

# ropecordNEWS

## THE CORDAGE INSTITUTE

Working on behalf of the Cordage, Rope and Twine Industry since 1920

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## DMF AND OFFSHORE LOBSTERMEN PURSUING BETTER SINK ROPE

Better rope may be the solution that will allow fisheries and whales to co-exist. Many fishermen have already replaced their “floating” lines, which connect strings of traps together, with heavier sinking line in order to prevent large whale entanglements. While this change is great for endangered and threatened whales, it is a burden on the industry. Fishermen have found accelerated wear caused by contact with the sea floor. Sinking groundline is a year-round requirement in Cape Cod Bay and seasonal in some other areas.

Within a few years, most fishermen along the eastern seaboard may be required to fish sinking lines under soon-to-be announced federal regulations. The proposed amendment to federal Large Whale Take Reduction Plan by NOAA recommends the wide-scale use of non-buoyant groundlines as a means to reduce the risk of entanglement of large whales.

DMF has collaborated with the Atlantic Offshore Lobstermen’s Association and cordage companies to identify preferred lines that can withstand the rigors of fishing lines that rest on the bottom. The premature failure of non-buoyant groundline is a problem for all lobstermen because of degradation of the line caused by sediment embedded in the fibers.

All lobstermen have reported this problem to some degree but the offshore lobstermen’s problems are far worse than their inshore counterparts. Deep water lobster trap hauling results in extreme strain on rope as the string of traps is brought to the surface through the water column. When rope is under strain it twists as it tightens and any sand within the rope can cut the fibers within the strands - from the inside out.

The first phase of this collaborative project was just completed. Over the past two years, a unique rope-testing machine was fabricated to simulate wear on groundline and allow comparisons of durability among different brands used by the offshore industry. This machine allows us to simulate a few years worth of hauling in just a few hours in the lab. The report can be viewed at: [http://www.mass.gov/dfwele/dmf/programsandprojects/nfwf\\_report\\_on\\_aola\\_study.pdf](http://www.mass.gov/dfwele/dmf/programsandprojects/nfwf_report_on_aola_study.pdf).

The next phase of this project will use the expertise of an international consultant, Hank McKenna, President of Tension Technology International (TTI). Hank has a long career in the area of textile chemistry and has advised many industries on rope design, including the offshore oil industry.

Over the next year, TTI will help us learn more about rope failure in the commercial fishing industry. This will include in-depth examination of the factors influencing rope damage and rope failure in actual fishing operations and then compare worn lines to those subjected to our rope-testing simulator. TTI will perform microscopic visual examinations and tensile tests of non-buoyant groundlines used in the industry and by our machine. Also, TTI will advise us on the variability in the performance among rope products. We want to ensure the simulated wear is comparable to wear in the commercial fisher.

By evaluating the rope fibers and rope interiors, they will gain knowledge about the causes of line fatigue and failure, including determinations of internal and external wear. In addition TTI will conduct an analysis of the presence of sediment and attempt to quantify sediment density. In the end, we hope to provide guidance to fishermen to find durable rope that meets their needs and for cordage companies to help them manufacture a better rope to meet these new challenges. We hope this project will help fishermen choose the proper rope for their groundlines that stands up to the elements, is affordable, and stays out of the way of swimming and feeding whales.

If you have questions about the results or the continued progress of the project, contact Dick Allen [rballen@cox.net](mailto:rballen@cox.net), Erin Burke [erin.burke@state.ma.us](mailto:erin.burke@state.ma.us), or AOLA Executive Director Bonnie Spinazzola [bonnie@offshorelobster.org](mailto:bonnie@offshorelobster.org).

*Funding for the project was provided by the National Fish and Wildlife Foundation and National Marine Fisheries Service.*

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## LEHIGH GROUP PURCHASES CONSUMER CORDAGE BUSINESS OF WELLINGTON CORDAGE, LLC

The Lehigh Group and Wellington Cordage, LLC are pleased to announce that Lehigh has purchased the assets of the Wellington consumer cordage business, including inventory, equipment, and the Wellington brand. In conjunction with this, Wellington Cordage has changed its name to Fibrex and will remain a supplier to Lehigh as well as to its commercial customers.

The Lehigh Group is a worldwide supplier of diverse but related consumer products (including cordage) to the home improvement, hardware, and mass market channels under the brand names Lehigh, Crawford, Storehouse, Ultra-Hold and M&K. The Lehigh team is very pleased to add the Wellington line of quality products to this portfolio, and have the opportunity to assume servicing the notable retail and wholesale customers currently purchasing Wellington consumer cordage products. Lehigh expects to provide all of its customers, current and new, with the very high levels of service, dependability, category management, and product innovation for which we are well known.

