The Information Authority for the Workboat • Offshore • Inland • Coastal Marine Markets

Marine News

APRIL 2014
www.marinelink.com

Shipyard Report
Go Big or Go Home

On the Inland Rivers:
Shortcut to Shortsea Savings

Pushboats & Barges
Barging right ahead on design & capacity

SATCOM:
Much more than just voice

LUFKIN

The Energy Flows Through Us®

HEAVY DUTY WORKBOAT SOLUTIONS

WORKBOATS WITH SINGLE ENGINE RATING FROM 1100-8200 HP

CUSTOM MARINE APPLICATIONS WITH SINGLE ENGINE RATING UP TO 18,000 HP

The marine industry demands reliable performance, extreme power and exceptional mechanical integrity from a propulsion system. Lufkin specializes in the design and manufacture of high-quality marine gearing, providing customers with the most cost-effective, dependable and timely solutions for critical propulsion applications.

AGMA

QUALITY MANAGEMENT SYSTEM
CERTIFIED BY DNV
ISO 9001:2008

LUFKIN

WWW.LUFKIN.COM

JOHN BLUDWORTH SHIPYARD, L.L.C.

QUALITY BARGE & BOAT REPAIRS

Design & New Construction

Gasper D'Anna - President
Matthew Kearns - V.P. GM
www.jbludshipyard.com

John Bludworth Shipyard, LLC
3101 Navigation Blvd. • Corpus Christi, Texas 78402
P.O. Box 2441 • Corpus Christi, Texas 78403
Mile Marker 500 • Corpus Christi Ship Channel
p.(361) 887-7981 • (Toll Free) (800) 874-7981
f.(361) 887-6014 • info@jbludshipyard.com

CONTENTS

MarineNews April 2014 • Volume 25 Number 4

12

26

42

EST. 1922

TAKE COMMAND

You've got a lot riding on this. A job, a contract, a crew. So you take command with KOHLER® commercial marine generators. They give you reliable, tough-as-nails power. And they're backed by a service network around the coasts and up and down The River.

99EOZCJ 99 kW

KOHLER® Marine

KohlerMarine.com | 877.910.8349

MarineNews

ISSN#1087-3864 USPS#013-952
Florida: 215 NW 3rd St., Boynton Beach, FL 33435
tel: (561) 732-4368; fax: (561) 732-6984
New York: 118 E. 25th St., New York, NY 10010
tel: (212) 477-6700; fax: (212) 254-6271
www.marinelink.com

PUBLISHER
John C. O'Malley • *jomalley@marinelink.com*

Associate Publisher & Editorial Director
Greg Trauthwein • *trauthwein@marinelink.com*

Editor
Joseph Keefe • *keefe@marinelink.com*
Tel: 704-661-8475

Web Editor
Eric Haun • *haun@marinelink.com*

Contributing Writers
Susan Buchanan • Lawrence R. DeMarcay, III • Joe Hudspeth • Randy O'Neill

PRODUCTION
Production & Graphics Manager Nicole Ventimiglia • *nicole@marinelink.com*

SALES
Vice President, Sales & Marketing
Rob Howard • *howard@marinelink.com*

Advertising Sales Managers
National Sales Manager
Terry Breese • *breese@marinelink.com*
Tel: 561-732-1185 Fax: 561-732-8414

Lucia Annunziata • *annunziata@marinelink.com*
Tel: 212-477-6700 Fax: 212-254-6271

Frank Covella • *covella@marinelink.com*
Tel: 561-732-1659 Fax: 561-732-8063

Mitch Engel • *engel@marinelink.com*
Tel: 561-732-0312 Fax: 561-732-8063

Mike Kozlowski • *kozlowski@marinelink.com*
Tel: 561-733-2477 Fax: 561-732-9670

Dawn Trauthwein • *dtrauthwein@marinelink.com*
Tel: 631-472-2715 Fax: 631-868-3575

Jean Vertucci • *vertucci@marinelink.com*
Tel: 212-477-6700 Fax: 212-254-6271

Managing Director, Intl. Sales
Paul Barrett • *ieaco@aol.com*
Tel: +44 1268 711560
Fax: +44 1268 711567

Uwe Riemeyer • *riemeyer@intermediapartners.de*
Tel: +49 202 27169 0
Fax: +49 202 27169 20

Sales & Event Coordinator
Michelle Howard • *mhoward@marinelink.com*

Classified Sales
(212) 477-6700

CORPORATE STAFF
Manager, Public Relations Mark O'Malley • *momalley@marinelink.com*
Manager, Info Tech Services Vladimir Bibik • *bibik@marinelink.com*

CIRCULATION
Circulation Manager Kathleen Hickey • *mncirc@marinelink.com*

TO SUBSCRIBE:
Subscriptions to ***Marine News*** (12 issues per year) for one year are available for $60.00; Two years (24 issues) for $95.00.
Send your check payable to:
MarineNews, 118 E. 25th St., New York, NY 10010.
For more information email Kathleen Hickey at: k.hickey@marinelink.com

POSTMASTER Time Value Expedite

BPA WORLDWIDE BUSINESS

On the Cover

42 Go Big or Go Home

As Vigor Industrial continues to think and build big, its skilled workforce remains busy all the time. Even as the company's new floating dry dock promises to be the largest in the United States, Vigor wants to get even bigger. The story starts on page 42.

POLLUTION RESPONSE & PREVENTION

36 Bioremediation Goes Mainstream

A reliable solution for response and prevention that can save money, time and regulatory aggravation is here.

By John Paparone

COMMUNICATIONS

48 A New Standard in Marine Communications

KVH provides and Harvey Gulf employs possibly the most sophisticated on-board SATCOM and related service package on the water. That's no accident.

By Joseph Keefe

MarineNews ISSN#1087-3864 is published monthly, 12 times a year by Maritime Activity Reports, Inc., 118 East 25th Street, New York, N. Y. 10160-1062. The publisher assumes no responsibility for any misprints or claims and actions taken by advertisers. The publisher reserves the right to refuse any advertising. Contents of this publication either in whole or in part may not be reproduced without the express permission of the publisher.

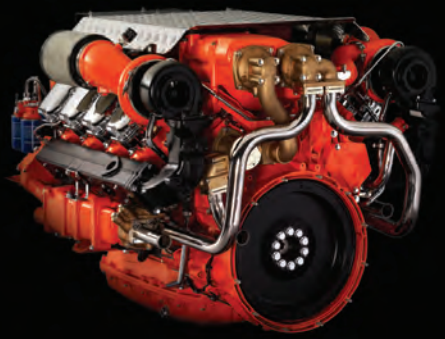
POSTMASTER: Send address changes to ***MarineNews***, 850 Montauk Hwy. #867 Bayport, NY 11705.
MarineNews is published monthly by Maritime Activity Reports Inc. Periodicals Postage paid at New York, NY and additional mailing offices.

Complete and Committed.

THE SCANIA MARINE SOLUTION.

Out there, confidence in performance, reliability and operating economy are the only things that count. With this in mind, we created the Scania marine solution: An array of flexible options including ratings, equipment, instrumentation and transmissions. Whatever your specification, we will provide you with the optimal Scania marine solution.

Power at work, every inch of the way.



DISTRIBUTORS

Northeast/Great Lakes
Mack Boring & Parts Co.
908-964-0700

Northwest
Cascade Engine Center
206-764-3850

Southeast
Certified Diesel
954-583-4465

Southwest
Boatswain's Locker
949-642-6800

Gulf Coast
NRE Power Systems
504-393-7272

Central/Eastern Canada
ADF Diesel
800-517-1489

www.scaniausa.com

SCANIA
Scania U.S.A. Inc.

keefe@marinelink.com

Even if, as Marcon International's Bob Beagle says, barges are the workhorses of the towing industry, then the pushboats that propel the 38,000 (documented and undocumented) deck, hopper, tank, crane and miscellaneous purpose barges to their destinations are the heart and soul of the most efficient – and greenest – means to move cargo known to man. This month, we take a close look at what's developing for both types of hulls; in terms of design, markets, boatbuilding and everything else in between. There's something happening on all fronts.

The second quarter of 2014 finds North American shipyards and the service and manufacturing sectors that support them still roaring along. But, it's not just production – it's also about innovation. For example, Robert Allen's design for an inland pushboat based largely on local requirements sheds new light onto how front end design work ultimately impacts the maximum utility of any hull. That it involves inland rivers and a shortsea formula makes it all the more compelling. The story begins on page 26.

Slightly off course for this edition, but no less important, the Robert Allen designs also foretell the efforts underway in South America to ramp up inland efficiencies in advance of a post-Panamax world. That's just a tiny window into efforts going on south of the equator to make it more economical to bring grain and other raw materials to market via various inland rivers. This should serve – although I fear it will not – as a wake-up call for federal and state officials, North American grain interests and anyone else who makes their living on the Mississippi and other important inland rivers. He who gets his product to market quicker wins. And, the race is on.

I'm not saying that there aren't good things happening right here at home. For one thing, AEP River Operations is perhaps betting that I'm wrong on the domestic inland situation as they barge right into the liquid transport markets in a big way. AEP has just taken delivery of the first of 20 high-end tank barges – all scheduled for production at Jeffboat in 2014 – that will propel them from already being one of the real river giants in terms of bulk transportation, but also a force to be reckoned with downstream in the tank barge markets. Already, there is pressure on this sector with shippers – current and future – competing for a finite supply of units. AEP might just be stepping in at just exactly the right time.

Looking just over the horizon, this month's OP/ED entry from the Offshore Service Vessel Dynamic Positioning Authority (OSVDPA) is pointed reminder that the offshore industry, chafing as it already is under the weight of any number of new regulatory burdens, also isn't sitting on its collective hands waiting for someone else to improve their performance. By itself, it constitutes a terrific warm up for our Offshore Annual in May. That said; oil & gas stakeholders will soon see that it means so much more.

Joseph Keefe, Editor, keefe@marinelink.com

GET ON BOARD WITH THE NEW INDUSTRY STANDARD IN BARGE RIGGING—THE YOYO WINCH.

THE NEW RIGGING STANDARD

DON'T MISS THE BOAT! YOUR EQUIPMENT MAY BE OBSOLETE.
The numbers are in: Patterson has set the new standard when it comes to barge rigging. Our revolutionary 25' and 40' YoYo winches have changed the way the industry works—and if you're not on board with the new technology, you'll be left behind.

THE BIGGEST OPERATORS IN THE U.S. NOW SPECIFY PATTERSON WINCHES.
…and South America is joining them. With only a few exceptions, the leaders in inland shipping now use our YoYo winches—and for good reason. The YoYo eliminates fouling, springcoil, and uncontrolled spooling while saving 50% more time. It's safe, fast, and cost-effective.

BARGE BUILDERS ARE SPECIFYING THE YOYO BECAUSE THEIR CUSTOMERS DEMAND IT.
True story—the YoYo is taking off not only because it's the best winch out there but because it's now specified as standard equipment by industry leaders. Patterson is expanding globally as well, which means that the rest of the world isn't far behind when it comes to demanding the YoYo.

CALL 800.322.2018 OR VISIT WWW.PATTERSONMFG.COM.
We'll show you how the YoYo has revolutionized the industry and is setting a whole new standard.

PATTERSON IS DEDICATED TO CREATING GEAR THAT'S SAFER, EASIER, AND FASTER. WE *ARE* THE FUTURE OF BARGE HANDLING EQUIPMENT, AND WE'D LIKE YOU TO SHOW YOU WHY.

PATTERSON | 870 RIVERSEA ROAD | PITTSBURGH, PA 15233 | WWW.PATTERSONMFG.COM

ISO 9001 SRI CERTIFIED

PATTERSON
SAFER. EASIER. FASTER.

Barges, Barges, and More Barges.

Although Marcon International, Inc. typically focuses its market reports on tugs, Marcon's Bob Beagle also says that most tugs worldwide would be laid up without a barge to tow or push. Barges are still the workhorses of the towing industry – hauling millions of tons of various cargoes both offshore and on global inland river systems. And, in many areas it is still more efficient to move cargo by water than land, while reducing both emissions and highway congestion. America's Marine Highway System consists of over 29,000 nautical miles of navigable waterways including the Great Lakes, the Saint Lawrence Seaway System, coastal, and open-ocean routes.

On the Mississippi River system a single 200' x 35' x 12' inland river hopper barge is capable of carrying 1,750 short tons of dry cargo which is the equivalent of 16 railcars or 70 semi-tractor/trailers. It will take 144 semi-tractor/trailers or 46 rail cars to replace a single 300' x 54', 27,500bbl tank barge hauling liquid bulk cargoes. Forty-one U.S. states plus Guam, the Pacific Islands and Puerto Rico and *all* states east of the Mississippi River are served by commercially navigable waterways. While all transport modes have been getting more fuel efficient, at 616 ton-miles per gallon, inland towing is still substantially more fuel efficient than rail or trucks.

Over 884.9 million short tons of total commodities were on the inland and coastal waters of the U.S. in 2012, down 0.5% from 2011 and most of this was carried by barge. As of 31st December 2012, with updates through 31st October 2013, the U.S. fleet consisted of a total of 31,550 dry, deck, tank and other barges, up 52 barges over 2011. Of these 31,550 barges, 26,705 were classified as freight barges – dry cargo/hopper or deck, and 4,627 as tank barges. Barges range from under 10' in length for sectional units up to almost 1,000' in length, capable of performing myriad chores including cargo transport, pipelay, heavy-lift, water-desalinization, power generation and offshore floating production/storage.

Marcon's analysis of U.S. barge fleets is based on U.S. Coast Guard records, the U.S. Army Corps of Engineers, the U.S. Maritime Administration, Marcon International's own databases and various owners and operators inputs. Each tracks different data at different times. Those numbers are a moving target. As of May 2013, there were are approximately 28,931 barges documented with the U.S. Coast Guard plus an estimated 10,000 +/- undocumented barges of various sizes in service (U.S. Army Corps of Engineers records show 31,550 barges, which does include many undocumented barges). 24,179 freight (3.86%) and 4,512 (5.67%) tank barges were documented with the U.S. Coast Guard compared to 23,281 freight and 4,270 tank barges in July 2008, which was almost half-way through the *"official"* 1-1/2 year U.S. recession that began in December 2007.

