

2020 UNOLS Annual Meeting Webinar

05 October, Monday: UNOLS Updates, Vessel Operations & Scheduling

James Allan	Bruce Appelgate	Amy Baco-Taylor	Kim Bernard
Ed Boyle	Suzanne Carbotte	William Curry	Kendra Daly
Hannah Delapp	Alice Doyle	Rose Dufour	Hedy Edmonds
Lee Ellett	Jessica Fitzsimmons	Roger Flood	Megan Greenaway
Tom Glennon	Dennis Hansell	Bridget Harrell-Donze	Chris Hayes
Frank Herr	Jim Holik	Mike Hopkins	Bob Houtman
Jules Hummon	Lauren J	Robert Kamphaus	Zoltan Kelety
Eric King	Stewart Lamerdin	Susan Lang	Craig Lee
JC Lewis	Anita Lopez	Candace Major	Joe Malbrough
Mike Marino	Claire Marsden	Gabriel Matthias	James Meza
Brian Midson	Joseph Montoya	Fin Moore	Bradley Moran
Brandi Murphy	Dennis Nixon	Dan Ohnemus	Kylie Pasternak
Mike Prince	Kimberly Puglise	Frank Rack	Anna-Louise Reysenbach
Richard Ricketts	Ethan Roth	Doug Russell	Tim Schnoor
Liz Sikes	David Smith	Rob Sparrock	Debbie Steinberg
Cynthia Suchman	Jim Swift	Rhian Waller	Angelique White
Rick Zechman	703-801-3029	805-982-1640	401-932-9939

Participants: 69

Doug Russell – Intro to zoom meeting. Recording Meetings. Available later.

Craig Lee – Introduction. New meeting format. Shorter meetings.

Doug Russell –
UNOLS Update
2020 & 2021 Vessel Usage and Scheduling

Questions:

Hedy Edmonds: *Is the increase in 2021 of ship time real or is it a reflective of 2020 cruises being rescheduled*

Doug – *Good question, not 100% sure of the answer to that*

Debbie Steinberg – *The number of paper reviews has risen. People have more time to write papers, so I would think they would have more time to write proposals.*

Rose Dufour – *I think there is some carry over in deferred work that is reflected in the number. I wanted to thank the UNOLS office. They have done a wonderful job of getting us through this.*

Rob Sparrock – *third vessel going through midlife renew*

2016-2030 Projected ARF Fleet Capacity

UNOLS year in Review

RVTEC – developing virtual meeting format

Revised Annual / Council / FIC meeting format to a series of 60-90 minute webinars

Questions:

Alice Doyle – *We have a question in chat on what is planned for ships' schedules next year.*

Doug – *Planning on being very conservative until the middle of next year. Working out of US ports. Canada, Greenland & Iceland – working with us. We will see where we are with virus next year.*

UNOLS Guidelines are being used outside of UNOLS as a template on how to proceed.

Angelicque White – *What would precipitate a change in how we operate next year? Would it just be the development of a vaccine?*

Doug – *We are going to have to wait and see what virus is doing.*

MFP Update Marine Facilities Planning

Craig Lee – 2020 UNOLS Ballot Measures

Council Members; Chair Elect, member at large, operator

Adoption of the MERAS Committee to the UNOLS standing committee

Charter Ballot Measures

Remove dated language

Adoption of the MERAS terms of reference, if MERAS is voted as a standing committee

Voting will be available via Survey Monkey

9 November last day to vote

Recording of the meeting can be found at: <https://youtu.be/HraSkzOeChI>

2020 UNOLS Annual Meeting Webinar

07 October, Wednesday: Agency Updates

James Allan	Bruce Appelgate	Amy Baco-Taylor	Doug Baird
Kim Bernard	Ed Boyle	Suzanne Carbotte	Yong Chen
William Curry	Kendra Daly	Gabriella David	Hannah Delapp
Alice Doyle	Rose Dufour	Linda Duguay	Hedy Edmonds
Lee Ellett	Ben Evans	Jessica Fitzsimmons	Roger Flood
Tom Glennon	Dennis Hansell	Bridget Harrell-Donze	Chris Hayes
Frank Herr	Jim Holik	Mike Hopkins	Bob Houtman
Rebecca Hudak	Jules Hummon	Kaya Johnson	Robert Kamphaus
Eric King	Stewart Lamerdin	Susan Lang	Craig Lee
Luc Lenain	Jon Lewis	Steven Lohrenz	Anita Lopez
Candace Major	Joe Malbrough	Mike Marino	Gabriel Matthias
Brendan Mendenhall	Brian Midson	Joseph Montoya	Robert Munier
Brandi Murphy	Dennis Nixon	Dan Ohnemus	John Orcutt
Mike Prince	Kimberly Puglise	Frank Rack	Richard Ricketts
Doug Russell	Kipp Sherman	Liz Sikes	David Smith
Deborah Smith	Rob Sparrock	Debbie Steinberg	Cynthia Suchman
Claire Surrey-Marsden	Jim Swift	Mark Twardowski	John Walter
Angelique White	Amanda Williams	Rick Zechman	703-220-8967
703-677-6895	805-982-1640		

Participants: 72

Craig Lee - Introduction to new meeting format, zoom etiquette, stating that it is being recorded and the recording will be available on you tube

Doug Russell – Introduces next presenter

Bob Houtman – NSF

- COVID-19 created many difficulties and increased spending.
 - We did receive some additional funds for unexpected cost gaps.
- FY 2021 – Operating under a Continuing Resolution (CR) until 11 Dec.
- NSF is very pleased with the final outcome of R/V Langseth retirement issue. The completion of the ownership transfer to Columbia University-LDEO is imminent. NSF perspective this is a fantastic outcome.
- NSF in Phase II of COVID return to work at NSF. No set date for moving to Phase III. That decision will be made by NSF leadership based on all related information. Many virtual workshops. NSF staff working from home. No in person meeting or panels in bldg. at least until end of calendar year and may be extended. Travel for staff is extremely limited and must be essential.

Doug – Introduces next presenter

Rob Sparrock – ONR (slides presented)

- Funding Priorities – may see decrease of ship time because of staying stateside during COVID
- USCGC HEALY propulsion motor fire has major impact on ONR 2020 funded science
- Emergent repairs have increased since ships weren't operating. Higher repair costs in 2020.
- Navy S&T base budget largely stable in CR, but congressional plus ups remain unknown.
- DOD has reorganized and put more emphasize on Science and Tech. Increased emphasis on STEM. Trying to increase user base of research vessels.

- INSURV inspections on hold for 2021, but new 3-year frequency

Questions:

Frank Herr – *why getting rid of FLIP?*

Rob Sparrock – *old & expensive to maintain. Hope to find a place where it can have honor after its operational life*

Doug – Introduces next presenter

Clair Marsden-Surry – NOAA (slides presented)

Thanks for including us. And thanks for the collaboration in dealing with COVID-19.

