



UNOLS Year in Review

UNOLS Office

2019 UNOLS Annual Meeting

Hilton Alexandria Old Town



UNOLS 2019 Office Year in Review

- **January**
 - New UNOLS Office team met with the URI Team at GSO
- **March**
 - FIC & Council Meeting at URI
 - Salute to the URI UNOLS Office Team
 - UNOLS supported the Marine Seismic Workshop at NSF
- **April**
 - AICC Winter Meeting via Webex
 - RVOOC & Safety Committee Meetings at SIO (70 participants)





UNOLS Office Year in Review

• **May**

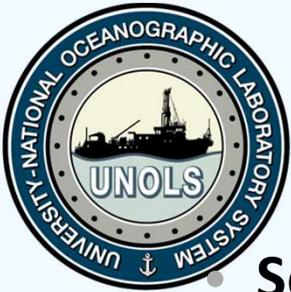
- New UW UNOLS Office on-line
- UW issued new contract with GW-Maritime Medical Services for medical advisory support to ships
- Keel Laying for R/V *Resolution* at GIS, Houma, LA
- Ship Scheduling Meeting at UNOLS Office
- DeSSC Spring Meeting at WHOI

• **June**

- Chief Scientist Training Workshop – R/V *Kilo Moana*
- Chief Scientist Training Workshop – R/V *Blue Heron*

• **August**

- Council Summer teleconference



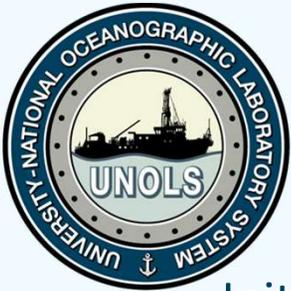
UNOLS Office Year in Review

- **September**
 - AICC Summer teleconference
- **October**
 - RVTEC Meeting at UAF (112 participants)
 - OBSIC-OS First Meeting at WHOI
- **November**
 - FIC Meeting
 - Council & Annual Meeting
- **December**
 - Winter DeSSC Meeting – AGU San Francisco
 - MSROC Annual Meeting - AGU San Francisco



STRS & PCAR Replacement

- **Marine Facilities Planning (MFP)** – see <https://maas-se.nl/mfp/>
 - Developed for NIOZ & NERC, since implemented for GEOMAR, being implemented by CSIRO
 - Modular, Cloud Based system that supports in integrated fashion:
 - Scheduling
 - Cruise Planning
 - Route Planning
 - Post Cruise Assessment
 - Equipment management
 - Supply management
 - Crew resource management
 - And more!
 - Development & Implementation supported by NSF & ONR



MFP Continued

- Initial meeting on 12 Nov with Beiko Maas of Maas Software Engineering (MSE – Groningen, NL) who developed & supports system
- Proposal submitted for requirements definition workshop in January 2020 in Seattle w/MSE
 - This will lead to fully understanding scope of effort => assemble cost & schedule estimate plus development/implementation plan
- Based on initial discussions – belief that system could be developed & implemented within a year
 - Many of the building blocks already developed & in use
 - What we do is very similar to other operators – just a bigger fleet & multiple operators involved.
 - It's more about understanding UNOLS processes & then integrating existing/new blocks to support necessary processes
- Target: Support 2022 scheduling process



MFP – see <https://maas-se.nl/mfp/>



+31(0)503210760
info@maas-se.nl



Groningen
Aweg 44-2

The Marine Facilities Planning system (MFP) is a NIOZ/NERC software development collaboration designed to integrate the different aspects of equipment management and ship programming, to streamline and integrate the process of delivering science cruises.

The MFP comprises a number of different modules designed to work as an integrated system or used as independent modules. The integrated system can be used as a complete system for voyage planning, equipment management, and cruise project delivery. Its modular design is able to be adjusted to each organisations specific requirements and scope of operation from large Global Class fleets to single regional vessels.