Of the 3,898 barges and 12,801 vessels worldwide which Marcon International actively tracks, approximately 750 are for sale. Some listings may have multiple barges included and other barges may also be able to be developed on a private & confi-

Mode	Ton-Miles/Gallon
Inland Towing	616
Railroads	478
Truck	150

Source: A Model Comparison of Domestic Freight Transportation Effects

Barges: Briefly By the Numbers ...

World's Largest barge (*): Heerema Group's 139,694 DWT (853x207x49') launch barge "H-851"
Longest Barge in the World: the 1973 built, self-unloading Great Lakes bulk carrier "Presque Isle"
Dimensions of "Presque Isle": 974.5' x 104.6' x 45.7'
Overall combined tug/barge length of "Presque Isle": 1,000'
Highest Domestic Gross Registered Tonnage (Barge): AT/B tank barges "OSG 350" and "OSG 351"
GRT of OSG 350 and OSG 351 (each): 27,615 tons.
Oldest documented U.S. freight barge: the steel hull "109" home-ported out of Holland, Michigan.
Oldest "tank" barge: 169' unit built in 1896 (might not be still in liquid service).

(*)Excluding ultra-large FPSOs, floating drydocks

FULL SPEED AHEAD

Caterpillar marine diesel engines deliver impressive performance throughout a wide speed range with exceptional power density. That means they're as smooth and efficient when you're pulling into dock at an idle as they are when you're heading up the river or out to sea at full throttle.

When it's time to "shove off" in a Cat® powered vessel, there's simply no holding back.

- Caterpillar offers the industry's largest range of marine engines to provide the power you need.
- High-performance or commercial, propulsion is in the name.
- The ease and speed of maintenance gets you quickly on the way.
- Cat marine generator sets and auxiliary engines keep things smoothly running onboard.
- Louisiana Cat is behind you all the way with fully equipped facilities, factory trained technicians, factory authorized warranty repairs and preventive maintenance programs.
- Long-term durability, high fuel efficiency and long life-to-overhaul provides maximum productivity with minimum outlay.

24-HOUR EMERGENCY PARTS AND SERVICE

Call our toll free number below to learn more about our Caterpillar products and services.

Bossier City **Morgan City** **New Iberia**

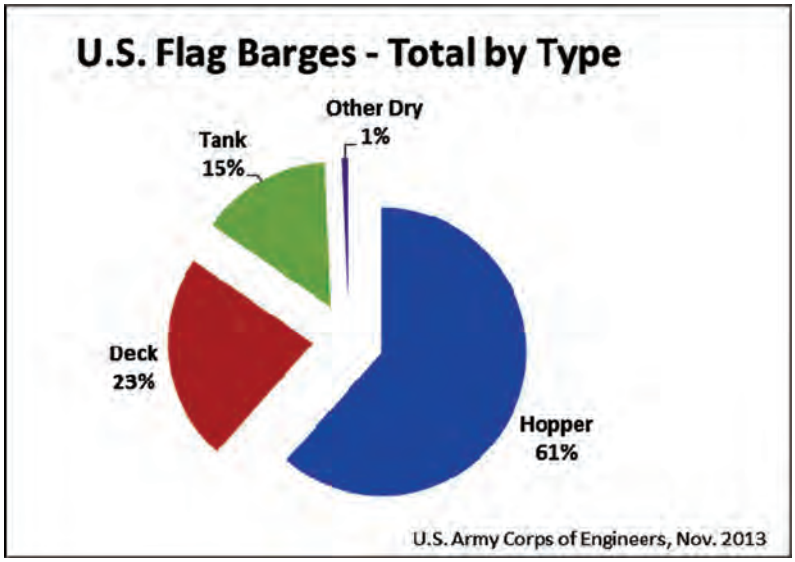
Port Fourchon **Prairieville**

GL CERTIFIED

Louisiana CAT

866-843-7440

www.LouisianaCat.com



Marcon Listed Barges for Sale

	Deck	Crane	Tank	Hopper	Misc.
Marcon File Designation	DB	DK	TB	HB	MB
Total Tracked	1,895	358	741	404	445
Total For Sale	350	92	97	107	82
U.S. Flag For Sale	109	21	27	14	16
Foreign Flag For Sale	241	71	70	93	66

dential basis. 26% of the barges that Marcon has for sale are U.S. flag, with the other 74% foreign flag.

Although there are two to three times as many hopper barges than flat deck barges in the United States, worldwide there are probably more conventional flat deck barges and a greater total deadweight carrying capacity than any other type. Flat deck barges carry cargoes on deck such as containers, gravel, construction equipment, multi-million dollar project cargoes and rolling stock. Most of the barges are single deck, although house, double and even triple deck Ro/Ro barges are in service. According to the U.S. Army Corps of Engineers, as of November 2013, there were 7,296 U.S. flag deck barges in the fleet with 31.9% of the barges of all sizes over 25 years of age. This is definitely an improvement compared to the end of 2008 when 43% of the U.S. deck barge fleet was over 25 years of age.

In the last 33 years, Marcon International, Inc. has sold or chartered a total of 1,329 vessels and barges including 134 ocean deck barges with an aggregate deadweight of 843,147 tons and 75 inland deck barges totaling 132,832dwt in addition to other types of vessels and barges.

Every™ Minute. Valuable.

There's too much money on the line to have your vessel tied up for weeks with an engine down. Many engine rebuilders fix only what is broken – they may not replace worn parts that are borderline or hidden from view. Cummins ReCon® engines are completely disassembled, inspected, remanufactured to factory specifications, performance-tested and backed by a full two-year Cummins warranty that's good anywhere in the world. For a genuine Cummins solution with less downtime, and for performance you can count on, contact your Cummins distributor and ask about Cummins ReCon engines. With a ReCon engine, you get reliability. Every time.

Cummins®

Paul Hankins, President American Salvage Association

This month's editorial calendar has, in part, as its focus, oil pollution, prevention and response. Or, in other words, missions and matters that cut to the very heart of the American Salvage Association (ASA) and the goals of its considerable membership. This month, ASA President Paul Hankins weighs in on a host of issues that impact the rapidly evolving world of salvage, the players that make up that sector of the marine industry, and why all of that is important. Mr. Hankins has over 30 years of experience in the marine industry and has participated in countless national level salvage and oil spill response operations and exercises. He has held positions with the Navy Supervisor of Salvage; with SERVS Alyeska in Valdez, Alaska; as Deputy Director of Maritime and Land Security at the U.S. Transportation Security Administration; and as president of the joint venture Donjon-SMIT, one of the five Salvage and Marine Fire Fighting Resource Provider networks, from 2005 to 2011. He is currently Vice President for Salvage Operations for Donjon Marine. Hankins graduated from the U.S. Naval Academy in 1981 with a Bachelors of Science in Naval Architecture and subsequently earned a Master's degree in Environmental Management from George Washington University in 1991. Listen in as he talks about salvage, response and everything in between.

Your background in naval architecture is a logical connection to the skills needed in salvage, but it is arguably not seen too often, nor is it much publicized. Do those skills come into play on a daily basis for you?

Salvors come in all shapes and sizes, to be sure. Perhaps the defining characteristic is the ability to problem-solve on the fly and the desire to help our fellow mariners. Naval architecture is but one skill-set that provides background to these other capabilities. I would argue that rather than being a requirement, it may just be a way to understand what is going on quicker without those years of experience so vital to the salvage master's repertoire.

The new Fi-Fi rules are here, and they are here to stay. How is that implementation going?

Implementation of anything new is always an opportunity. The new firefighting and salvage rules are no exception. They have required much more pre-event coordination between owner and salvor than in the past. The good news is that the regulations do not fundamentally change the way we conduct our business. Beyond the planning and coordinating BEFORE an event, when an event occurs we pretty much do it exactly the same – move as rapidly as possible to prevent or mitigate the effects of an accident.

Have the new Fi-Fi rules impacted your business?

True, the rules have provided a huge impetus for salvors to make investments in their capabilities. But even more importantly – institutionalizing the always extensive networks of professionals of many related industries so critical to our success has been the greatest positive effect in my opinion. The speed with which we are able to access available assets often makes all the difference during an event.

As part of the long awaited Non-tank Vessel Response Plan (NTVRP) and other Response Plan regulations, these regs are designed to improve preparedness and reaction to an incident, including a worst-case discharge, and improve effectiveness of shore-side and onboard response activities. What I describe above is testimony to that.

Care for the marine environment and the salvor's role in that equation are both important components to a happy ending in marine casualties. When salvors make best efforts to contain an environmental disaster and the final salvage value does not reflect those efforts, making the salvor whole can be problematic. What's the solution?

The solution is really quite simple. Adopt industry-wide standards that acknowledge the importance AND the value of a salvor's efforts, even when the traditional remuneration process may not properly reflect the value of the effort. The SCOPIC clause of the traditional salvage contract, Lloyds Open Form (LOF), takes measures to do this and there has to be better industry-wide understanding of what it is

SAVE FUEL. INCREASE PROFITS.

Choosing Volvo Penta marine engines for repowering saves fleets thousands each year. Our fuel efficient technology and longer service intervals lower operating costs. Learn more about the savings you could see at volvopenta.com/us.

VOLVO PENTA

meant to do. Another important element the ASA has been actively advocating is the concept of Responder Immunity. If salvors have to worry that reasonable and measured actions may subject themselves to a lawsuit if something goes amiss through some unforeseen consequence not of their own doing, then the time element that is so critical will be lost forever. Instead, we'll all have to huddle with our lawyers to determine if an action is suit-proof. That radically changes the speed and the inventiveness of the salvor.

New regulations impact self-propelled non-tank vessels of 400 gross tons or greater that operate in navigable waters of the United States and carry any kind of oil as fuel for main propulsion. How many vessels does this entail and does industry have the capacity to absorb this business?

The number is continually debated – but we know it's in the tens of thousands. But what's important is that now each vessel owner will have had to have that important conversation with the salvor before an event happens. It's not really about capacity, it's about effective planning. Remember, we aren't increasing the number of salvage events – we're just improving the response to those that unfortunately do occur from time to time.

The new rule stipulates that non-tank vessel owners operating in and out of U.S. waters enter into agreements with a Salvage and Marine Firefighting (SMFF) provider and list predefined response resources in the VRP. Has ASA prescribed a standard contract / agreement form?

No, I think this is one area on which all ASA members are very much in agreement. The contracting mechanisms that are in place are more than adequate from this question's perspective. How each individual salvor uses these existing contracts, or even develops new ones, is a commercial advantage that salvors will want to leverage. ASA has no desire or the mandate to step into that commercial marketplace.

Responder immunity: still the big hot button issue; the 600 pound gorilla in the room. Where are we at with this, what is ASA's role in the process and are we any closer to a solution that is satisfactory to everyone?

As I said earlier, Responder Immunity is of vital importance to keep the responders in the business of responding. Imagine if your fire department had to check with its legal department before responding to your house fire. The same type of protections should apply to all responders who are responding in good faith. If there is something being done wrong or improper, the responder immunity provision does nothing to prevent holding the persons responsible for those actions accountable.

Pollution response has not necessarily been the traditional line of business for salvors. Some, but not all get involved with it. With the new regulations coming out, it will probably be part of the ASA membership's revenue stream for a long time to come. Talk about the relationship between traditional pollution response consortiums and salvors that are emerging with a much bigger role in that equation.

What is traditional? A salvor has always been involved in PREVENTING pollution. The very act of recovering a vessel in danger of sinking or keeping a tank from being breached is in essence a response to PREVENT pollution. There is certainly a much stronger relationship with those that clean up spilled oil and with those that prevent that same oil from being spilled. What these regs do is to right the equation to some extent. Instead of concentrating on the oil after the fact, we are trying to prevent the spill from occurring in the first place. Using the fire department analogy, it's important to be able to clean up after a fire – but it's also important to prevent and extinguish that fire.

You've seen two major regulatory events in just the last couple of years that have affected your industry – Fi-Fi and non-tank rules. What's happening today inside the beltway and how are you – as ASA President – involved? What's the next disruptive event?

The so called Fi-Fi and non-tank rules are one and the same – the non-tank rules just extend most of the OPA-90 tanker provisions to a broader spectrum of the community, which has been in development for years. While any change isn't easy, I'd argue it's only been disruptive to those that haven't been paying much attention to the relative success of the tanker regulations. But the regulations themselves in my opinion will have the net effect of making our responses more efficient and timely. As for the next disruptive event, that's a loaded question. But if the question is, are there more regulations the ASA is advocating for, that answer is no. Responder immunity is the biggest legislative challenge we are faced with today.

How has contracting evolved over time? What's the standard course for a salvage event today – from first call to final completion of assignment? Are the non-tank and Fi-Fi rules changing the nature and structure of the relationship between the salvor and the traditional customer at least on this side of the pond?

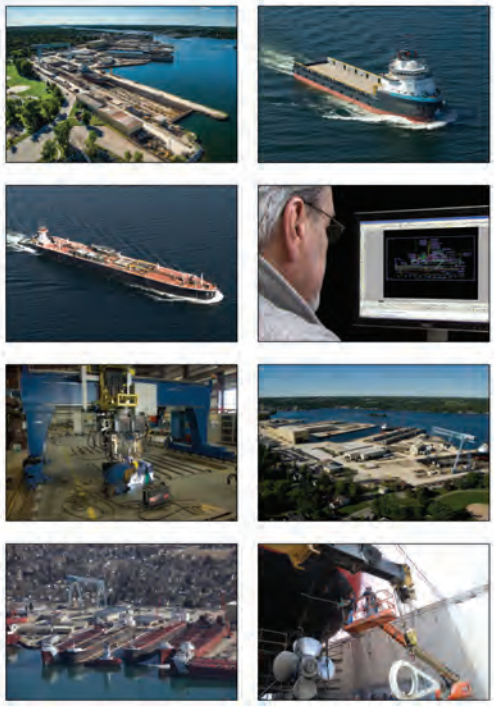
The only thing that is changing is making the relationship closer and more transparent. Having talked through the response mechanisms prior to an event always helps improve how that response is executed. The salvage rules are no exception.