- Ships' Status
- NOAA COVID-19 Protocol Safety net
 - 32,000 medical screenings the in past 6 months
 - 2,118 tests administered, 8 positives=positivity rate of 1.28%
- NOAA Fleet Planning FY21

Questions:

Suzanne Carbotte – *How did you come to a 7-day quarantine vs the UNOLS 14 -day?*

Claire – *We have been working with our health officials. And while we know about the CDC recommendations, we decided that trying to enforce a 14-day quarantine that the return didn't meet the demand. We have a extremely strict 7-day quarantine and extremely sensitive tests. It was our decision based on the risk analysis. To date it has been working.*

Alice Doyle – *How far offshore are your vessels working?*

Claire – *Two ships currently underway. Relatively close to shore. < 250 miles offshore. We keep them close to the coast just a bit longer to make sure no one develops symptoms. We require masks the entire time we are u/w. We are considering foreign ports for next year. Looking at testing in foreign ports. Depending on which ports will allow us. Pilotage is required for our ships.*

Doug – Introduces next presenter

Amanda Williams, Gabriella David and Emma Tulley – State Department (slides presented)

- Marine Scientific Research
 - Really hoping RATS will be up by the end of the week. Server updates.
 - Refresher: MSR (Marine Scientific Research) and LOSC (Law of the Sea Convention)
 - Presidential Proclamation on MSR – Foreign scientist wishing to conduct MSR in the US EEZ and on continental shelf
- Review of challenges for conducting U.S. Science in Foreign EEZs
- Trends and Challenges
 - *** 6-month advance request is so important
 - Late Reports/Data – coastal states can withhold consent
 - Bahamas, Barbados, Canada, Cuba – all have had changes
 - France strict on deadlines – 6.5 months minimum, prefer 7
 - Mexico
 - Philippines
 - Solomon Islands – now require 11 additional documents

Questions:

Amy Baco-Taylor – *Any paperwork required for MSR in international waters?*

Amanda Williams – *Not that I know of, we really deal with the EEZ*

Doug – *We really have not had to worry about working in international waters for oceanographic research. But you can reach out to Allison at the state department with any questions related to BioDiversity issues...*

Jim Swift – How do you know if you have an outstanding report?

Amanda – You can sign into RATS and see if you have any outstanding tasks. Also, Gabby and Emma have a spreadsheet of outstanding reports that was sent out to the UNOLS community.

Doug – The ARF are not planning on any international ports until at least 2021. So, I don't expect you will see many requests for the ARF vessels.

Amanda – Whenever you are ready to start planning international trips, we are always happy to reach out to the embassies find out what the port call status is.

Doug – Introduces next presenter

Brian Midson – NSF - Interagency Work Group on Ocean and Coastal Mapping (slides presented)

- Relationship between the different agencies that belong to this working group.
- President issued a memo on ocean mapping of the US EEZ and the shoreline and nearshore of Alaska. 10-year strategy of mapping the coast of Alaska
- Could include the unmapped areas in the MFP application so people could see if the area they will be working in has been mapped?
- Standard Ocean Mapping Protocol Symposium Oct 6-7, 2020
 - Mentioned many times that the ARF could be helpful to mapping the missing areas.

Doug – We have actually discussed adding the mapping layer to the MFP. We will keep that in mind as we work on further requirements & development of the system.

Questions:

Liz Sikes – Why is the plan for Alaska separate? Is it just the size of the state?

Brian – It is many reasons including the size. There is a lot of shallow water around the coastline of Alaska and hard to map in shallow water. The strategy for mapping the rest of the US EEZ is a different approach from the Alaska Mapping.

John Orcutt – For Alaska will there be a resolution standard that will make the data useful?

Brian – Yes, want the quality to be useful. Make the data meaningful.

John – I understand there is talk of a 100meters standard..

Brian – I am not a fan of 100 meters. It won't be useful.

John – What will be scientifically useful.

Suzanne Carbotte – Off the west coast EEZ the gap analysis. Will this effort lead to more homogenous mapping of the west coast EEZ?

Brian – I absolutely think we will be getting more useful information.

David Smith – I was glad to hear you are considering water column signal and I hope the people with the right expertise will be working with your work group.

Brian – there is a lot of interest in that data for many uses. Very robust discussion.

Frank Herr – I have a question about something we discussed during the meeting on Monday. Small particle HVAC filters for the use in ARF vessels. What is going on with getting filters? Are you having problems getting filters? Has the air turnover rate been sped up?

Doug – Interestingly enough I just received document from SCRIPPS on filtration. We have not dictated to the fleet what kind of filtration to use. We have been more focused on preventing the virus from getting on our ships. Some ships have made updates to their filtration systems but I do not know which ones.

Frank – Are the filters we currently use of any use to filter out the virus.

Doug – I don't know, because every ship could be different. We are having a Marine Superintendent meeting soon and I will bring it up then.

Craig Lee – Next week no meeting on Monday. Will reconvene on Wednesday.

Link to video of meeting: <https://youtu.be/pcMBM1z9NZw>

2020 UNOLS Annual Meeting Webinar

14 October, Wednesday: Facility Updates

Aaron Davis	Alice Doyle	Amy Baco-Taylor	Angelicque White
Anita Lopez	Anna-Louise Reysenbach	Bob Houtman	Bradley Moran
Brandi Murphy	Brian Guest	Brian Midson	Bridget Harrell-Donze
Bruce Appelgate	Christopher Romsos	Claire Surrey-Marsden	Craig Lee
Dan Fornari	Dan Ohnemus	Dana Savidge	David Smith
Dennis Hansell	Doug Baird	Doug Russell	Ed Boyle
Eric Buck	Eric King	Ethan Roth	Fin Moore
Frank Herr	Frank Rack	Gabriella David	Hannah Delapp
James Allan	James Austin	James Meza	Janet Hsiao
Jessica Fitzsimmons	Jim Holik	Jim Swift	Joe Malbrough
John Collins	John Orcutt	John Walter	Jon Lewis
Joseph Montoya	Jules Hummon	Kaya Johnson	Kim Bernard
Kimberly Puglise	Kipp Sherman	Lee Ellett	Linda Duguay
Liz Sikes	Luc Lenain	Maria Osiadacz	Masako Tominaga
Maureen Walczak	Mike Prince	Paul Walczak	Rebecca Hudak
Richard Ricketts	Rick Zechman	Rob Sparrock	Robert Kamphaus
Rose Dufour	Sam Laney	Sharon Cooper	Stewart Lamerdin
Susan Lang	Suzanne Carbotte	Tim Schnoor	Timothy Deering
Tom Glennon	William Curry	703-220-8967	805-982-1640
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Participants: 74

Craig Lee - Intro, Zoom Etiquette, Meeting Recorded

Doug Russell - Hello and Intro

NSF/UNOLS Van Pool Update

Kaya Johnson – West Coast Van Pool

Tim Deering – East Coast Van Pool

Kaya Johnson -

- Van types
- Modular
 - can be shipped worldwide,
 - can fit on all UNOLS Vessels
- Regulatory issue with ABS & USCG, particularly on the Portable Accommodation Modules (PAMS)
 - Working on getting clarification
 - Regs are based on commercial vessels not R/V
- User feedback on possible upgrades

Questions:

Eric King – Can vans be shipped international on non-UNOLS ships to assist US scientists?

Kaya – Great question. We hope they will be available, if there are no restrictions on shipping international.

Dan Fornari – I haven't run into any roadblocks shipping international yet

David Smith – Can we talk about the new regulations on the PAMS? How different are they? Is this something we should be trying to meet?

