

UNOLS East Coast Winch Pool

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Who is the ECWP?

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Jamie Haley

Maintenance , logistics, testing
and shop operations



Who is the ECWP?

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Josh Eaton

Engineering, upgrades, modifications,
Appendix A & B compliance
User Training



Who is the ECWP?

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Brian Guest

Management, maintenance, supplies
and records



Who is the ECWP?

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There are many others that are involved with ECWP operations.

Al Suchy and Dutch Wegman – Wire spooler scheduling for UNOLS vessels

Matt Heintz – Rapp Hydema (Jason) scheduling and maintenance.

Doug Handy – Crane work and wire spooling

Christopher Griner – Wire Spooling and lubrication

Faith Hampshire – Administrative support

Dave Fisichella – Management and supervision

Our Mission

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- Established in 2009 as a single point of contact for overboarding systems.
- Act as a center of expertise in winch use, maintenance and engineering support.
- To provide portable winch systems in support of oceanographic research
- Provide expertise in tension member spooling for both portable and shipboard winches.

ECWP Winch Assets

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- 2 ea. MacArtney MASH2K (one with MRU)
- 2 ea MacArtney MASH4K
- 2 ea Dynacon 10030 Light duty winches
- 1 ea Hawboldt Medium duty
- 1 ea Dynacon Medium duty (GEOTRACES)
- 1 ea Rapp Hydema Heavy duty (Jason)
- 1 ea TSE mooring spooler
- 1 ea Sea-Mac 1300 lb SWT

Non Winch Assets

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- Three tensioning systems
- Turntable mounting systems (designed by Haley and Eaton)
- Metering and non metering blocks
- Standard and fiber optic slip rings
- Winch baseplates
- Assorted tension members
- Dynamometers
- 208 to 480 VAC step-up transformer

Non Winch Assets

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MASH2K mounted on a turntable



WHOI Facilities

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Access to a wide range of shop services and resources that are available at WHOI.

- Complete machine shop
- Welding and fabrication shop
- Electricians
- Carpenter Shop
- Shipping Department
- Warehouse

Handling Heavy Equipment

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Transporting assets is handled with a wide range of equipment at our disposal. All are maintained at WHOI's expense.

- Hyster 20,000 lb forklift
- Hyster 34,000 lb forklift
- Kalmar 28,000 lb forklift
- Multiple 6000 lb forklifts
- Crane 20 ton
- Crane 10 ton
- Flatbed trailer

Winch Pool Shop

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The shop was designed specifically for the winch pool with the purpose of maintaining, testing and storing winch systems.



Winch Pool Shop

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- We have the ability to handle large winch systems
- Two 20 ft side opening containers for storage
- Large outside area will accommodate spooling and loading of trucks.
- Three pallet racks for inside storage
- Enough square footage to accommodate up to 10 winches for inside storage and repair.
- Carpenter shop, warehouse, stockroom and shipping department within 100 yards

Winch Pool Shop

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Features include 5 Ton overhead hoist



Winch Pool Shop

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Two foot on center bolt down pad allows us to secure winches while spooling tension members and conducting pull test.



Winch Pool Shop

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- 4 Ton deadman for static testing
- Wired for 480 VAC power
- Light machine tools
- 12 ft high rollaway door for ease of access
- Hydraulic press for custom hydraulic hose fabrication
- Ample space for spare parts, paints and other supplies

Web Site

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In 2012 the ECWP established a web site, thanks in a large part to the efforts of Josh Eaton, to allow users to request equipment for their work, provide information about our equipment and to improve asset management. This has proven to be a real asset to the ECWP.

Web Site



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Front Page

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UNOLS East Coast Winch Pool

Home Request Form Inventory Schedule Contact Us



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 for the winches.

Wire Spooler

Wire spoolers are used to spool cable onto winches. Contact the WHOI Port Office for scheduling.

Sheaves

Sheaves in the pool available to users



How to Schedule

Use the schedule [request form](#), or call the winch pool.

