# 13 October, Wednesday: UNOLS Updates, Vessel Operations & Scheduling Session One

*Recording available:* <u>https://www.youtube.com/watch?v=rxFYdiMluXM&t=7s</u>

Alice Doyle	Amy Baco-Taylor	Andrew Naslund	Andrew Woogen
Andrew Young	Anita Lopez	Anna-Louise Reysenbach	Ash Hayden
Bob Houtman	Brandi Murphy	Brian Midson	Bridget Harrell-Donze
Bruce Appelgate	Byron Blomquist	Cesar Cevallos	Chad Caron
Chris Hayes	Chris Zappa	Clair Surrey-Marsden	Cynthia Suchman
Dan Ohnemus	David Kadko	David Rivera	David Smith
Deb Eason	Dennis Hansell	Deborah Bronk	Doug Baird
Doug Ricketts	Doug Russell	Ed Boyle	Eric King
Ethan Roth	Fin Moore	Frank Herr	Frank Rack
Hannah Delapp	Howard Goldstein	Jessica Makowski	Jesus Gaytan
Jim Holik	Jim Swift	Jocy Morejon	Joe Montoya
John Collins	John Orcutt	Jonathan Gutoff	Jules Hummon
Kaila Rosales	Kaya Johnson	Ken Feldman	Kevin Jerram
Kevin Johnson	Kevin Kavanagh	Kim Puglise	Kipp Shearman
Laura Gibson	Lee Ellett	Maria Osiadacz	Mark Amend
Maurice Tivey	Miguel McKinney	Mike Hopkins	Mike Prince
Monty Graham	Nick Benz	Nicole Raineault	Rhian Waller
Rick Zechman	Rob Sparrock	Rob Sterner	Robert Morris
Robert Paddock	Rose Dufour	Sam Laney	Sarah Fuller
Sharon Cooper	Shelby walker	Steven D'Hondt	Stewart Lamerdin
Susan Lang	Tim Schnoor	Tim Twomey	Tom Glennon
508-737-7180			

Participants: 85

### Welcome – Dennis Hansell

Thanks to Office Staff Thanks to all the standing committees & Chairs Thanks to Member Representatives Thanks to all the Agency Personnel Amazing Community 50<sup>th</sup> Anniversary of UNOLS

### Welcome - Doug Russell

Thanks to all of the Agencies

## Zoom Etiquette

#### **COVID-19 Response – Doug Russell**

Slideshow available: <u>COVID-19 Response</u> Questions:

Bruce Appelgate – Risk Assessments, do we have any idea how long we will continue doing these risk assessments? What does the future look like?

Doug Russell – We don't require them as much. Only medium to high-risk cruises. As we see how the virus continues to evolve, we will probably wind down more. The big cruises are the ones that we have a lot of questions about.

Way fewer than they were before.

For example: HOT cruises on the KM we don't receive briefings anymore. They send us their risk assessments electronically

*Bruce Appelgate – Would be nice to have clear guidance on when they are required and when they are not.* 

Doug – We can do that. I understand how that would be helpful.

#### **UNOLS Year in Review – Doug Russell**

Slideshow available: UNOLS Year in Review

## **MFP Updates – Alice Doyle**

Slideshow available: <u>MFP Updates</u> Questions: Jules Hummon – Will the 2021 schedules be added to MFP? Alice Doyle – We weren't planning on it, but we can talk about it if you think it is necessary. Jules Hummon – STRS's ability to export the 2021 schedule to various calendars will take care of that need.

### **UNOLS Membership Ballot Measures – Doug Russell**

Slideshow available: <u>Ballot Measures</u> Comments: Dennis Hansell – Great Job to Doug and Alice. They are making so much progress and these presentations really show how much they have accomplished.

### 2021 & 2022 Vessel Usage & Scheduling – Doug Russell

Slideshow available: Vessel Usage & Scheduling

### **Fleet Projected Service Life – Doug Russell**

Slideshow available: <u>Projected Fleet Service Life</u>

Dennis Hansell -

Great presentations. In awe of work getting done in the office.

I think we are all familiar with the need to open doors for increasing diversity and inclusiveness. This has been an agenda item for the last few Council meetings. I have been asking each chair of each committee what each committee can do. Not ships or home institutions, but actually our UNOLS family. How can we improve our own home as far as diversity is concerned? This will be an agenda item on our 15 November Council meeting. We will go around the room and talk to each committee. We need to make it a priority. I know it will take time and effort, but this is my priority right now.

If you have ideas, please share them with us.

## Doug Russell -

The ship operators are struggling with crewing issues. It is a problem around the planet but it is now affecting the U.S. Academic Research Fleet. Rose Dufour has asked us to start a Tiger Team within the operator community. Looking for ideas of what we can do. Maybe we will need to create a crew pool similar to the tech pool. The agencies are open to any suggestions. Can't solve the problem overnight but looking at what we can do down the road.

## Dennis Hansell-

The next meeting will be Monday 18 Oct. for Agency Reports. Thanks everyone for being here.

# 18 October, Monday: Agency Reports Session Two

*Recording available:* <u>https://www.youtube.com/watch?v=0tr2hGwCbOs&t=11s</u>

Alice Doyle	Amanda Williams	Amy Baco-Taylor	Andrew Naslund
Andrew Woogen	Andrew Young	Andy Robinson	Angelicque White
Anita Lopez	Anna-Louise Reysenbach	ASP Power	Bob Houtman
Bradley Moran	Brandi Murphy	Brian Midson	Bridget Harrell-Donze
Bruce Appelgate	Byron Blomquist	Cesar Cevallos	Chris Hayes
Chris Zappa	Claire Surrey-Marsden	Cynthia Suchman	Daniel Ohnemus
David Smith	Deb Eason	Deborah Bronk	Doug Baird
Doug Ricketts	Doug Russell	Emma Tulley	Eric Benway
Ethan Roth	Fin Moore	Frank Rack	Gabriella David
Hannah Delapp	Jamie Allan	Jessica Makowski	Jesus Gaytan
Jim Holik	Jim Swift	JM	John Coffey
John Orcutt	Jonathan Gutoff	Jules Hummon	Kaya Johnson
Kerry Strom	Kevin Kavanagh	Kim Bernard	Kim Puglise
Kipp Shearman	Lee Ellett	Lila Ardor Bellucci	Lisa Clough
Liz Sikes	Maria Osiadacz	Mark Amend	Mark Brzezinski
Maureen Conte	Maurice Tivey	Mike Prince	Monty Graham
Nicole Raineault	Rick Zechman	Robert Paddock	Rob Sparrock
Rose Dufour	Sam Laney	Steven Brodet	Stewart Lamerdin
Susan Becker	Susan Lang	Suzanne Carbotte	Tim Schnoor
Timothy Leach	Timothy Twomey	Tom Glennon	Zhen Li
Zoltan Kelety			