Because of its history and wide-spread recognition by consumers, Lehigh plans to continue to use Wellington's well-regarded brand. Day-to-day points of contact for Wellington consumer customers, representatives, and suppliers will remain the same until further notice. On a go forward basis, the operating relationship between companies has been configured to ensure transparency to customers and total continuity of supply.

The commercial and industrial business of Fibrex (formerly Wellington) is not affected by the agreement with Lehigh. Fibrex will continue to operate and service its commercial customers from its manufacturing facilities in Merida, Mexico and distribution center in Madison, Georgia, and existing points of contact for customers, representatives and suppliers will remain unchanged until further notice.

## LOOKING FOR A SIX-INCH WIRE ROPE SLING?

In Texas you tend to think big, and Holloway Houston (HHI) thinks bigger than most. It recently completed a six inch diameter wire rope sling, the biggest ever.

"Last month, using our new 4000-ton swaging machine, we fabricated a six inch diameter, flemished and swaged, wire rope sling. As far as I know, this has never been done before," says Blake Michell, a spokesman for Holloway Houston, Inc., Houston, Texas.

HHI can now build and swage single-leg slings up to six inch diameter, with a capacity in excess of 250 tons with a design factor of 5:1.

*Wire Rope News & Sling Technology, October 2005*

## CALL FOR PAPERS INTERNATIONAL ROPE TECHNOLOGY WORKSHOP 2006

The 6<sup>th</sup> International Rope Technology Workshop will be held at Texas A&M University, College Station, Texas on March 29 and 30, 2006. The Workshop is being organized by the Marine Technology Society Ropes and Tension Members Committee and the Texas A&M Offshore Technology Research Center.

The workshop will consist of informal and formal presentations on a variety of topics related to fiber and wire ropes, cables, chains, composite rod and other tension members.

You are invited to give a talk, demonstration or video at the workshop. You don't need to prepare a paper. Only your abstract will be published. You may hand out printed material.

To propose your presentation, prepare a brief abstract or description of the proposed talk, demonstration or video. Send this, along with your name, affiliation, phone number, and postal address to [MTS-Ropes@att.net](mailto:MTS-Ropes@att.net). Times allotted for presentations will vary, either 15 minutes, 30 minutes, or 45 minutes, including questions and discussions. Please indicate your preferred time.

Primary consideration will be given to those proposals submitted by February 1. Proposals must be received by March 1st to be considered for the preliminary program. Proposals received after that date will be considered only if there is still space in the program.

A preliminary program, listing the selected presentations, will be published and sent to registrants on or about March 6.

Information on the 6<sup>th</sup> International Rope Technology Workshop is posted at [www.mtsociety.org/pro\\_committee/rt6th\\_IRTW](http://www.mtsociety.org/pro_committee/rt6th_IRTW). For more information, contact Evan Zimmerman at 832-252-7100 ext. 16, or John Flory at 973-267-0871, or send email to [MTS-Ropes@ATT.net](mailto:MTS-Ropes@ATT.net).

## HURRICANE DISASTER RESCUE ASSISTANCE

In the week after Hurricane Katrina hit the United States, 20 Navy ships, 360 helicopters and 93 airplanes were deployed to the Gulf Coast area. In addition, 17,000 active duty personnel were on the ground supporting National Guardsmen, Air Force and Army units, including elements of the 82<sup>nd</sup> Airborne division, boosting the total military presence to 60,000.

Seventy-five thousand were evacuated from the region, with 14,000 rescued from imminent danger and 5,500 treated in new emergency facilities. Eleven million meals and 5 million gallons of drinking water were also provided.

The U.S. Coast Guard's response to Hurricane Katrina was the single largest search and rescue operation in its history. Coast Guard crews rescued and evacuated more than 33,000 people in the storm's wake (12,000 by helicopter). The Coast Guard provided 43 helicopters, 25 cutters, eight airplanes and many smallcraft,

*Continued on next page...*



## IT'S A GOOD TIME TO BE IN DRILLING

The political heat has been turned up on the likes of Exxon Mobil, Shell and Chevron as high energy prices persist and record profits roll in.

But behind the big names of Big Oil, a second string of energy companies – the ones that drill oil and natural gas wells – are making record profits, too.

Drilling companies, including Nabors, Noble and Global Santa Fe, that are hired to probe for new oil reserves around the world have steadily jacked up their rates this year – a trend that is expected to continue in 2006 and probably into 2007.