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Request Form

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UNOLS East Coast Winch Pool

AUTHORIZED USERS

Home Request Form Inventory Schedule Contact Us

Request Form

Requestor*: first last

PI*: first last

Institution Name:

Email Address*:

Telephone Number(s)*:

Agency: NSF or other agency:

Ship: Cruise:

Mobilization date (mm/dd/yyyy): 04/22/2015 Mobilization port:

Demobilization date (mm/dd/yyyy): 04/22/2015 Demobilization port:

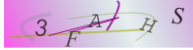
Weight of gear (lbs):

Expected tension (lbs):

Wire used: Wire length (m):

Use description:

Comments:



Please type what you see (case sensitive):

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Web Site

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Request Information

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UNOLS East Coast Winch Pool

WINCH REQUESTS

Request form

Winch requests

Users

Wire designs

Winch catetories

Lookup table

Inventory

Schedule

Archive

Edit Winch Pool Request | [All requests](#) | [View](#) | [Edit](#) | [Schedule](#) | [Delete](#) |

Requestor: Kris Newhall

Email:

Telephone number:

Institution Name:

Agency:

Grant number:

Weight of gear (lbs):

Expected tension (lbs):

Request status:

Principle investigator:

Chief scientist:

Ship:

Cruise number:

Cruise leg:

Wire used:

Wire length (m):

Mobilization

Port:

Days at sea:

Leaving pool:

Arriving at port:

Mobilization date:

Demobilization

Port:

Demobilization date:

Leave port:

Return to pool:

Archived

Archived: ☒ No ☐ Yes

Comments

Use description:

Comments:

Submit

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DATE

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Review of Request

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UNOLS East Coast Winch Pool

WINCH REQUESTS

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Winch Pool Requests | **All requests** | [Open](#) | [Review](#) | [Approved](#) | [Denied](#) | [Canceled](#) | [Deleted](#) |

