

UNOLS East Coast Winch Pool

2022 RVOC Meeting



WOODS HOLE
OCEANOGRAPHIC
INSTITUTION

Ready for 2022



Woods Hole, Massachusetts



| Our Staff



Brian Guest
Manager



Jamie Haley
System
Maintenance



Josh Eaton
Engineering

Christopher Griner
Wire winding and Lubrication

Jim Fluke
Wire Winding Operations

What We Do

- Provide portable overboarding systems to vessels and the scientific community
- Maintain these systems in proper working order
- Provide shipping and logistics
- Provide engineering solutions and consultation
- Provide wire winding services for UNOLS vessels
- In port setup and breakdown as needed
- Work with vendors for new system specifications

Equipment

- 2 ea. MacArtney MASH2K
- 2 ea MacArtney MASH4K
- 2 ea Dynacon 10030 Light duty winches
- 1 ea InterOcean light duty trace metal winch
- 1 ea Hawboldt SPRE-2530S light duty with 1400 meters of .322 EO
- 1 ea Hawboldt SPR-2648 medium duty (at U Delaware)
- 1 ea Hawboldt Medium duty SPRE - 3464
- 1 ea Dynacon Medium duty (GEOTRACES)
- 1 ea Portable A-frame (GEOTRACES)
- 2 ea TSE mooring spooler
- 1 ea Sea-Mac 1300 lb SWT ultra light

Equipment



TSE wire tension spooler
Manual brake resistance and diesel haul in.



Pine Hill wire tension spooler
Electrohydraulic tension control and haul in.

Equipment

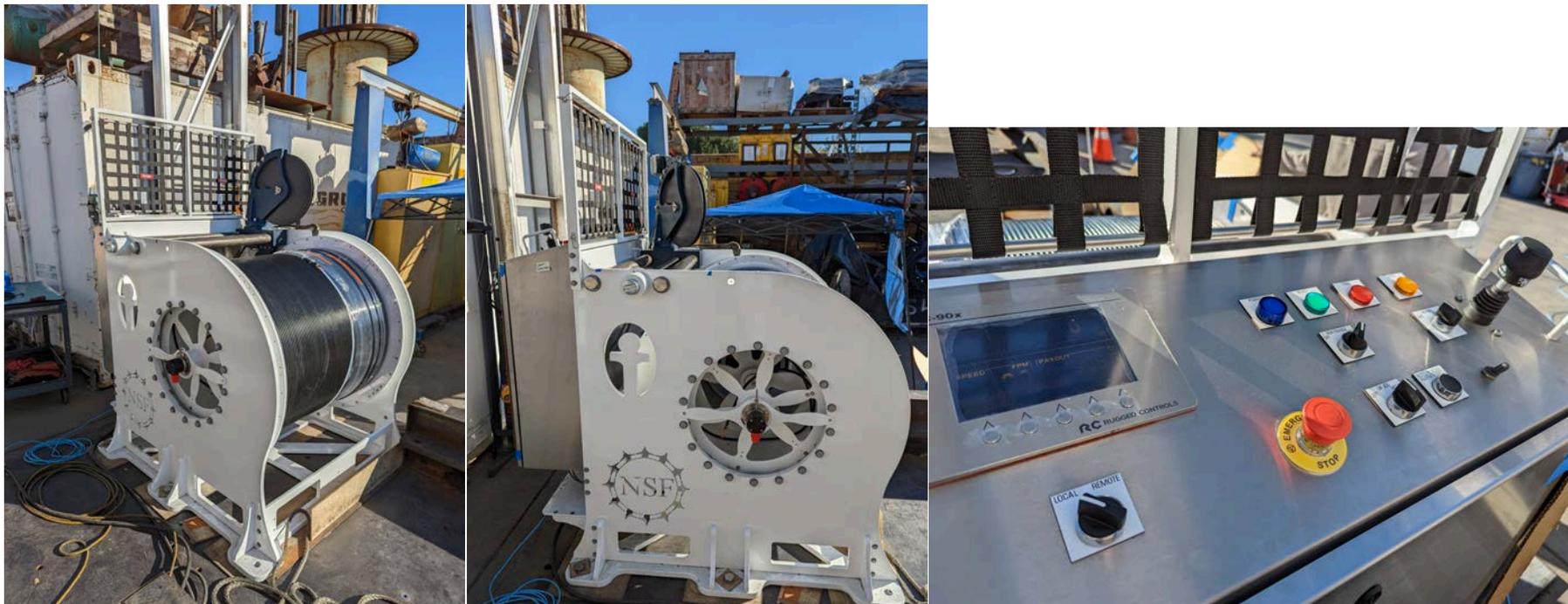
- One ½” Harken Block
- Two .322 Harkin Blocks
- One 36” diameter 0.681 Block
- One 0.322 Trace Metal Sheaves
- One Wide Groove Metering Shreve
- One ¼” Trace Metal Sheave
- One 48” diameter 0.681 Sheave



Equipment - Other

- Two Light Duty Turn Tables
- One Medium Duty Turn Table
- One 25K and one 50K Load Cell
- One Quick Check Tensiometer
- 2000 sq ft Winch Pool Shop
- One 3 Phase 220 VAC to 480 VAC Transformer
- Multiple Slip Rings
- 2 ea Kongsberg Motion Reference Unit (MRU)

Newest Additions



InterOcean Systems Trace Metal Winch

With active heave control and 3000 meters of synthetic strength member.

