

# UNOLS Committee Updates

- Fleet Improvement Committee (FIC)
- Research Vessel Operator Committee (RVOC)
- Research Vessel Technical Enhancement Committee (RVTEC)
- Scientific Committee for Oceanographic Aircraft Research (SCOAR)
- Deep Submergence Science Committee (DeSSC)
- Marine Seismic Research Oversight Committee (MSROC)
- Arctic Icebreaker Coordinating Committee (AICC)
- Maintaining an Environment of Respect Aboard Ships (MERAS)

# Fleet Improvement Committee

Kipp Shearman, [UNOLS FIC Webpage](#)

## Global Class Fleet Capacity

- High demand, cruise back-log not shrinking
- Formed subcommittee (S. D'Hondt, M. Tominaga, A. White) in spring to investigate and make recommendations
- Requested global class but sailed on intermediate/ocean class:

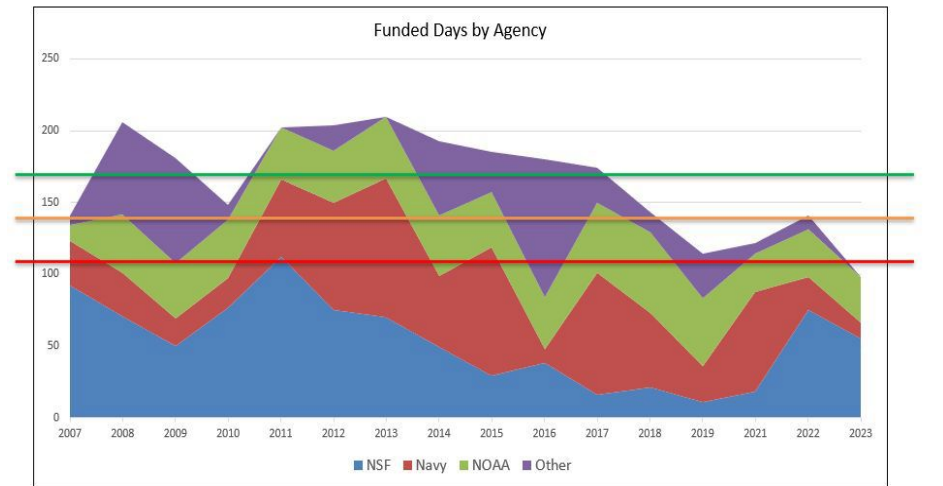
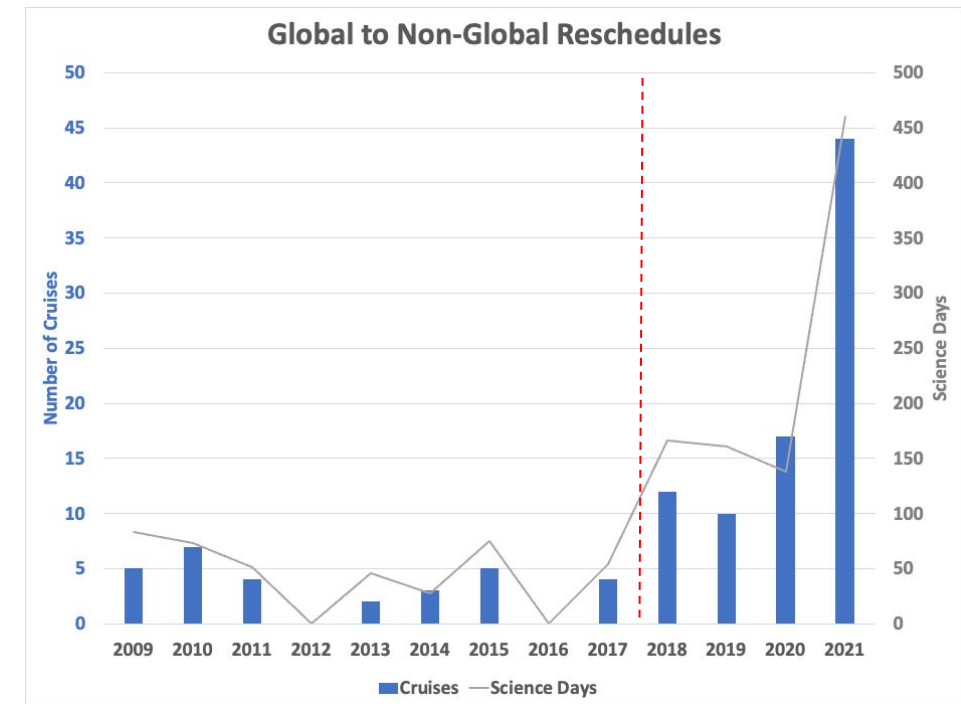
Before 2018: ~5 cruises/year (KM most common)  
 Since 2018: >10 cruises/year (Sally Ride most common)