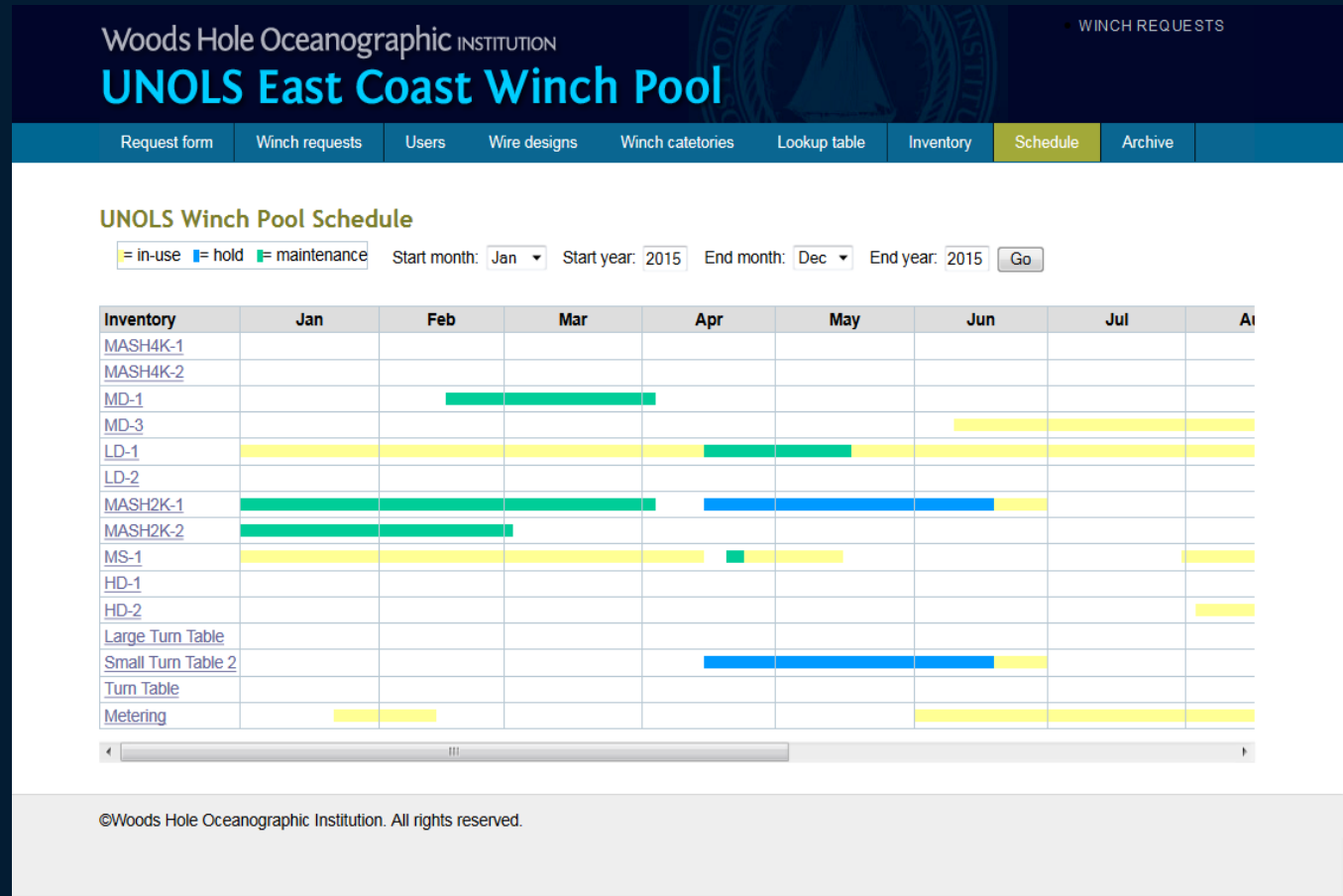
Request	Requestor/PI	Institution /Grant number	Ship	Mobilization	Demobilization	Status	Assignment
View/Edit Schedule	Kris Newhall Robert Weller	WHOI 42011401, 1345534440000	Atlantis	Dec-9-2014	Apr-14-2015	Approved Final	MS-1
View/Edit Schedule	Joshua Eaton Fred Thwaites	WHOI	Alucia	Dec-22-2014	Mar-31-2015	Approved Final	LD-1
View/Edit Schedule	Edward Cassano Edward Cassano	Pelagic Research Services	R/V McCALL	Jan-22-2015	Feb-8-2015	Approved Final	Metering
View/Edit Schedule	Steve Murphy Al Plueddemann	WHOI	R/V Atlantis	Apr-28-2015	May-9-2015	Approved Final	MS-1
View/Edit Schedule	Bill Fanning Samantha Joye	URI	ENDEAVOR	May-10-2015	Jul-2-2015	Approved None	
View/Edit Schedule	Stephen Murphy John Kemp	WHOI	R/V Sikuliaq	May-23-2015	Nov-1-2015	Review None	LD-1
View/Edit Schedule	Gregory Cutter Gregory Cutter	Old Dominion University	Healy	Jun-10-2015	Nov-6-2015	Approved Final	MD-3
View/Edit Schedule	Andrew Barclay Spahr Webb	LDEO	Revelle	Jun-19-2015	Jun-30-2015	Approved Final	MASH2K-1 Small Turn Table 2
View/Edit Schedule	Kris Newhall Robert Weller	WHOI	Atlantis	Aug-2-2015	Oct-4-2015	Approved None	MS-1
View/Edit Schedule	Catherine Offinger Scott Noonan		THOMPSON	Aug-10-2015	Aug-26-2015	Approved Final	HD-2
View/Edit Schedule	Steve Pike Ken Buesseler	WHOI	Healey	Aug-15-2015	Nov-1-2015	Approved Final	Metering
View/Edit Schedule	Timothy Deering Jeffrey Rogers	University of Delaware	R/V HUGH R SHARP	Aug-24-2015	Sep-5-2015	Canceled	N/A
View/Edit Schedule	Catherine Offinger Kate Moran		THOMPSON	Aug-27-2015	Sep-15-2015	Approved Final	HD-2
View/Edit Schedule	Catherine Offinger Jeffrey McGuire		THOMPSON	Sep-16-2015	Sep-25-2015	Approved Final	HD-2
View/Edit Schedule	Catherine Offinger Douglas Toomey		Thompson	Sep-26-2015	Oct-13-2015	Approved Final	HD-2
View/Edit Schedule	Andrew Barclay Douglas Toomey	LDEO	Thompson	Sep-27-2015	Oct-13-2015	Approved Final	MASH2K-1 Turn Table
View/Edit Schedule	Steve Murphy Al Plueddemann	WHOI	R/V Atlantis	Oct-10-2015	Nov-2-2015	Approved Final	MS-1
View/Edit Schedule	Eugene Domack Eugene Domack	Univ. South Florida, College of Marine Science	on ice	Nov-1-2016	Mar-31-2017	Review None	
View/Edit Schedule	Brian Hogue John Toole	WHOI		Apr-1-2017	Apr-30-2017	Review Partial	MS-1
View/Edit Schedule	Brian Hogue John Toole	WHOI		Oct-1-2017	Oct-30-2017	Review Partial	MS-1

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Scheduling



Web Site

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Clicking on the schedule provides us with specific information about the winch and scheduled task. All information is retained in an archive.