Doug R. – the UNOLS van requirements are very comprehensive. We told the USCG that any new accommodation vans will be built to the PAM standards

Kaya – Definitely the accommodation vans will meet the new standards. But it will be difficult to meet those standards for the science vans. Our concern is ironing out the standards with the USCG.

NSF/UNOLS Winch Pool Update

Aaron Davis - West Coast Winch Pool

Brian Guest – East Coast Winch Pool

Aaron Davis –

- West Coast operated by SCRIPPS
- In addition to vans offers Spooling services.
- NSF funded
- Inventory

James Holik – If you need engineering assistance, give them a call.

Brian Guest -

- East Coast Winch Pool operated by Woods Hole Oceanographic Institution

Multidisciplinary Instrumentation in Support of Oceanography (MISO) and Potential Fields Pooled Equipment (PFPE)

Dan Fornari - WHOI

- Both MISO and PFPE are at Woods Hole.
- They are managed by SSSG.
- MISO focused on providing imaging throughout the UNOLS fleet and augmenting Alvin and Jason.
- Remote training of technicians via zoom calls as a result of COVID-19. Success doing this with the R/V Kilo Moana
- PFPE – Gravity and Magnetics
- WHOI doing this for almost two decades

Marine Sediment Sampling Group (MARSSAM)

Maureen Walczak - OSU

- What is a sediment core?
 - Details of Jumbo Piston Core
- What science needs cores?
 - Earth's Past & Sea Life
- Sea Change Document – 2015-2025 Decadal Survey of Ocean Sciences
- Science Priority Questions – Eight questions all require marine sediment
- MARSSAM exists because in 1992 it was decided that a central facility should exist to support coring for all NSF-supported PIs
- MARSSAM is 28 years old located at OSU
 - Do tech exchanges.
 - Use tech pool.
- All equipment lists available on website

Questions & Comments:

Mike Prince – Any comments on how the system modifications on Sally ride and Armstrong are working for you?

Paul Walczak – Not a huge fan of using the cranes to move the core around the fantail, but there is no real reason not to use those vessels for coring. I think going to synthetic line is going to be the wave of the future.

Liz Sikes – Can you give us an update on the line coring?

Maureen – Appendix A and Appendix B have limited the pulling tension we can put on the 9/16 wire to pull out a core. The limit on the 9/16 wire is really low. This limits the length of the cores. We are collecting shorter cores than we did 20 years ago. The synthetic line means is neutrally buoyant. We only have to pull the weight of the sample, not the weight of the line. But our cranes are not strong enough to move the cores. So, we need to update the cranes to be able to handle the weight of the

core. We are also looking at spooling synthetic on the ship's drum to use the winch instead of the crane. But the time needed to spool synthetic on the ships makes this difficult.

Liz – Coring through A-frame on new Regional Class vessels, will you be using synthetic line?

Paul – The new ships will come preloaded with the appropriate synthetic line, but the ships are smaller which also reduces the length of the cores.

Doug R. – This also means we have to plan even further in advance for coring cruises.

Aaron Davis – My suggestion is to put pressure on wire pool to have more synthetic lines.

Ocean Boom Seismology Instrument Center (OBSIC)

John Collins - WHOI

- Housed at WHOI under a 5-year agreement
- Funded by NSF
- OBSIC replaces the Ocean Bottom Seismograph Instrument Pool (OBSIP) that was created in 1999

Doug R. – There have been big challenges for OBSIC due to quarantine.

Doug R. – Thanks for attending. See you next Monday.

Link to coring video, "What's a core for?" <https://tinyurl.com/yxpnqg86>

2020 UNOLS Annual Meeting Webinar

19 October, Monday: Instrumentation & Data Facilities

Alice Doyle	Angelicque White	Anita Lopez	Anna-Louise Reysenbach
Bob Houtman	Bradley Moran	Brandi Murphy	Brett Hembrough
Brian Midson	Bridget Harrell-Donze	Chris Hayes	Chris Romsos
Craig Lee	Dan Ohnemus	Dana Savidge	Daryl Swensen
David Smith	Dennis Hansell	Doug Russell	Ed Boyle
Eric King	Erich Gruebel	Frank Herr	Frank Rack
Hannah Delapp	James Allen	James Meza	Jasmine Nahorniak
Jessica Fitzsimmons	Jim Holik	Jim Swift	Joe Malbrough
John Collins	John Walter	Jon Lewis	Joseph Montoya
Jules Hummon	Katie Watkins-Brandt	Kaya Johnson	Kendra Daly
Kevin Johnson	Kimberly Puglise	Kipp Sherman	Lauren Jarlenski
Lee Ellett	Linnea Avallone	Liz Sikes	Luc Lenain
Maria Osiadacz	Masako Tominaga	Mike Kovatch	
Mike Prince	Mike Twardowski	Paul Johnson	Rebecca Hudak
Rennie Meyers	Richard Ricketts	Rick Zechman	Rob Sparrock
Roger Flood	Rose Dufour	Sharon Cooper	Steven Lohrenz
Stewart Lamerdin	Suzanne Carbotte	Tim Leach	Timothy Deering
Vicki Ferrini	William Curry	703-220-8967	703-785-9507
805-982-1640			

Participants: 71

Craig Lee - Introduction zoom etiquette, reminder that meeting is being recorded and the recording will be available on YouTube

Doug Russell – Introduces next presenter

Suzanne Carbotte – LDEO

Rolling Deck to Repository (R2R)

- 20 active service ships plus Falkor & Nautilus
- 350 cruises a year
- Focus is on u/w environmental sensor data
- Automated Post -Cruise quality assessment and Data documentation
- Automated Quality Assessment
- Palmer and Gould now have full academic suite managed by R2R
- New ELOG Client

Questions:

Doug Russell– *With cruise number down, what are you focusing on this year?*

Suzanne – *We have been working on 2019 data. We don't get complete cruise data until end of year, so next year will be slower for us.*

Mike Prince – *I really think everyone has done an excellent job with this and a shout out to Jim Holik for having the bravery to start this organization even when people weren't sure it would be useful.*

Dennis Hansell – *Who is the user community?*

Suzanne – *Distribution is through the R2R website but also to NSF World database*

**Vicki Ferrini – LDEO & Paul Johnson - LDEO
Multibeam Advisory Committee (MAC)**

- Collaborative between UNH and Lemont
- Established in 2011
- To ensure the consistent collection of high-quality multibeam data across the US ARF
- Shipboard Assessment Team
- Quality Assessment Team
- Acoustic Noise Team
- 11 Research Vessel
- 1 USCG Icebreaker

Questions:

Dennis Hansell – *This pool of spares you are promoting? What are the steps to make this a reality?*

Paul Johnson – *Originally was included in our proposal. We keep bringing it up, but it is an issue of the availability of money.*

Jim Holik – *It is a matter of money. And also, where to store the spares? If it happens at sea how do we get it the spare part to the ship?*

Rob Sparrock – *What would Revelle look like in the system not having a gondola, not having a 124? Data that has changed qualitatively due to changes in equipment.*

Paul Johnson – *Revell went from a 122 to a 124 and a 712. Their near shore capability is greatly improved. You should have better signal to noise. Better electronics. We also felt it was necessary to replace the 122 because the company said that the spares and support would be limited for the 122.*

Jim Holik – *I think that w Rob's question was, was it worth it?*

Paul – *Most arrays are going to be updated once a decade. And ships that are working in extreme environments are going to be more frequent.*

Rob – *Is there a metric of data quality? Is there a way to measure the improvement?*

Paul – *On the Palmer NSF paid to upgrade to a 122. We went down there and the swath was nowhere like it should have been. We documented all of that. By showing what a normal 122 should look like and what they had.*

Vicki – *We have a catalogue of swaths and we can compare over time .*

Doug – *Should that become a routine practice so we can look at degradation of systems?*

Paul – *We are happy to do that and look at the information for you.*

Vicki – *A lot of the problems can be addresses with upgrades and system work.*

Mike – *How do differentiate between how the addition of the gondola vs installing the 124?*

Paul – *We can look at that during SAT and that kind of problems shows up during the data. It is an easy thing to see the differences.*

Jules Hummon – UH

UH DAS/ADCP

Acoustic Doppler Current Profiler

University of Hawaii Data Acquisition System

What does it do?

