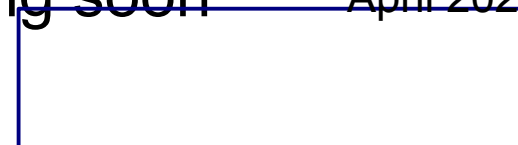
What Went Wrong Wednesday (WWWW) Webinar series.

- Our next WWWW will be on pCO2 Systems
- - Denis Pierrot with NOAA, April 24th, 2024

Determining the next RVTEC Friday Training soon

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# Multibeam Advisory Committee

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- Continued to provide Help Desk support for shipboard techs and scientists
- Provided remote support (planning, conducting, reporting) for **Sea Acceptance Tests** and **Quality Assurance Tests** for
  - Atlantis, Neil Armstrong, Rachel Carson, Roger Revelle, Sikuliaq, Sally Ride

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# Diversity, Equity, and Inclusion Working Group

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- Meeting first Thursday of every month
  - moving to a rotating-facilitator mode
  - Members discuss DEI topics
    - Invite expert speakers
    - Facilitate awareness raising activities
    - Share resources

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SCOAR

- Chris Zappa / LDEO



# DeSSC

## Deep Submergence Science Committee



New User Program @ Ocean Sciences  
Community meeting @ Ocean Sciences

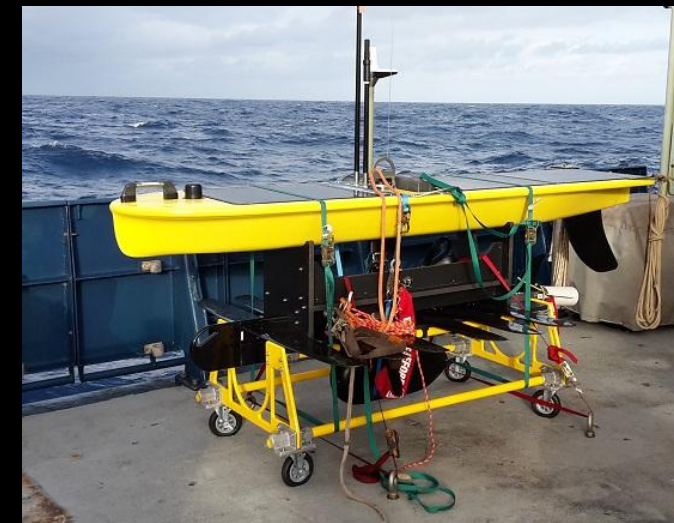
Two Townhalls at Ocean Sciences:

- 1) Participated: Deep Sea Early Career Townhall (Joint with COBRA, DOOS, ODL)
- 2) Increasing Accessibility to the Deep Sea through the Acquisition of a Medium ROV for

Regional UNOLS Vessels

Current Initiatives:

- 1) Increasing at sea efficiency – Interactions with National Deep Submergence Team
- 2) Advancing input on mROV design and needs
- 3) Feedback through post-cruise assessment to make it better
- 4) Dual vehicle operations guidelines



# mROV Town Hall and a White Paper

ROV Jason is oversubscribed  
-2015 Sea Change Report

Smaller vessels (including RCRVs)  
are not designed for use with  
JASON (and vice versa)

A slightly smaller but highly  
capable ROV would increase  
access to coastal and diverse  
stakeholders

## Deep Submergence Science Committee Recommends Acquisition of a Medium-Sized Remotely Operated Vehicle (mROV) to the National Deep Submergence Facility

The Deep Submergence Science Committee (DeSSC) strongly encourages the addition of a working-class, medium-sized Remotely Operated Vehicle (mROV) to the National Deep Submergence Facility (NDSF). The addition of an mROV would facilitate greater accessibility of deep-sea research, provide redundancy for a heavily used asset, and facilitate increased inclusion and accessibility across a diverse user group and suite of stakeholders. In particular, we propose an ROV of similar capability to ROV Jason, but designed for use on smaller research vessels, including the Regional Class Research Vessels (RCRV). This vehicle would also allow new avenues of research through being available for extended research cruises; long duration ROV cruises are often in conflict with the diverse suite of science already supported by ROV Jason and, thus, a second and highly capable ROV would facilitate research in polar or otherwise difficult to support regions of the globe.

