

R/V Marcus G. Langseth



MSROC Winter Meeting – January 28, 2022
L-DEO Office of Marine Operations

Lamont-Doherty Earth Observatory
COLUMBIA UNIVERSITY | EARTH INSTITUTE

2022 Provisional/Final Schedule

Langseth Schedule ~255 Days

- April - Pablo Canales- ROV/Node Deployment and Refraction on Cascadia Margin
 - STEMSEAS- Transit from Newport to San Diego
 - May-June- Anne Becel et al. – Guerrero Gap – 2D MCS/OBS – Manzanillo, Mexico
 - July- Cowen et al. – Bio-Oceanography Program- Cascadia Margin-
 - August- Rob Harris/Anne Trehu- Combo-Heat flow Probe & Hi-Res Seismic –Cascadia Margin
 - Sept. – Wilcock – Axial Seamount- OBS Deployment
 - Sept- Worthington et al.- QCF – OBS Retrieval
 - Late Sept –Mid-Oct- Maintenance and Inspections
 - LTER- Send- Mooring-Buoy Recovery and Deployment
 - Nov.- Transit to Puerto Rico
- Deferred/Canceled – Loss of 48 days total :
- Mid-October-November- Jian Lin et al. – Puerto Rico Trench 2D MCS/OBS and
-USGS- add on to Puerto Rico- Uri Ten Brink- Shallow- Hi-Res Seismic – (4-5 days) –
 - Early Dec.- Parnell-Turner- Cayman Islands OBS Deployment

Final # of Operational Days: 217

2023 Provisional Schedule

Langseth Schedule ~200-260 Days

- March – April - Hooft _- Broadband OBS-- Galapagos
- May- early June- Daigle & Becel- 2D Seismic/Coring -North Carolina -Geohazards
- Late June-early July – Parnell-Turner – OBS Retrieval –Cayman Islands
- July- -mid- August- Van Avendonk et al. - Blake Plateau MCS
- Mid-August – Mid-Sept- Van Avendonk et al. - Blake Plateau OBS
- Mid-Sept- Oct- Maintenance

Tentative –Oct- Dec. Options:

- New England Seamounts – Roman
- Puerto Rico Trench Seismics – Canales et al. &
Puerto Rico USGS Add-on - Ten Brink et al