Excellence by Design

The ship construction and repair expertise of FINCANTIERI is unrivaled. With 21 shipyards on four different continents, nearly 20,000 employees, and a 200-year history of building more than 7,000 ships, FINCANTIERI ranks as a global leader in quality, innovation and service.

Bay Shipbuilding Company (BSC) is proud to be part of the FINCANTIERI family. An operating division of FINCANTIERI's US-based Fincantieri Marine Group, BSC is uniquely qualified and strategically positioned to manage the new construction, repair and conversion needs of your fleet. FINCANTIERI recently completed a $100 million capital expansion investment in its US-based shipyards. BSC improvements include state-of-the-art manufacturing equipment, additional climate-controlled manufacturing facilities, and a new floating dry dock.

We'd like the opportunity to tell you more about how BSC can provide cost-effective solutions for your next project. Please visit our website or call Michael Pinkham, BSC Vice President of Sales and Marketing, at 715.587.6960.



FINCANTIERI
MARINE GROUP
www.fincantierimarinegroup.com

BAY SHIPBUILDING COMPANY
605 North 3rd Avenue ▪ Post Office Box 830
Sturgeon Bay, WI 54235 ▪ 920-743-5524
www.bayshipbuildingcompany.com

BSC
a FINCANTIERI company

M/V HOS ACHIEVER

Accommodations, Features and Comfort combine with Safety. All are key for Offshore Housing missions.

By Eric Haun

Deepwater operations are increasingly demanding more personnel offshore, often for longer periods of time, placing a greater emphasis on crew accommodation. Now, accommodation and special features join safety as the key components for a new range of comfortable, large-scale offshore housing vessels. Emerging in this range is Hornbeck Offshore Services' HOS Achiever. On its own, the vessel presents as a relatively normal offshore multipurpose vessel. What's unique about it, though, is what she accomplishes.

In order to provide top-of-the-line offshore housing, Hornbeck has essentially converted the HOS Achiever into a floating hotel (flotel) with total accommodation for the berthing of 267 persons by way of 93 air-conditioned and heated staterooms. Supporting all of that are the boat's ample amenities which include a coffee and tea room, diner, exercise room, galley, internet café and quiet room, laundry room, locker/wash room, recreation areas, smoker's lounge, sick bay and deck changing room. And with DP-3 positioning, a motion-compensated gangway, helideck, helicopter refueling capabilities and a 160-metric-ton crane, HOS Achiever' safety and comfort are notably matched by functionality.

The vessel's active and passive stabilization equipment – or roll dampening – is a perfect example of where those metrics are achieved in a single application.

Originally conceived as a dive support and construction vessel, the HOS Achiever has lived up to its designation as a multipurpose support vessel. Since its launch in 2008, it has supported a diverse range of offshore activities such as platform inspection, repair and maintenance activity, well intervention projects including decommissioning and riserless intervention – periodically serving as a flotel for major projects throughout. But Achiever's capacity for accommodation has made her especially attractive to customers requiring flotel support, particularly for offshore construction and wind farm operations.

Hornbeck recently won a contract to support the hookup and commissioning of an extended tension leg platform production facility in the ultra-deepwater Gulf of Mexico, a project that requires hundreds of offshore workers to transfer repeatedly between the worksite and dynamically positioned vessels over an extended period of time. Aiming to upholding safety and expand upon the comfort range of previous flotel configurations, Hornbeck consulted crew and operations management teams as part of its meticulous configura-

Stay the course.

For more than 70 years, commercial vessels have depended on Detroit Diesel 2-Cycle engines. Today, genuine Detroit Diesel 2-Cycle parts, long blocks and reliabilt® remanufactured engines are available from MTU—all built to the latest engineering specifications from the original manufacturer, resulting in uncompromised quality and service life. From preventive maintenance to repairs to repowering, count on MTU's worldwide service network for complete Detroit Diesel 2-Cycle service and support.

Find your local service location at
www.2-cycle.mtu-online.com

mtu

mtu ValueCare

tion of the flotel design; geared specifically for the project.

"The additional accommodations were custom designed and constructed according to specifications that were intended to match the comfort and quality of the vessel's pre-existing berths, a representative from Hornbeck said. "Hornbeck believes the vessel will provide a safe, DP-3 mono-hull solution to a specific niche based on the available berthing and differentiating features, such as a motion-compensated gangway and helicopter refueling capabilities."

HOS Achiever's conversion was completed at a Gulf of Mexico shipyard in January 2014, and the vessel was delivered to HOS Port, the company's shore-based facility in Port Fourchon, Louisiana, where it awaits commissioning. The possibilities for offshore housing do not stop with HOS Achiever. Hornbeck said it sees potential for additional vessels dedicated to accommodation support; the company is actively evaluating alternative designs which will provide a solution that qualifies under the Jones Act to meet an anticipated surge of new floating production systems in the Gulf of Mexico.

The possibilities for this type of vessel are endless, especially as North America eyes its first offshore wind farm in the not-too-distant future. In that application, the key to productivity is getting the workers out to the work site safely, minus the sea sickness, and keeping them comfortable so that they can work efficiently. In the case of HOS Achiever: mission accomplished.

HOS Achiever at a Glance ...

Length: 432 ft 1 in (131.7m)	*Net : 2,558 NT*	*Flag: Vanuatu*
Beam: 72 ft 1 in (22.0m)	*IMO: 9414163*	*Cruise Speed: 12.0 kts 296 gal/hr*
Draft Max: 22 ft 2 in (6.75m)	*Max Speed: 13.0 KT*	*Certifications: Oceans, SOLAS*
Draft Min: 14 ft 0 in (4.27m)	*Classification: DNV*	*On DP: 146 gal/hr (553 l/h)*
Tonnage : 8,524 GT	*O.N.: 1759*	*DYNPOS-AUTRO (+DPS-3), 1A1, SF, HELDK, E0, DK(+)*

Our Commitment to the Inland Operators hasn't wavered, Eastern has a new construction slot for you. "We've Got You Covered."

E.N. Bisso & Son, Inc.

Crounse Corporation

New York Fire Department

Florida Marine Transporters

Settoon Towing

Since 2006, ESG has delivered 79 vessels that are currently navigating the U.S. inland waterways, upholding our reputation of building hard-working and reliable vessels for our customers. "We've Got You Covered."

EASTERN SHIPBUILDING GROUP, INC.

To add an ESG built vessel to your fleet, contact us at:
Tel: 850-763-1900 ext 3216 Fax: 850-763-7904
Email: sberthold@easternshipbuilding.com

2200 Nelson Street, Panama City, FL 32401
13300 Allanton Road, Panama City, FL 32404
www.easternshipbuilding.com
www.youtube.com/user/EasternShipbuilding

NEW CONSTRUCTION • REPAIRS • CONVERSIONS

The Offshore Service Vessel Dynamic Positioning Authority

By Aaron Smith, Executive Director, OSVDPA

In a recent study, two groups were shown the same painting; one group was told it was painted in 1905, the other was told 2005. Not surprisingly, the first group reported liking the painting more than the second, proving the human brain almost automatically equates longevity with quality.

But does longevity always equal quality? Of course not, but our natural inclination is to respect that which has been around and to be uncomfortable with change. I admit it; I fear change as much as the next person. However, in certain circumstances we must take a breath and recognize the status quo can no longer be our only option. Nowhere in the maritime community is the need for well-crafted options more evident than the certification of dynamic positioning operators (DPOs).

For this reason, we recently announced the formation of the Offshore Service Vessel Dynamic Positioning Authority, the OSVDPA. Our organization seeks to provide an alternative method of certifying DPO's that is more relevant to the offshore service vessel industry. I'm confident you'll see that the change the Authority is proposing is nothing to fear.

It's no secret the current DPO certification system wasn't written for supply vessels. After all, the system predates the use of DP aboard supply vessels or similar vessels serving the offshore energy industry. But the current system never adapted to incorporate these vessels, and because of this, the system has no way of supplying a sufficient number of well-qualified DPOs for the existing fleet, let alone the increased demand caused by the proliferation of DP supply vessels or the requirements for an increased number of DPOs aboard each vessel.

Instead of addressing this problem, the current system continues to discourage those without STCW licenses from becoming certified, blocking off the hawse pipe and preventing some of the most skilled mariners in the industry from becoming certified DPO's. Similarly, mariners serving aboard vessels with unclassed DP systems are currently cut off from receiving training in the safest way to use DP systems.

These prohibitions do nothing to improve the safety of the maritime industry. In fact, they hinder safety. The fact is that professional mariners without STCW credentials are controlling DP vessels, and some of those vessels—more than 100 in the Gulf of Mexico alone—do not have classed DP systems. Thus, it is incumbent upon the industry to provide certification systems to train these mariners in the safe operation of DP.

Moreover, while much of the maritime industry has adopted competency based certifications, the industry standard for DPO certification continues to be based on measuring time served on a DP vessel. The OSVDPA agrees that a DPO requires real-world experience prior to certification. However, we also believe that sea-time alone is not proof of proficiency.

Before describing how the OSVDPA will address these problems, let me describe what we won't do. First and foremost, the OSVDPA will not reduce standards. The Authority's Board of Directors is comprised of some of the safest vessel operators, the best training centers, and most respected DP manufacturers. To a person, Board members understand that a good safety record is vital to our industry's reputation. As such, the OSVDPA Board refuses to take any action which will degrade the safety of our people, our vessels, the environment or our customers.

Due to this commitment, the OSVDPA's certification system will follow the recognized guidance laid out by the IMO, IMCA, and other foundational documents, thereby ensuring our standards meet the expectations of the maritime industry. Additionally, the Authority will not create employment restrictions or divide the DP industry. Instead, the OSVDPA seeks a system where certified DPOs and prospective DPOs can transfer between certification systems and industries, provided each adheres to the same high standards.

OSVDPA has collaborated with the DNV classification society and industry stakeholders to craft a set of recommended practices for all DPO certification systems. When this document is produced, the OSVDPA will take steps to ensure our certification system meets all practical requirements contained therein.

Going forward, the OSVDPA will continue to invite comments and even criticism of our system. The Authority's primary mission is to improve safety and we'll work with anyone who shares this mission. As we move forward, the Authority will strive to craft a certification system based on the following principles:

- *Our system will be built on a defined list of competencies, ensuring prospective DPOs know what they are expected to learn, training centers know what they are expected to teach, and employers know what to expect from OSVDPA-certified DPOs. The OSVDPA believes such a foundation to be vital to any certification program. In fact, the OSVDPA working group spent much of the past year crafting this list, which the Authority ex-*

pects to release for public review in the near future.

- *The OSVDPA certification system will assess prospective DPOs against this list. Under our system, prospective DPOs will be assessed at each stage of their training; failure to pass will mean a failure to advance. The capstone of our training system will be a final assessment ensuring the prospective DPO is competent not just in DP 'buttonology' but in the real-world operation of a vessel.*
- *While the OSVDPA system is assessment based, we also understand the importance of experiential learning. Thus, the OSVDPA system will include a sea-time requirement. Specifically, the Authority's sea-time requirement will track not only the time spent aboard a DP vessel—as dictated by the current system—but also time at the actual DP controls. By ensuring prospective DPOs have gained both on-board and hands-on experience, the OSVDPA is confident our DPOs will provide the level of safety demanded by our industry.*
- *By including both assessments and sea-time requirements in our certification system the OSVDPA believes it has blended the best of the currently available DPO certification systems into one program. Such a combination will make the OSVDPA-certified DPOs experienced and safe operators for their current employer and the entire industry.*

The OSVDPA understands no one likes change for the sake of change. However, the Authority wholeheartedly believes we can provide a viable alternative to existing DPO certification methods that will be inclusive of mariners, gauged properly to service vessels, and will ensure greater operational safety. The OSVDPA looks forward to working with the maritime industry as we finalize our certification system.

Aaron Smith *is the Executive Director of the Offshore Service Vessel Dynamic Positioning Authority. He manages the day-to-day operation of the Authority. Along with the OSVDPA Board of Directors and Technical Advisory Council (TAC), Aaron is crafting the Authority's dynamic positioning operator (DPO) certification program and ensuring this program is accepted by the U.S. Coast Guard, the offshore energy industry, and international counterparts. Prior to joining OSVDPA, Aaron was the Deputy Chief of Staff and Legislative Director for Congressman Jeff Landry (LA).*

Your Response is Required

The government has a plan for responding to your oil spill. Do you?

By Larry DeMarcay

In February, due to a collision between a tug boat and a tank barge, approximately 31,500 gallons of crude oil were released into the Mississippi River. The Mississippi River was closed down for two days and the residents of St. Charles Parish sat on pins and needles, waiting to find out if their drinking water would be contaminated. Thankfully, the drinking water was not affected, there were no reports of serious environmental damage and the River re-opened several days after the closure. It doesn't always and happily, however.

A question of when; not if …

Unfortunately, the potential for a spill like this is always present when operating vessels. Similar spills occurred on the Mississippi River in 2013 when 80,000 gallons were released when a barge hit a train bridge and in 2012 when 10,000 gallons were released when a barge hit a bridge. In 2008, a major spill occurred on the Mississippi River, when a barge broke in half after a collision and spilled 283,000 gallons of oil into the river closing it for six days.

Oil spills are a risk regardless of how safe and well trained your crew is. Unfortunately, in the marine environment there are too many variables at work and, if they all line up against you at the same time, this type of disaster could happen to your company. As the potential is always out there, it is important to have a plan and know how to respond as soon as you are notified that a spill has occurred.

The federal government has developed a plan for responding to spill incidents and it is important to know how to notify the government, and just as importantly, how they will respond to the incident. It is also important to have a company plan that provides a response procedure that allows the government to be notified, manage the company's response to the incident and allow the government and the company to work together to minimize the effect of the spill on the environment, the public and the company.