Participants: 81

Welcome – Debbie Bronk

Loved the newsletter

### Welcome – Doug Russell

Any Questions from last week? Posting videos and presentations

# NSF Update – Bob Houtman

- Great work done by the UNOLS office and all of the stakeholders.
- Truly impressive amount of work being done by everyone.
- Brief update on NSF
- Personnel

- Dr. Flemming Krem who served as Chief Operating Officer has retired. Dr. Karen Marrongelle is now assuming those responsibilities.
- Dr. Jim Ulvestad, Chief Office for Research Facilities has retired, and Dr. Linnea Avalone is assuming those responsibilities. She was most recently the Sr. Advisor for Facilities in the GEO directorate.
- Dr. Shelby Walker back to NSF Sr. Advisor for facilities in GEO directorate
- Dr. Bill Easterling's tour has ended, and he returned to Penn State University.
- $\circ~$  Dr. Alex Isern who was acting AD. will be the permanent AD of GEO
- Terry Quinn IPA appt closing mid- 2022 recruiting and replacement is underway
- NSF recruiting for quite a few positions. USA Jobs.
- OCE has an ad out for full time permanent Program Director for OOI. Job opening closes on 25 Oct.

# Questions:

Bruce Applegate – Any update on NSF travel for ship inspections? Any personnel changes in Integrated programs sections?

Bob Houtman - If you are fully vaccinated you may travel as the mission requires. Unvaccinated can only travel if mission critical. Looking at restarting ship inspections. Need to clearly understand the covid protocols in place by ship operators. Starting to work with Doug Russell to determine

## Recruiting for OOI program director.

In the process of developing a recruitment for a ship inspection program director.

- Budget
  - Under a continuing resolution until 03 Dec.
  - NSF gets an allocation of funding based on length of CR and previous budget year.
  - Received an allocation and it has been distributed. Keep things moving while FY22 budget gets resolved.
  - NSF leadership requires that the major facilities have three months of funding available in case of budget shortfall.
  - At closeout provided 3 mos. of budget. Will do the same thing with CR funding.
  - FY21 was a good year.
  - Eventual 2022 budget you know as much as we do.
  - FY 22 president is requesting an increase over 2021. Establishment of new Directorate for Technology, Innovation & Partnership (TIP).
  - FY22 NSF Request of \$10.1Billion. 19% increase over 2021
    - GEO Directorate 1.2 billion. \$190 million over 2021 level. About 19%.
    - Ocean Science \$476 million, 18% increase over FY21.
    - Ongoing discussion about the budget and the debt ceiling. Don't know what the final 2021 budget will be. Pressing on with ongoing projects.
- Staffing

- NSF is still in max teleworking mode.
  - 25% occupancy. No panels. No meetings in bldg.
- At least until the end of the year. Don't know what will happen after that.

# **ONR Update – Rob Sparrock**

# Slideshow available: ONR Update

- Praise to mariners who have kept working during these times of COVID..
- If the budget does get approved, might be able to enhance existing budgets.
- Implementing new IT systems. Will all get new emails in the next year and a half. New systems, lots of growing pains.

## Questions:

Rob Sparrock - Navy has a 30-year shipbuilding plan. There is a brief mention of AGORs. It says they have no influence on the Navy, they belong to a different agency. I think when the Navy is looking at uncrewed platforms in 15 years they will be looking at people who already have experience with these systems. Jim Swift – Interesting your statement Globals enhanced to work in the new Arctic. Might want to set up a dialogue with you and FIC to discuss future ops in high latitude regions. Lots of thinking about RV operating in high latitude regions.

*Rob Sparrock – Completely speculative. Five ships to operate in arctic. Jim Swift – look forward to continued dialogue* 

# NOAA Update – Claire Surrey-Marsden

## Slideshow available: NOAA Update

Doug Russell – Congrats on your promotion

Claire Surrey-Marsden – Thanks for noticing that

- Didn't find Revenue Cutter Bear but had a lot of people working on helping to find it.
- 2650 days at sea planned. Hope to increase that amount based on the President's budget.

# Questions:

*Kerry Strom – Wanted to know more about Class B vessel out of Newport. Also wondering if NOAA is going to buy into the MFP software.* 

Claire Surrey-Marsden – It is a Class A vessel that will be in Newport. We don't have a name yet. We are Shopping MFP software. We have our own system. It has its quirks, but we are used to it. We are working to get a pilot from the vendor to see if it would work for us.

# U.S. Department of State Update – Amanda Williams, Gabby David & Emma Tulley

Slideshow available: <u>U.S. State Dept. Update</u> Questions:

Doug Russell – Thank you for the great presentation. I am going to forward your presentation to all of the Marine Superintendents. And wanted to plug the new MFP application which will make processing the SMRs easier.

Amanda Williams – Be careful of what data is being used for the boundaries in MFP. It may be different from what the US government recognizes. Make sure to remember to leave boundaries off of the cruise tracks.

*Alice Doyle – Some of the post cruise steps in MFP will be to submit the reports. Hopefully this will help to remind people to get them completed.* 

*Mark Brzezinski – Emma, you mentioned a number of outstanding reports. Do you know how many countries are affected?* 

Emma Tulley – Don't have those numbers, but more countries are asking for reports. Amanda Williams – A lot of countries and it should be increasing.

Alice Doyle – Please feel free to send your list of outstanding reports to me. I can reach out to the PIs and see if we can get them to complete the reports.

Bruce Appelgate – What do you know about Guatemala and the new requirement for NDA signed by someone on ship. Is this new or unique? How can an institution approach that? Lawyer and notary are required to sign it.

Gabby David – This policy is so new that we don't have specific guidance about it yet. Working with the embassy to see if we can get some voice of reason. Everything is so new; we are working through it. Kerry Strom – Thrilled that the State Dept is packed with a team of women. Appreciate all of the help and responses. I have six outstanding reports due. Three of them from cancelled cruises. Those will never be submitted. Can they be removed?

Emma Tulley – If you send me an email, we can take a look. There is an option to fix that. Kerry Strom – I want to be taken off the naughty list!

Amanda Williams – Do not hesitate to reach out to us.

Doug Russell – That concludes our planned presentations for today. Thanks to all of our representatives for letting us know what is happening in your worlds. Wednesday we are going to talk about facilities. Same time as today. Updates on all the facilities. Lots of scientific information.

Alice Doyle – I will be sending out a pre-meeting note. This year we have asked the facilities to concentrate on any updates and changes from last year. If you want more general information or if you missed last year, the pre-meeting notes will have links to their last year's reports. Doug Russell – See you all Wednesday.