Acquisition of the Data - start by collecting the data well

Monitoring – keep it working well

Processing – Provide access to data and plots at sea

Stewardship

Replaces the commercial system that came with the equipment when it was bought

Chris Romsos – OSU

RCRV Datapresence: Cruise Observations Real-time Interface & Open Live Information Exchange (CORIOLIX)

Datapresence components of the RCRV Project

Delivering a robust research platform with a comprehensive suite of instrumentation

Forward looking in key areas like remote access and participation and shoreside support

Working toward consistent outcomes

Continuously improving – live deployments of systems on research vessels that will be our future

RCRV – Datapresence & Engineering Support Center

Your design, construction, transition and operations support team

Here is a link to our CORIOLIX Demo site: <https://datapresence.coas.oregonstate.edu/demo/>
<https://tinyurl.com/w794wga>

2020 UNOLS Annual Meeting Webinar

21 October, Wednesday: Satellite Communications & Cybersecurity
Session 5

Aaron Davis	Alice Doyle	Amy Baco-Taylor	Angelique White
Anita Lopez	Bob Houtman	Brandi Murphy	Brian Midson
Bridget Harrell-Donze	Bruce Applegate	Byron Blomquist	Claire Surrey-Marsden
Chris Romsos	Craig Lee	Dan Ohnemus	Dana Savidge
Daryl Swensen	David Smith	Deborah Smith	Dennis Hansell
Don Cucchiara	Doug Baird	Doug Russell	Eric Buck
Erich Gruebel	Ethan Roth	Frank Rack	Hannah Delapp
James Allen	Jasmine Nahorniak	Jessica Fitzsimmons	Jim Swift
John Collins	John Haverlack	Joseph Montoya	John Orcutt
Jon Lewis	Jon Meyer	Jules Hummon	Katie Watkins-Brandt
Kaya Johnson	Ken Feldman	Kendra Daly	Kevin Johnson
Kim Bernard	Kimberly Puglise	Kipp Sherman	Lauren Jarlenski
Lee Ellett	Lisa Clough	Liz Sikes	Maria Osiadacz
Masako Tominaga	Matthew Durham	Maureen Walczak	Megan Greenaway
Mike Hopkins	Mike Prince	Pam Clark	Piers Chapman
Rebecca Hudak	Rennie Meyers	Richard Ricketts	Rick Zechman
Rob Sparrock	Robert Kamphaus	Rose Dufour	Scott Ferguson
Sharon Cooper	Suzanne Carbotte	Thomas Glennon	Tim Schnoor
Timothy Deering	William Curry	401-874-6554	703-677-6895
805-982-1640			

Participants: 77

Craig Lee – Introduction, zoom etiquette, reminder that meeting is being recorded and the recording will be available on YouTube

Doug Russell – Introduces the presenter

Jim Holik – NSF

Cyber Infrastructure - What it is and why it is important to the ARF

- CIA Triad: Confidentiality, Integrity, Availability
- Each Operator will need to develop and integrate a Cybersecurity Risk Management Plan into their Safety Management System
- NSF Large Facilities Guide requires the establishment of a robust Cybersecurity plan
- Single point of contact
-

Questions/Comments:

Jon Meyer – Most universities have a Cyber Infrastructure Plan

Jim – a Cyber Infrastructure Plan that includes a Cyber Security Plan

Pam Clark - WHOI

Cybersecurity Pilot Program update

NSF has identified the need for a pilot program to address cybersecurity compliance for the ARF

Questions/Comments:

David Smith - Is there a significant difference between the Navy and ARF requirements?

Pam Clark – There is a fairly significant difference. The Navy's requirements are more stringent.

David – Is it possible that the Navy requirements would be good for ARF ships too?

Pam – We will have to wait and see; their requirements might be too excessive.

Jon Meyer - SIO

HiSeasNet and Secondary Satellite Network Update

<https://hiseasnet.ucsd.edu/>

Questions/Comments:

Are Bruce and Lee at sea?

Jon Meyer– Yes, they are out there. This test is a regional link and seems to be functioning really well. It isn't the current technology that is holding us back.

Jules Hummon - Revelle is out there right now. ADCP is transferring data to the university at very high speeds. When does link go down?

Jon Meyer – When the ship pulls in.

Brandi Murphy – Sharon Cooper pointed out that that kind of high speed connection would be very helpful for education and outreach as well.

Erich Gruebel - URI

SatNAG update

- Formed by Jim Holik in 2016
- Satellite Network Advisory Group

<https://satnag.unols.org/doku.php>

Questions/Comments:

Jon Meyer – We did double the bandwidth for most ships this year. The berthing count was a criteria for deciding what tier of bandwidth to give to which ship. Stay tuned is the best I can offer right. If we can fiscally expand bandwidth, we are all about that.

Piers Chapman – TAMU

Tech Pool Update

- NSF started pool in 2012 with 2 techs.
- We currently have a 5-year cooperative agreement
- 17 techs in current pool, but we have been up to 25 at various times
- We work with UNOLS tech support manager
- Techs are independent contractors
 - They are paid standard day rates
 - They are paid for travel
 - If they work more than a 100 day/ year they get training, workshops, and meetings paid for
 - The work is not guaranteed and techs can opt out if they wish
- Our cooperative agreement ends in February 2021, both TAMU and UNOLS wish to extend it and are arranging an extension for at least another year.

Questions/Comments:

Masako Tominga – You said they are a group of private contractors, with UNOLS acting as umbrella organization. How do you run the post cruise feedback survey between techs and user facilities?

Brandi Murphy – I have a check-in with the manager post cruise (especially for first time and occasionally repeat customers). I don't have a form; I try to touch base individually.

Piers Chapman – If you want to send in comments please feel free to do that.

Brandi Murphy – We behave more as a matchmaking service and getting people paid. The more feedback we have the better we can make the matches. I encourage all feedback from both sides.

Brandi Murphy – Discussion of RVTEC virtual format this year.

Doug Russell – We will return 02 NOV. Keynote speech by Dr. Brandon Jones

Craig Lee – Thanks everyone for great presentations.

Doug Russell – Thanks for your time and for all the great presentations.