ROVs are a cornerstone of deep-ocean research across disciplines, are heavily utilized in ocean science at all latitudes, and are supported by a wide variety of funding streams including NOAA, NASA, ONR, private donors, and NSF. Of note, ROVs are critical for supporting diverse large-scale projects, which includes providing the required annual service of the Ocean Observatories Initiative (OOI) regional nodes. As highlighted in the 2015 Sea Change report, the NDSF Asset ROV Jason is used for much of this research and has been fully scheduled and oversubscribed for decades. In recent years, even during the SARS-CoV-2 pandemic, ROV Jason has been unable to meet the demand for research. The limit of what the vehicle can do has previously led to last minute cancellations, which has previously led to significant risk to the use of non-NDSF vessels. The NDSF has previously led to last minute cancellations, which has previously led to significant risk to the use of non-NDSF vessels. The NDSF has previously led to last minute cancellations, which has previously led to significant risk to the use of non-NDSF vessels.



*“It is apparent that realizing the vision of deep ocean research will require access to a broader mix of more capable vehicles than are currently available through the NDSF”*

NRC study - 2004



MSROC  
Committee  
Update  
April 2024



# MSROC Committee Update April 2024



## What is MSROC?

- Marine Seismic Research Operations Committee; OBSIC-OC
- Representatives of marine seismic community; Liaison between community and facilities, NSF
- Summary of Terms: Input on technological advances, regional planning, international collaborations and facilities, promote training and engagement of early career and new marine seismic researchers

# MSROC Committee Update April 2024



## Membership (3 year staggered terms):

- MSROC—Welcome new members!
  - Lindsay Worthington (UNM-Chair), *Andrew Gase (WWU)*, Helen Janiszewski (U of HI), *Shuoshuo Han (UTIG)*, *Satish Singh (IPGP)*, *Jared Kluesner (USGS)*, Beatrice Magnani (SMU), Anne Bécel (LDEO), Robert Steinhaus, Dan Lizarralde (WHOI), Lee Ellett (SIO), Debbie Bronk
- Thank you members rotating off:
  - John Orcutt (SIO-Chair), Emily Roland (WWU), Nathan Miller (USGS), John Hopper (GEUS)
- Call for nominations in May 2024!

# MSROC Committee Update April 2024



## Major Activities 2023:

- Mar/April: Future Science Mission Requirements Follow Up Survey
  - MSROC input to LDEO on priorities for *Langseth* replacement vessel
- Sept: Regional planning meeting (virtual)
  - MSROC provided input to NSF for an updated regional plan
  - Solicited Letters of Interest (15); virtual meeting
  - NSF will accept proposals for:
    - 2025: Atlantic, Gulf of Mexico, and eastern Pacific
    - 2026: Eastern Pacific, western Atlantic, Gulf of Mexico, Caribbean
- Dec: Early Career Workshop
- Dec: Annual Community Meeting



MSROC  
Committee  
Update  
April 2024



## MSROC Early Career Workshop

**51 Applicants, 40 Accepted, 8 Mentors**

**Topics:** Working with facilities, technical; development and opensource software, proposal development and conducting science at sea, career support and professional development

**Goals:** Engage new and early career users of marine geophysics science facilities; provide networking and career building opportunities; learn from ECR community—what do you need/want from MSROC and facilities?

**Organizing Committee and Support:** Helen Janiszewski, Andrew Gase, Shuoshuo Han, Lindsay Worthington, MSROC, NSF, UNOLS

MSROC  
Committee  
Update  
April 2024



## MSROC Early Career Workshop

### Panel 1 : Interacting with Facilities

John Collins, Sean Higgins, Lee Ellett

### Panel 2: Technical Interchange

Helen Janiszewski, Joshua Russell, Jianhua Gong,  
Hanchao Jian

### Panel 3: "Doing Science"

Jared Kluesner, Emilie Hooft, Satish Singh, Donna  
Shillington, Maureen Walton, Jim Gaherty, Lindsay  
Worthington

### Networking Breaks between Panels

### Poster Session

### Dinner Keynote - Donna Shillington

# MSROC Committee Update April 2024



## MSROC Annual Community Meeting

**Dec 10, San Francisco; 8:30 am – 5:00 pm**

- ~70 participants (early career, MSROC, other community members)
- Facilities and Committee Updates
- Science Updates
- Community Updates
- Technical Industry Talk
- Early Career/Student Posters

**Breaks – ‘*Make a Friend*’ Challenge**

**Catered Lunch on Site**

# MSROC Annual Community Meeting Agenda Overview

## UNOLS and Committee Updates

- |                |                     |
|----------------|---------------------|
| • UNOLS Update | Doug Russell        |
| • MSROC Update | Lindsay Worthington |
| • OBSIC-OS     | Jim Gaherty         |