Chat saved
13:36:40 From Jules Hummon to Everyone:
Is there an authoritative US marine boundaries source?
13:36:53 From Amanda Williams to Everyone:
No, unfortunately, there isn't one
13:37:14 From Amanda Williams to Everyone:
So, we ask all claimants if we know it could be in an overlapping area
13:37:19 From Rose Dufour to Everyone:
Amanda,
13:37:35 From Rose Dufour to Everyone:
I believe MFP uses the VLIZ data for EEZ
13:37:50 From Jules Hummon to Everyone:
Can you put in a link for VLIZ?
13:38:07 From Amanda Williams to Everyone:
marineregions.org
13:39:26 From Amanda Williams to Everyone:
It's a useful starting point, but the data isn't always 100% accurate and it doesn't take into account overlapping
claims, so that's why I caveat to use caution with it.
13:50:19 From Brian Midson to Everyone:
8000!
14:18:53 From Amanda Williams to Everyone:
Thanks for having us!
14:20:03 From Kerry Strøm to Everyone:
Great meeting, Thanks All :)

14:20:10 From Liz Sikes to Everyone: Thanks!!! 14:20:24 From Angelicque White to Everyone: Mahalo to all the speakers! 14:21:00 From Kipp Shearman to Everyone: Thanks all! 14:21:04 From Kim Bernard to Everyone: Thanks! 14:21:04 From Jonathan Gutoff to Everyone: Thanks! 14:21:11 From Amy Baco-Taylor to Everyone: Thanks

# 20 October, Wednesday: Facility Reports **Session Three**

# Recording available: <u>https://www.youtube.com/watch?v=CU5ZCrddqBq&t=8s</u>

Aaron Davis	Alice Doyle	Amy Baco-Taylor	Andrew Naslund
Andrew Woogen	Andrew Young	Anita Lopez	Brandi Murphy
Bradley Moran	Brian Guest	Brian Midson	Bridget Harrell-Donze
Bruce Appelgate	Byron Blomquist	Chad Caron	Dan Fornari
Dan Ohnemus	David Rivera	David Smith	Dennis Hansell
Don Bryan	Don Cucchiara	Doug Ricketts	Doug Russell
Eric King	Ethan Roth	Fin Moore	Frank Rack
Hannah Delapp	Howard Goldstein	Jamie Allan	Jason Williams
Jeff Beeson	Jessica Warren	Jesus Gaytan	Jim Holik
Jim Swift	Jin Tanaka	John Collins	John Orcutt
Jonathon Gutoff	Jules Hummon	Kaya Johnson	Ken Feldman
Kerry Strom	Kevin Kavanagh	Kipp Shearman	Lee Ellett
Lindsay Worthington	Lisa Clough	Liz Sikes	Maria Osiadacz
Mark Brzezinski	Masako Tominaga	Maureen Conte	Maurice Tivey
Mo Walczak	Monty Graham	Nick Benz	Rhian Waller
Robert Paddock	Rob Sparrock	Rose Dufour	Rut Pedrosa Pamies
Sam Laney	Sarah Fuller	Stewart Lamerdin	Susan Becker
Tom Lanagan	Zhen Li	Zoltan Kelety	

Participants: 71

## Welcome – Dennis Hansell

Thanks for being here. It is great that presentations are being recorded.

### Welcome - Doug Russell

Welcome everyone. Facilities, short updates, no more than 10 minutes for each one. Alice sent out a read ahead, so if you want more details about any of the facilities you can refer to that. Zoom etiquette We will be live streaming and recording today's meeting

### NSF Portable Lab Van Pool Update – Kaya Johnson/OSU

Slideshow available: Van Pool Update Questions: Jim Holik – I would like to give kudos to the East Coast Van Pool for sending cold vans to Lumcon after the hurricane. Kaya Johnson – Thanks for mentioning that.

Dennis Hansell – What constitutes as-sheltered area of the ship? Kaya Johnson – Usually aft. Not up on the bow. Doug Russell - Aft under the structure of the ship Sarah Fuller – I just wanted to share a misstep we made at WHOI to try to prevent you from making our mistake. We had the LSC on the floor of our van and it got flooded. Kaya Johnson – Thanks Sarah. Our deck units are smaller and will be at the countertop level. Rob Sparrock – Do other agencies use the vans? Are they available? Kaya Johnson – Anyone in the Academic Research Fleet can use them including ONR. Byron Blomquist – Clarifying if the vans they use are still allowed? Kaya Johnson – I would check with your OCMI and get a copy of the letter sent to UNOLS by the USCG.

# NSF Portable Winch Pool Updates – Aaron Davis/SIO & Brian Guest/WHOI

Slideshow available: <u>West Coast Winch Pool\_East Coast Van Pool</u> Questions: Brian Guest – Any problem with new Humboldt winches and level wind? Aaron Davis – No problems. Brian Guest – We have had some problems and will be making modifications. We will keep you in the loop. Jim Holik – Aaron is available for advice and consultation across the fleet. Jim Holik – Major NSF investment in Hawboldt Industries. Are we ok with Hawboldt? I think the customer service is good, do you agree?

Brian Guest – Customer service is the best I have seen. Newer equipment with electronic controls have to be tested in every way before they leave the factory floor. I do think Hawboldt is capable of dealing with the problems.

Aaron Davis – I agree with what Brian says. When we have a problem with a Hawboldt Industries product they are there to help. I think we need to do more testing in the future. A way to test them more rigorously at sea and have Hawboldt there, before doing science with them.

## **Ocean Bottom Seismometer Instrumentation Center (OBSIC) Update – John Collins/WHOI** Slideshow available: <u>OBSIC Update</u>

John Collins – Funded to build new broadband OBSs. Developing a Rapid Response Team using USGS funding, will take possession of 10 dedicated OBSs for rapid response. *Questions:* 

*Rose Dufour – NSF provided funding for new broadband OBS.* 

# Marine Sediment Sampling (MarSSAM) Update – Maureen Walczak/OSU

Slideshow available: <u>MarSSAM Update</u> Questions:

Jim Holik – What is the astronaut system?

Mo Walczak – Our nicknames for the R/V Armstrong and the R/V Ride.

*Liz Sikes – Photos of the astronaut system, in the pull in you are using a wire pendant?* 

Mo Walczak – Yes, because the synthetic could part.

*Liz Sikes – Lots of trouble spooling on the way up.* 

*Mo Walczak* – *balanced cable that doesn't corkscrew. Synthetic is the way of the future.* 

# Potential Fields Pool Equipment (PFPE) Update – Masako Tominaga/WHOI

Slideshow available: PFPE Update

### Portable Seismic System Update – Lee Ellett/SIO

Slideshow available: <u>Portable Seismic System Update</u> Questions: Jesus Guytan – How many SCFM? Lee Ellett - 385 SCFM

#### **Multidisciplinary Instrumentation in Support of Oceanography (MISO) Update – Dan Fornari/WHOI** Slideshow available: MISO Update

Doug Russell – That concludes our talks for today. Meet again on Monday at the same time. Thanks for the great updates today.

Dennis Hansell – Thrilled to hear about our capabilities. Thank you to Jim Holik for your dedication and professionalism.