- What's changing?

## Regional/Coastal/Local Class Struggles

- Utilization trending down, ships are aging, crew shortages (Fall Meeting 2022, Jon Swallow)
- Formed subcommittee (J. Austin, J. Montoya, A. White) in spring, survey of operators (waiting for responses)
- R/V Hugh R. Sharp situation is critical - discuss more in Council?

## Autonomous Systems



— 170 days at Sea Fully utilized; efficient, fully staffed, reasonable day rates. (150-160 days ideal).  
— 140 days at Sea Sustainably Utilized w/out significant cost cutting (Crew, etc.); rates not competitive commercially.  
— 110 days at Sea Sustainable only with major cost cutting and/or high % day rate and MOSA rate increases.

Note: Funded days at sea shown; funded home port days begun in CY2019 are not shown.

# RVOC Updates

Doug Baird / UAF

# RVTEC

Fall RVTEC Meeting in Honolulu:

- 114 in-person attendees, 67 virtual

DEI working group Code of Conduct adopted prior to the meeting

new: added Cyber Monday

- IT staffing problems, OmniSOC, HiSeasNet, Fortigate firewall

Meeting T,W,Th with presentations by agencies, pools/facilities, subcommittees and working groups

- SatNAG, MAC, Training subcommittee, CyberInfrastructure working group, DEI working group
- breakout sessions in the afternoon, new: 3D printing

Friday training:

- Serial communications
- Introduction to Electrical Design

RVTEC Updates  
Julia Hummon / UH

- 3 Members will rotate off this year. Staggered overlapping approach. Ad is out. Gender diversity is priority.
- CIRPAS flew 4 field programs in 2023 (recovered from fire in 2022). CLASI, SWESARR, SCILLA, MAGPIE.
- Review Supporting Crewed Aircraft (Provide centralized information. MFPs exist for aircraft. Work with ICCAGRA.)
- Review of the UAS Guidance document; Original Published: July 2021 – Version 2.0.
  - UAVs and Security Issues... e.g., DJI. List of UAVs that should not be used because of security issues.
  - Update on procedures; BVLOS (Beyond Visual Line-of-Sight) issues
- SCOAR participation in STEMSeas... working with Sharon Cooper to participate in future cruises. Excitement.
- White Paper for a Phased Plan to explore the desire and feasibility of UAS Facility (Community Workshop in 2024)
- AGU Ocean Sciences Town Hall (Feb 2024). Present White Paper?
- RVTECs using UAVs on RVs (Ethan Roth deployment from R/V *Sikuliaq*). Was learning experience.
- SCOAR support for upcoming decade of oceanographic research... e.g., US CLIVAR Air-Sea Transition Zone Study Group Report (“A New Paradigm for Observing and Modeling of Air-Sea Interactions to Advance Earth System Prediction”) and SCOR Working Group #162 OASIS
- Antarctic Research Vessel - Opportunity to provide input (Ross Hein)
- One framework for outreach... Road Show on SCOAR. Annually update 5-slide, 30-slide decks