* Possible option in February with SERCEL to test equipment in GOM

2022 Operational Highlights

**Cascadia Subduction Zone
ROV NODE Deployments
APRIL 2022**

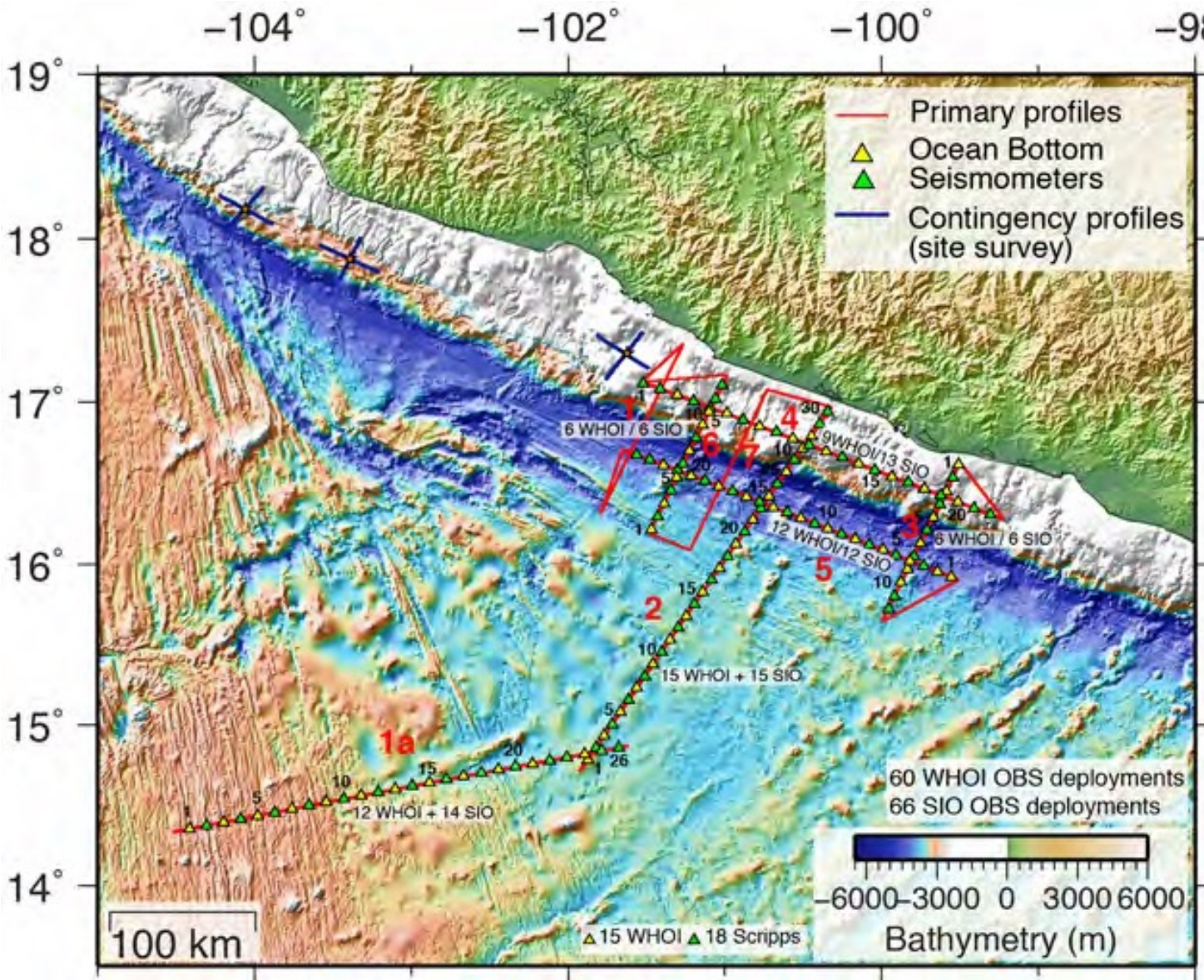
PI:
Pablo Canales



**Guerrero Gap-
Mexico
May-June 2022**

PI's:

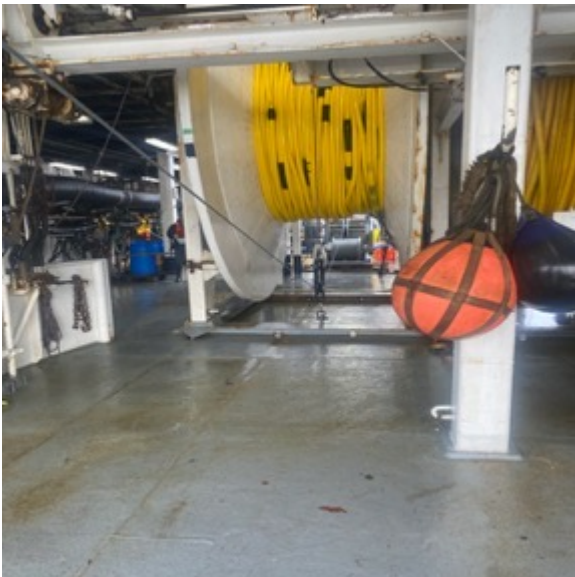
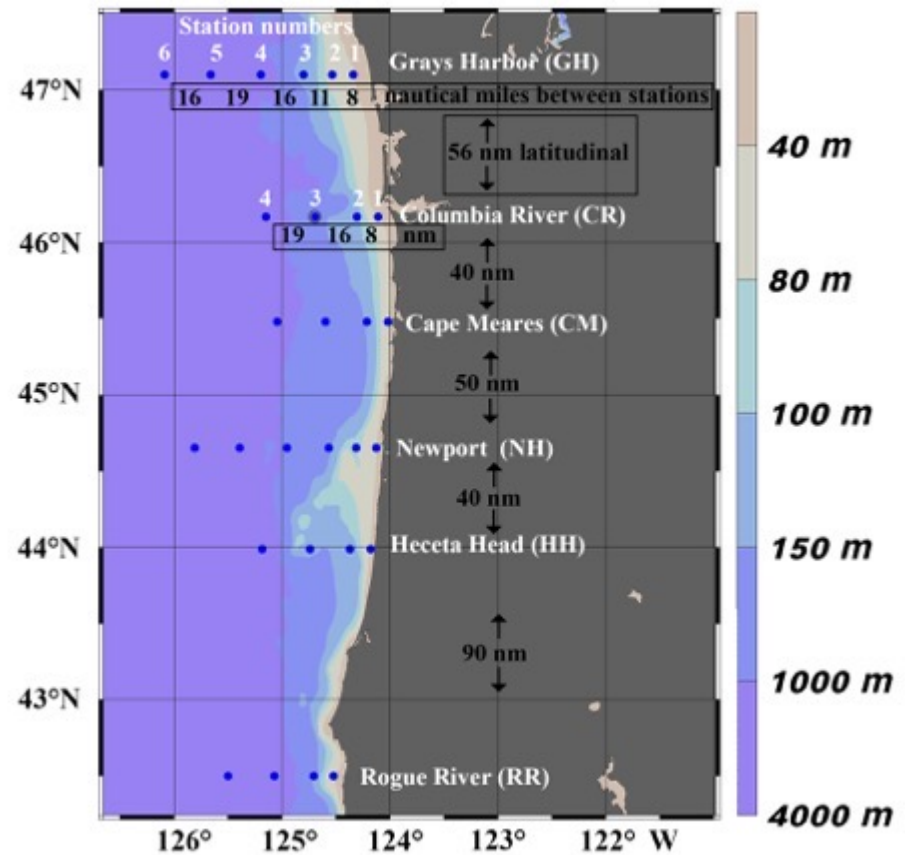
Anne Becel
Donna Shillington
Brian Boston
Victor Cruz



Cascadia Margin Plankton- SPECTRA - July 2022

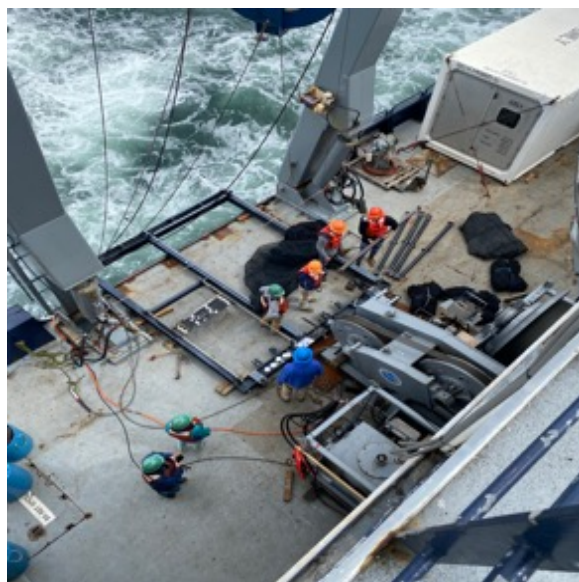
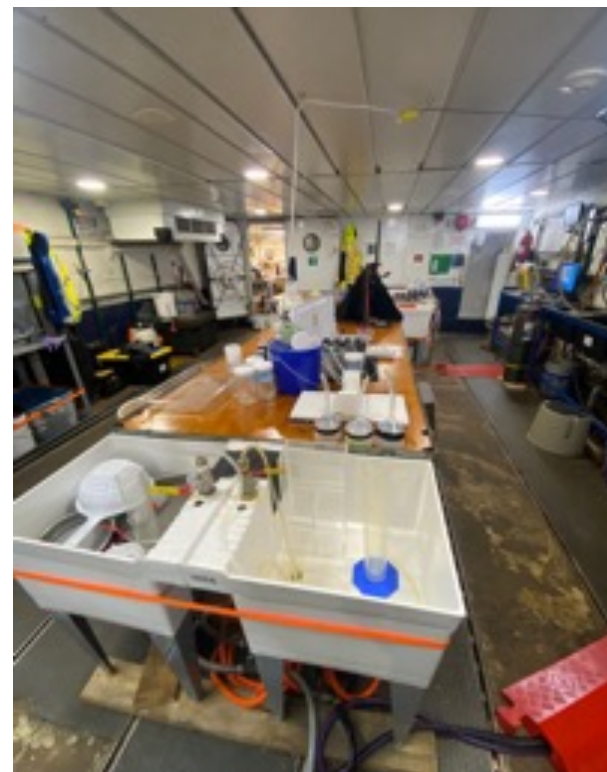
MOCNESS, CTD, ISISS