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UNOLS East Coast Winch Pool

WINCH REQUESTS

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Winch Pool Inventory

| List all | View | Add | Edit | Show schedule |

Inventory

Light Duty: MASH2K-1

Manufacturer: MacArtney

Manufacturer serial: H11151 V35479-1

Empty weight (lbs): 3750

Width (in): 76.8

Drum diameter (in): 18.0

Drum width (in): 28.7

Tension monitoring: Yes

Safe working load (lbs): 3360

Comments:

Base plate compatibility: None - Has mounting holes

Documents: [Maximum Capability Document MASH 2000 - Rev. B.PDF](#)

Status: available

Model: MASH2000

WHOI property tag: 114783

Length (in): 53.2

Height (in): 53.2

Roller diameter (in): 5.9

Flange diameter (in): 27.5

Payout monitoring: Yes

Remote control: Yes

Tension member compatibility: none

Images: [MASH2K.jpg](#)

History

Request	Status	Start	End	Comments	View Add to schedule
Ted Koczynski	In-use	Jun-29-2012	Sep-23-2012		[Edit] [Remove]
Daryl Swensen	In-use	Oct-24-2012	Nov-19-2012		[Edit] [Remove]
	hold	Sep-24-2012	Oct-23-2012	At OSU	[Edit] [Remove]
	maintenance	Nov-19-2012	Dec-3-2012	Post Cruise	[Edit] [Remove]
Andrew Barclay	In-use	Jun-14-2013	Jul-10-2013		[Edit] [Remove]
Andrew Barclay	In-use	Aug-27-2013	Sep-11-2013		[Edit] [Remove]
	hold	Aug-4-2013	Aug-24-2013	Hold in Newport, OR	[Edit] [Remove]
	hold	Jul-12-2013	Jul-16-2013	Ship and Hold in Newport	[Edit] [Remove]
Michael Jakuba	In-use	Feb-24-2014	Mar-17-2014	.322 EOM	[Edit] [Remove]
Andrew Barclay	In-use	Jun-2-2014	Jul-10-2014		[Edit] [Remove]
Andrew Barclay	In-use	Sep-1-2014	Oct-13-2014		[Edit] [Remove]
Andrew Barclay	In-use	Sep-27-2015	Oct-13-2015		[Edit] [Remove]
	maintenance	Oct-13-2014	Dec-12-2014		[Edit] [Remove]
Andrew Barclay	In-use	Jun-19-2015	Jun-30-2015		[Edit] [Remove]
	maintenance	Jan-1-2015	Apr-3-2015	Level wind guides	[Edit] [Remove]
	hold	Apr-15-2015	Jun-19-2015	Shipping to NZ	[Edit] [Remove]

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Current Activities

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- Working to improve communication with WCWP.
- Establish standardized testing and practices with WCWP.
- Working with vendors to improve systems
- Establish a more complete formal testing procedure specific to each winch.
- Development of a new winch design using internal WHOI grant (Josh Eaton and Jamie Haley).
- Development of training protocols for users.
- Establish a post cruise assessment report for assets.

Wish List

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In order to meet the necessary testing requirements a system for dynamic testing is desirable.



Wish List

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Due to the high demand for mooring spoolers, we would like to add one or more TSE spoolers and/or a Lebus traction head style winch (a favorite of one of our mooring groups at WHOI). Another possibility will be the Eaton/Haley designed winch once available. OOI has monopolized our TSE in 2015 and other request (all non NSF) were referred to the WHOI Rigging Shop and URI.

Wish List

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A few additional items that would allow us to respond to request more efficiently and limit the amount of work sent to the shops or time spent looking for equipment to borrow.

- Add to our shop tools with things like a drill press, sand blaster and additional hand tools.
- Increase our inventory of spare parts on hand. Some parts have very long lead times.

East Coast Winch Pool

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Overall, utilizing the various resources at WHOI, we are able to provide the scientific community and UNOLS vessels with overboard handling systems in excellent condition, expert wire winding, engineering support, training and advice as well as the logistics to get these systems delivered anywhere in the world that they are needed.