# DeSSC Highlights from the past year

## **Worked with NDSF to advise regarding community needs and input**

- DeSSC members attended ~10 post-cruise vehicle debriefs
- Provided recommendations for updating NDSF Data Policy
- Began discussions about refining NDSF pre-cruise planning protocols and chief scientist on-boarding
- Continued to emphasize community interest in diversifying NDSF sea-going vehicle teams

## **Represented the scientific community in advancing deep-submergence infrastructure**

- Promoting the addition of a medium ROV (mROV) to the US deep-submergence asset pool
  - See white paper “Deep Submergence Science Committee Recommends Acquisition of a Medium-Sized Remotely Operated Vehicle (mROV) to the National Deep Submergence Facility”

# DeSSC Upcoming Activities

## Activities at Ocean Sciences Meeting

- ***New User program*** - February 17-18
- ***Community Meeting*** (coupled to New User Program) - February 18
- ***Town Halls:***
  - ***Connecting Early-Career Deep-Sea Professionals with Opportunities for Training and Networking*** (Mon Feb.19) - in collaboration with other deep sea groups
  - ***Increasing Accessibility to the Deep Sea Through the Acquisition of a Medium ROV for Regional UNOLS Vessels*** (Fri Feb.23) - soliciting community input and feedback regarding need for new mROV

## Preparing recommendation to add still cameras (i.e., Go-Pros) to NDSF that are currently part of MISO facility at WHOI

- Community has emphasized the scientific and operational utility of these fixed-focus, still images that auto-capture images during a dive.
- These cameras acquire perspectives not otherwise easily captured via “traditional” vehicle cameras

# MSROC Update

- 4 new committee members
  - **3 are scientists early in their careers who bring a lot of energy & new ideas to the committee**
- RV Langseth to operations extended through 2026 – MSROC provided input to NSF for an updated regional plan
  - **NSF will accept proposals for:**
    - **2025: Atlantic, Gulf of Mexico, and eastern Pacific**
    - **2026: Eastern Pacific, western Atlantic, Gulf of Mexico, Caribbean**
- Early Career Workshop on 9 Dec in San Francisco
  - **lots of creative ideas and support ensuring it will be a great experience.**
  - **Great interest by early career scientists -**
    - **51 Applicants**
    - **40 Accepted, finalizing final participant list**
  - **All thanks to NSF's strong support**
- MSROC Community Meeting 10 Dec in San Francisco - strong participation expected





# AICC – 2023 activities

- Polar Early Career Chief Scientist Training Cruise (June, Seward-Nome, R/V Sikuliaq)
- Strategic Planning:
  - Short-term: easing current pinch-points in Arctic science planning
    - Scheduling timeline mismatches for *Sikuliaq/Healy* (implications for STARC support)
    - Increasing Arctic domain / Homeland Security focus for *Healy*
  - Long-term: facilitating discussions on future Arctic seagoing science needs
    - Observing needs and opportunities for USCG Polar Security Cutters and other icebreaking platforms
    - Committee to refresh science missions and SMR for future Arctic capabilities

# Maintaining an Environment of Respect Aboard Ships (MERAS)

During our 2023 Activities we interacted with over 250 members of our oceanographic sailing community  
Assisted ARF marine technician teams with field safety toolkit resources and developing codes of conduct.

Compiled options for period products, mounted dispensers, signage, and secure trash bins for ARF vessels and RCRV project.

UNOLS Early Career Scientist, Arctic PI Training Cruise sessions on bystander intervention and creating codes of conduct

ASLO Aquatic Sciences Meeting Townhall on best practices for preventing sexual harassment in remote fieldwork

RVTEC Breakout Session on how vessel operators can create more gender inclusive environments

RVTEC DEI Working Group meeting on field safety and inclusivity efforts pre-cruise and post-cruise

Interagency Arctic Research Policy Committee (IARPC) Field Operations Community of Practice (FOCP)

Public meeting

Upcoming Ocean Sciences Meeting Townhall on best practices for successful gender-diverse field expedition



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