NIST: National Institute of Standards and Technology <https://www.nist.gov/>

2020 UNOLS Annual Meeting Webinar

2 November, Monday: Keynote Speaker & Outreach Virtual Meeting – Session 6

Alice Doyle	Amanda Williams	Amelia Moore	Amy Baco-Taylor
Angelicque White	Anita Lopez	Anna-Louise Reysenbach	Aradhna Tripathi
Bob Houtman	Brandi Murphy	Brandon Jones	Brian Midson
Bridget Harrell-Donze	Byron Blomquist	Candace Major	Catalina Martinez
Chris Parsons	Craig Lee	Cynthia Suchman	Dan Ohnemus
Dave Sutherland	David Smith	Deidre Sullivan	Dennis Hansell
Doug Russell	Ed Boyle	Eric King	Gabriel Matthias
Hannah Delapp	Hedy Edmonds	James Allen	Jeffrey Dixon
Jessica Fitzsimmons	Jim Holik	Jim Swift	Joe Malbrough
John Haverlack	John Orcutt	John Walter	Jon Lewis
Joseph Montoya	Jules Hummon	Kadidia Thiero	Kate Ruck
Kaya Johnson	Kendall Moore	Kendra Daly	Kimberly Puglise
Kipp Sherman	Linda Duguay	Lisa Clough	Lisa White
Liz Sikes	Luc Lenain	Madeline Mann	Maria Osiadacz
Marissa Vara	Masako Tominaga	Michael Marino	Mike Hopkins
Mike Kovatch	Mike Prince	Paula Bontempi	Rennie Meyers
Rhian Waller	Roger Flood	Rose Dufour	Sam Laney
Sean Higgins	Sharon Cooper	Steven Hovan	Tim Schnoor
Timothy Deering	Wendy Smith	Zoltan Kelety	

Participants: 76

Craig Lee - Introduction zoom etiquette, reminder that meeting is being recorded and the recording will be available on YouTube

Doug Russell – Introduces next presenter. UNOLS Representatives please vote! We need the votes in by the next meeting.

STEM-SEAS Update

Sharon Cooper - LDEO and Jon Lewis - Indiana University of Pennsylvania

Slide Presentation available at: <https://www.unols.org/event/meeting/2020-unols-annual-meeting-webinar-series>

Video available at: <https://youtu.be/P6VULZWIF4>

- 250 applicants in 2020
- Asked if they wanted to participate in virtual events and almost all did
- Multiple Zoom lectures
- Upcoming: Careers you never heard of Panel, graduate student mentoring panel

Chat Comments:

From Rennie Meyers: This is great :)

From Chris Parsons: I'd love a copy to put out on social media

From Rhian Waller: Really nicely done - is this up somewhere public I can put up for my undergraduates?

From STEPHEN KELETY: BZ

From Candace Major: Really well done, Sharon and colleagues. Thanks for sharing with us.

From Craig Lee: Fantastic! Thanks.

From Brandi Murphy (she/her): <https://youtu.be/P6VULZWIF4>

From James Allan: Thanks, Sharon and Jon!

From Brandi Murphy (she/her): <https://openhouse.ideo.columbia.edu/content/stemseas-sailing-towards-more-equitable-inclusive-diverse-future-geoscience>

From Rhian Waller: Thank you!

From Sharon Cooper: yes, the video is linked from our webpage.: https://youtu.be/_P6VULZWIF4

From Jon Lewis, Indiana U of PA: Thanks to everyone for “thinking outside the boat” in supporting STEMSEAS virtual.

MATE Internship Program Update

Maria Osiadacz - MATE

Slide Presentation available at: <https://www.unols.org/event/meeting/2020-unols-annual-meeting-webinar-series>

Video available at: https://youtu.be/_P6VULZWIF4

- 14 internships planned for 2020
 - 4 were
 - 2 canceled
 - 2 converted to land base
- Consider hosting interns in 2021
- Host intern form available
- Mate coordinator matches candidates
- Hosts receive a shortlist of top candidates to choose from
- Coordinator assists with hiring process
- Mate pays for travel land-based lodging, intern stipend

Questions:

Doug Russell: What is success rate for interns becoming technicians?

Maria Osiadacz: 90% in STEM related field and 50% in marine tech field

Chat Comments:

From Brandon Jones - NSF: These programs are beyond inspiring!!

From Sharon Cooper: That's awesome!

From STEPHEN KELETY: Thank you for your hard work and successes

From Brandi Murphy (she/her): It is always such a pleasure to work with STEMSEAS and MATE participants! Thank you for such great programs!

From Sharon Cooper: Thanks to you, Brandi, for helping us make all these connections!

From Rose Duffour: I especially appreciate how StemSeas and MATE have been able to keep going despite the challenges the COVID caused to their sea-going experiences. Kudos!

From Rennie Meyers: Hear hear!

Science Does Not Conduct Itself. So, Who's Conducting?

Keynote Speaker - Brandon Jones

Brandon Jones is the Program Director for education and broadening participation efforts in the National Science Foundation's Directorate for Geosciences.

Slide Presentation available at: <https://www.unols.org/event/meeting/2020-unols-annual-meeting-webinar-series>

Video available at: https://youtu.be/_P6VULZWIF4

- Story about Alvin experience.
- The STEM workforce cannot operate at full capacity if all available/qualified minds are not engaged
- Individuals who are in the workforce cannot operate at full capacity if they are stressed
- Our planet is facing “all hands on deck” problems, but all hands are not on deck.
- B-JEDI
 - Belonging - supportive environments

- Justice – dismantling barriers
- Equity – access to resources
- Diversity - differences
- Inclusion - valuing and centering differences
- No progress on diversity in 40 years – Nature Geoscience
- Assumptions related to where Geoscience research is conducted
- Sold them an experience but didn't prepare to retain them
- GOLD-EN Program
 - Geoscience Opportunities for Leadership in Diversity – Expanding the Network
 - Cultivate “diversity champions”
- 10 Considerations (besides mentoring and allyship)
 - Scientists seek other technical expertise for research, why not for B-JEDI?
 - Asset vs deficit
 - Isolation in isolated locations
 - Critical self reflection by white colleagues and administrators
 - Recognition that bias impacts hiring, awards, appointments, tenure & PROMOTION
 - RECOGNITION OF THE MULTIPLE WAYS OF KNOWING”
 - Trauma informed approaches
 - Develop relationships
 - Let underrepresented scholars:
 - Tell their own stories
 - Have their own spaces
 - It is okay to be quiet and listen.

Questions:

Dennis Hansell: The challenges seemed overwhelming and insurmountable to me. How do we get started?

Brandon Jones: You aren't in it by yourself if you are serious. It is a group effort. Plenty of information out there about where in the system we can make things more accessible and welcoming. Do research. Continue having conversations. Not a one size fit all, continue to listen and do a bit of research. Don't look for the magic bullet because there isn't one. Don't feel isolated.

Doug Russell: We at UNOLS are in the center, not an institution not an agency. We are looking at how we can be a catalyst for change. We have a committee. It is something we all struggle with. Not just we talked about and we are done. UNOLS is trying to get the ball rolling even more.

Brandon Jones: What I hear is you are trying to implement. A road map for a way forward. Many organizations are at different stages. Look at and partner with the underrepresented focused professional science alliances. There are so many of them because they don't feel like they belong. You don't have to create right now, there is a lot out there.