The Government's Playbook

The federal government's response is governed by the National Oil and Hazardous Substances Pollution Contingency Plan, more commonly called the National Contingency Plan or NCP. The NCP is the federal government's blueprint for responding to both oil spills and hazardous substance releases. The NCP has developed a national response capability and promoted coordination among the hierarchy of responders. The NCP was implemented in 1968 in response to a massive oil spill from the oil tanker Torrey Canyon. The plan has been modified several times over the years, with the last major revision occurring after the implementation of OPA 90. The NCP establishes Regional Response Teams (RRT) and their roles and responsibilities in the national response system, including coordinating preparedness, planning, and response at the regional level. The RRT consists of a standing team made up of representatives for each federal agency that is included in planning spill response, as well as state and local government representatives.

The NCP requires notification of any discharge or release to the National Response Center through a toll-free telephone number. The National Response Center (NRC) acts as the central clearinghouse for all pollution incident reporting. The NCP has a pre-designated On-Scene Coordinator to direct all federal, state, and private response activities at the site of a discharge. The process establishes a unified command structure for managing the response through coordinating personnel and the resources of the federal government, the state government, and the responsible party. Essentially, once you place the call to the NRC, the RRT will take over and manage the response.

Although the RRT will manage the spill response, each marine operator should have in place a detailed environmental emergency response plan. The purpose of the plan is to provide guidance to the vessel's captain and officers with respect to steps to be taken when a pollution incident has occurred. The primary purpose of the plan is to set into motion the necessary actions to minimize the discharge and mitigate the effects of a discharge. Effective planning will make sure that necessary actions are taken in a structured, logical and timely manner. An effective plan will guide the vessel's captain through the various actions and decisions that will be required during an incident response.

The Operator's Role

Response plans must contain several elements including vessel particulars, reporting requirements, what to do in the event of a discharge, how to report a discharge and how the response will be coordinated with national and/or local authorities. In addition to these topics, a plan may also contain additional information such as a description

of the equipment to be utilized in the event of a release, information on how to handle public relations, check lists to be used in the case of an emergency, procedures for critical tasks that could cause a pollution incident, or the requirements for conducting ongoing drills.

Each vessel's plan should provide the particulars for the vessel. Although this information can easily be provided by the vessel's captain, in the event of an emergency, this information may need to be provided quickly at a time when the captain may not be available. The plan should identify the name of the vessel, the vessel's owner and operator, the official number, the flag, port of registry, vessel builder, gross tonnage, length, draft, etc. If this information is included in the emergency response document, any crew member will be able to provide this pertinent data to the authorities.

The next section of the plan should assist the crew in determining whether a discharge of oil, should be reported and to whom it should be reported. As such, the first element of the vessel's response is to assess the nature of the incident. The crew member who becomes aware of the discharge should immediately alert other crew members, identify the source of the spill and then a spill assessment can be conducted. Once the spill is assessed, the vessel's captain can determine whether the discharge should be reported.

It is important that the crew knows that reporting a spill is required whenever there is a discharge of oil resulting from damage to the vessel or its equipment, an intentional discharge for the purpose of securing the safety of the vessel or saving a life at sea, or during the operation of the vessel. In addition to these actual discharges, a probable discharge should be reported when a discharge is noticed on the surface of the water when the crew is unable to determine where the discharge is coming from. As with the vessel particulars, it is pertinent to have a checklist included within the plan that provides crewmembers a quick description of how they should proceed.

The captain should report the spill by the quickest means possible, whether via radio or telephone. The plan should include a contact list that the captain can use to report the incident. Under most circumstances, the list should include contacting the company's operation center, the dock/terminal operator where the vessel is working, and the state and federal authorities. The captain should provide an initial report that includes the location of the spill, the characteristics of the oil spilled, the disposition of the vessel and its cargo, the movement of the slick and the type of assistance required.

This section of the plan should include a listing of the reporting number for the NRC and all of the government agencies and designated response companies that should be contacted in the case of an emergency. These agencies could include entities such as the United States Coast Guard, MMS, the adjoining state's Oil Spill Response Office, the adjacent state's Department of Environmental Quality, the State Police Hazardous Material Unit, and the State Police Emergency Response Unit. Specific numbers for each state that your vessel operates in should be included as part of the plan.

Special Circumstances: the devil in the details

The plan should also provide the procedures for dealing with specific events that may cause a spill. Such events can include the transfer of fuel while fueling the vessel, the transfer of material from the vessel to another vessel or platform, leakage from equipment on deck such as winches, pumps, etc. or the leakage of material caused by a vessel casualty. As one would expect, the crew's response to each of these particular events would be much different. A response to a vessel grounding causing fuel to leak from a tank would be very different from the leaking of fluid from a winch located on deck. Providing a simple checklist provides the crew with a listing of the tasks that need to be completed to minimize the chance of a spill.

Furthermore, the plan should designate which member of the crew is responsible for documenting the incident by maintaining logs, diaries, etc. detailing the incident, the reporting of the incident, the response of the incident and the incident clean-up. As the captain is usually very busy during an emergency incident, it may be wise to designate a mate or other similar officer for this task.

Additional areas of the plan could include a section on how to deal with the public relations aspect of the spill. As such, the plan should detail which company representatives are authorized to issue statements or give information to any of the entities that may request information that are not included in the plan. For example, ship board personnel need to be authorized to provide information to MMS, Coast Guard, State Police, etc. However, these employees should not be authorized to provide information to local media, environmental groups, etc. The plan should designate which company representative is responsible for providing information to these other entities.

Although none of us want to have a spill, it is important to develop a response plan prior to receiving the call from a vessel notifying you that a spill has occurred. An effective plan will allow the company to coordinate the activities of company personnel, to assist the federal government in responding to the spill and attempt to minimize the effect that a release will have to both the company's reputation and bottom line. Pre-spill planning may seem like carrying an umbrella on a sunny day. That said; you will be glad that you spent the time planning for an oil spill if you ever do receive a call notifying you that one of your vessels is involved with a spill.

The global leader in flexible couplings for marine applications. Trust the innovator-trust CENTA.

Over 20 unique designs | Torsional Vibration experts
Over 16 million sold | Carbon Fiber Driveshaft leaders

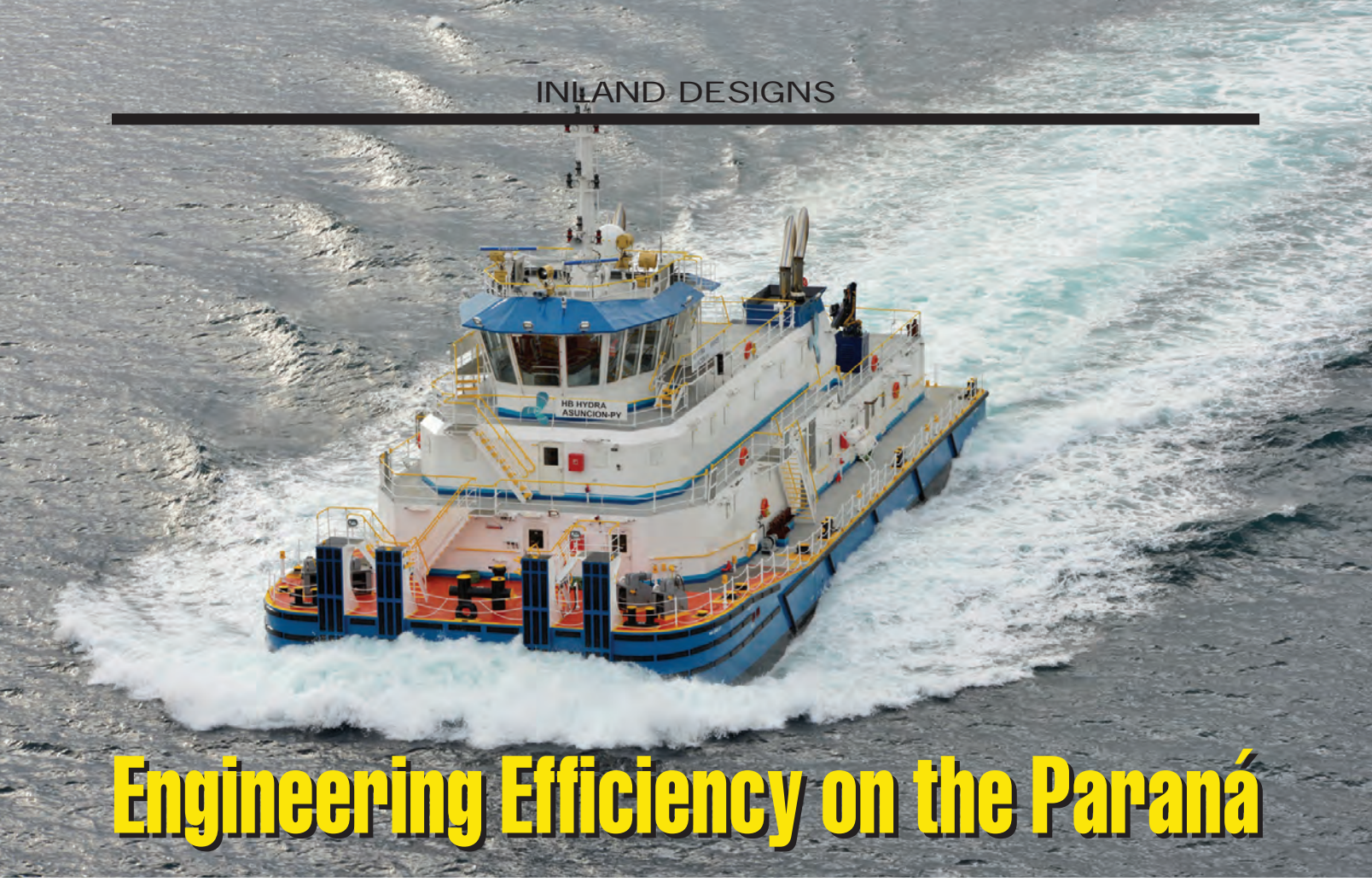
CENTAFLEX
for close coupled gear drives

CENTALINK
for intermediate drive shafts

CENTAX-SEC
for remote mounted gear drives

CENTA POWER TRANSMISSION
LEADING BY INNOVATION

2570 Beverly Dr. #128, Aurora, IL 60502 **T** 630.236.3500
Catalog downloads at **www.centa.info**
Email inquiries to **mn@centacorp.com**



Engineering Efficiency on the Paraná

A North American design tailored for South American operation: the new fleet of diesel-electric push boats engineered by Robert Allan Ltd. (RA) brings an improved level of performance to the Paraná River.

By Eric Haun

The Paraná River flows some 3,000 miles through Brazil, Paraguay and Argentina, meeting the Paraguay River and then farther downstream the Uruguay River before eventually emptying into the Atlantic Ocean at Buenos Aires. Second only to the Amazon for longest river in South America, the Paraná provides a vital means for South American transporters to carry bulk petroleum, agricultural and manufactured goods. The river's geographic properties pose a number of challenges for operators that have not been addressed by naval architects — until recently.

A major problem on the Paraná is that most pushboats currently navigating the waterway – some upwards of 40 years old – are inefficient and were mostly purchased secondhand from North American operators. Above all, none were designed specifically to meet the demands of the Paraná. But as efforts to ramp up production and efficiencies escalate in South America, a new generation of vessels will enter operation.

RApide 4500 to the Rescue

Enter Robert Allan's new custom-designed push boats, RApide 4500, which according to the designer, are the first engineered for the Paraná River, present a number of unique elements to improve operational capabilities and overall efficiency. The newbuild fleet will enter long-term barge transportation contracts to move iron ore some 2,500 kilometers from Vale S.A.'s Corumba mine in southwest Brazil to tidewater near Buenos Aires. Vale intends to move roughly 10 million tons of iron ore per year from Corumba via the Paraná by awarding three contracts to push boat operators for 3.3 million tons each, the first of which was won by Robert Allan's client Hidrovias do Brazil.

The Hidrovias do Brazil contract calls for the construction and operation of eight RApide 4500 shallow-draft river push boats (46.5 x 16.5 x 4 meters) and 144 Mississippi-style hopper barges (61 x 15 x 4.27 meters) configured especially for the project to operate 24 hours a day, 11

months of the year.

"These boats are among the first to be specifically designed for the challenges of this particular river system," said Mike Fitzpatrick, vice president at Robert Allan. "There are 40 or so push boats [currently] operating on the Paraguay Paraná, and up until last year, they were all pretty much hand-me-downs from the Mississippi River. They're 30 or 40-year-old push boats purchased in the States and transported down to the river, typically too deep for the Paraguay Paraná. They work, but only during certain portions of the year and in certain portions of the river. A Mississippi boat is too deep; it doesn't have enough fuel capacity, and generally doesn't have enough crew accommodation. They're not ideal for the river system."

Looking to forgo the limitations of existing Paraná fleet, RA generated a design geared for the river on which they'd operate. "The goal was to design vessels that were optimized for the required service on the Paraguay Paraná," Fitzpatrick said, "which means fuel capacity for a range of 5,000 kilometers, accommodation for upwards of 16 people, and relatively shallow draft."

Fitzpatrick said the concept for the vessels was in the works as far back as 2005 when the Corumba mine was owned by the U.K.-headquartered mining company Rio Tinto, who would own and operate the vessels themselves. Contracts were in place to build the push boats at shipyards in Brazil, Chile and China, with barge construction contracts in Paraguay, Argentina and China, when the financial crisis of 2008 caused the project to be scrapped, and the mine was then sold to Brazilian mining corporation Vale. Vale sat on the project for a few years until it eventually decided the time was right to award operational contracts. That's when Hidrovias do Brasil entered the picture, working with RA to present a design for Vale.

The highly specialized fleet is to be built entirely in Turkey's Uzmar Shipyard, known as the "workboat and tug factory." The first two vessels for Hidrovias do Brasil were transported from Turkey to Uraguay via semi-submergible heavylift vessels were delivered in early March 2014 and are currently undergoing owner acceptance trials, with the remaining six vessels expected for delivery by the third quarter of 2015.