## Facilities Updates

- |                                   |              |
|-----------------------------------|--------------|
| • OBSIC Update                    | John Collins |
| • RV <i>Marcus Langseth</i>       | Sean Higgins |
| • Scripps Portable Seismic System | Lee Ellett   |

## Community Updates and News

- |                         |                                   |
|-------------------------|-----------------------------------|
| • Seafloor GNSS         | Andy Newman                       |
| • Canadian OBS          | Pascal Audet                      |
| • SZ4D                  | Donna Shillington                 |
| • IODP                  | Larry Krissek                     |
| • Community Experiments | Shuoshuo Han, Lindsay Worthington |

# MSROC Annual Community Meeting Agenda Overview

## Science Updates 1

- |   |             |
|---|-------------|
| • NZ3D  | Andrew Gase |
| • Gas, Hydrates, and Slope Failure History at the Cape Fear Slide | Hugh Daigle |
| • Mexico SZ   | Anne Becel  |

## Science Updates 2

- |  |                   |
|--|-------------------|
| • Pacific Array  | Zach Eilon        |
| • Interplay between seismicity, fault architecture, slip modes, and regional tectonics at oceanic transform faults   | Wenyuan Fan       |
| • From resource exploration to tackling tectonophysics: Understanding our dynamic Earth with marine electromagnetics | Christine Chesley |

## Industry Technical Talk

- |  |              |
|--|--------------|
| • Ocean Bottom Nodes, Low Frequency Seismic Sources, Processing Approaches<br>(Shearwater Geoservices) | Edward Hager |
|--|--------------|

# MSROC Committee Update April 2024



## MSROC Activities 2024

### Upcoming:

- Spring committee business meeting
  - April - virtual
- Regional planning beyond 2026
  - Solicit LOIs Sept
- Membership
  - Solicit nominations May
- 2024 Annual Community Meeting – December 8; Washington, DC

# AICC updates:

## Meetings:

Winter meeting in Seattle (January 10<sup>th</sup>-11<sup>th</sup>, 2024)

Summer meeting (virtual) – June/July (TBD)

## Happenings:

USCG Polar Coordination Office established, 3 yr advance submission of project support

USCG has ad for science liaison

Sikuliaq shipyard/drydock maintenance (significant work on sonar flat, georeferencing system, science network); Coriolix pilot

Healy: upgrades to science network to replace aging infrastructure, new seapath/gyro

## Initiatives:

Arctic marine research capabilities committee (AMRCC)

Early Career Chief Sci Training

# Maintaining an Environment of Respect Aboard Ships (MERAS)

Letter to Marine Superintendents with allyship resources, modeled communications, and safety considerations for transgender and gender-diverse (TGD) members of our community.

2024 Ocean Sciences Meeting Town Hall - "Best practices for successful gender-diverse field expeditions"

RVSS Appendix E revision suggestions and Safer Seas Act guidance and communication

## Members

Emily Shimada, OSU, Chair

Dr. Kay McMonigal, UAF

Dr. Brandon Shuck, LDEO

Hannah Delapp, SIO, SSC Representative

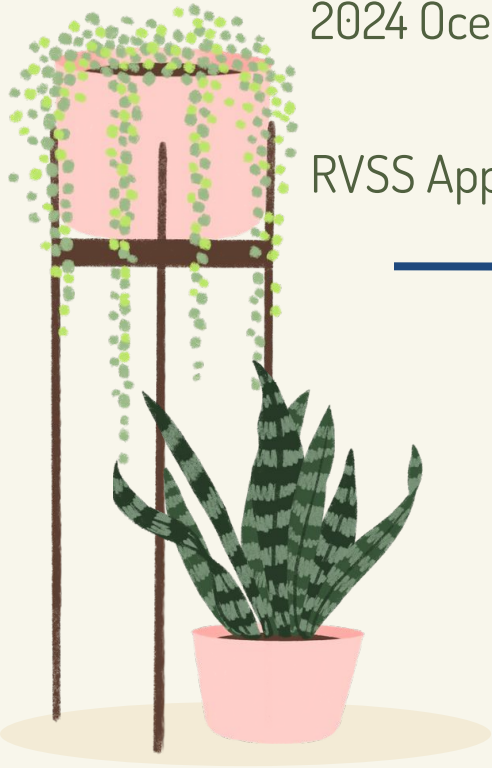
## Valued Contributors

Captain Kenneth Boda, USCG

Rose Dufour, NSF

LCDR Cherisa Friedlander, NOAA

Rob Sparrock, ONR



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