Craig Lee: You talked a bit about trying to understand potential and how we as a community tend to evaluate people. Looking at candidates especially looking at grad school. We tend to gravitate towards people that have back grounds like ours. We need to get beyond that. Do you have any resources on how to broaden how we look for people?

Brandon Jones: So many resources. I will have to get back to you or give the info to Alice. Analytical and verbal are the only way we evaluate people. There are so many other ways to evaluate people. Holistic evaluations. Look at alternatives to the typical way of evaluating. Recognize your bias.

Brandon Jones: One area of diversity that doesn't get discussed a lot is generational. We have kids going through stuff now that no one has ever gone through. This will be a whole other level of mentoring that we will have to take into consideration.

Catalina Martinez: So many efforts are focused at early intervention. An inclusive and equitable future for STEM requires diverse voices at all levels, and especially in positions of power and influence. So many efforts are focused

at early intervention, etc. Can you speak to how we build a bridge for diverse voices in positions of leadership, power and influence? How do we build bridges to leadership for underrepresented groups?

Brandon Jones: That is a deep question Cat! Get out of the way of the grad and undergrad students, because they are doing. They are the future leaders; we need to work out how to mentor them. I will lean on the GOLD-EN program at NSF because that is about diversity at the leadership level. What kind of training, skill building, etc. to prepare those individuals? Continuing to have these discussions at these leadership levels. How to leverage the federal Geoscience workforce? We need to stay connect with you all in the community, so we know when to create programs or opportunities. And it isn't just us throwing things out there. Normalizing diversity in the academic research institutions.

Sean Higgins: Some of this is financial. Even when I was going into Geology my parents are why? How much of this is an obstacle for people of color? And another is structural. We have already lost so many of the people because of the structure.

Brandon Jones: I would lean on something I said in the talk about the nuances in the sciences. Science is a culture. How do we make people comfortable in that culture? We have to go back and look at the k-12 system. Geoscience is not a core in the k-12 system. They aren't introduced until late in high school or early undergraduate classes if they go to college. We have to do a better job of that. We also have to do a better job of advertising that you can make a good living in the geosciences. Most underrepresented groups approach science because they want to do something with it to help someone. We have to do a better job of advertising how geoscience can help people.

Chat Comments:

From Rose Dufour: NSF asked UNOLS to reconsider hazing and instead focus on milestone ceremonies.

From Rose Dufour: https://www.unols.org/sites/default/files/MERAS_MilestoneCeremonies_White_Paper_final_011019.pdf

From Amelia Moore: That was exceptional, Brandon! Thank you.

From Rennie Meyers: Incredible Brandon, thank you so much

From Dan Ohnemus (Skidaway): Thanks for the great talk, Brandon!

From Marissa Vara: That was great Brandon! Thank you

From John Haverlack: Fantastic presentation!

From Catalina Martinez (she/her): So powerful and important and honest Brandon. Thank you.

From Angelicque White: Wonderful talk!!

From Craig Lee: Thanks Brandon - that was excellent.

From Jon Lewis, Indiana U of PA: Thanks Brandon. We need to work on the water!

From Brandi Murphy (she/her): Thank you for such an honest and educational lecture!

From Hedy Edmonds: Thank you so much. I'm going to remember that "it's not the fish, it's the water" analogy for a long time

From Kendall Moore: Brilliant! Thanks, Brandon.

From Rennie Meyers: I second Hedy

From John Haverlack: I would be interested in discussing this further in a smaller group setting.

From John Haverlack: Where this = diversity and inclusion

From Sharon Cooper: Absolutely, @John!

From David Smith: Thanks Brandon, that was excellent - lots to think about.

From Liz Sikes: Hedy-- yes-- that was a great one!

From Jon Lewis, Indiana U of PA: @John. Yes. Happy to participate.

From Vernon Morris: Nice talk, Brandon. It's a "we" problem and a "we" solution

From KADIDIA THIERO: Excellent Talk Brandon!

Sharon Cooper: UNOLS is a partner on one of the new GOLD-EN grants Brandon mentioned!

From John Haverlack: Email me at jehaverlack@alaska.edu if you would like to discuss. I'm happy to set up a zoom meeting.

From Jon Lewis, Indiana U of PA: @John. Will do.

From Wendy F Smythe: <https://notimeforsilence.org>

From KADIDIA THIERO: <https://www.shutdownstem.com/>

From Jon Lewis, Indiana U of PA: <https://fromtheprow.agu.org/agu-action-on-confronting-racism-in-stem/>

From Marissa Vara: GOLD-EN Award UNOLS partnering with...https://www.nsf.gov/awardsearch/showAward?AWD_ID=2035093&HistoricalAwards=false

From Craig Lee: Thanks Brandon.

From Brandi Murphy (she/her): It can be so easy for those of us not affected by these things every day to forget about them. Thank you for helping us keep it on the top of our brains.

From Rennie Meyers: ^^^^

From Rose Dufour: Brandon, thank you. Excellent and very thought provoking.

From Catalina Martinez (she/her): An inclusive and equitable future for STEM requires diverse voices at all levels, and especially in positions of power and influence. So many efforts are focused at early intervention, etc. Can you speak to how we build a bridge for diverse voices in positions of leadership, power and influence?

From Jon Lewis, Indiana U of PA: Sincere relationships matter.

From Paula Bontempi: Thank you for allowing me to see your perspective. I also have the question from Catalina Martinez in the chat.

From Sharon Cooper: This is exactly what the GOLD-EN grant is about, @catalina! :)

From Marissa Vara: Holistic mentoring

From Jon Lewis, Indiana U of PA: @Catalina: GOLD-EN awards include cross generational mentoring projects.

From Marissa Vara: He's a master JEDI :)

From Cynthia Suchman: Great question, Catalina.

From Sharon Cooper: If anyone wants to be a part of our GOLD-EN, now is the perfect time, email me: scooper@Ideo.columbia.edu

From Jon Lewis, Indiana U of PA: We want the grad students and postdocs to land in non-toxic situations. The water needs attention.

From Marissa Vara: Exactly...most like to help out their own community!

From Catalina Martinez (she/her): Thanks to those who pointed to GOLD-EN. Fabulous program. We must get beyond pointing to individual programs, and B-JEDI must be infused throughout our decisions, choices. .. in all the spaces and places we have influence.

From Chris Parsons: Thanks ! Great talk !

From Rennie Meyers: Great point Catalina!

From Liz Sikes: Can we archive this talk? I need to see it again...

From Sharon Cooper: it's being recorded

From Jon Lewis, Indiana U of PA: Thanks to all presenters and the UNOLS leadership.

From Brandi Murphy (she/her): It will be on the UNOLS YouTube site and the annual meeting event page.

From Rennie Meyers: You can use the save chat function by clicking the ellipses

From Liz Sikes: oh right!

From Sharon Cooper: thank you all!

From Brandi Murphy (she/her): <https://www.unols.org/event/meeting/2020-unols-annual-meeting-webinar-series>

From Brandi Murphy (she/her): https://saberbio.wildapricot.org/Diversity_Inclusion

From Brandi Murphy (she/her): Keynote speaker start <https://www.youtube.com/watch?v=k6Zz2n7SMxM&t=1320s>

Doug Russell: Brandon I can't thank you enough. And a lot of us are looking forward to engaging with you more.

Craig Lee: thank you that was fantastic.

Doug Russell: we will be back on Wednesday.