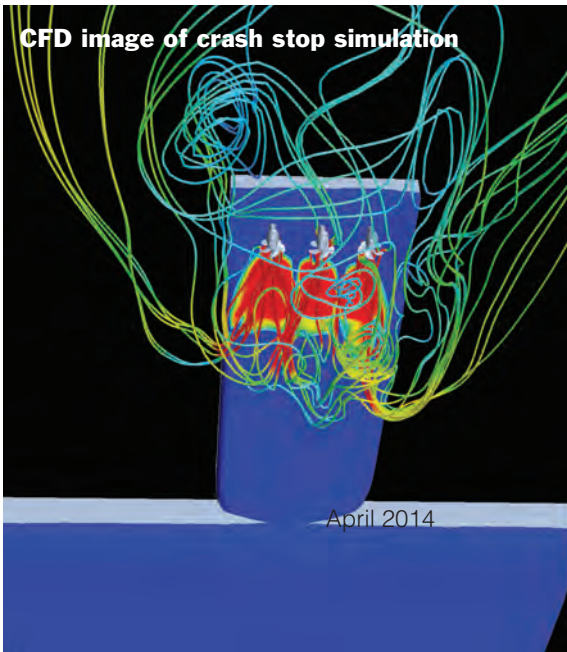
Special Features

The vessels are propelled by a diesel-electric propulsion system, which is helpful to improving operational efficiency in a few important areas. An electric azimuth drive will provide a better option than a conventional six-shaft propeller boat in terms of maneuverability and speed and also allows for a shallower draft (2.1 meters). But according to Fitzpatrick, "The primary technical, operational reason for going diesel-electric was to ensure a safe crash stop."

"The biggest reason for azimuthing drives," Fitzpatrick explained, "is the requirement on the river that the vessel be able to stop in 2.5 convoy lengths, which is about 700 meters. Up until some point probably about two years ago, that regulation was somewhat loosely defined as just being able to stop in 2.5 convoy lengths, but it didn't stipulate under what conditions, so people were doing that slightly loaded, flat water, going up river. About two years ago, the Brazilian authorities clarified the requirement to say that the crash stop has to happen from a fully loaded condition going down river at full speed, and they have to be able to stop not just relative to the water, but over ground."

Fitzpatrick continued, "This is a very challenging requirement, and ultimately it has driven the installed power and the propulsion equipment. With azimithic drives, 100 percent of our ahead thrust we can also get astern, where with conventional propellers you're only going to get 50 percent astern thrust."

First of class HB Hydra on trials in Turkey.



CFD image of crash stop simulation

Fitzpatrick admits that diesel-electric drives are significantly more expensive than conventional propulsion systems and create a more complex vessel which requires maintenance from a higher level or personnel, but he said they nonetheless provide the best technical option, especially when considering in the river's geography and operational requirements. "With a conventional propeller boat, especially running on heavy fuel, going full ahead to full astern, there's a very high chance, with the propellers being reversible, of overloading the engines and stalling the ship, which would be an absolute disaster if they tried to do a crash stop."

Another challenge presented by the river system is its enormous amount of debris, especially when running azimuth drives, which Fitzpatrick said has led to the installation of propellers, nozzles and gear boxes in the drive that are "essentially ice-class." The electric propulsion system would then offer another benefit as an overload would be passed to the main generator.

Three main diesel generators sets provide 3 x 1,710 ekW of power to 3 x 1,600 kW motors, each driving a Schottel SRP 1215 Z-drive with nozzle custom-modified for shallow draft hull form. The nozzle is flattened on the bottom to reduce draft and suction, while the upper part of the nozzle is designed to match the shape of the tunnel for better embedment into the hull, which reduces draft by another foot. The major electric components, such as AFE drives, propulsion motors, generators, etc., are of ABB design and supplied by Elkon, while the generator engines are three Wärtsilä 9L20, medium speed engines, each producing 1,800 bkW at 1,000 rpm.

Schottel, ABB/Elkon and Wärtsilä were chosen not only for the equipment capabilities and suitability to the project, but also for the in-service support they will provide. Due to the vessel's complexities, a high degree of technical maintenance is required, leading the companies to establish project-specific service stations to assist Hidrovias do Brasil in the remote area of Paraguay.

Economy and the Environment

Notably, the push boats will run on heavy fuel oil (HFO), saving thousands in fuel costs, though the ability to operate on marine diesel oil (MDO) is available if needed. According to Fitzpatrick, no other river boats in the world run on HFO, but "because of the length of the journey and constant load on the vessel, we're able to figure these vessels to run on heavy fuel, which represents a 40 percent reduction right off the bat in fuel costs. That's a huge factor."

Because the boats are carrying heavy fuel, Robert Allan wanted to make the vessels double hull. Fitzpatrick explained, "Even though it's not required by regulation, that was one of our stipulations that if we're going to do this we want all the fuel off the shell, and the owner agreed quite readily to that."

Each push boat has a total fuel capacity of 500 meters^3 of HFO and 30 meters^3 of MDO, with ballast capacity of 400 meters^3. The potable water capacity of 34 meters^3 is supplemented by two onboard flash evaporator units.

Rugged Barges for Demanding Conditions

The barges, though of conventional hopper Mississippi style, are also tailored for the Paraná. The barges, which include a combination of box-shaped barges for mid-convoy and rake-ended barges for the ends, are designed to maximum allowable convoy dimensions, and must carry the required 2,500t deadweight with limited draft due to restricted under keel clearance. The barges will operate in 4x4 convoys of 16 to transport lots of approximately 40,000 metric tons per shipment. According to RA, a rigorous design exercise was required to minimize the steel weight in the barge structure without sacrificing the strength needed for the demanding service.

RA said finding a shipyard with the capacity to build and deliver 128 barges in the required time frame was also a challenge, but investigations soon led to ZPMC in China, a facility largely noted for its extensive production of large container cranes. One of the major attractions of this facility, RA said, was the availability of the facility's semi-submersible ocean transporter fleet for delivering the barges. Thirty-two barges have already arrived in Buenos Aires as art of the first shipment from China, while an additional 16 barges are presently under construction at CIE S.A. in Asuncion, Paraguay. RA provided construction overseeing services for the barge fleet on behalf of the owners. The last batch of barges will also see a 54 x 25.2 meter 1,600 metric ton floating drydock, also built at ZPMC and designed by RA, for Hidrovias do Brasil to service its new fleet of push boats and barges.

The entire project is noteworthy in that these built-for-purpose vessels are part of a larger effort to increase efficiencies on this South American waterway, where very soon, local grain producers hope to compete with American suppliers and move increasingly larger volumes to global markets in a post-Panamax world. The race is on and the new push boats and barges are expected to commence ore movements in October 2014.

AEP Barges into the Liquid Transport Markets

Answering the needs of longstanding clients, bulk transport giant AEP dips its toes into the liquid transport arena.

By Joseph Keefe

AEP River Operations needs no introduction for most *MarineNews* readers. One of the true river giants operating on America's domestic inland waters today, AEP is headquartered in St. Louis, Missouri, and is primarily known as a barge company that provides transportation of dry bulk commodities throughout the inland river system. AEP River Operations is owned by American Electric Power, one of the largest electric utilities in the United States, delivering electricity to more than 5.3 million customers in 11 states. The current AEP fleet includes more than 79 towboats ranging up to 11,000 horsepower and more than 2,900 hopper barges, moving more than 65 million tons annually. Very soon, as AEP acquires a newbuild fleet of 20 state-of-the-art tank barges, that mix of equipment is about to change.

In business for 41 years, AEP continued to grow over time, acquiring the barge line MEMCO in 2001, which was then combined with the River Transportation Division (RTD), resulting in the name change to AEP River Operations LLC in 2008. The company headquarters are located in Chesterfield, MO. AEP River Operations additionally has fleeting services in Convent and Algiers, LA, and a shipyard in Belle Chasse, LA. Crew and operations offices are located in Paducah, KY, and Lakin, WV.

Dipping It's Toe in the Water

Already ranked as the second largest commercial inland tug and barge company in America, trailing only Ingram, the reason for AEP's foray into the uncharted waters of tanks barges wasn't necessarily readily apparent, but nevertheless, says AEP President Keith Darling, the move makes a lot of sense.

Rather than thinking the company's excursion into the liquid freight market is a means of offsetting any decline in coal tonnage, though, as some may believe because of the bleak predictions regarding demand for domestic coal, Darling explained that it evolved more as a response to his customers' urging them for years to move their liquids.

"Coal's not going away," he said. "It's just that the current shifts in the marketplace indicated it was the right time

for us to finally jump into the tank barge market. It will not only allow us to offer our customers a more complete range of services, it will be a good way for us to diversify our revenue stream." Today's AEP River Operations' barge fleet primary routes are Chicago to New Orleans and Pittsburgh to New Orleans including all points in between. The majority of their open hopper fleet moves tonnage on the Ohio River and its tributaries along with some movement to New Orleans. Due to the harsh winter weather, says AEP, its combined fleets are booked to capacity for the immediate future. AEP defines "full capacity" as meaning that their barge fleet has frequent multiple opportunities to move tonnage for shippers, versus only one option or no bid interest at all. On the new, tank barge side of the equation, the first liquid loading for AEP River Operations was a load of ethanol from St. Louis, MO to Vicksburg, MS.

Up until now, AEP River Operations moved only bulk cargoes such grain and grain products for all of the major grain exporters as well as coal for most of the major coal producers in the U.S. Additionally, they transport steel and raw materials for steel making, with salt, petroleum coke, limestone, and cement rounding out their capabilities. That line-up is about to widen. AEP expects to operate its new fleet of 20 tank barges in both the day rate and point-to-point markets. The 20 barges being delivered will not have heating coils and AEP expects to focus on the carriages of chemicals.

State-of-the-Art

JeffBoat is building all of the tank barges for AEP. And yet, AEP has its own shipyard, as well. AEP Belle Chasse shipyard is an 11 acre facility has 1,100 feet of waterfront equipped with seven dry docks ranging from 1,200 to 2,700 tons and includes a full-service machine shop. That yard is busy enough on its own, having recently completed several major repowers to Tier 3 engines on vessels ranging up to 6000 hp. That said, the vast majority of AEP's barge fleet, which totals some 1,000 open and 2,000 covered hopper barges, was built at Jeffboat, Darling said. "We have a very good, longstanding relationship with them. Their workmanship is excellent, as is the ongoing support and service from the Jeffboat team."

Like most things at AEP, the new tank barges will meet and more than exceed applicable safety and equipment standards on the water today. Beyond the Tier III John

"Coal's not going away. It's just that the current shifts in the marketplace indicated it was the right time for us to finally jump into the tank barge market. It will not only allow us to offer our customers a more complete range of services, it will be a good way for us to diversify our revenue stream."

– AEP River Operations President Keith Darling

Deere engines, the barges are built with 6.4 pound pressure tank tops with the Superac High Velocity, 6 PSI pressure relief valves which will provide a greater degree of safety in the event of overpressure. Several stages of safety coverage against spills provide maximum redundancy in the form of high level alarms, high level shut downs, gauge trees, high level dipsticks, sight glasses, and overflow through PV valve into the containment space on the tank top.

Keith Darling explains, "The cargo tanks have "six-pound tops," so named because they can withstand pressures of 6.4 pounds-per-square-inch before venting. The number is double what is most often found on the river, and will result in greater safety and minimal emissions, in keeping with AEP's established record of environmental stewardship." Additionally, each barge will be equipped with a Hermetic closing gauging and sampling system. According to AEP, the vapor recovery system was designed and installed by the construction shipyard under the authority of the U.S. Coast Guard.

To say that the new units will be robust in their construction would no t be overstating the case. The 6.4 PSI external framed tank top is 100% seal welded to provide greater strength and prevent rust bleeding. The barge is built with ½ inch side plate shell and an extra rub bar for greater protection and added manhole openings on both ends of each wing tanks allow for easier access to wing tanks.

New Markets, New Training & Protocols

Stepping into the tank barge market constitutes a whole different market sector, but also a whole new set of rules. AEP set about the process with eyes wide open and as the first

barge was being delivered, they were ready for what came next. Ramping up for the handling of liquid cargoes required training and education of AEP's entire workforce. Already, more 1,000 employees have been trained over the course of the past eight months and the firm expects to complete the process very shortly. Using a combination of third-party and in-house trainers, different layers of awareness training and 40-hour Hazwoper sessions were held. With the help of a third-party vendor, cargo transfer procedures, ballasting and Vessel Response Plans were formulated in accordance with U.S. Coast Guard requirements. Beyond this, AEP took several groups of employees through the construction shipyard to show how a tank barge is put together and the equipment which is required. AEP, for the time being, will use contract tankerman services. Those vendors, according to AEP, will be audited to ensure environmental and operational standards.

The entry into the tank barge markets involved tremendous changes in AEP's safety and training protocols. A "Liquid Addendum" section to AEP's RCP manual, which deals with vessels having tank barges in tow, was added. The standard new hire training course was changed to add Awareness and Security training to the agenda and AEP will require refresher training for all individuals who received the 24 hour technician level or 40 hour Hazwoper training, including all wheelhouse personnel, Barge Maintenance, Qualified Individuals and Incident Command Team members.

Around the next Bend

AEP River Operations began operations of its new Liquids Division at the end of January with receipt of the first of 20 tank barges. All 20 units are expected to be delivered within 2014, meaning AEP will soon impact the inland tank barge markets, in a small way, at first. As the possibility of increased tank barge traffic increases, especially with the very real possibility of Coast Guard approvals of the carriage of fracking materials on inland rivers also increases demand for existing tonnage. An AEP spokeswoman would not rule out further expansion down the road. In the meantime, look for AEP to bring the same commitment to safety and environmental performance to the transport of liquid products that they have offered for dry commodities for the last 41 years. That's good news for everyone.

Bioremediation Goes Mainstream

A reliable solution for response and prevention that can save money, time and regulatory aggravation is here.

By John Paparone

The threat of oil pollution has long been a problem in the shipping community. You don't have to look too far to review the myriad of oil spills that have plagued the industry. The *Exxon Valdez* spill that occurred 25 years ago has recently come to the forefront once again as there is evidence that the ramifications of the spill are still being felt in the fragile eco-system of several Alaska beaches. Today's oil spill response industry has certainly been moving with the times by introducing more and more advanced technologies to contain spills when they occur but even the tried and true method of using skimmers and booms can only do so much.