Meeting saved chat: 13:12:36 From don Cucchiara to Everyone: you mentioned could be used in sheltered area on ship? What do you define as sheltered? 13:14:16 From Byron Blomquist to Everyone: Just to clarify, from now on the vans we have been using on the foredeck of RVS, including privately owned vans, are not longer allowed? 13:14:38 From Robert Sparrock to Everyone: do any other agency vessels use the Van such as NOAA 13:16:34 From Byron Blomquist to Everyone: OK. Thanks. I'd like to see that letter... 14:09:26 From Kerry Strøm to Everyone: Great presentation! 14:11:21 From Andrew Woogen to Everyone: Solid presentation Mo! MARSSAM specializes in "mud":) 14:13:12 From Maureen Walczak to Everyone: Thanks guys :) 14:13:20 From Maureen Walczak to Everyone: We do love mud. 14:23:24 From Tom Lanagan to Everyone: PFPE email is pfpe-internal@whoi.edu 14:26:38 From Jesus Gaytan to Everyone: what brand, how many scfm? 14:27:07 From Jesus Gaytan to Everyone: ok thank you 14:43:24 From Kipp Shearman to Everyone: Thanks all, super interesting stuff!

# 25 October, Monday: Outreach & SatComms Session Four

Recording available: <u>https://www.youtube.com/watch?v=u00b5qTk7-E</u>

Alice Doyle	Anna-Louise Reysenbach	Andrew Woogan	Andrew Young
Brandi Murphy	Brian Midson	Bridget Harrell-Donze	Claire Surrey-Marsden
David Rivera	David Smith	Deborah Bronk	Dennis Hansell
Don Cucchiara	Doug Baird	Doug Ricketts	Doug Russell
Erich Gruebel	Ethan Roth	Frank Herr	Frank Rack
Jamie Allan	Jessica Makowski	Jesus Gaytan	Jim Holik
Jim Swift	Jin Tanaka	Jocy Morejon	Jonathon Lewis
John Coffey	John Collins	John Haverlack	Joe Montoya
John Orcutt	Jules Hummon	Kate Wieczorek	Kaya Johnson
Ken Feldman	Kerry Strom	Kimberly Puglise	Kipp Shearman
Kristen Yarincik	Laura Gibson	Laura Stolp	Lee Ellett
Leila Hamdan	Lisa Clough	Liz Sikes	Maria Osiadacz
Mark Brzezinski	Monty Graham	Nick Benz	Nicole Raineault
Rob Sparrock	Rob Sterner	Robert Paddock	Robert Pinkel
Robert Sterner	Sharon Cooper	Steven D'Hondt	Susan Becker
Suzanne Carbotte	Ted Colburn	Zhen Li	

Participants: 63

# Welcome – Dennis Hansell

Welcome everyone. StemSEAS and MATE programs are great entry programs. I think they are a way to help to increase diversity. Cyber Information is important.

### Welcome - Doug Russell

Welcome everyone. No meeting this Wednesday, due to RVTEC.

# StemSEAS Update – Sharon Cooper / LDEO & Jonathon Lewis / IUP

Slideshow available: <u>StemSEAS Update</u> Questions: Alice – Ginger Armbrust first time working with StemSEAS. She is very impressed. Making great connections.

### MATE Update – Maria Osiadacz / MPC

Slideshow available: <u>MATE Internship Update</u>

### Questions:

Dennis Hansell – Have your intern numbers grown recently? Is there a capacity in the community where we will reach maximum numbers of interns?

Maria – We have not increased in completed internships due to COVID. Interest has increased. We received an extension of our grant until 2022. There is interest in renewing the grant. We will address an increase in capacity at that time. In 2022 we have the funding available to increase the number of interns as long as COVID doesn't interrupt. Dependent on continued funding. Lots of positive feedback and interest.

Monty Graham – When you talk to the Naval Academy make sure they will treat your cruise as a summer cruise and not as their vacation. Many will not want to come do it on their vacations. Maria Osiadacz – We are hoping we have some good matches between summer cruise and internship availability.

# Cyber Infrastructure Working Group Update – Lee Ellett / SIO

Slideshow available: <u>Cyberinfrastructure Working Group Update</u> Questions:

Jim Holik – Research SOC engagement is co-funded between OCE and Advanced Cyber Infrastructure program. Great to see them working together on this project. Doug Russell – We appreciate the work you have done to get us where we need to be in the community.

# SatNAG Update – Erich Gruebel / TAMU

Slideshow available: <u>SatNAG</u> Questions: Doug Russell – Thanks for all the great information and the work you have done with the committee.

# HiSeasNet Update – Jon Meyer / SIO

Slideshow available: <u>HiSeasNet Update</u> Questions: Jim Holik – First proposal to do this was John Orcutt way back when. John Orcutt – Back in 1990. Doug Russell – Thanks for all the great work accomplished by your team despite COVID. Going to a commercial provider has really paid off.

Doug Russell – Next meeting is next Monday. Fleet renewal updates.

# 01 November, Monday: Fleet Renewal Session Five

# Recording available: <u>https://www.youtube.com/watch?v=JNr7Ij-8\_hA</u>

Adam Soule	Alice Doyle	Amy Baco-Taylor	Andrew Naslund
Andrew Woogen	Andrew Young	Anita Lopez	Anna-Louise Reysenbach
Bob Houtman	Bradley Moran	Brandi Murphy	Brian Midson
Bridget Harrell-Donze	Bruce Appelgate	Chad Caron	Chris Zappa
Claire Surrey-Marsden	Clare Reimers	Daryl Swensen	David Palazzetti
David Smith	Deborah Bronk	Dennis Hansell	Don Cucchiara
Doug Baird	Doug Ricketts	Doug Russell	Ed Boyle
Eric Benway	Eric King	Ethan Roth	Fin Moore
Frank Rack	Frank Herr	Gerado Nixon	Hannah Delapp
Jamie Allan	James Austin	Jared Cox	Jessica Makowski
Jesus Gaytan	Jim Holik	Joe Montoya	John Calderwood
John Orcutt	John Walter	Jules Hummon	Kaya Johnson
Kerry Strom	Kevin Johnson	Kim Puglise	Kipp Shearman
Lee Ellett	Leila Hamdan	Lisa Clough	Liz Sikes
Maria Osiadacz	Mark Amend	Mark Brzezinski	Maurice Tivey
Miguel Goni	Mike Hopkins	Monty Graham	Nicole Raineault
Rick Zechman	Robert Paddock	Robert Sterner	Rose Dufour
Sean Higgins	Sin Suen	Steven D'Hondt	Stewart Lamerdin
Susan Becker	Susan Lang	Ted Colburn	Tim Schnoor
Tim Twomey	Timothy Leach	Zhen Li	

Participants:83

### Welcome – Dennis Hansell

Welcome. I am looking forward to hearing about the fleet renewal.

I really want to thank the people at NSF and ONR. We will be hearing about the renewals they have supported. I don't know where we would be without their dedication.

### Welcome - Doug Russell

Second That. Without their support where would we be?