The white-hot rig market is snagging ever-growing margins because more and more oil companies are drilling again with crude oil prices above \$55 barrel. Hurricanes Katrina and Rita also took out nine rigs in the Gulf of Mexico, but some were scheduled to leave anyway. And projects in Saudi Arabia, Qatar, Nigeria and Angola are ramping up, putting pressure on the global supply of drill equipment.

Companies committed to exploring for new resources are ponying up serious money. For example, Houston-based Transocean, the world's largest offshore drilling company, has racked up a 150 percent gain in profits so far this year, earning \$564 million - or \$1.68 per share - on revenues of \$2.1 billion in the first nine months of 2005.

"Our industry is facing significant challenges. Costs, such as those for labor, rig maintenance and insurance, are escalating," CEO Robert Long said when the company reported earnings to the U.S. Securities and Exchange Commission earlier this month.

The Gulf of Mexico is especially tight in the wake of rig damage left by Hurricanes Rita and Katrina. But even more rigs are moving overseas to places like Saudi Arabia, Qatar, Nigeria and Angola, said Roger Reid, an analyst with Natexis Bleichroeder.

He said another 45-50 rigs are under construction around the world, but they won't hit the market until 2007 or later. Tight demand for drilling equipment is pushing rig rates up across the sector.

Rowan Cos. Offshore rigs in the Gulf of Mexico fetch an average \$74,400 a day, up 60 percent over this time last year. Nabors' U.S. drilling rig fleet averages \$17,400 a day, up 63 percent over this time last year.

Noble's international rig fleet averages have ticked up, too. They average \$62,265 per day, up 13 percent over a year ago.

Bobby Parker, CEO of Houston-based Parker Drilling, said the surging rates are simply a nod to how much new drilling is taking place around the world and the kind of technical know-how needed to unlock the oil. "This kind of technology is not cheap." *Houston Chronicle, November 16, 2005*

## SLIDES RULE

*Before the calculator, before the computer,  
a simple tool that worked remains far from forgotten.*

At Purdue University in West Lafayette, IN, a permanent display on the first floor of the university's Potter Engineering Center showcases per-digital analytical marvels. In all, the display includes about 200 slide rules from Purdue alumni Neil Armstrong, Jerry Ross, Richard Covey, and Roy Bridges. Another Purdue alumnus, Eugene Cernan, the last man to walk on the moon, has promised to send his slide rule, as well.

The exhibit is more than just a curiosity. It is indicative of the attachment – some might say outright affection – that these and other engineers have for an old standby with a long history. The calculator and the computer may have usurped the slide rule's place in the engineer's toolbox, but that doesn't mean the old rule has been forgotten.

"If these slide rules could talk, they'd tell stories of amazing projects," said James Alleman, a Purdue professor of civil engineering who began collecting them about 15 years ago. "There was a point in time when the slide was king," he said. "During a period of about 400 years, anything anybody built that was of any magnitude would have required a slide rule."

The exhibit is arranged in a series of panels detailing the history of slide rules, starting with Scottish mathematician John Napier's discovery of the logarithm that made it possible to perform multiplication and division by addition and subtraction. Six years later, English mathematician Edmund Gunter devised a logarithmic ruler with a set of dividers for adding and subtracting. In 1632, countryman William Oughtred used Gunter's approach to invent the first slide rule.

The oldest slide rule in the exhibit doesn't date back quite that far, but it does hail from the mid – 1800s. In addition to antique specimens, the exhibit includes slide rules made of metal, wood, bamboo, paper, and plastic as well as two 7-foot-long rules. The oversize slide rules were used in classes to teach students how to use them, according to Purdue alumnus and retired civil engineering professor Robert Miles, who helped design the exhibit and provided funding for it. "Taking a course to learn to use a slide rule was mandatory at one time," he said. "And from then on, you used it for the rest of your academic career."

It's not just the folks at Purdue who think slides still rule. When Space Ship One made its X Prize-winning flight, it carried some special mementos, including spaceship designer Burt Rutan's 1961-vintage college slide rule, a Pickett 3-T.

## SLIDES RULE

*Continued from page 4...*

That bit of news spread like wildfire through the International Slide Rule Group, an Internet-based network for collectors of slide rules and associated mechanical calculating instruments. The group discusses everything from how best to clean old slide rules to sightings of slide rules in the latest "Ben Affleck saves the planet from extinction" movie.

