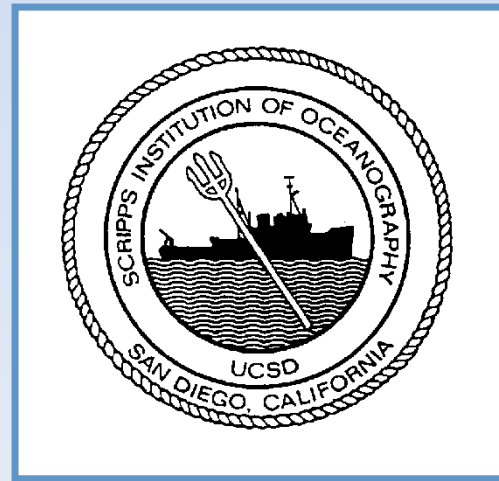


RVTEC 2016

NSF West Coast Winch Pool
operated by
Scripps Institution of Oceanography



Winch Pool Mission

- To provide an inventory of oceanographic winches (etc.) for shared use.
- To keep the inventory in good repair, in compliance with applicable standards (CFR, RVSS).
- To modify the composition of the inventory to reflect the needs of end-users.
- To provide technical support: maintenance, repairs, design, engineering, fabrication, Q&A.

How the Pool Works

- Science parties conducting NSF-funded research generally incur no costs (freight included)
- Others pay a “day rate” and the cost of freight
- Routine maintenance paid for with day rates
- All other expenses funded via NSF grant



Funding

- Routine Maintenance
 - Covered by the day rate for each winch
- Logistics (Shipping and Crane Service)
 - Expenses estimated annually and funds requested
- Engineering Services
 - Engineering design, analysis, MCD development, etc.; generally included in our annual proposal
- Upgrades & Repair
 - Major overhaul/repair items not part of routine maintenance; called-out separately in proposals
- Capital Equipment Purchases
 - Generally big ticket items; called-out separately in proposals

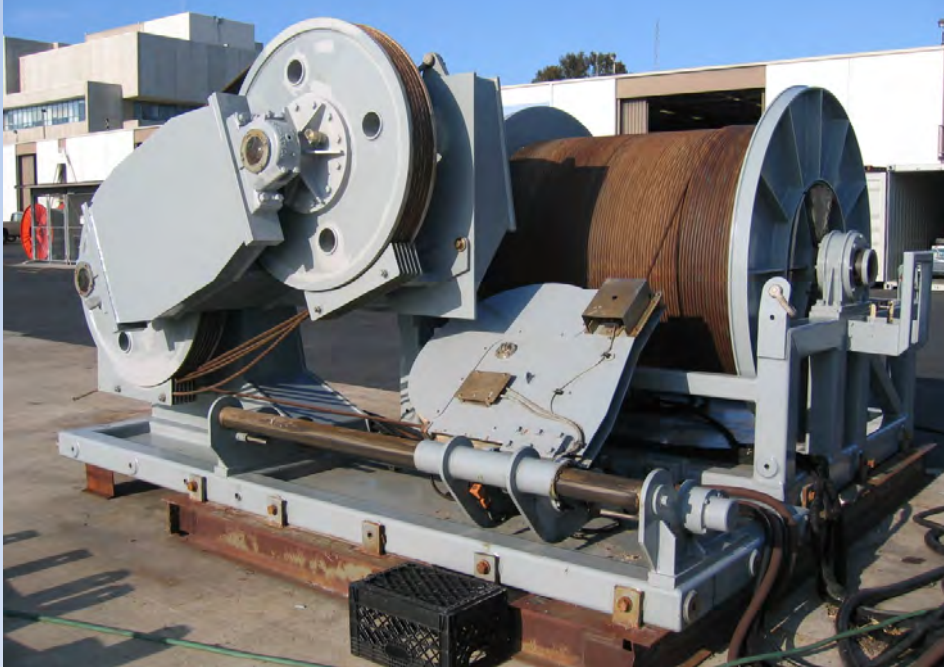
Personnel

- Management and Quality Control
 - Pool Manager: Capt. Eric Buck (part time, 20 %)
 - Winch/Wire Engineer: A. Davis, PE (full time)
- Mechanical
 - WP Technician: Lorenzo McCoy (as required)
 - Attends vessels for mob/de-mob of Dynacon deep sea traction winch
 - Occasional travel supporting other winches
 - Spooling services