### Atlantis Mid-Life Update – Tim Twomey/WHOI

Slideshow available: Atlantis Mid-Life Update

80% complete with Alvin inclination test.

Tomorrow we expect to be on the first dive off of Bermuda.

Questions:

Liz Sikes: What were the troubles with the cranes?

*Tim Twomey- Quality of the coatings wasn't ideal. Firmware updated. Hydraulic. Most of the issues are clear now.* 

# ALVIN Upgrade and Science Verification Expedition Update – Adam Soule

## Slideshow available: <u>ALVIN Upgrade</u>

Questions:

Clare Reimers – With so many people on the science verification team will there be enough time for everyone to do their science? Adam – Everyone knows that the verification goals are the priority of the cruise. But there will be opportunistic science taking place. Gearing towards more junior scientists. People understand they may only get a couple samples.

## **Regional Class Research Vessel (RCRV) Update – Clare Reimers/OSU**

Slideshow available: <u>RCRV Update</u> Questions: Tim Twomey – Approximate cost of one of the new vessels? Clare Reimers – Difficult to answer, depending on what you mean. Project cost is \$364 million, that includes support of transition to operations. The actual building of the ship is less.

## Langseth Update – Sean Higgins/LDEO

Slideshow available: Langseth Update Questions: Kipp Shearman – Are you working with FIC and UNOLS concerning your replacement vessel? Sean Higgins – Yes, we will be in contact with them.

# NOAA Class A & B Construction Programs Update – Greg Raymond, Director NOAA OMAO's

Platform and Acquisitions Division & Sin Suen & Gerado Nixon

Slideshow available: NOAA Class A & B Construction Programs Update

Dennis Hansell: See everyone on Wednesday.

Alice Doyle: We have one of our guest speakers on Wednesday, Larry Mayer. It should be interesting. Dennis Hansell: He is speaking on the Decade of the Ocean? Alice Doyle: Yes.

Doug Russell: Looking forward to it. See everyone on Wednesday.

# 03 November, Wednesday: Instrumentation & Featured Speaker: Larry Mayer Session Six

Alice Doyle	Andrew Woogen	Angelique White	Anita Lopez
Anna-Louise Reysenbach	Brad Moran	Brandi Murphy	Brendan Phillip
Bridget Harrell-Donze	Bruce Appelgate	Chad Caron	Chris Hayes
Chris Zappa	Clare Reimers	David Smith	Dennis Hansell
Don Cucchiara	Doug Baird	Doug Ricketts	Doug Russell
Eric King	Ethan Roth	Fin Moore	Frank Rack
Frank Herr	James Allan	James Austin	Jared Cox
Jeffrey Beeson	Jessica Makowski	Jessica Warren	Jesus Gaytan
Jim Holik	Jim Swift	Joe Montoya	John Collins
John Orcutt	John Walter	Jon Gutoff	Jules Hummon
Ken Feldman	Kendra Daly	Kerry Strom	Kevin Jerram
Kim Puglise	Kipp Shearman	Kristin Yarincik	Larry Mayer
Laura Gibson	Lee Ellett	Lisa Clough	Liz Sikes
Maria Osiadacz	Mark Amend	Mark Brzezinski	Marshall Swartz
Masako Tominaga	Maurice Tivey	Miguel Goni	Mike Hopkins
Mike Prince	Monty Graham	Paul Johnson	Phil White
Reginald Beach	Rhian Waller	Rob Munier	Rob Sparrock
Rob Sterner	Rose Dufour	Sarah Fuller	Sean Higgins
Sharon Cooper	Shelby Walker	Stephen Miller	Steve Brodet
Stewart Lamerdin	Suzanne Carbotte	Ted Colburn	Tim Schnoor
Tim Twomey	Vicki Ferrini	Zhen Li	

## Recording available: <u>https://www.youtube.com/watch?v=l\_otpSafCQq</u>

Participants: 83

# Welcome – Dennis Hansell

Great to see everyone. Underway data acquisition. Archiving data.

I remember the days when all the data was lost. Having the data available forever is an amazing thing.

# Welcome - Doug Russell

### Rolling Deck to Repository (R2R) Update – Suzanne Carbotte/LDEO

Slideshow available: Rolling Deck to Repository (R2R) Update

Questions:

Larry Mayer – I wanted to point out a problem with AWS. It is easy to get the data to them, but there are surprise charges to archive data from them. I am wondering if this FSU program could work for the broader community. I am hoping one of the Agencies can answer that question.

*Jim Holik – I am from NSF, but I don't know the answer.* 

Suzanne Carbotte - There is an effort to develop shared resources to share data storage. John Orcutt – Data collected from the ocean bottom is being archived at IRIS. IRIS is changing but we will continue to want to archive the data.

Jamie Allan – Joides Resolution data is associated with CERN. It seems to be a long-term low-cost solution. Zenodo associated with CERN might be a possible approach. <u>https://zenodo.org</u>

# Multibeam Advisory Committee (MAC) Update – Kevin Jerram/CCOM UNH

Slideshow available: Multibeam Advisory Committee (MAC) Update

#### Acoustic Doppler Current Profiler (ADCP) Program Update – Jules Hummon/UH Slideshow available: ADCP Program Update

Dennis Hansell – Thanks for the great presentation and for all the work you do. Thanks to Larry Mayer for being here today. UNH founding director for Coastal and Ocean Mapping.

# Keynote: Larry Mayer: US Decade of Ocean Sciences – Goals & Activities

Slideshow available: Keynote: Larry Mayer: US Decade of Ocean Sciences

- The US Decade of Ocean Sciences was formed in response to UN Decade of the Ocean. UN proclaimed 2021-2030 the UN Decade of Ocean Science for Sustainable Development
- The Science we need for the Ocean We Want.
- Comes with no funding. Looking to individual nations and philanthropic groups to fund.
- oceandecadeus@nas.edu

# Questions:

Dennis Hansell – You did really well presenting what you called "a bureaucratic presentation." Jules Hummon – I love the idea of collecting data all over the ocean. How do we deal with other countries' EEZ?

Larry Mayer – U.S. is dealing with U.S. projects although they can be all over the world. Would have to deal with the EEZ. But if it is an international project with international goals, it might be easier to work around.

Dan Fornari – Terrific presentation. Thanks for your commitment to this. Are there similar efforts in how you try to codify this approach to the U.S. effort? And how does this relate to how to access and how have the international partners contributed to this? We have seen relatively low response from international partners. In general, various ship ops deal with requests for entry into EEZs in different ways. I am wondering if there is an opportunity to standardize this accoss the fleet.

Larry Mayer – Great questions. Several levels of answers. I encourage you all to check out the UN Decade website. The UN had its first call for activities which are either programs or projects. Number of U.S. programs that are endorsed. Ongoing and involved in some international collaboration and data sharing. I hope that this decade will greatly accelerate the sharing of data. I wrote a paper from the seafloor mapping perspective to the UN. And how they contradict themselves when we have to ask for permission to collect data and then deny us permission or don't answer. I hope this will lead to a discussion. Nowhere in the maritime law of the sea is research defined.

