## **STARC Report AICC Summer 2022**





**2022** Dockside Mobilization

2022 Shakedown

**2023** Drydock Sonar

**Outreach** and **Inclusion** 











# Acknowledgements



**National Science Foundation (NSF)** 

**United States Coast Guard (USCG)** 

**Arctic Icebreaker Coordinating Committee (AICC)** 

**Multibeam Advisory Committee (MAC)** 

WHOI Potential Fields Pool Equipment (PFPE)

STARC University Partners (SIO, OSU, UW)









### 2022 Dockside Mobilization





#### CTD, SSW, and MET sensors

Sensor calibrations completed and delivered

#### **Science Seawater Water**

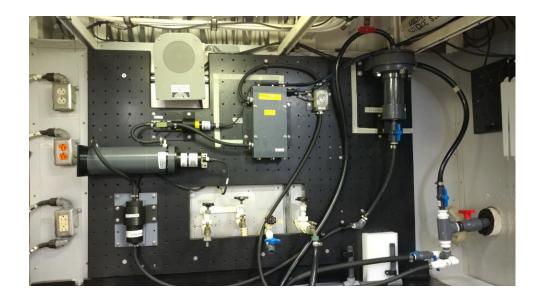
- Reconfigured water wall based on previous seasons observations
- Supported pCO2 and Picarro gas analyzer installations

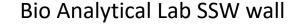
#### Ultrasonic anemometer forward jackstaff

Metek Omni 3D replaced

#### **Oceanographic Wire**

- Winch monitoring system support during winch and wire spooling operation
- Slip ring terminations and maintenance











### 2022 Mobilization & Shakedown





### **Computers and Data Management**

- Software and hardware maintenance
- Virtual machine cluster maintenance
- Replace damaged machines and UPS units
- Audit automated STARC systems to meet cybersecurity requirements

#### **Gravimeters**

- BGM-3 gravimeter mobilization
- Additional testing to confirm sensor verification

#### **Shakedown 2-legs**

- Multibeam patch test complete
- ADCP calibration coordinated with UHDAS
- Acquisition systems operational









# 2023 Drydock Work Items



### **Transducer Well Deck Preservation**

- 100% deck and 3" up bulkheads
- Transducer well exteriors and lids
- Request new ice windows for aux wells

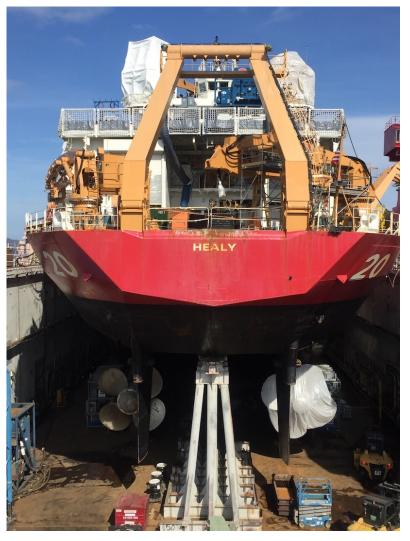
#### **Transducer Maintenance:**

- All transducers will be removed
- Clean and preserve transducer well interiors
- Replace OS75 and OS150 ADCP transducers
- Install EK80 18kHz and 38kHz fishery sonars

#### Multibeam:

- EM122 RX array replacement
- Modify RX frame to install baffles





Healy high and dry



## Outreach and Inclusion



**Tours Ship Visits** 

Crew familiarization

**Early Career Scientist** 

**MATE** new Techs