Winch Pool Inventory (NSF-owned)

- 1 Dynacon traction winch (DTW)
- 1 Dynacon spooling winch (DSW) *New*
- 1 Lebus mooring capstan
- 3 TSE mooring spoolers
- 3 sets fiber optic slip rings

Winch Pool Inventory

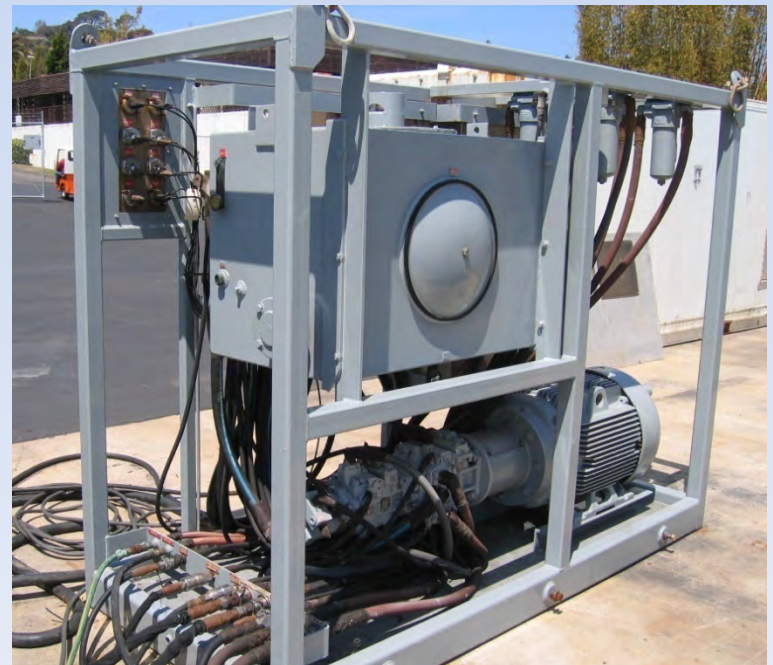


Dynacon Traction Winch

August 2014-Sept. 2016:
leased to Fugro Pelagos to search for MH370.

Undergoing maintenance. Available soon.

(w/.680 cable. Remote operating station not shown.)



Winch Pool Inventory

NEW!

Dynacon Spooling Winch

Formerly MBARI "MOOS" winch.

A mooring spooler.



(Remote operating station, HPU not shown)

Winch Pool Inventory



Lebus Mooring Capstan

Heavily subscribed by OOI & Others
(Remote operating station, wireless remote not shown)

Winch Pool Inventory



3 TSE Mooring Spoolers

Our most highly requested asset.

Note: These are not oceanographic winches.

SIO Inventory

- 1 TSE mooring spooler
- 2 Light-duty winches (SeaMac, Poseidon)
- 2 Line spoolers (1960's vintage)
- 3 Line Tensioners
- Portable Crane
- HPU
- 1 SIO Tensioning Spooler *New*

SIO Inventory



SeaMac, Poseidon Winches

Highly requested.

Reliable, but long in the tooth, not Appendix A&B friendly.

A replacement is in the works (funding requested).

SIO Inventory

Line Spoolers & Tensioners



Note: most of this equipment is 1960's vintage; no capability for precise level winding or tensioning.

