

University-National Oceanographic Laboratory System ~UNOLS ~

UNOLS Council Report RVOC April 17-19, 2018



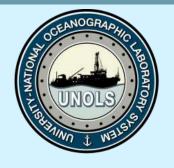






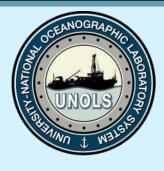






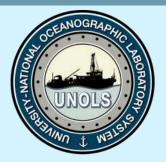
UNOLS Council Report – a few selections from a long list...

- Current Council members
- UNOLS Office Transition
- Maintaining an Environment of Respect Aboard Ships (MERAS)
- Morale at Sea
- Planning for the next US Global Class Research Vessel



UNOLS Council Members- Current (April 2018)

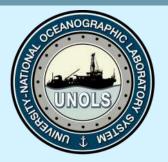
| Debbie Steinberg, VIMS (Chair) | 10/14 - 10/18 |
|--|--------------------|
| Craig Lee, UW (Chair-Elect) | 10/12 - 10/18 |
| Chris Measures, UH (Past Chair) | 10/12 - 10/18 |
| Elizabeth Sikes, Rutgers U (At-Large Rep.) | 12/17 - 12/20 |
| Elizabeth Kujawinski, WHOI (Operator Rep.) | 03/17 - 10/18 |
| Bruce Appelgate, SIO (At-Large Rep.) | 10/12 - 10/18 |
| Mark Brzezinski, UCSB (At-Large Rep.) | 04/15 - 10/18 |
| Kipp Shearman, OSU (Operator Rep.) | 10/14 - 10/20 |
| Rhian Waller, U Maine (Non-Op Rep.) | 12/15 - 10/18 |
| Tammi Richardson, U S. Carolina (Non-Op Re | ep.) 12/13 - 12/19 |
| Robert Campbell, URI (Chair, AICC) | 01/16 - 01/19 |
| Anna-Louise Reysenbach, PSU (Chair, DESSC |) 12/16 - 12/19 |
| Jim Swift, SIO (Chair, FIC) | 12/15 - 10/18 |
| Doug Ricketts, UMN (Chair, SSC) | 03/14 - 03/18 |
| Thomas Glennon, URI (Chair, RVOC) | 10/16 - 10/19 |
| Scott Ferguson (UH) (Chair, RVTEC) | 04/15 - 11/18 |
| Luc Lenain (SIO) (Chair, SCOAR) | 04/15 - 04/18 |
| Patrick Hart, USGS (Chair, MSROC) | 03/17 - 03/20 |
| | |



UNOLS Office Transition "Role of the UNOLS Office"

Excerpt from the UNOLS Charter

- h.) UNOLS Office and Executive Secretary: A UNOLS Office shall be established for the purposes of providing staff support and secretariat services to UNOLS, the UNOLS Chair, Council, and Committees as directed.
 - The Office shall serve as a focal point for UNOLS correspondence and for central files on facilities, schedules, user requirements and related information. The Office shall advertise, arrange, support and report on UNOLS, Council and Committee meetings. It shall arrange and manage contracts for blanket services to the UNOLS fleet and UNOLS institutions under guidance from the Chair and Council, and at the behest of sponsoring agencies.



UNOLS Office Transition ~UNOLS Host Institution~

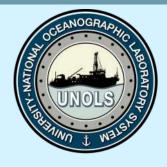
- It is expected that the UNOLS Office will rotate among UNOLS institutions.
- The Office should not remain at a single institution for more than ten years, except under extraordinary circumstances



UNOLS Office Transition

Some key dates in timeline

| 2017 | | |
|------------------|--|--|
| September | Competition announced for hosting the UNOLS Office and solicit Letters of Intent | |
| November 28 | Letters of Intent due to UNOLS Chair or UNOLS Office | |
| 2018 | | |
| March 16 | Proposals due (to UNOLS Chair or UNOLS Office) | |
| April 1 – July 1 | Evaluation of Proposals; may include interviews with candidate Ex. Secretaries, etc. | |
| August 15 | Notify Institution selected as the UNOLS recommendation | |
| October 15 | Recommended Host Institution submits proposal to NSF and other Funding Agencies | |
| May 1, 2019 | UNOLS Office established at new host institution | |



UNOLS Committee for Maintaining an Environment of Respect Aboard Ships (MERAS)

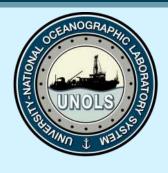
- Medical privacy, pregnancy policies
- Promotion of civility, respect
- Prevention of harassment, discrimination, bullying