*Liz Sikes* – *Thank you so much for that overview. And putting the U.S. framework in the context of the UN framework. The U.S. has a global footprint of research. Individual ocean mandates. Does the U.S. Decade address these individual ocean frameworks?* 

Larry Mayer – In the latest call for activities they came back with gaps where they would like to see further submissions. One of the things they called for is the more regional approach. Liz Sikes – The U.S. or the UN?

Larry Mayer – The UN. One of the regions we called out is the Arctic. That is the only regional area we called out. We also highlighted the most remote areas.

*Liz Sikes – Was the calling out of the Arctic due to climate change or because it is adjacent to us? Larry Mayer – Both. UN is looking for climate change. U.S. is looking at the Arctic. Meet all the criteria.* 

Dennis Hansell – Thank you so much. Very impressed with all you are accomplishing. Dan Fornari wants to ask a late question to Kevin Jerram about multibeam.

Dan Fornari - I know the MAC page is available but I am not sure how well versed the community is in using the MAC page. I would encourage the MAC to send out an update to remind the community about it. I also think it would be very helpful for the operators to broadcast the status of their systems. Having some ability to see some of the data collected and what the status is. Some way of communicating to the community the status of the systems on the ships would be really helpful.

Kevin Jerram – Thank you. I appreciate that feedback. This support we provide is all from the operators. We could have a more proactive approach to reaching out to the ships we haven't visited in a while. I can see your point here. The related point about sharing status of issues on different ships is a work in progress. We are working on a Wiki kind of system. There are a lot of the same issues, but everyone has a different style to document those things. We are looking for a more common way to document those things.

Bruce Appelgate – Shout out to MAC because as ship operators there is so much information out there and there are so many systems on our ships with so many different data streams. The support that the MAC provides is so helpful. Our techs are maxed out so the assistance we get is so great.

Dan Fornari – Some of what I asked for does put more of a burden on the tech groups and we all know they are maxed out. In the best possible way this is information that will help everyone. I am appreciative that the MAC is doing the best they can with all the various institutions and systems.

Kevin Jerram – One related point, many of the ships are coming out of the shipyard at the same time, which makes it hard to get someone out there to do testing. So if there is a way we can encourage ships to think about opportunistic testing to be spread throughout the year especially during transits that would be very helpful.

*Vicki Ferrini – Dan had a request to contact a bit more with the science community. A lot of what we have is technical. Working with R2R and MAC is a good opportunity to provide and plan better.* 

Doug Russell – Thanks to Larry for his great presentation. Monday we are back at it with committee updates. Great job done by all.

Meeting Saved Chat: 13:18:03 From Liz Sikes to Everyone: can you repeat that? 13:18:33 From James Allan to Everyone: Zenovo 13:18:57 From Liz Sikes to Everyone: thx got it now! 13:20:24 From James Allan to Everyone:

Zenodo

13:20:26 From James Allan to Everyone:

https://zenodo.org

13:20:51 From James Allan to Everyone:

Correction, said a v when it should be a d

13:30:21 From Liz Sikes to Everyone:

Thank-you!!

14:12:37 From Jules Hummon to Everyone:

*Question for Larry - Much of the ocean is within "someone else's EEZ". That seems like a real problem for data collection. Can you comment?* 

14:16:41 From DAN FORNARI to Everyone:

following Jules' question are other similar comprehensive conceptual and practical approaches being formulated by foreign country partners - data from international partners is often very difficult to access, despite the USA being a leader in sharing oceanographic data of many types

14:24:44 From Kerry Strøm to Everyone:

Blanket clearances can be granted via the UN World Climate Research Program and the US State Dept has granted "Blanket" clearances for a year at a time for some projects.

14:28:23 From DAN FORNARI to Everyone:

Thanks Kerry, that is great to know and good that the US state dept. has stepped up - it is the foreign nations that need to also step up to the plate and have similar mechanisms to enable data collection on transits or routine surveys that cross their EEZs

14:30:30 From Kerry Strøm to Everyone:

There are also instruments that can shut down data collection at EEZ's that do not grant clearances in time.

14:36:14 From Bruce Appelgate to Everyone:

I have a comment to follow on Dr Fornari's

14:39:36 From Brandi Murphy to Everyone:

The near real time systems that are becoming more common could move that monitoring/information sharing burden to shore parties. Just a thought.

14:40:08 From Bradley Moran to Everyone:

Great talk Larry! Got to run.

14:41:49 From Liz Sikes to Everyone:

Thank you Larry!!

14:42:01 From Phil White to Everyone:

thanks

# 08 November, Monday: Committee Reports Session Seven

# Recording available: <u>https://www.youtube.com/watch?v=Cofq4Qew3qo</u>

	-		
Alice Doyle	Amy Baco-Taylor	Andrew Woogen	Anita Lopez
Anna-Louise Reysenbach	Bob Houtman	Brandi Murphy	Brian Midson
Bridget Harrell-Donze	Chad Caron	Chris Zappa	Craig Lee
David Rivera	David Smith	Debbie Bronk	Dennis Hansell
Don Cucchiara	Doug Baird	Doug Ricketts	Doug Russell
Emily Shimada	Ethan Roth	Frank Rack	Hannah Delapp
Jarod Cox	Jason Agnich	Jeff Garrett	Jesus Gayton
Jim Holik	Jim Swift	Joe Malbrough	Joe Montoya
John Coffey	John Calderwood	John Orcutt	John Walter
Jules Hummon	Kasey Aderhold	Kaya Johnson	Kerry Strom
Kevin Johnson	Kipp Shearman	Kristen Yarincik	Kristin Beem
Lee Ellett	Leigh Zimmermann	Lisa Clough	Liz Sikes
Maria Osiadacz	Mark Amend	Mark Brzezinski	Maurice Tivey
Mike Einhorn	Monty Graham	Patrick Haggerty	Rob Munier
Robert Morris	Robert Paddock	Rose Dufour	Sam Laney
Sarah Fuller	Stern007	Steve Brodet	Stewart Lamerdin
Susan Lang	Ted Colburn	Thomas Glennon	Tim Schnoor
Tim Twomey	Timothy Leach	William Curry	Zhen Li
Particinants: 72			

Participants: 72

### Welcome – Dennis Hansell

### Welcome – Doug Russell

# Safety Committee Update – Jeff Garrett

Slideshow available: <u>Safety Committee Update</u> Questions: Doug – Thanks for RVSS Rewrite/Update effort. Dennis – What is the synthetic material made of? Jeff Garrett – Most of the lines in appendix A refer to steel cables. Synthetic cables can be made up of nylon or other materials. That is what makes this difficult, going forward.

### MERAS Update – Emily Shimada/OSU

Slideshow available: MERAS Update

Please reach out to us with questions or concerns. meras@unols.org email address will go to all of us.