Alice Doyle: Thanks everybody

2020 UNOLS Annual Meeting Webinar

04 November, Wednesday: Fleet Renewal Updates Virtual Meeting – Session 7

Adam Soule	Alice Doyle	Amy Baco-Taylor	Anita Lopez
Blake Powell	Bob Houtman	Brandi Murphy	Brian Midson
Bridget Harrell-Donze	Bruce Appelgate	Byron Blomquist	Craig Lee
D. Zimmermann	Dan Ohnemus	Dana Savidge	Daryl Swensen
Dave Sutherland	David Smith	Debbie Steinberg	Demian Bailey
Dennis Hansell	Don Cucchiara	Doug Baird	Doug Russell
Ed Boyle	Eric King	Ethan Roth	Frank Herr
Frank Rack	Greg Cutter	Hannah Delapp	Hedy Edmonds
James Allen	Jessica Fitzsimmons	Jim Holik	Jim Swift
Joe Malbrough	John Collins	John Orcutt	John Walter
Jon Lewis	Joseph Montoya	Jules Hummon	Katie Watkins-Brandt
Kaya Johnson	Kendra Daly	Kevin Johnson	Kimberly Puglise
Kipp Sherman	Lee Ellett	Linda Duguay	Linnea Avallone
Lisa Clough	Liz Sikes	Luc Lenain	Maria Osiadacz
Maureen Walczak	Mike Prince	Rob Sparrock	Rose Dufour
Sean Higgins	Sharon Cooper	Tim McGovern	Tim Schnoor
Tim Twomey	Zoltan Kelety	703-785-9507	

Participants: 86

Craig Lee - Introduction zoom etiquette, reminder that meeting is being recorded and the recording will be available on YouTube

Fleet Renewal Updates

RV Revelle Midlife Refit Upgrades to Science Systems & Habitability

Bruce Appelgate - SIO

Pre-Meeting Read Ahead

The RV Roger Revelle returned to SIO after a successful midlife refit in July, completed the science instrumentation and equipment outfitting through early October and just finished their science calibration/science verification cruise. Details of the mid-life refit upgrade can be found in their summer 2020 presentation to Council [here](#). Today we will hear specifically about the science system upgrades, the habitability upgrades and the recent calibration/verification cruise.

Slide Presentation available at: <https://www.unols.org/event/meeting/2020-unols-annual-meeting-webinar-series>

Video available at: <https://youtu.be/P6VULZWIF4>

Please put any questions in the chat.

Questions from chat:

From Tim Schnoor: *How about the HDSS?*

From Bruce Appelgate: *HDSS was tested throughout the trials and seems to be working as expected. Rob Pinkel is preparing a report for that.*

Maureen Walczak: *Did the Revelle refit impact the range at all?*

Bruce Appelgate: *So far, we don't anticipate, or so far see, an impact on fuel consumption or maneuverability. We'll be able to say more following our next two cruises when we get home in March.*

RV Atlantis Midlife Refit Update

Tim Twomey - WHOI

Pre-Meeting Read Ahead

In early April, just after the US ARF COVID-19 pause began, the RV Atlantis transited from WHOI to the shipyard in Anacortes, WA to start the 3rd AGOR-23 class midlife refit. WHOI gave a detailed briefing of the mid-life and upgrades at the 2020 summer Council teleconference [here](#). Despite the COVID-19 pandemic, the refit has continued. Today we will hear a brief summary of the progress since July, any schedule updates and lessons learned.

Slide Presentation available at: <https://www.unols.org/event/meeting/2020-unols-annual-meeting-webinar-series>

Video available at: <https://youtu.be/P6VULZWIF4>

Please put any questions in the chat.

HOV ALVIN Upgrade Update

Adam Soule - WHOI

Pre-Meeting Read Ahead

Just prior to the RV Atlantis departing for the shipyard, the HOV Alvin was offloaded at WHOI to begin the upgrade which will enable ALVIN to dive to 6500m. A detailed presentation of the upgrade and the schedule was given at the 2020 Summer Council meeting [here](#). Today we will hear about any updates since July including any schedule changes and lessons learned.

Slide Presentation available at: <https://www.unols.org/event/meeting/2020-unols-annual-meeting-webinar-series>

Video available at: <https://youtu.be/P6VULZWIF4>

Please put any questions in the chat.

Questions from chat:

Zoltan Kelety: *Are the ballast system upgrades from SWRI?*

Adam Soule: *I'm not positive what I can share regarding contactors involved with sphere production and testing. I will get back to you.*

Regional Class Research Vessel (RCRV) Update

Demian Bailey & Daryl Swensen - OSU

Pre-Meeting Read Ahead

The build of the 3 NSF owned, state of the art Regional Class Research Vessels continues to progress at Gulf Island Shipyard in Houma, LA. Early in 2020 there were some scheduling updates that were outlined in their presentation to Council in summer 2020 [here](#). A lot of details on the design and capabilities can be found at their website link above. Additionally, the group made a thorough presentation of the science systems at the Fall 2019 FIC meeting which can be seen [here](#). Today we will hear about any updates since their summer presentation.

Slide Presentation available at: <https://www.unols.org/event/meeting/2020-unols-annual-meeting-webinar-series>

Video available at: <https://youtu.be/P6VULZWIF4>

Please put any questions in the chat.

RV Marcus Langseth Update

Sean Higgins - LDEO

Pre-Meeting Read Ahead

The RV Marcus Langseth is the only academic research vessel in the world capable of conducting the seismic work it does. In July 2020, the NSF announced the very exciting news that the RV Marcus Langseth would be sold to the Lamont-Doherty Earth Observatory and continue

operations through 2024. Today we will hear about Lamont's plans for the next few years.

Slide Presentation available at: <https://www.unols.org/event/meeting/2020-unols-annual-meeting-webinar-series>

Video available at: [https://youtu.be/ P6VULZWIF4](https://youtu.be/P6VULZWIF4)

Please put any questions in the chat.

Antarctic Research Vessel (ARV) Updates

Tim McGovern - NSF

Pre-Meeting Read Ahead

The Antarctic Research Vessel project has been under development in one form or another for more than a decade. This vessel will be the follow-on flagship Antarctic research vessel to the Nathaniel B. Palmer, which is rapidly approaching its end of service life. Today we will hear an update on the recent, significant developments of this project.

Slide Presentation available at: <https://www.unols.org/event/meeting/2020-unols-annual-meeting-webinar-series>

Video available at: [https://youtu.be/ P6VULZWIF4](https://youtu.be/P6VULZWIF4)

Please put any questions in the chat.

NSF Vessel Inspection Program

Bob Houtman - NSF & Blake Powell - JMS

Pre-Meeting Read Ahead

The primary purpose of the NSF Vessel Inspection Program is to ensure the research vessels in the US Academic Research Fleet (ARF) are capable of effectively and safely conducting NSF-sponsored research cruises and in particular, that the scientific equipment and systems are both fully operational and state-of-the-art with those being utilized within the scientific community and industry. The inspections, conducted by a 3-person team from JMS Naval Architects, surveys all scientific support equipment, ship machinery, hull, superstructure, decks, interior tanks, voids, other spaces and equipment that are accessible, navigation and communications equipment, lifesaving and firefighting equipment. Onboard scientific instrumentation and laboratory spaces, as well as shore-side shared use equipment, are also inspected for operational suitability and adequacy. Inspections include 1-2 days at the dock and ½ - 1 day at sea. Today we will hear a brief update of the program.