The MFP is available for use by other institutions and organisations internationally and we would be pleased to discuss your requirements and interest in accessing the system





RVSS Update

- RVSS is now 4 years old and due for a refresh
- Working with Safety Committee Chair Jeff Garrett on a rewrite/refresh plan
- Examples of some key areas that require attention:
 - **Chartering non-UNOLS Vessels / Chapter 18**
 - Draft of new guidance submitted for concurrence
 - **Aviation Operations / Chapter 19**
 - UAS Guidelines
 - No Helicopter capable ships
 - **Rope & Cable Standards / Appendix A**
 - Synthetic line?



UNOLS Outreach and Pre-Cruise Planning App

Alice Doyle
Annual Meeting
Alexandria, VA
November 22, 2019





UNOLS Outreach

- 2 Workshops in June 2019
 - RV KILO MOANA/UH
 - RV BLUE HERON/UMinn
- Annual DeSSC New User Program
- STEMSEAS program
- MATE Internship Program
- UNOLS Cruise Opportunity Program
- Participate in RV SALLY RIDE AGU Open House
- 2020 Ocean Sciences Meeting Booth





UNOLS Cruise Planning Application

- An information sharing portal for
 - Scientists
 - Marine Technicians
 - Crew
 - Support Staff
- Coupled with the Ship Time Request System
- Initiated by URI, UNOLS & NSF
- Developed in 2017
- Alpha in 2018
- Actively maintained at URI/GSO by Erich Gruebal



Goals of the Cruise Planning App

- Consistent experience for scientists
- Convenient tool for ship operators
- Configurable to suit the operator's needs
- Metadata repository
- Minimize information redundancy
- Maximize information Security



UNOLS Cruise Planner – Why now?

- It has been years coming
- It is a really good application and available now
- Operators are keen to get started
- This will greatly streamline cruises planning process