PI's:
Robert Cowen



**Cascadia Margin
Plankton- SPECTRA
July 2022**

PI's:
Robert Cowen



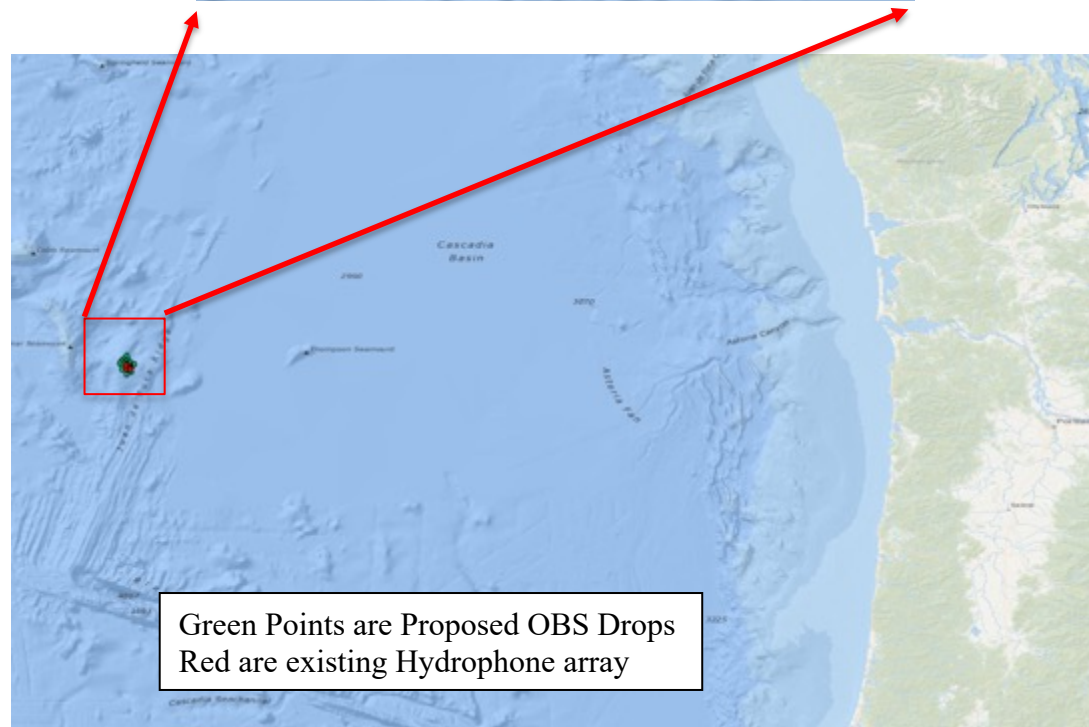
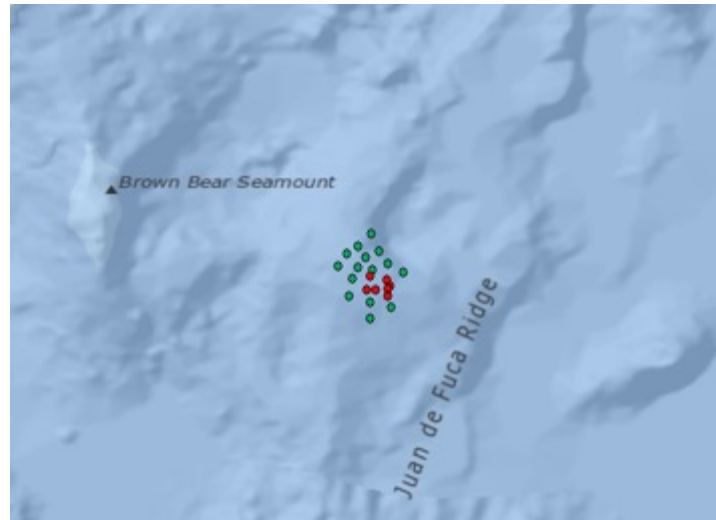
**Cascadia Margin
Heat Flow Probe/
Hi-Res Seismic
August 2022**