## FIC Update – Jim Swift/SIO

Slideshow available: FIC Update

#### **DeSSC Update – Anna-Louise Reysenbach/PSU**

Slideshow available: <u>DeSSC Update</u>

Questions:

Dennis Hansell – Will be hard to fill your shoes. We can see how healthy the assets are. We owe you a lot. Anna- Louise Reysenbach – Well, I said the same when I started. It has been difficult, due to covid. Brian Midson- I just wanted to express my gratitude as well.

### MSROC Update – John Orcutt/SIO

Slideshow available: MSROC Update

Questions:

Dennis Hansell – The autonomous vessel. Are the OBS mostly on the West coast or do you deploy on the East Coast as well?

John Orcutt – So much of the earth is covered with water that it is difficult to get seismic info from those areas. Dennis Hansell – How many floats are you talking about then?

John Orcutt – I think if you had two global ships you could cover most of the planet. One on the east coast, one on the west coast then they could both cover the Arctic as well.

#### **RVOC Update – Doug Baird / UH**

- Zoltan has moved on to a new assignment. I have been the Chair for 5 days.
- Rose Dufour has asked us to set up a Vessel Crewing Tiger Team. Crew shortages are a problem throughout the maritime industry. Need new ways to get crew members.
- We have been meeting every month to month and a half. We met to discuss lessons learned. In spite of all of the challenges we have been going to sea and getting research conducted. Doing it effectively and safely.

Questions:

Doug Russell – thank you for stepping up. Dennis Hansell – Thank you for taking over for Zoltan. Doug Russell – We will be recruiting for a new RVOC Chair-Elect.

### AICC Update – Sam Laney/WHOI

- Duties of AICC change rapidly. Very adaptable committee.
- Broad responsibilities to coordinate any of U.S. researcher on U.S. icebreaker. Try to also give aid to U.S. researchers on other countries' vessels. And any research scientists that are in the arctic.
- Healy and Sikuliaq. We are interested in and track all Healy ops. Sikuliaq ops we are involved only when they are working in the ice.
- Broad membership 8 members, 3 ex-officio members, program managers from all agencies that use ships.
- Regional stakeholders. Absorbed representatives of different native communities and tribal representatives of D17 CG.
- We pretty much focus on upcoming cruises.
- Gearing up for the Annual Winter Meeting.
- We had a summer meeting in June. Tried to bring in ex-officio members to give some reports.
- A junior scientist asked her to give us the perspective from her point of view what the barriers are to using these resources. Gave us a very good perspective.
- Midlife refit extension opportunity coming up for Healy in next few years. Trying to provide Frank Rack with the information he needs.
- Unmanned vehicles in the Arctic. More difficult in the Arctic. Oversight of airspace is different.

- Looking forward to MFP! Will help immensely with keeping on top of everything. Especially on Sikuliaq in ice ops.
- Big turnover year for AICC.
  - Recurring 3-year memberships 8 members. Got the ok from Dennis to keep two members for an additional year. Dr. Chris Cox from NOAA. Met scientist.
  - Still short a member. Have a call out. Please encourage any colleges you may have.
  - Losing chair this year. Former AICC members you can serve again as long as one term has gone by. Jim Swift was first AICC chair 20 years ago.
- Main focus on helping to coordinate people's use of the ships. Fire on Healy. Able to complete unique field season. Primarily CG operational cruise but they were very good to offer space to scientist. They enabled science to get done. Maybe the way operations are going int the arctic in the future.
- Dave Forcucci retired. Not clear if there will be another civilian in this position or if we will be working directly with the officer corp. Will offer interesting challenges.
- Next meeting in January.

#### Questions:

David Smith – Understanding that the Falkor2 will have some kind of ice rating. Have you talked to them? Sam Laney – I have not but I think it is a great suggestion to talk to them. I did not know they were getting an ice rating.

Dennis Hansell – Sorry to have such a capable chair stepping down. Complicated committee. Always admired what you have been able to accomplish.

Sam Laney – What I like about this committee is you don't know what is coming next. The people in the community are good to work with.

## SCOAR Update – Chris Zappa/LDEO

Slideshow available: SCOAR Update

Doug Russell – Thanks for taking over the committee. I know you also have big shoes to fill but I am sure you are up to it.

### **RVTEC Update – Jules Hummon/UH**

Slideshow available: <u>RVTEC Update</u> Doug – Thanks to Lee for his leadership! Jules, thank you for stepping up.

Dennis – Ending next Wednesday with a toast to UNOLS. Everyone will have to BYOB, but it will be fun.

Alice – Encourage everyone to come

Meeting Saved Chat: 13:22:13 From Liz Sikes to Everyone: Yes Thank you!!!! 13:23:02 From Lisa Clough to Everyone: Thanks Jim! You've given so much over the years- really appreciate it! 13:23:36 From Alice Doyle to Everyone: I second that Jim! 13:42:18 From Amy Baco-Taylor to Everyone: Thanks for all your hard work, Anna-Louise! 13:43:42 From Liz Sikes to Everyone: I second that!! 14:00:09 From Kerry Strøm to Everyone: Hi John (Orcutt), With seismic equipment being outdated by 2 decades! ...has MSROC considered reaching out to seismic companies to get their cycled-out gear? There may likely be some opportunities there14:08:00 From Lisa Clough to Everyone:

Hah- love Jim returning to AICC! I'm afraid NSF frowns upon me sitting on UNOLS comms, but thanks for the call out, Sam!

14:25:09 From Brandi Murphy to Everyone:

WWWW are a Tech Training Subcommittee event. :)

14:27:01 From John Orcutt to Everyone:

Yes, there has been outreach to companies, although not with regard to surplus/older instruments. I will bring this up with the committee for discussion. There was an effort to lease equipment earlier this year, but the seas were not kind!

14:30:13 From Kerry Strøm to Everyone:

Cute daughter Alice :)