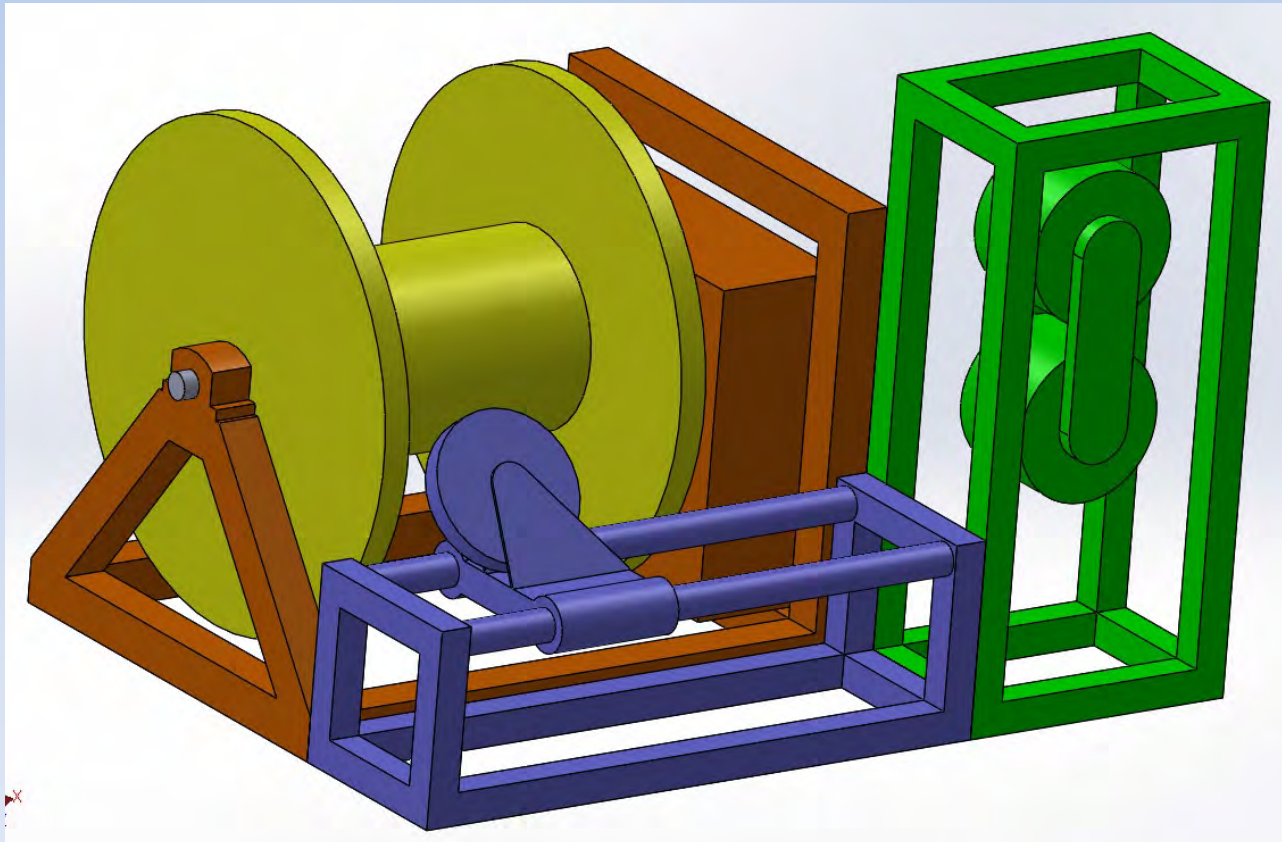


SIO Tensioning Spooler



We've received funding from NSF under the Shipboard Scientific Support Equipment (SSSE) program for a tensioning spooler suitable for oceanographic wire and cable. Markey Machinery of Seattle Washington won the competition to design and build it. Currently conducting acceptance trials.

SIO Tensioning Spooler



Concept

SIO Tensioning Spooler



FAT
2016

Current Projects

- R/V Atlantis, Revelle, Sally Ride, Thompson(?), West-Coast Winch Pool:
 - Appendix B compliance.
- Tools for Appendix B compliance:
 - Tools for self-assessment
 - Templates
 - Examples
- Appendix B training.

Current Challenges Facing the Pool

- Maintaining a high state of readiness on a greater amount of equipment, providing high quality of service to a greater number of customers, with less maintenance staff.
- Providing engineering services to a broader population.
- Paving the way for fleet-wide appendix B compliance.

Contact Us

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#NSF winch pool