Active Heave Control Test



Turntable Demonstration



ECWP Website

Woods Hole Oceanographic INSTITUTION UNOLS East Coast Winch Pool

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About us

The [UNOLS](#) East Coast Winch Pool was developed to facilitate the science based use of winches. The East Coast Winch Pool is part of the [UNOLS Equipment Pool Program](#). We maintain, prepare, and repair portable winches used in the fleet. The majority of our funding comes from the [National Science Foundation](#).

Types of Winches

Heavy Duty

These winches are large and are for large diameter cables. They are multiple pieces.

Medium Duty

These winches are relatively large and are best suited for larger diameter cables or very long lengths of smaller cable. They are capable of holding 2000 meters of 0.5 inch cable. They can be used with a motion reference unit and have active heave compensation. They are also capable of operating with render and render recover modes.

Light Duty

These multipurpose winches are best suited to small diameter cables. They can level wind any diameter cable and are suitable for most applications. For example, they are capable of holding 2000 meters of 0.322 cable. They can be used with a motion reference unit and have active heave compensation. They are also capable of operating with render and render recover modes.

Ultra-light Duty

These winches are the smallest least powerful winches available. They are used for light loads.

Mooring Spooler

These winches are used in mooring operations.

Base Plate

The East Coast Winch Pool has standard base plates and turntables



Equipment Request Form

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Request Form

Requestor*: first last

PI*: first last

Institution Name:

Email Address*:

Telephone Number(s)*:

Agency: or other agency:

Ship: Cruise:

Mobilization date (mm/dd/yyyy): Mobilization port:

Demobilization date (mm/dd/yyyy): Demobilization port:

Weight of gear (lbs):

Expected tension (lbs):

Wire used: Wire length (m):

Use description:

Comments:

I'm not a robot  reCAPTCHA
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Current Schedule

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UNOLS Winch Pool Schedule

■ = equipment in-use

Start month: Jan Start year: 2022 End month: Dec End year: 2022 Go

Inventory	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
MASH4K-1								
MASH4K-2								
MD-1								
MD-2								
MD-3								
MD-4								
LD-1								
LD-2								
LD-3								
MASH2K-1								
MASH2K-2								
MS-1								
MS-2								
ULD-1								
Liethiser								
Pine								
TSE								
HD-2								
Large								
Small								
Turn Table								
#20								
#21								
18" Metering Block								
Metering								
MRU 1								
MRU 2								

Future Plans

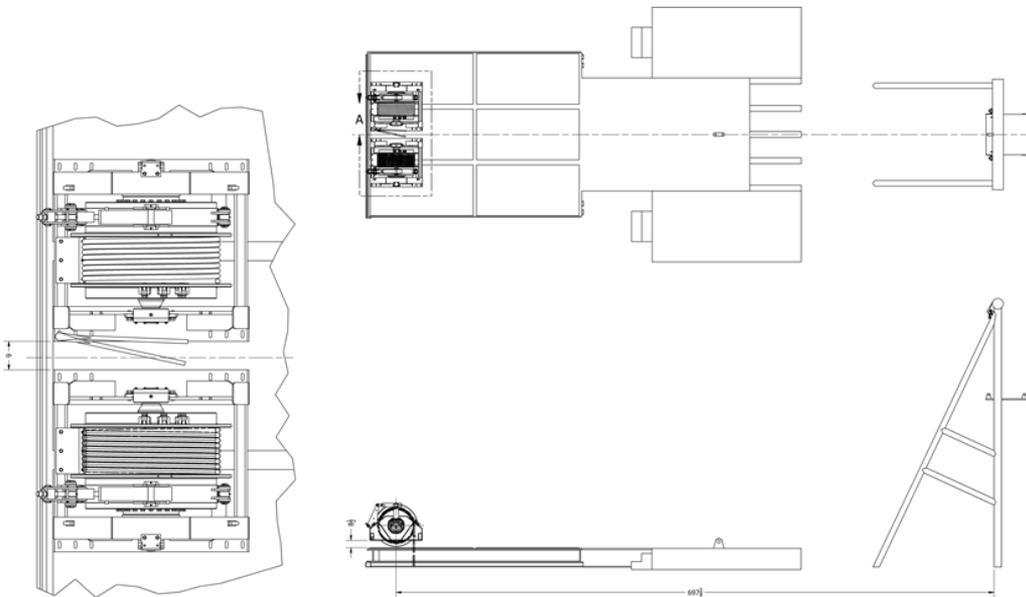
- Increase shop space



Future Plans

- Add dynamic testing capability

Photo and drawing courtesy of Hawboldt Industries



Future Plans

- Hoping to add two ultra light duty winches to inventory
- Asking WHOI to enlarge shop door to accommodate large forklift
- Requested 7 ton overhead hoist upgrade

Current Active Deployments

- Ultra light Seamac winch is on the RV Savannah
- Mooring spooler 1 on RV Armstrong for OOI work
- Mooring spooler 2 is leased to Canadian MFS on RV Atlantis
- MASH2K-1 just arrived in Seward, AK for the RV Sikuliaq
- NOAA is borrowing a .68 block for a scallop survey
- Pine Hill being used to remove HiCo and replace with .68 on RV Armstrong May 1
- Pine Hill going to Newport for .68 wire replacement on Okeanos Explorer for NOAA

Questions?



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