Walter Shawlee, president of Sphere Research in Kelowna, British Columbia, maintains the Slide Rule Universe Web site (<http://www.sphere.bc.ca/test/sruniverse.html>), which is as information-rich as it is hard on the eyes.

Shawlee, who was part of the team that put together The First Edition Oughtred Society Slide Rule Reference Manual, said he gets calls all the time from teachers who need slide rules to use in the classroom. They still use the slides to teach logarithms because they find that students retain more when they learn with slides than with calculators, Shawlee said.

"People are desperate to get their kids smarter," he said. "And it's these people whose desire for slide rules touches me more than the collectors who want something different, and more exocitic."

Another fan. Mike Konshak, in Louisville, CO, may only have been collecting for a year or so, but he's already got more than 800 slide rules to his name. And he's the happy proprietor of Mike's Slide Rules: Calculators for Hairy-Eared Engineers ([http://www.konshak.com/MK\\_Slidesrules.htm](http://www.konshak.com/MK_Slidesrules.htm)) The affectionately named site is an Internet museum dedicated to engineers and their slide rules.

Shawlee, curator of Slide Rule Universe, pointed out: "If some cataclysmic event happened, most of our digital world would vanish forever. But people would still find things, like slide rules, that go back 200 years."

Part of the charm is the slide rule's reliability. As Purdue's Alleman observed, "Calculators and computers are more powerful than slide rules, but they become obsolete so quickly, you can't develop a personal attachment to them."

Slide rules it seems, have earned a permanent place in the hearts and minds of engineers. *ASTM Mechanical Engineering Vol. 127/No.12, December 2005*

*Editors note: In reading this article I was reminded of Arthur Thomas, an engineer that worked for Samson at the Shirley Massachusetts plant. He always had a large slide rule in a case hanging from his belt. Fond memories are what keeps me in this business.*

## POCKET GUIDE PROVIDES INSPECTION AND RETIREMENT CRITERIA FOR FIBER ROPE

The new International Guideline CI 2001, developed by the Cordage Institute to provide inspection and retirement criteria for fiber rope, is now available in pocket book size. It provides all the information needed to inspect, evaluate and determine retirement criteria for used fiber ropes.

The guideline contains 60+ pages of detailed information including information for rope logs and record-keeping for details on inspection and evaluation procedures. There are unique assessment tables that describe damage conditions and indicate the type of action to be taken.

It is reported to be the most extensive document available for rope inspection and is expected to be an important tool for enhancing rope durability, improving the safe use of rope by identifying when a rope needs to be replaced.

The price is \$35 plus shipping. A 10% discount is available for the purchase of 20 or more books and a 20% discount is available for the purchase of 50 or more books.

Orders should be sent to the Cordage Institute via Fax: 610-971-4859 or E-mail: [info@ropecord.com](mailto:info@ropecord.com).

## IMPORTANT EVENTS

### 6<sup>th</sup> International Rope Technology Workshop

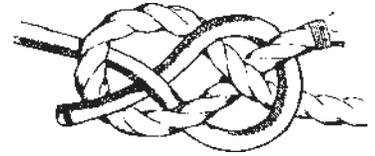
March 29-30, 2006  
Texas A&M University  
College Station, Texas

### Cordage Institute 2006 Annual Conference

May 10-13, 2006  
Amelia Island Plantation  
Amelia Island, FL  
(Near Jacksonville)



# Knots & Notes



## THIS JUST IN

Marlow Ropes, the UK rope manufacturer that went into receivership last month after failing to recover from rising debt, has announced that it will continue trading after the UK's English Braids purchased the company for an undisclosed sum.

Marlow, which makes ropes and cordage products for use in yachting, industrial, and defense applications, will trade independently from its new owner at its Hailsham site in East Sussex.

"For many years, Marlow has led the way in rope technology and this innovation and quality will continue with our ranges of premium yachting ropes, specialist military ropes and technical ropes for industrial applications," reads Marlow press release. "Our renewed financial strength offers us the opportunity to grow and strengthen the Marlow brand with further product and technical development and improvements in customer service and sales support."

English Braids, which is based in Malvern, Worcestershire, makes braids and ropes for the yachting sector. According to managing director Peter Earp, the two companies will run in competition with each other, and any changes at Marlow will be a matter of 'evolution, not revolution'. The acquisition of Marlow Ropes does not include the heavy marine division, which remains in administration.

"I am truly delighted over this acquisition," Earp told IBI. "Marlow has huge respect all over the world. I feel very confident in being able to manufacture successfully in the UK and take on the cheap imports by offering quality service support and value-for-money products with an excellent reputation." *IBI News 12/21/2005*

*Stay tuned for further developments.*

## MORE MONEY NEEDED FOR HEAVY ICEBREAKER

The two U.S. Coast Guard heavy-duty icebreakers are nearing the end of their careers. At this time, there is not a plan to replace them.