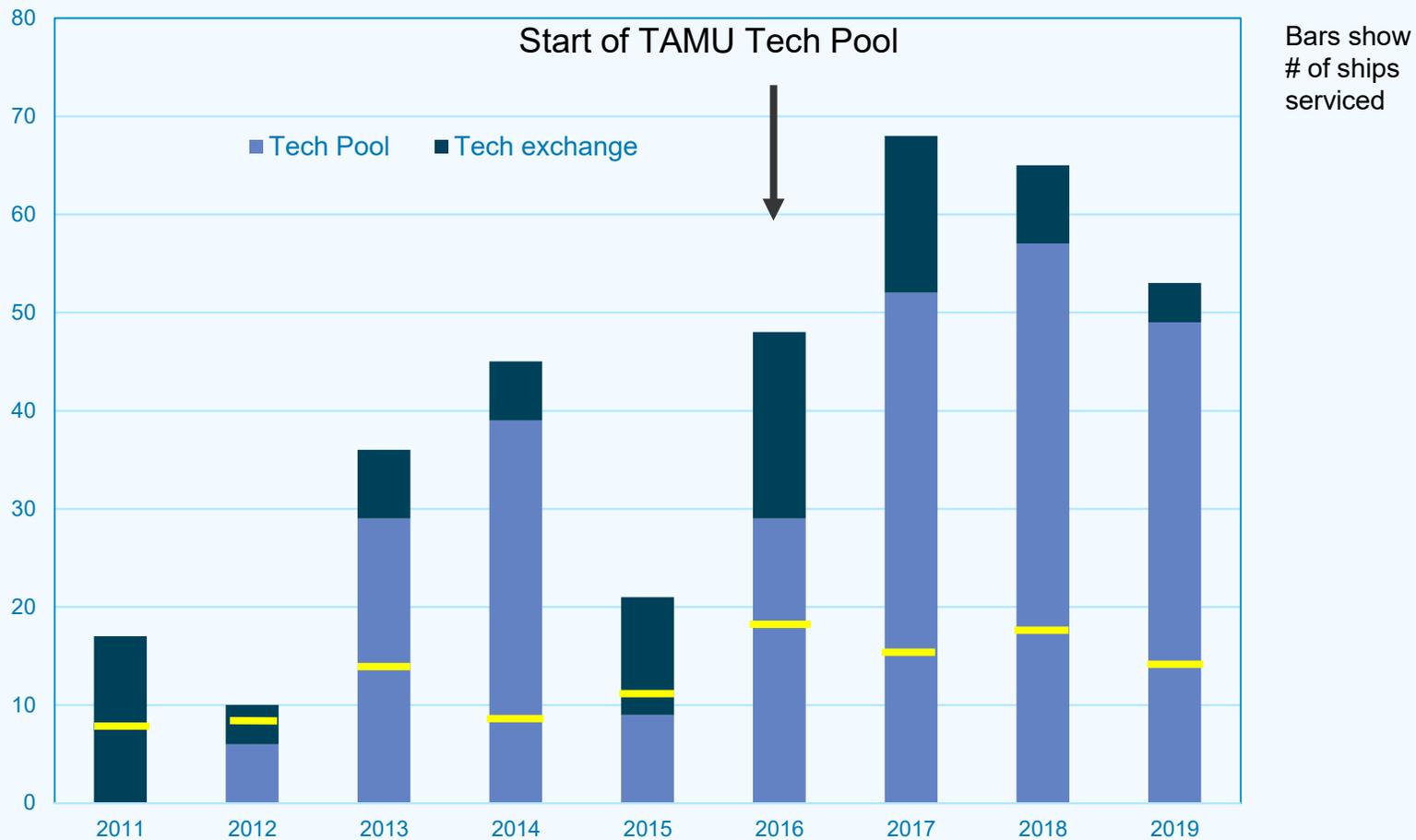
UNOLS Tech Pool Update

Brandi Murphy
Annual Meeting
Alexandria, VA
November 22, 2019





Cruises supported 2012-2019





Deployments 2016-2019

Technician #	2016	2017	2018	2019
1	6	5	4	1
2	6	8	5	9
3			2	3
4	1	3	4	5
5	1	2	2	6
6	1	1	3	2
7		7	7	
8		5	5	2
9		1		1
10		1	4	3
11				1
12			1	1
13			1	9
14				1
15				1
16				1
17*	1	6	6	
18*	1			
19*		1	4	
20*			2	1
21*		1		
22*		1		
23*		No contract		
24*		No contract		
Total	3	23	33	23

* Technician has left pool





Pre-cruise Considerations for Successful Dredging Operations

Brandi Murphy | UNOLS
Annual Meeting
Alexandria, VA
November 22, 2019



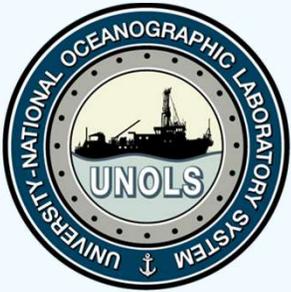
What's the problem?

PI Expectations

- PIs may use pre-Appendix A dredging operations (either via published methods or experience) in their planning.

Safety of equipment, wire, and operation

- Appendix A requires trained winch operators
- Definition of trained varies between ship operators and science party



Discussion group

1. NSF Representatives
2. Tech managers
3. Experienced and New PIs
4. Equipment providers/managers (some overlap with tech managers)

Goal

Create a list of considerations to cover in the pre-cruise planning process that will ensure operators, technicians and PIs are on the same page in regards to operation and expectations before getting underway



Considerations

- In person planning meetings with actual cruise participants as early as feasible.
- Equipment needs
- Sampling
- Vessel specifics
- Wire
- Winch
- Overboarding equipment
- Dredge Targets
- Roles and responsibilities
- Procedure and contingency plans



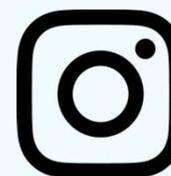
Feedback?
brandi@unols.org



@UNOLS



@UNOLS



@UNOLS_org





UNOLS Office & Social Media



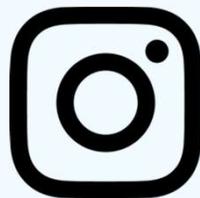
@UNOLS

Contact media@unols.org for comments & questions or to share your news stories, accounts, pictures and hashtags.



@UNOLS

We want to hear what's new with you!



@UNOLS_org