Conventional Wisdom

Skimmers skim oil off the top of the surface; yet the oily mess has to be stored elsewhere and/or then transported to be disposed of. Booms help contain oil to stop it expanding in the affected area, but tools are still needed to pick up the oil that has to be once again treated at another location. 'Diapers' or absorbent pads are also typically used in oil spill situations but then the matter of disposal – the logistics and the cost – has to again be faced.

The big oil spills are only part of the picture. Everyday spills aboard all manner of ships as well as land-based marine facilities also occur more often than you might think. Oil and harmful contaminants seep into bilges and are run out through the waste stream and into the ocean or into soil. Galley hoods, surfaces and floors harbor bacteria that can get into food. The floors can also become very slippery as a result, which can cause a host of any number of slip-and-fall accidents.

In marine facilities, storm water runoff is a huge concern around soil contamination. A standard cleaner-degreaser product will only semi-clean the area but again, do nothing to break down the hydrocarbons in the waste stream. It's like putting a Band-Aid on a big open gash. And, then, there are the collection tanks. Often, hydrocarbons are bled out through a pump but then have to be moved offsite in order to be treated – another time-consuming, costly endeavor.

Bioremediation

While the shipping industry is going greener it is also trying to cut costs. So treating hydrocarbons *in situ* is definitely something to look into. There is where using the right kind of bioremediation products come in. The process of bioremediation is nature's way of solving contamination problems at the root of the cause. Tiny micro-organisms literally "eat" away at hydrocarbons, transforming them into a non-toxic combination of carbon dioxide and water, leaving surfaces like asphalt and workshop floors skid-free, countertops and floors shiny and clean, and hydraulic equipment looking like new.

This natural process then produces valuable bio-nutrients that can be utilized by both plant and aquatic life. Essentially, this means that wherever and whenever a spill occurs, you can treat it safely and effectively, with the confidence that it will not harm the environment or your employees.

Preventative maintenance is the key to overall reduction of toxic compounds in the industrial environment. That's where bioremediation products really prove their worth. When used in a regular maintenance program, the microbes will continually "eat" hydrocarbons, keeping work areas clean and free of residues.

Specific Solutions

EnviroLogic Biobased Technologies Inc, located in Philadelphia, has been developing industry-specific EPA-approved bioremediation products for over 20 years. One major result of their efforts is an honest claim they make that not one of their products has ever been returned for lack of performance. The product line includes over 30 solutions for the marine, aviation and food industries. When the U.S. Navy's Military Sealift Command (MSC) needed to solve the problem of dealing with harmful hydrocarbons in their ship bilges and holding tanks, they turned to EnviroLogic. The end result was a product called NavalKleen – a highly-concentrated, active mixture of hydrocarbon-oxidizing, naturally-occurring, single-celled micro-organisms with a "bio-surface cleaning agent" and water.

In this instance, Naval Kleen kept the oil content down in the bilges such that MSC experienced bilge oil content of 5 ppm or less prior to passing through the (OWS) oil separator system. The results helped extend the life of key components of the OWS, including ceramic filters.

"Military Sealift has been using NavalKleen II for over eight years," stated René Fry, a manager in the Chemical and Fuel Programs for MSC. "It is by far our single most popular cleaner on board MSC's 106 ships. We use it for several purposes, but all are associated with the removal of grease and oil from the surface of equipment, bilges and in our oil water systems, including our oily water separators with oil water content monitors. We rarely see our Oil content Monitor read anything above 5 ppm ever since we have used this product. Our waste oil bill used to be as much as $19 million. We are now below $7 million."

As EnviroLogic Vice President Mark Weinberg explains, "Use the product once and you've done the job of getting rid of hydrocarbons in a single shot. Use it as part of a regular maintenance routine, and you're actually continuing the process of bioremediation by keeping hydrocarbons under control. I'd venture that most of the other products companies use now, do not have this capability." Shipping companies such as Maersk Line have also seen the benefits in a real-world situation. In 2007, the M/V SL Atlantic suffered a large-scale contamination of one of the ship's double-bottom ballast water tanks as a result of a crack in the steel deck.

After the crack was repaired and the contaminated water was offloaded, it was found that there was still a significant amount of oily residue. The search for an effective cleaning product began, with less than optimal results from most, leaving the tank full of cleaning slops. Subsequently, the operators came across Naval Kleen II, an EnviroLogic cleaner-degreaser.

The ballast tank was refilled with sea water and Naval Kleen II was added. The ship then proceeded to sail several transatlantic voyages. Several lab tests were conducted and it was found that there was a significant reduction in hydrocarbon contamination as follows:

Date of Sample	Date of Test	Results in mg per Liter (mg/L)
18Aug06	22Aug06	13.0 and 8.79 (two samples)
15Sept06	20Sept06	3.7 and 3.72 (two samples)
19Oct06	23Oct06	2.4 mg/L (single sample)

Jeff Phelps, Vessel Manager of Maersk Line Ltd reported: "In our experience, Naval Kleen II has proven to be a highly effective product for mitigating oil contamination of ballast tanks." The oil and gas industry can now also benefit from another industry-specific bioremediation product. Rigwash was recently released by EnviroLogic and is the only bioremediation cleaner-degreaser awarded the Gold Standard by CEFAS, the UK's Centre for Environment, Fisheries & Aquaculture Science. This organization validates products used in the North Sea based on their effect on aquatic life, environments, etc.

Rigwash is a specific highly-concentrated formula that easily maximizes its use on oil rigs over long periods of time. Used in a regular preventative maintenance routine, the product's bioremedial microbes go to work in the waste stream right away and keep myriad of surfaces, floors and

lines clean and working efficiently.

Selecting the Right Product

"How do you know what to look for in a bioremediation product you can trust?," asks EnviroLogic CEO Jay H. Murland. It turns out that the number one thing to watch for is if a product boasts a neutral pH, whether diluted or concentrated. However, the real truth is in the MSDS (Material Safety Data Sheet). Many products that claim to be "green," actually still contain Hazmat properties. On a MSDS sheet, the HMIS (Hazardous Materials Identification System) safety and health issue rating pertain to four areas: health, fire, reactivity, and hazard. The ratings with a zero (rare) indicate a purely clean and safe product. All of EnviroLogic's products have the zero rating.

Additionally, the EPA-term SARA (Superfund Amendments and Reauthorization Act of 1986 (U.S.) Hazard rating should show Title III Section 313: "Not Listed" and Fire (Section 311/312): "None" in order to prove full environmental compliance. (The SARA act amended the Comprehensive Environmental Response, Compensation, and Liability Act).

Most recently, EnviroLogic has added FOG microbes to NavalKleen so in addition to the product's quick ability to dramatically reduce hydrocarbon build-up and cut through fats and grease that often accumulate in the galley bilge, it can now also be used on galley floors; an all-in-one cleaning solution.

With today's stringent environmental regulations and zero risk goals in the shipping industry, it makes sense to use cost-effective, quality, proven bioremediation products in everyday marine and oil and gas applications. It's the smart way to save time, money and the environment.

America's First Marine Highway Comes Back to Life

The New York State Canal System, once forgotten as a commercial shipping option, is on the rise again, after years of decline. The shorter, greener and smarter route(s) make increasingly good sense for high value cargoes.

By Joseph Keefe

Commercial utilization of America's original superhighway – the Erie Canal – is on the rise again in recent years after years of decline. The third generation of the famed Erie Canal – the "Barge Canal" was constructed between 1905 and 1918. Designed to accommodate up to 10 million tons of cargo per year, the modern Erie Canal peaked at just over 5 million tons in 1951. Then, and with growing competition from railroads and highways, and the opening of the St. Lawrence Seaway in 1959, commercial traffic on the Canal System declined dramatically in the latter part of the 20th century.

Over the last two decades, commerce has slowed to a trickle along the Canal System, which has become a major recreational boating destination. Cargo volume on the Canal in recent years would average 10,000 tons annually or less, and in 2011, only 6,150 tons were recorded. In 2012, tonnage exceeded 43,000 tons and in 2013 – a year plagued by flooding and extensive repairs on the Canal – 96,433 tons of cargo was shipped on the Canal, the highest total since 1993.

The New York State Canal System is a 524-mile long, commercially viable waterway connecting the Hudson River with the Great Lakes, Finger Lakes, and Lake Champlain. The federally improved route between Waterford and Oswego provides a vertical clearance of at least 21 feet; the Champlain Canal has at least 17 feet; Cayuga-Seneca Canal, 16; and the western Erie Canal, 15.5. The controlling depth on the Erie Canal between Waterford and Oswego is currently 11 feet; the Champlain Canal is 9.5 feet; Cayuga-Seneca Canal, 8; and the western Erie Canal, 9. Efforts are underway to return the Canal System to its published depth of 14 feet from Waterford to Oswego and 12 feet elsewhere.

Today, the Canal System remains a viable artery for the movement of bulk and project cargo. With connections to the Great Lakes and the St. Lawrence Seaway, as well as to the interior of New York State where manufacturing and commerce is on the rise, today's Canal System can be an effective complement to land-based transportation systems – completing the intermodal chain – around and within the Empire State.

The locks of the New York State Canal System have a usable length of 296 feet and a usable width of 44.45 feet. The Canal Corporation recommends a beam of no greater than 43.5 feet. Every lock on the New York State Canal System is equipped with a capstan for the purposes of double locking. Several Canal terminals remain available for commercial use, but with little or no infrastructure for loading and unloading cargo. A variety of aids to navigation mark the channels of the New York Canal System, with the vast majority of these aids being unlighted. Products still shipped on the Canal System include pre-fabricated rebar caissons, liquid calcium chloride, radar dome material, commercial paper dryers, aggregate, turbines, commercial boilers, transformers, and other over-sized cargo.

On the Water

It might surprise you to know that at least five barge towing companies ply the NYS Canal System. NYS Marine Highways is one of those firms. NYS Marine Highways' Rob Goldman told MarineNews in March that his firm accounts for as much as 85 percent of all cargo moved on the canal last year. He said, "The canal is ideal for high value, project and heavylift cargoes." In other words: the perfect cargoes for shortsea shipping. Other cargoes include the movement of Canadian corn to ethanol plants using hopper barges.

According to Goldman, last year's problems and two months of lost time on the water probably cost the wa-

terway another 50,000 tons that could have been moved. Beyond this, he says, the system is handicapped because it is not being currently maintained to its project depth – something many inland waterways operators, no matter where they push their barges, can relate to.

Air draft and water depth can also be an issue, he said. His 1,800 and 1,400 HP towboats therefore have retractable wheelhouses to accommodate the sometimes difficult conditions. Goldman's biggest year on the New York Canal System coincided with the year that Enron failed. As it turned out, numerous, high value turbines had to be moved into storage. The shippers turned to Goldman and his fledgling operation. The rest is history.

Goldman says, "Canal service providers are problem solvers. The tugs, in this case, are tools. Shippers have unique requirements and we meet those needs with innovative solutions."

Unlimited Possibilities: Shorter & Greener

For those not convinced of the canal(s) utility, shippers moving cargo from mid-Atlantic ports to the Great Lakes should take notice. The benefits in terms of fuel savings alone can be enormous. Consider that Philadelphia to Oswego (NY) is 1,884 miles outside; via canal, just 536 miles. Shorter, greener – the canal beckons. Could a company get carbon credits for doing the right thing inland? Rob Goldman further insists that if water depths increase through better dredging and maintenance, the economy of scale for lesser value cargoes also increases. John F. Kennedy perhaps said it best – although not referring to the New York State Canals – that, "When the tide comes in, all boats float."

We asked both Goldman and New York Canal officials about the possibility of the canal being used in the near term to move crude oil from the Midwest fracking production fields. Currently, much of that moves East via train – but that's becoming increasingly unpopular, especially given several high profile derailments and questions about the safety of moving volatile crude oils via railroad. But, according to Goldman, the state of New York requires a twin screw arrangement for any vessel pushing petroleum cargoes, something that's not practical in the canals. "Operators would need an exclusion," he said. As for the New York State Canal System, the issue of fracking oil is a sensitive one. Local officials want to increase commerce, but not necessarily the drama or politics that accompany something that is, to date, a controversial issue. Arguably, there is no more direct, greener, shorter or more sensible route to do so.

Canal Tonnage at a Glance

Year	Tonnage
2009	4,283
2010	9,107
2011	6,150
2012	43,022
2013	97,426

Shortsea Shipping: Models, Modes and Maximizing Logistics

A Commercial Shipping Study completed for the Canal Authority in May 2010 (www.canals.ny.gov/business/modern-freightway.pdf) clearly demonstrated the benefits of waterborne freight logistics and makes the case for instituting container-on-barge service on the New York State Canal System. Summarizing numerous studies comparing the energy requirements and environmental externalities of freight transportation modes, the report provides a roadmap through some of the best prior research that demonstrates the benefits of waterborne logistics.

The report went on to say, "Since barge traffic on the New York State Canal System declined five decades ago, much has changed in modern logistics. Containerized cargo revolutionized global trade, enabling multi-modal systems that move cargo farther, faster and cheaper but regions that fail to embrace "the box" run the risk of being left behind." Significantly, the report points to the European shortsea model, with the Rhine region as a perfect example of how to make better use of inland waterborne containerized freight to strengthen local economies and provide an environmentally sustainable logistics solution.

In 1921, General Frank T. Hines, Chief of the Inland and Coastwise Waterways Service of the War Department, declared, "It is not enough to provide a waterway, even though it may be an excellent one, and overlook entirely the equally important elements which must be integrated before the waterway may become a trafficway." Hines understood then, even before the word "intermodal" would become part of the everyday lexicon of transportation professionals everywhere, that the maritime component of the intermodal equation is important; but one only one part of the supply chain.

Beyond the New York Canal system's obvious potential for expanded commercial utility, the all fresh water transit canals are also used for flood control. And, over the past three decades, the absence of a robust commerce presence has encouraged an increase in recreational use. Today, the Canal Corporation continues to work with shippers, manufacturers, port officials, economic development professionals, and other businesses to maximize the increasingly compelling benefits of what was – and is – America's most successful and enduring waterways: the Erie Canal.