Committee Membership:

- Debbie Steinberg/VIMS (Co-Chair)
- Mark Brzezinski/UCSB (Co-Chair)
- Clare Reimers/OSU
- Bruce Appelgate/SIO
- Scott Ferguson/UH
- Chris Measures/UH
- Brandi Murphy/UW
- Assisted by: UNOLS Office- Alice, Annette, Caitlin, & Jon

Video Project: Shipboard Civility

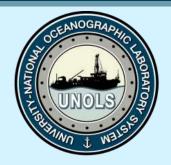
- Collaborative effort between NSF, ONR, NOAA, and UNOLS
- Composed of three modules
 - Module 1 (~ 12 minutes) Shipboard Civility: Fostering a Respectful Work Environment
 - NOAA supported production, produced by Maritime Training Services Applicable to all Research Vessels
 - Explains appropriate, respectful behavior and provides Scenarios as animations
 - Module 2 (~ 12 minutes) Fleet-Specific Video
 - Issues/information/practices that apply to all UNOLS ships
 - Currently in scenario development, engaging script writer
 - We will own the videos and they can be shared openly (e.g., YouTube)
 - Module 3 Ship specific information regarding policies and reporting.
 In the form of posters or PPTs
 - Nearly all operators have sent in their ship specific material; *addition of hotline info to posters



2017/2018 UNOLS Goals

 Ensure a smooth transition for the new UNOLS Office, including analysis of existing structure and suggestions for future changes.

 Improve quality of life and morale at sea (food, exercise, fun, internet) operators- we need your input



Science Mission Requirements Overview

- Purpose of SMRs is to set down mission capabilities to be used as guidelines during the various design phases for a vessel class
- A key concept is that ship systems are completely integrated with the science mission for these vessels
- SMRs lead to Design Specifications- "if it's not in the specifications, it's not in the ship"



R/V Thompson, 1991



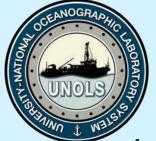
R/V Revelle, 1996



R/V Langseth, 2004



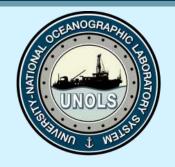




SMR Elements

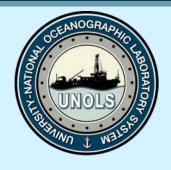
- Accommodations and habitability
- Operational characteristics
 - Endurance, Range
 - Speed
 - Sea keeping
 - Station keeping
 - Track line following
 - Ship control
 - Ice strengthening
- Over-the-side and weight handling
 - Over the side handling
 - Winches & Wire
 - Cranes
 - Towing
- Science working spaces
 - Working deck area
 - Laboratories

- Vans
- Storage
- Science load
- Workboats
- Masts
- Deck incubations
- Marine mammal & bird ops
- Other considerations:
 - Cost
 - Energy Efficiency
 - On the Horizon Technologies
 - Operation & Maintenance
 - Regulatory Requirements and Classifications
 - Polar code requirements
 - Air emissions



FIC Subcommittee for Global Class Vessel Planning – Science Mission Requirements (SMR)

- Greg Cutter, Old Dominion U., Chair
- Byron Blomquist, U. Colorado, Boulder
- Suzanne Carbotte, Lamont-Doherty Earth Observatory
- Clare Reimers, Oregon State U.
- Jim Swift, Scripps Institution of Oceanography



Committee Charge: Develop a "Living" (easily modified) SMR for the next US Global Class Vessel

- Task: Define Science Drivers Existing and future individual PI to large program needs
- Task: Evaluate the Fleet and future needs.
 - ◆ Fleet Improvement Plan
 - Evaluation of existing fleet service life, scheduling, costs
 - Agency needs and funding
 - Examine existing SMRs for US Global and Ocean Classes



SMR – Timeline

2017

June Define science drivers and gather data on international Global

fleet – size, endurance, berthing, deck/lab facilities, build and

maintenance costs

Dec. Survey past Global ship users, captains, engineers

2018

Feb. Town Hall at 2018 Ocean Sciences Meeting

(Other Town Halls are needed to reach "MG&G")

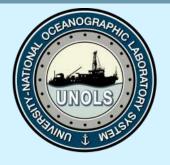
April/May Gather Community Input

Draft SMR Ver. 1.0

May Circulate SMR to Fleet Improvement Committee

June Circulate SMR Ver. 1.1 to UNOLS Council

July Compile all inputs and create "living" SMR Ver. 2.0



Thank you!