## SAMSON ENTERS THE EQUINE ARENA - ENDORSED BY TRAINER CLINTON ANDERSON

Samson has recently signed on as a sponsor with Downunder Horsemanship in Belle Center, Ohio and world-renowned trainer and owner Clinton Anderson.

The two time winner of the prestigious Road To The Horse Competition, host of a weekly training program broadcast on satellite television, and star of the Downunder Horsemanship 2005 Wahl Walkabout Tour, Clinton Anderson will be endorsing Samson rope for his equestrian tack and using Samson rope on his weekly program and training videos.

Samson currently markets several products to the equine industry for applications including reins, lead ropes, high lines, halters, longe lines as well as general purpose tie downs. Randy Nulle, Samson's Equine Division Manager says, "Samson is dedicated to serving the equine market. Receiving the endorsement of someone of Clinton Anderson's caliber reinforces that we have the right products for this industry." For more information visit <http://www.downunderhorsemanship.com>.

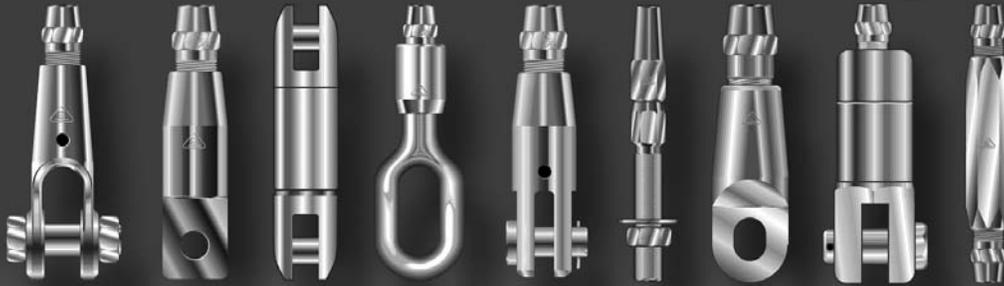
## SOMEONE FINALLY GOT IT RIGHT

Researchers at the University of Iceland in Reykjavik found that red wine consumption decreases the risk of cataracts. In addition, there is evidence that moderate red wine consumption may also have benefits which protect neurons or other brain cells against macular degeneration, Alzheimer's disease and possibly Parkinson's disease.

A recent study done at McGill University in Canada provides new evidence that moderate wine consumption may protect against certain neurological disorders, especially age-related neurodegenerative disorders such as memory loss and dementia.

*Haak Vineyards & Winery newsletter 12/20/05*

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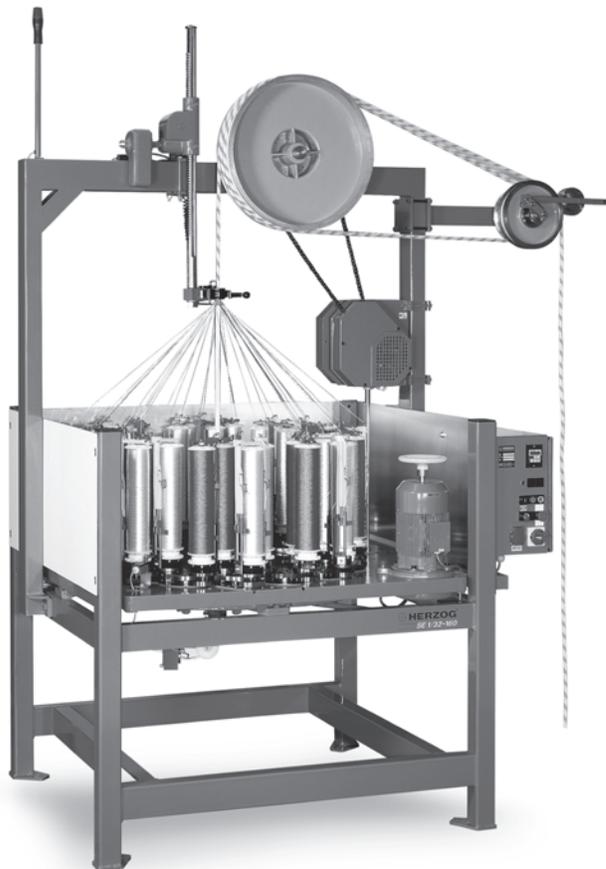
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