# 10 November, Wednesday: Keynote: Kendall Moore & UNOLS 50th Celebration! Session Eight

# Recording available: https://www.youtube.com/watch?v=B8nNPAu1xWI

Alian Davia	Amalia Maana	Arrey Deee Teyler	Andrew Frenchech
Alice Doyle	Amelia Moore	Amy Baco-Taylor	Andrew Frambach
Andrew Woogen	Angelicque White	Anita Lopez	Anna-Louise Reysenbach
Annette DeSilva	Bob Houtman	Brandi Murphy	Brian Midson
Bridget Harrell-Donze	Bruce Appelgate	Bruce Corliss	Catalina Martinez
Charna Meth	Chris Measures	Clare Reimers	Curtis Collins
Cynthia Suchman	Dan Ohnemus	Daryl Swensen	David Kadko
David Bowman	David Karl	David Smith	Deborah Bronk
Deborah Steinberg	Dennis Hansell	Dennis Nixon	Dolly Dieter
Don Cucchiara	Doug Baird	Doug Ricketts	Doug White
Frank Herr	Frank Rack	Howard Goldstein	Howell Johnson
James Austin	James Holik	James Swift	Jared Cox
Jason Agnich	Jesus Gaytan	Jin Tanaka	Joe Montoya
John Byrne	John Morrison	John Orcutt	John Freitag
John Walker	Jon Alberts	Juan Mate	Jules Hummon
Kay McMonigal	Kaya Johnson	Kendall Moore	Kendra Daly
Kerry Strom	Kevin Johnson	Kipp Shearman	Kristen Yarincik
Kristin Beem	Lee Ellett	Leigh Zimmermann	Leila Hamdan
Lisa Clough	Liz Sikes	Lynne Butler	Marcia McNutt
Maria Osiadacz	Mark Brzezinski	Martha Merson	Maurice Tivey
Mike Perfit	Mike Prince	Monty Graham	Nicole Raineault
Patrick Haggerty	Rhian Waller	Rick Keil	Robert Knox
Robert Morris	Robert Paddock	Robert Pinkel	Robert Sparrock
Robert Sterner	Rose Dufour	Sam Laney	Sean Higgins
Steve Brodet	Stewart Lamerdin	Susan Becker	Suzanne Carbotte
Ted Colburn	Thomas Glennon	Thomas Wilson	Tim Schnoor
Timothy Leach	Timothy Twomey	Wendy Smythe	William Curry
Zhen Li			

Participants: 105

### Welcome – Dennis Hansell

Recognizing departing Committee Chairs and Committee Members.

Welcome – Doug Russell

Keynote: Kendall Moore – There Are Many Sides to The Story of Access, What's Your Story?

Introduction of Guest Speakers – Doug Russell

Wish we could do this in person. Pandemic. People who have had a great influence on the start of UNOLS and the support to keep it going through the years.

Memories, insights & stories from many influential people that helped mature and evolve UNOLS to what it is into including:

- Bob Knox SIO
- John Byrne OSU
- Marcia McNutt MBARI, National Academy of Sciences
- Mike Prince MLML, UNOLS, ONR, NSF
- Dolly Dieter NSF
- Dennis Nixon URI
- Brian Midson NSF
- Clare Reimers OSU
- Frank Herr ONR
- Bob Houtman NSF
- Deb Steinberg VIMS
- Jim Holik NSF
- Chris Measures UH
- Jim Swift SIO
- Annette DeSilva URI, UNOLS
- Jon Alberts WHOI, UNOLS
- Tim Schnoor ONR
- Rose Dufour NSF
- Doug Russell UNOLS

# Toast to the UNOLS Community

Meeting Saved Chat: 13:10:43 From James Swift to Everyone: FYI, I am also rotating off as FIC Chair. 13:11:24 From Rick Keil to Everyone: *Jim, I thought you decided to stay! :-)* 13:15:33 From Dennis Hansell to Everyone: Apologies, Jim!!! Rick told us you were staying. 13:45:16 From Kendall Moore to Everyone: https://vimeo.com/644397590 13:48:47 From Kendall Moore to Everyone: https://vimeo.com/644397590 13:49:10 From Kendall Moore to Everyone: Naming-https://vimeo.com/644400162 13:57:53 From Brandi Murphy to Everyone: Thank you Kendall! 14:04:46 From Maria Osiadacz to Everyone:

Wonderful presentation! Do you have any practical suggestions or examples of educational resources for improving recruitment into the marine engineering or technical workforce, specifically creating a more inviting application process that encourages candidates from underrepresented groups to apply? 14:06:23 From Catalina Martinez (she/her/ella) to Everyone:

Good resource and at least a place to start. https://ncar.ucar.edu/what-we-offer/educationoutreach/faculty-resources/geo-reu-resource-center/geo-reu-handbook

14:07:58 From Maria Osiadacz to Everyone:

Thank you!

14:09:32 From Brandi Murphy to Everyone:

I think we also have to start evaluating \*all\* of our practices and kind of auditing what barriers it might be throwing up to participants. All practices/policies/roadmaps have to re-evaluated. There should be no process that is still being done because of "tradition" or because it has "always been that way" or because "it has served us in the past". It's a proactive step you can take today. From recruiting to accepting students to HR practices. 14:10:19 From Lisa Clough to Everyone:

Out of New Zealand- Decolonizing Methodologies by Linda Tuhiwai Smith- a book in the academic realm 14:12:28 From Kerry Strøm to Everyone:

Thank you Dr. Moore.

14:21:37 From Alice Doyle to Everyone:

Or the Marine Technicians!

14:43:44 From Kerry Strøm to Everyone: Best presentation ever! :) Thanks Mike!

14:44:41 From Douglas White to Everyone:

Unleash the Kraken!

14:52:30 From Kerry Strøm to Everyone:

Seismic vessels with teams of geologists onboard that cost ~\$500k/ day have alcohol...Just saying :)

14:56:50 From Liz Sikes to Everyone:

Great story Dennis!

14:58:24 From Kerry Strøm to Everyone:

Will miss your great stories Dennis. Enjoy sailing in St. Thomas :)

15:00:41 From Dennis Nixon to Everyone:

Thanks, it was a great run!

15:21:27 From Liz Sikes to Everyone:

can I have an extra brain too?

15:24:18 From Deborah Steinberg to Everyone:

@liz extra brain coming!

15:26:25 From Lisa Clough to Everyone:

Emanuelle still complains to me about not being able to quit!

15:27:47 From Liz Sikes to Everyone:

a PhD is really piled high and deep in nothing practical!

15:32:27 From Kerry Strøm to Everyone:

YAY Annettte!

15:33:00 From Annette DeSilva to Everyone:

It is sooo good to see all of you! I miss you!

15:36:26 From Mike Prince to Everyone:

Jack, Jon and I were the lucky ones!

15:42:05 From Kerry Strøm to Everyone:

Hahhhahhhhaaaa!!!

15:42:06 From Brandi Murphy to Everyone:

Yes!

15:42:20 From Liz Sikes to Everyone:

more more more!!!

15:42:25 From Lisa Clough to Everyone: Awesome! 15:45:22 From Rose Dufour to Everyone: Hello everyone- sorry for leaving before I can say anything... but everyone's stories have been amazing and it's been an excellent 50th celebration! 15:46:48 From Clare Reimers to Everyone: Hear Hear! 15:46:58 From Kerry Strøm to Everyone: So thankful to come into this community under Jon & Annette's tutelage. What a classy & gracious group of folks :) 15:51:18 From Kerry Strøm to Everyone: Great job Doug, Alice & Team :) 15:51:56 From Dennis Nixon to Everyone: Wonderful job, Doug! 15:52:09 From Clare Reimers to Everyone: Thank you all..I'm confident the next 50 years will continue to be great for ocean science. 15:52:12 From Wilf Gardner to Everyone: Thanks to everyone for 50 great years! Sorry I couldn't join earlier. Cheers! 15:52:24 From Jules Hummon to Everyone: Great stories, so much respect and fun!