PI's:
Rob Harris
Anne Trehu



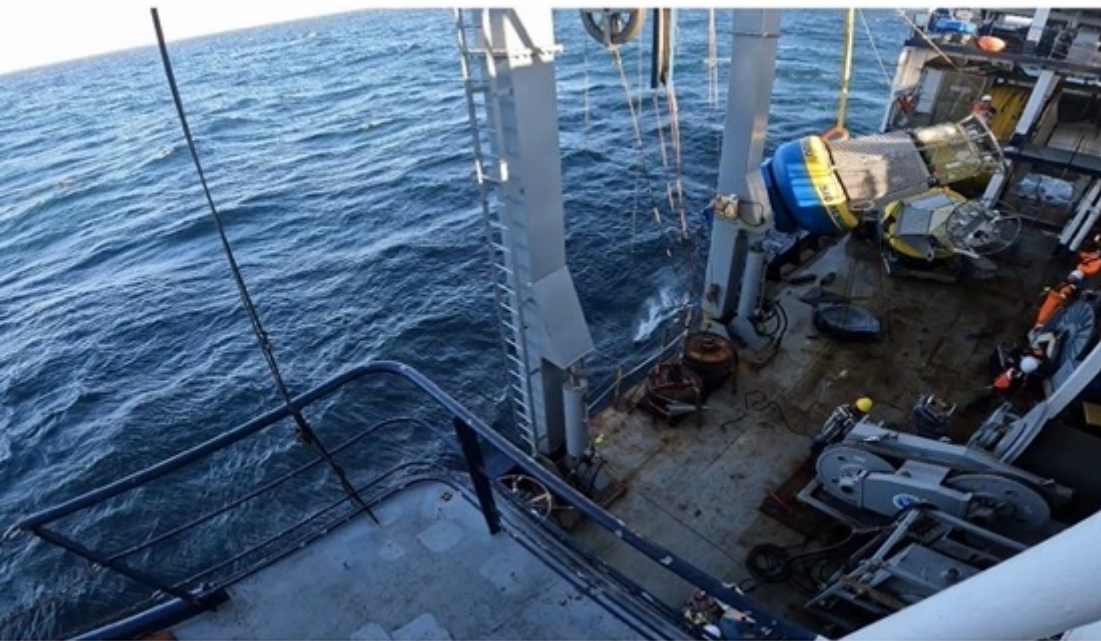
**Axial Seamount
OBS /Hydrophone
Array
Deployment
September 2022**