GO BIG OR GO HOME

Vigor Industrial has ballooned from a modest shipyard in Portland, Oregon, to the largest shipbuilder in the Pacific Northwest and Alaska.

By Sarah McCoy

Vigor increasingly thinks big and builds big. The company's new floating dry dock will be the largest in the United States. And Vigor wants to get even bigger. CEO and owner Frank Foti expresses an ambition to grow to twice the current size in the "next few years." Foti, who is also chairman of the Shipbuilder's Council of America, says he is, "striving for critical mass. That means being the right size financially and geographically, and developing the right mix of business lines and capabilities to move out of the boom and bust cycle of the typical shipyard business. Proof is in the results," he continues, "our fabrication team has a growing backlog at a time when industry analysts are predicting flat or shrinking backlogs."

To make it in a highly competitive global industry, Vigor offers the full range of services; including new build and repair, conversions, outfitting and modernization. Beyond this, the company does marina and land-based fabrication, industrial and marine coatings, plus machining services. Joe Covelli, Senior Vice President of Fabrication, says that in addition to these, Vigor is setting its sights on "moving up stream, developing our design, planning and engineering teams to work with customers earlier and earlier in the design process."

Location, Location, Location

Vigor has multiple shipyards, half a billion dollars in annual revenue and 2,000 employees who build tugs, barges, workboats, cargo ships, fishing vessels and ferries. It has seven loading facilities, ten dry-docks, 17,000 feet of dedicated pier space and half a million square feet of covered shop area. Vigor fabricates large projects like bridge sup-

Image above: Vigor's 60-acre shipyard on Swan Island near Portland, Oregon with artist's rendering of soon-to-be-delivered largest floating dry dock in the United States.

ports and wave energy platforms and also works on all kinds of ships. It made safety and environmental upgrades to the semi-submersible drill rig Kulluk and drillship Noble Discoverer before they set sail for rough Arctic waters in 2012. According to Vigor, the firm works on more vessels in the Coast Guard fleet than any other company.

Vigor's facilities stretch from Portland, Oregon to Seward, Alaska. A 60-acre shipyard is located in Portland, another 27 acres on Harbor Island in Seattle, 16 acres in Ketchikan and 11 more acres in Seward. Vigor teams also work in the Navy shipyards in Bremerton and Everett. There is a smaller facility, Washington Marine Repair, in Port Angeles, Washington. Of the two shipyards in Alaska, one is in Ketchikan at the south end of the wet panhandle and one is farther north in Seward on the Kenai Peninsula.

Vigor's recent acquisition of Seward Ship's Drydock improves the company's ability to work on vessels from the fishing, oil and gas industry as well respond to expected increases in demand linked to Arctic drilling. The company is accustomed to working on vessels deployed in the cold North Pacific, Bering Sea and Gulf of Alaska.

With yards located from Oregon to Alaska, there is plenty of opportunity to cross-pollinate between operations, find efficiencies and work on design changes earlier in the planning process.

Covelli says that each shipyard is training to do more than in the past. "Portland is a good example, where our teams are learning best practices and deploying experts from across the company to grow from simpler barges to more complex barges to now self-propelled vessels," he says.

CEO Frank Foti founded Vigor -- its name chosen for its connotations of energy and power – in 1995, when he took proceeds from selling a family-owned construction company in Cleveland, Ohio and bought the Cascade General shipyard in Portland, Oregon. By 2011, Vigor Industrial was buying Todd-Pacific Shipyards, a leading West Coast builder of ferries and repairer of Navy ships, and a company nearly Vigor's same size.

The Vigor companies include Vigor Fab (formerly US Fab), Vigor Shipyards, Vigor Industrial, Specialty Finishes, Vigor Marine, Vigor Machine, Vigor Alaska, Specialty Finishes, Washington Marine Repair and Shipyard Commerce Center. There have been enough name-changes that the company's brochures haven't kept up with them.

New Projects, Healthy Backlog, and Workboats, too

Vigor has several new projects in the pipeline: river tugs, very large barges and ferries among them. Two 422-foot tank barges of articulated tug and barge configurations will be some of the largest vessels constructed for Harley Marine's fleet. The "state-of-the-art," double-hulled fuel barges will be built at the Portland yard. Vigor is also building a 242-foot split-hull hopper barge with an advanced sealing mechanism to safeguard environmentally sensitive areas from potential leakage.

In the Seattle area, historically the place where ferries have been built, the company is finishing a 362-foot state ferry, the Tokitae, to carry 144 cars and 1500 people. Vigor has a contract for two of the ferries, plus there is the possibility of a third. In 2011, Vigor finished three 64-car ferries for Washington State. With a planned cost of $213 million, the ferries came in almost $7 million under budget, with a total cost of $206 million.

Foti and his company don't shy

from trying something new, as illustrated by Vigor's contract, just underway, to build three new tugs with Tidewater Barge Lines of Vancouver, Washington. The future Columbia-Snake River pushboats will be built in Portland instead of Seattle.

Says Foti, "Building tugs in Portland is a sign that Vigor is evolving as a business. In the past, our different locations had different fabrication specialties: barges in Portland, ferries in Seattle and fishing boats and ferries in Alaska. Rather than be content with that, we've worked hard to share knowledge and talent between all of our locations."

Horses for Courses

The Tidewater tugs, which will be 102 feet long each and designed for the Columbia-Snake River system began, says the naval architect, as an ordinary project. Corning Townsend, of CT Marine in Edgecomb, Maine, is a specialist in river towboats and highly loaded propellers. "The project seemed to be quite ordinary (relative to other 4400's for the Mississippi River)," he writes in an email, "so I sketched a conceptual design of what we thought might be a solution and headed West for a visit."

Townsend began riding Tidewater tugs up and down the Columbia. "It was immediately obvious that the differences between the barges pushed, the river and the ambient weather made the new towboat unlike any we had done in the past 40 years for river in the East."

Some locks on the Columbia are 100 feet deep; so the first thing he decided to do was extend the main engine exhaust pipes nearly 60 feet above the engines so that when in the lock chamber, the ambient air would be breathable for the crew.

Next, he noticed that the variety of barges pushed on the Columbia have a much larger range of drafts and freeboards than on the Mississippi, so he changed the location and path of the push wires used to steer and stop the barge fleet. And as Townsend rode Tidewater's barges on the river, he got a big surprise.

"There were times when we went less than half a mile upstream in 60 minutes due to extreme current. There were other times when we needed to top the tow against 70 MPH winds. When I asked the captain if this was normal, his reply was: 'if we can't operate in 70 MPH winds, we would never leave the dock.'

"On the Mississippi," Townsend says, "all towboats would be tied to the bank if such a wind occurred. This pointed out the need for very high thrust and extraordinary steering ability for the new boats. Consequently we included the CT-28 nozzles around each propeller and two steering rudders behind each nozzle. The towboat is also fitted with 4 flanking rudders two ahead of each the propellers, each pair with independent differential linkage."

Vigor's Joe Corvelli calls the tugboats "a perfect example of evolution in progress. Our in-house production engineering teams worked with the customer, their designers and engineers to create fully developed, well-engineered designs with our production process and facilities in mind.

"The idea is that this upfront engineering will pay off with efficiencies throughout the three-vessel build project. All the pieces are there and you know how they fit," he says. "For example, when you know where every piece goes, you can paint components earlier in the workflow, ideally while in modules are still under roof, with the confidence that you won't have the risk of doing lots of rework because the part doesn't fit or you need to make an entirely new piece."

Peel Strip Remove

An improved method for removing paint, rust, adhesives & coatings from concrete. Aurand tools literally "peel" any accumulation from any hard surface. Here is the power of sandblasting in a compact, hand-held tool that can be used wherever a hard surface needs to be prepped prior to painting, refinishing or coating.
Available in several widths, and in gasoline, pneumatic and electric models.

TAKE IT OFF, TAKE IT ALL OFF

Since 1937

AURAND

1210 Ellis Street
Cincinnati, Ohio 45223-1843
(513) 541-7200 • FAX (513) 541-3065

Email: sales@aurand.net • web: www.aurand.net • (800) 860-2872

FM MAFCO

The Powerful Solutions People!

- BIRMINGHAM, AL
- CARSON CITY, NV
- CHARLOTTE, NC
- CINCINNATI, OH
- EDMONTON, AB
- HOUMA, LA

Buy • Sell • Rent • Repair • Retrofit

AMERICAN • AMCLYDE • CLYDE
LINK-BELT • MANITOWOC
SKAGIT • TIMBERLAND

www.fmmafco.com

Cranes • Hoists • Winches • Parts
• Derricks • Tuggers • Cables
Slings • Rigging & More!

WORLD-WIDE 1.513.367.2151
FAX 1.513.367.0363
TOLL-FREE USA
1.800.333.2151

Used • New • Surplus • Salvage

Smith Berger

SMITH BERGER MARINE, INC. OFFERS A COMPLETE LINE OF

SHARK JAWS

SAFE - RELIABLE - ECONOMICAL

Smith Berger Marine, Inc. builds a full range of Shark Jaws for Anchor Handling Tug Supply vessels. Standard ratings are 100, 200, 350, 500 and 750 metric tons and all units have Quick Release at the rated load. Smith Berger flexibility allows us to customize our equipment to suit the operating characteristics of your vessel. Third party certification, load tests, release tests and load monitoring systems are available options.

Rely on the 100 year history of Smith Berger to outfit your vessel with our rugged and dependable equipment.

SHARK JAWS • TOWING PINS • STERN ROLLERS

Smith Berger Marine, Inc. 7915 10th Ave., S., Seattle, WA 98108 USA
Tel. 206.764.4650 • Toll Free 888.726.1688 • Fax 206.764.4653
E-mail: sales@smithberger.com • Web: www.smithberger.com

SELCO USA, INC.

Tel: 770-455-9110
SELCOUSA.com
Offering the off-shore community technical solutions

SELCO U.S.A., Inc. has been offering marine electrical products since 1992, and we are proud to supply **Ships Monitoring** systems and **Generator Control** products, along with **Captain Watch** and **Fire Alarm** Systems. Our **Captains Watch** provides safety through field experience, offers a high functionality through PLC and touch screen solution, at a low cost to both operator and installer. Contact us today!

Our partners:

PROPEL ELECTRIC

DECKMA GmbH

Littelfuse
SELCO

megacon
INNOVATION BEYOND TRADITION

"Building tugs in Portland is a sign that Vigor is evolving as a business. In the past, our different locations had different fabrication specialties: barges in Portland, ferries in Seattle and fishing boats and ferries in Alaska. Rather than be content with that, we've worked hard to share knowledge and talent between all of our locations."

– Frank Foti, Vigor Industrial CEO

In a press release, Tidewater calls the tugs "state-of-the-art vessels. The new tugs have a deeper draft, are taller and have more engine horsepower for the length of boat in order to most efficiently traverse the eight navigational locks on the CSR [Columbia-Snake River] system," Tidewater writes. "With their unique double-hulled design, no potable water, fuel, or lubricants will be adjacent to the hull, further increasing the safety and environmental factors built into the design. Additionally, the vessel design features ergonomic accommodations and comforts proven to minimize fatigue and reduce injuries amongst crew."

A Wide Menu

In addition to building vessels, Vigor repairs and modernizes all kinds of vessels. Spokesperson Brian Mannion reports that Vigor has more than 30 repair projects underway across locations, ranging from small fishing vessels to Navy Destroyers and U.S. Navy Military Sealift Command supply ships.

For instance, Vigor retrofitted the 97-foot Chief Seattle fireboat. It also replaced the 300-ton bow of Olympic Spirit, a double hull petroleum barge owned by Harley Marine subsidiary, Olympic Tug & Barge, Inc. See the time-lapse video at http://vigorindustrial.com/vigor-marine/projects#olympic_spirit_bow_replacement. Vigor is a shipyard with its own YouTube channel.

For the Navy, Vigor has worked on the massive aircraft carrier USS Lincoln, which is 1,092 feet long by 257 feet wide at the flight deck, more than once. The company also services the USS Nimitz aircraft carrier based in Everett, Washington.

On the Coast Guard side, Vigor finished $56 million in maintenance and modernization efforts for the heavy icebreaker Polar Star, 399 feet, to return it to service at the end of 2012. Vigor does routine and emergent maintenance for vessels in the USCG fleet, including National Security Cutters, high and medium endurance cutters and the buoy tender fleet.

Balancing Act: No Problem for Vigor

Construction funds linked to government work are about as placid and dependable as the Bering Sea. Says Foti. "At best, the government is looking at reductions in defense spending. At worst, we'll keep seeing made-up crises like sequestration and unpredictable government shutdowns. The shipbuilding and repair industry is a $20 billion industry. About 60 percent of that is government work, with the balance being commercial shipbuilding and repair."

To counteract the uncertainties, Vigor is working to acquire non-shipbuilding business. Its website says, "Vigor companies can fabricate just about any steel structure regardless of shape, size or complexity." Vigor fashioned eight 25-metric ton bridge bracing cubes for the Portland-Milwaukie Light Rail Bridge on the Willamette River. It is producing 153-foot-long wave buoy platforms to capture renewable energy from ocean waves. Vigor constructs precision metal platforms to turn methane gas from landfill garbage into electricity in South America and other locations.

Sheer size helps even out workloads and use of skilled workers. Keeping people employed is "more than just a feel-good issue for us," says spokesperson Brian Mannion, "It's a competitiveness issue." Vigor must retain the best people by keeping a steady flow of work.

As MarineNews went to press, Vigor was about to take possession of the largest floating dry-dock in the United States. At 960 feet long, 300 feet longer and one-and-a-half times wider than anything Vigor already has, it will be large enough to service Military Sealift Command dry cargo/ammunition ships and private vessels including post-Panamax cargo ships and cruise ships. The increased capacity will also help Vigor meet growing demand from the Arctic as oil and gas exploration and other ship operators take advantage of longer ice-free summers.

Frank Foti says, "It's more than an investment. It's a symbol of the resurgence of the industry. Back in 2000, we sold off a nearly identical dry-dock to stabilize the business. At that time, the shipyard only had a few hundred people working and a lot of debt. When that dry-dock left, a lot of people predicted it would be the end of the shipyard in Portland. Today, we have 700 people working at the yard and a growing business strong enough to buy the largest dry-dock in the country and put it to good use." In today's robust boatbuilding environment, then, Vigor has indeed "Gone Big."

