RVTEC 2021

NSF WEST COAST WINCH POOL
OPERATED BY
SCRIPPS INSTITUTION OF OCEANOGRAPHY

NSF

SCRIPPS INSTITUTION OF OCEANOGRAPHY
SAN DIEGO, CALIFORNIA
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.
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 ORGANIZATIONS: 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.
- DESIGNED A RADOME MOUNT FOR ROBERT GORDON SPROUL.
CONTACT US

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