PI's:
William Wilcock/
Bob Dziak



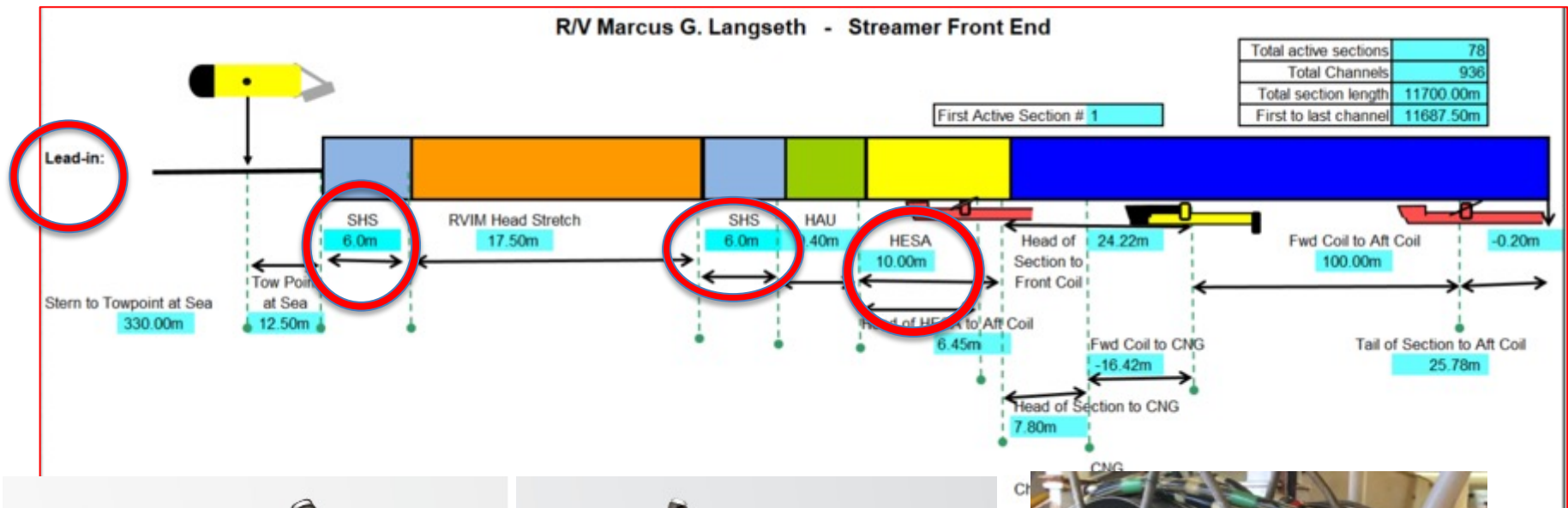
**LTER –Mooring Deployment/Retrievals
Offshore S. California
October 2022**

PI:
Uwe Send



2022- Ocean Instrumentation Equipment

1- Armored Lead-In, 4-Short Head Sections & 2- Head Elastic Section Adapters



LEAD-IN

ARMoured ELECTRO OPTICAL CABLE

- Traction resistance: up to 570 KN
- Length: up to 1900 m



SHS2

SHORT HEAD SECTION

- Flexible section
- Acceleration sensor for noise monitoring
- 2 Nautilus transducer
- 1 coil acoustic
- Length: 6 m



HESA



Awareness Items

- 1) Permitting for IHA, Biological Opinion, and multitudes of other possible authorizations (e.g. CZMA, EFH)
- 2) Coordination with OBSIC
- 3) Foreign Vessel Clearances and environmental assessments.
- 4) Other complications for project risk assessments

OMO Personnel Changes

New Additions:

Marine Operations Manager -- John Kinkela (August 2022)

Marine Recruitment/Staff Coordinator– Pending hire right now

Chief Engineer –Sabrina Taraboletti (November 2022)

Departures:

Marine Technician –Shaun Shaver (August 2022)

Sr. Marine Technician – David Martinson (Feb. 2023)

Financial Analyst- Toshiba Jones (April 2022)

Chief Engineer – Matt Tucke (Feb. 2023)