Slide Presentation available at: <https://www.unols.org/event/meeting/2020-unols-annual-meeting-webinar-series>

Video available at: [https://youtu.be/ P6VULZWIF4](https://youtu.be/P6VULZWIF4)

Please put any questions in the chat.

From Liz Sikes: The inspections are so valuable!!

2020 UNOLS Annual Meeting Webinar

09 November, Monday: Committee Reports Virtual Meeting – Session 8

Alice Doyle	Amy Baco-Taylor	Angelicque White	Anita Lopez
Anna-Louise Reysenbach	Blake Powell	Brandi Murphy	Brian Midson
Bridget Harrell-Donze	Byron Blomquist	Candace Major	Chris Hayes
Claire Surrey-Marsden	Craig Lee	Dan Ohnemus	Dave Sutherland
Debbie Steinberg	Dennis Hansell	Dennis Nixon	Doug Russell
Eric King	Frank Rack	Greg Cutter	Hannah Delapp
James Allen	James Austin	Jeff Garrett	Jim Holik
Jim Swift	John Collins	John Orcutt	Jon Lewis
Joseph Montoya	Jules Hummon	Kate Ruck	Kaya Johnson
Kevin Johnson	Kipp Sherman	Lee Ellett	Liz Sikes
Luc Lenain	Maria Osiadacz	Mark Brzezinski	Maureen Walczak
Mike Prince	Rhian Waller	Richard Ricketts	Roger Flood
Rose Dufour	Sam Laney	Stewart Lamerdin	Tom Glennon
William Curry	Zoltan Kelety		

Participants: 57

Craig Lee - Introduction zoom etiquette, reminder that meeting is being recorded and the recording will be available on YouTube, there will be a Council Working session in next few weeks

Doug Russell – All of the UNOLS reps should have received their ballots, please vote, due by Nov 14

Committee Reports

Safety Committee

Jeff Garrett

Slide Presentation available at: <https://www.unols.org/event/meeting/2020-unols-annual-meeting-webinar-series>

Video available at: <https://youtu.be/P6VULZWIF4>

- Appendix A Waiver Requests
- RVSS Update – 11th Ed.
- Should have completely updated draft available in the next couple of months.

MERAS Committee – Maintaining an Environment of Respect Aboard Ships

Mark Brzezinski – UCSB

Slide Presentation available at: <https://www.unols.org/event/meeting/2020-unols-annual-meeting-webinar-series>

Video available at: <https://youtu.be/P6VULZWIF4>

- Will be doing some recruiting for the committee.
 - Thanks to Debbie Steinberg and Clare Reimers for their participation. They are rotating off.
- Inclusion and Diversity Statement
- Gender expression, support and safety

- Pregnancy policies on ship operator websites
- Ongoing discussion on whether or not MEARAS will become a standing committee.

Alice Doyle – The conversion of MERAS to a standing committee is part of the 2020 UNOLS ballot. I encourage everyone to vote!

Fleet Improvement Committee

Jim Swift

Slide Presentation available at: <https://www.unols.org/event/meeting/2020-unols-annual-meeting-webinar-series>

Video available at: <https://youtu.be/P6VULZWIF4>

- Last meeting 20 NOV 2019 – Planning a meeting for 2020
- Membership is stable and full

DeSSC Committee

Anna-Louise Reysenbach

Slide Presentation available at: <https://www.unols.org/event/meeting/2020-unols-annual-meeting-webinar-series>

Video available at: <https://youtu.be/P6VULZWIF4>

- Fairly stable membership
 - Added Jeff Marlow of Boston University
- Very busy year.
 - Abyss Workshops/mini labs – Science priorities for the Abyss
 - March 2021 – Imagery user skills workshop in collaboration with NDSF
- DeSSC Dec 2020, early Dec Date TBD.

MSROC Committee

John Orcutt

Slide Presentation available at: <https://www.unols.org/event/meeting/2020-unols-annual-meeting-webinar-series>

Video available at: <https://youtu.be/P6VULZWIF4>

Challenges – OBSIC Discussions

- Extended quarantine requirements and selection of US ports
- Budgets challenged by extension
- Morale may become an issue with such a busy OBSIC year AND the quarantine
- Most hardware more than eight years old

Marine Seismology Symposium funded by NSF

- Virtual spring 2021
- Will be held over several days

RVOC

Zoltan Kelety

Video available at: <https://youtu.be/P6VULZWIF4>

- Made up of Marine Superintendents
 - Doug Baird is Chair Elect
- Concentration has been on COVID-19 mitigation.
- Monthly meeting to discuss risk mitigation and best practices.

- No one plan works for all ships
- All ships have returned to sea since the beginning of pandemic
- New cybersecurity requirements in 2021
- Hoping to start international cruises as allowed by world situation.
- By and large doing science at sea.

AICC

Sam Laney

Video available at: [https://youtu.be/ P6VULZWIF4](https://youtu.be/P6VULZWIF4)

- Healy Engine fire –
 - January, February back in water.
 - Confident that they will be able to 2021 science cruises
- Gave opportunity for scientists to do science in Baffin Bay. AICC is helping to choose who would be able to take advantage of this opportunity. Working as a pipeline to help the CG execute this.
- Sikuliaq is doing great. Phenomenal job
- Big turnover of AICC membership. Two members departing. Two new scientists brought on board. Two more opening next year.
- Meeting in January.
- Contributing information to Healy to refitting their foremast. Keep them at leading edge of global science.
- Making sure scientists have a reasonable time doing science in more difficult political areas. We need to understand what the challenges are in order to help scientist where necessary.

SCOAR Committee

Luc Lenain-SIO

Slide Presentation available at: <https://www.unols.org/event/meeting/2020-unols-annual-meeting-webinar-series>

Video available at: [https://youtu.be/ P6VULZWIF4](https://youtu.be/P6VULZWIF4)

- Changes in membership
 - Three new members
 - Keep a balance between unmanned and piloted aircraft research expertise.
- During the COVID pandemic, switching annual in-person meeting to monthly 1-2 hours virtual meetings.
- Townhall – During the 2020 Ocean Sciences Meeting. Well attended, with a lot of early career scientists and students
- CIRPAS is no longer a Center at NPS
 - Possible new names:
 - Naval postgraduate school CIRPAS airborne Research Facility
 - NPs-CIRPAS
 - CIRPAS

RVTEC

Lee Ellett

Video available at: [https://youtu.be/ P6VULZWIF4](https://youtu.be/P6VULZWIF4)

- Largest RVTEC Committee meeting ever
 - Great challenge to move that to virtual meeting
 - 200 registrants, 136 attendees in slack, 79 introductory slides
 - Tools:
 - Zoom

- YouTube
- Slack

- Future Plans
 - Quarterly moderated technical sessions
 - Future use of Slack as a communication and coordination tool for RVTEC

Doug Russell – Thank you all for attending these meetings. The UNOLS office welcomes feedback on how these meetings went. How can we do better as we continue to do this virtually for a while?

Craig Lee – I want to thank everyone for a great series of meetings. Thank you for attending. And thank you to the UNOLS office for making this happen.