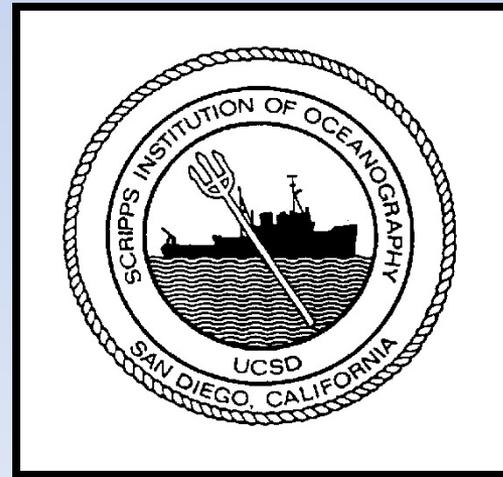


2020 UNOLS Annual Meeting

NSF West Coast Winch Pool
operated by
Scripps Institution of Oceanography



Our Mission

- To provide an inventory of oceanographic winches (etc.) for shared use.
- To keep our inventory in good repair and in compliance with applicable standards (CFR, RVSS).
- To modify our inventory to better serve our community.
- To provide technical support: cable/wire rope spooling, training, maintenance, repairs, engineering, fabrication, advice...

How the Winch Pool Works

- Funded by NSF
- Customers (science parties and others) communicate their needs to us.
- We match their needs to available machinery and personnel.
- We work with customers to send machinery and personnel to and from the vessel and schedule work.
- Those conducting NSF-funded research generally incur no costs to use machinery.
- Others **generally** pay a “day rate” and the cost of freight.

Spoolers → Mooring Winches

TSE Spooler

- A hydraulic utility line spooler
- High maintenance & repair costs



Hawboldt Mooring Winch

- An electric marine winch
- Easy to use
- Stronger, better pull



Hawboldt Mooring Winch



- In sea trials users found it rendered line when lifting suspended loads.
- Complaints that the control lever was broken.
- Complaints the winch wouldn't pay out/in on the first try.
- A fault in the main motor drive rendered the winch inoperable.
- The dynamic braking resistor isn't waterproof.

Dated Winches → Modern Winches

SeaMac and Poseidon Winches

- Increasingly unreliable
- Not Appendix A/B compliant



Hawboldt Light-Duty Winch

- Appendix A & B compliant
- Accommodates 1/4" – 3/8" line
- Stronger, better pull



Hawboldt Light-Duty Winch



- Loud cooling fan.
- Fragile protruding things.
- Trace metals.

2020-2021

- 11 Different Clients: NSF, DARPA, NIWC, ONR, OOI, OSU, SAIC, SEA, UCSD, USGS, and UW.
- Deployed Aboard 11 vessels: BOLD HORIZON, MARCUS G. LANGSETH, NEIL ARMSTRONG, OCEANUS, REUBEN LASKER, ROBERT GORDON SPROUL, ROGER REVELLE, SALLY RIDE, SIKULIAQ, THOMAS G. THOMPSON, TRESHNIKOV.
- Spooling Services Provided to 7 vessels: OCEANUS, ROBERT C. SEAMANS, ROBERT GORDON SPROUL, ROGER REVELLE, SALLY RIDE, SIKULIAQ, THOMAS G. THOMPSON.

Engineering Projects 2020-2021

- Replaced the Markey DEYSH-3 levelwind aboard ROBERT GORDON SPROUL.
- Created hydraulic diagrams for ROBERT GORDON SPROUL.
- Created a new fire plan for ROGER REVELLE.
- Began designing a new turning sheave for ROGER REVELLE's stbd. crane (for coring).
- Helped the SIO RESTECH group design a new CTD cart.
- Evaluated ROGER REVELLE's deck to determine limits for a portable crane.
- Evaluated ROGER REVELLE's deck with the GEOTRACES system (port side).
- Made test procedures for handling systems on R. REVELLE, R. G. SPROUL, and S. RIDE.
- Tested the side-handling systems on ROGER REVELLE and SALLY RIDE.

Contact Us

Capt. Eric Buck, Manager
(858) 534-5568
ebuck@ucsd.edu

Aaron E. Davis, PE, Engineer
(619) 251-6368
aed001@ucsd.edu

#NSF winch pool