A New Standard in Marine Communications

KVH provides and Harvey Gulf employs possibly the most sophisticated onboard SATCOM and related service package on the water. That's no accident.

By Joseph Keefe

If quality service, high tech hardware and quality personnel are the common bonds shared by marine communications provider KVH and its customer Harvey Gulf International Marine, then the relationship is probably a match made in heaven. Harvey Gulf, already a long-time user of the KVH suite of services and equipment, is today converting every vessel in their rapidly expanding 60+ fleet to the latest and greatest equipment standard. From where they sit, that means KVH.

For its part, the business relationship allows KVH to showcase to every other customer and potential user as to what is actually possible at sea in today's environment. And, that involves plenty. Talking about Harvey Gulf's business model, Steve Griffin, Sales Manager of the KVH Commercial Maritime, Mobile Broadband Group told MarineNews in March, "They are a visionary company. They are building and adapting the capabilities of their supply boats. As they are constantly trying to be ahead of their competition, we're doing the same."

Quality Equipment for Quality Operators

Today, Harvey Gulf International Marine and its President and CEO Shane Guidry are known as high end providers of multi-missioned offshore support vessels in the Gulf of Mexico, and beyond. Founded on the premise that superior performance and safer operations provide customers with value and satisfaction, the firm's environmental and safety record over time has few peers among competitors. In order to support Harvey Gulf's HSE (Health, Safety, and Environment) vision to cause no harm to people, assets, or the environment, as well as its new ventures in the environmentally sensitive Alaskan oil and gas market, Harvey Gulf is updating its onboard communications solution.

For Harvey Gulf's diverse fleet of vessels, flexibility is the key. In addition, as a leader in HSE policies, Harvey Gulf continuously implements new solutions designed to make their vessels and crews safer and greener.

Harvey Gulf chose KVH's mini-VSAT Broadband network to support a myriad of onboard applications, including: crew Internet access (for things like personal email and online banking), business email for training, reporting, auditing, and other purposes, reliable voice communication in the event of incidents at sea or sick crew members.

In addition to crucial everyday business communications, Harvey Gulf also utilizes mini-VSAT Broadband to stream video from onboard cameras that monitor cargo loading and unloading and other activities to ensure optimal operational efficiency. This allows key operations to be monitored live and on demand by staff at the company's headquarters, who can then address any concerns immediately. For instance, compliance with Harvey Gulf's HSE vision statement can be ensured by monitoring hard hat use, and immediately contacting the crew to remedy any noncompliance.

Steve Griffin, Sales Manager of the KVH Commercial Maritime, Mobile Broadband Group adds, "Even though the satellite and broadband technology will change, the KVH platform is adaptable. Harvey Gulf is a long-term client. They saw the value in our systems and have started to use our technologies to stream video from the decks of their ships straight into their corporate conference room. Is there a competitive advantage to look at the deck of a ship at any point in time? Yes. This helps with compliance, productiv-

ity. They are looking to incorporate into their whole fleet."

Harvey Gulf's first KVH VSAT installations were TracPhone V7 (60 cm, 24 inch diameter antenna), a system that is 85% smaller and 75% lighter than standard 1.2 meter VSAT systems. Hardware this light and compact is important for commercial vessels, since installation downtime and space onboard often come at a premium. In addition, KVH's mini-VSAT Broadband network was designed from the ground up to be the first next-generation maritime satellite communications solution, perfect for commercial fleets. The global spread spectrum satellite network, built with ViaSat's patented ArcLight® technology, offers more affordable airtime, voice service and Internet access as fast as 1 Mbps (ship to shore) and 2 Mbps (shore to ship).

Cost:

Harvey Gulf is putting KVH VSAT (TracPhone V7-IP or V11-IP) plus KVH satellite TV (TracVision M5) on all of its vessels. Having acquired as many as 50 vessels in the past year, every vessel in the fleet, including several highly publicized new builds powered by liquefied natural gas (LNG), is being outfitted with KVH. This includes KVH's new content delivery service, IP-MobileCast, for both operational content (ECDIS updates) and entertainment content (for crew welfare). The move comes at no small cost.

Harvey Gulf nevertheless insists that the investment is already paying handsome dividends, and promises a bigger payout down the road – across virtually every line time and cost center on their books. According to Steve Griffin, "We've (KVH / Harvey Gulf) grown together addressing Harvey Gulf's specific needs. Our customized solutions have kept our platform 'sticky.' When Harvey Gulf acquires a new fleet, they go through the very expensive effort of changing over to our system. It's pretty flattering. They're happy with what we have."

According to Harvey Gulf IT Manager Andy Adgate, companies who secure "pay-as-you-go" contracts often pay more than they should for communications solutions. "If we had to pay as we go for all of the functions we support today, we'd pay far more than we do for our guaranteed KVH service plan." He adds, "Shell is one of our largest customers. Nothing but the best in communications is acceptable, and we make sure that we have it. We use KVH, in part, because we found that other providers also didn't have the range of coverage that KVH provides."

In the Alaskan markets, in particular, Harvey Gulf needs every bit of bandwidth it can get, especially in an area where coverage can be spotty and where environmental monitoring requirements are especially stringent.

Beyond Business: Taking care of the crew

New Harvey Gulf mariners quickly find out what long time employees already know. All Harvey Gulf newbuild hulls have all the bells and whistles related to crew comfort and amenities. Acquisitions of used tonnage get upgraded – or they get sold. In terms of communications options for the crew, the KVH provided suite is impressive. It includes, 24/7 access to telephone services, DirectTV on all vessels (the Captain and Chief Engineer have their own receivers and some vessels have TV access in all cabins), access to the KVH newly acquired content from Headland Media and of course, Internet. And Adgate adds, "We are in the process of rolling out WiFi across all of our vessels."

But taking care of the crew, especially in the Harvey Gulf business model, means so much more than just crew amenities. For example, very soon, all Harvey Gulf vessels will be equipped with WiFi supported ipads specifically designed to support the firm's 'Behavioral Based Safety' initiative. Here's how it works: crew members, spotting any unsafe situation or operational matter of importance, merely need to pick up the ipad and dial in their information which is streamed live to the Harvey Gulf offices. Immediate corrective action can then be taken.

On the Horizon – and here today

Steve Griffin says, "Our goal is to get other companies to recognize how communications affect: crew, captain, IT groups and safety. We look at our clients as knowledge partners. Fifty percent of their takeaway should be a new awareness of the possibilities. 'What do you want to accomplish with SatCom?'" Arguably, Harvey Gulf has few peers in the regard already. In the near future, the sky – no pun intended – is truly no limit. Soon, Harvey Gulf will use a new KVH fleet tracking tool, so as to better keep track of and improve the efficiency of their business.

In the end, though, it all comes down to service. Harvey Gulf's IT Manager, Andy Adgate says simply, "Support from KVH has been exemplary." That's high praise from a firm that also strives to provide very best in service to its oil & gas customers. At the heart of that service is Harvey Gulf's commitment to safety, its crew and the environment. The close relationship with KVH, then, is no accident.


Morgan


Fremin


Glas


Pinto


Martinez

Schottel Adds Two to North American Team

Schottel Inc. announced that Hank Morgan has been promoted to Vice President, Sales and Service and James Fremin has been promoted to Vice President, Finance. Schottel reports strong growth in the North American market place and has recently expanded and realigned their organization to support their customers in a more efficient way. The new facility in Houma is fitted out for service work and repairs with modern equipment and procedures to ensure high quality work.

Bouchard Transportation promotes Director of Compliance

Bouchard Transportation has promoted Captain Robert W. Glas to Vice-President of Regulatory Affairs. Glas will interact with regulatory committees and trade organizations on behalf of Bouchard Transportation Co, Inc., reporting directly to the Executive Vice President, Michael S. Brady. Glas has been with Bouchard Transportation Co., Inc. for a total of 22 years and most recently the company's Director of Compliance.

Dometic Names Pinto National Account Manager

Dometic Marine has announced the appointment of Joe Pinto as National Account Manager - Reverse Osmosis Systems. In his new role, Mr. Pinto will lead Dometic's Aftermarket and OEM sales teams as they expand the company's presence in the fresh water and sea water reverse osmosis systems marketplace. Prior to joining Dometic, Mr. Pinto was consulting for Spot Zero, providing sales direction to the organization. Pinto has a B.S. degree in Business Management from Pepperdine University and a Juris Doctorate degree from Western State University.

TMPS Appoint Martinez Sr. Superintendent Engineer

Noel Martinez has joined diesel engine service and engineering specialists Trans Marine Propulsion Systems, Inc. (TMPS) as the Senior Superintendent Engineer to manage Non OEM 2 and 4 stroke field and component service on Wartsila engines and their related components. Prior to joining TMPS, Mr. Martinez served in a series of service roles at Wartsila.

Cummins Announces Northwest Positions for Growth in Marine

Cummins Northwest strengthened its marine presence and expertise recently by adding two new professionals to its marine organization. Mike Fourtner has joined as the newest member of the sales team with focus on developing the commercial marine markets in Oregon and Washington. Joe Tobin will serve as Lead Marine Application Engineer at Cummins Northwest. Cummins Northwest has ten Service Centers throughout the territory.

Port of Greater Baton Rouge Commission Elects 2014 Officers

The board of commissioners for the Port of Greater Baton Rouge recently elected officers for 2014. Officers elected include Blaine Sheets, Ascension Parish, president; Clint Seneca, Iberville Parish, vice president; Corey Sarullo, Iberville Parish, secretary; and Bobby Watts, East Baton Rouge, treasurer. Blaine Sheets, president, is president of Specialized Industrial Maintenance in Gonzales and is a former member of the Board of Commissioners for the Pontchartrain Levee District. The port governance body is a 15-member commission appointed by Governor Bobby Jindal to establish policy and provide oversight. Port commissioners are selected from the four parishes served by the port.

Cummins Names Schacht GM – Commercial Marine

Cummins Inc. has named Jim Schacht General Manager for the Commercial Marine Business. Working in close cooperation with the Cummins distributor network, Schacht will be responsible for commercial marine business activities for the Engine Business Unit (EBU) globally. Schacht joined Cummins in 2010 as the Executive Director of Cummins Business Services and holds a BA from Trinity College and an MBA from Harvard University.

W&O Expands Engineered Solutions Team

W&O announced the expansion of its Engineered Solutions team with the additions of John Catanzaro and Marc Lagattuta. Bot will provide customers and OEM partners with service as the

Coast Guard Foundation Names 2014 Board


Candies


Carthew


Roos


Smith

The Coast Guard Foundation, a non-profit organization committed to the education and welfare of all Coast Guard members and their families, has announced its 2014 board of trustees. Consisting of 117 members, the Coast Guard Foundation Board of Trustees and Directors oversees management of the organization and helps to provide resources to advance the Foundation's mission to support the service of men and women in the United States Coast Guard. This year, the board welcomes three newly elected officers and four new members to its executive committee, as well as three new board members. Among the Foundation's Executive committee members are Nicki Candies, Director of Regulatory Affairs at Otto Candies, LLC, Michael L. Carthew, president of Chevron's global marine transportation subsidiary Chevron Shipping Co. LLC, Judith Roos, Marine Spill Response Corporation in vice president of marketing, customer services and corporate relations and Duncan C. Smith, III, President of Smith Advocacy Group, LLC. A complete list of the 2014 Coast Guard Foundation Board of Trustees can be found at coastguardfoundation.org/about/board/104.


Tobin


Fourtner


Sheets


Schacht

company further develops its Engineered Solutions portfolio. Catanzaro joins W&O as a service engineer to provide on-site support for actuation, Hyde Ballast Water Treatment Systems (BWTS), and PG Marine products.

Lagattuta joins the W&O team as a project manager for BWTS and Offshore Supply Vessels (OSVs). He previously worked for Tidewater Marine, where he spent the last eight years as a project manager focusing on new construction and ensuring vessels met regulatory compliance.

Richardel Named VP-GM at Bollinger Marine Fabricators

Bollinger Shipyards has announced that Daniel "Danny" Richardel has been named Vice President-General Manager of Bollinger Marine Fabricators, Amelia, Louisiana. Richardel has been with Bollinger for seventeen years working in various operational positions, most recently the Operations Manager of Bollinger's Lockport New Construction Division where he coordinates the USCG Fast Response Cutter program. He holds a Bachelor of Science degree in Mechanical Engineering Technology and a Master of Business Administration from Nicholls State University.

Cantrell is new Coast Guard Top Enlisted Member

The Coast Guard announced last month the selection of the new master chief petty officer of the service who is currently based in Portsmouth. Master Chief Petty Officer Steven W. Cantrell is the current Atlantic Area command master chief and will relieve the current master chief of the Coast Guard during a change of watch ceremony scheduled for May 22. The Master Chief Petty Officer of the Coast Guard (MCPO-CG) is the top senior enlisted leader in the Coast Guard and serves as an advisor to the Commandant of the Coast Guard in matters affecting the enlisted members of the Coast Guard, both active and reserve, and their families.

MAN Appoints Antoniazzi to lead Cruise, Ferry and Merchant Sales

MAN Diesel & Turbo North America has appointed David Antoniazzi as Director Sales – Cruise, Ferry and Merchant. In his new capacity, he is responsible for promoting and selling MAN Medium Speed Engines and aft ship products in North America. In his new role, he will lead the promotional sales of MAN medium speed marine diesel engines and related ship propulsion and auxiliary machinery components including reduction gears, propellers, and shafting systems to the major Cruise Lines, large ferry operators, and merchant shipping companies throughout the North American region. Antoniazzi brings 20 years of sales, marketing and operational experience to the diesel engine industry.

Matson's Kevin O'Rourke Retires, Peter Heilmann Named as Successor

Matson, Inc. has announced that


Catanzaro


Lagattuta


Richardel


Cantrell


Antoniazzi

Kevin O'Rourke, senior vice president and chief legal officer, is retiring after 21 years with Matson. O'Rourke will be succeeded by Peter Heilmann, who has been promoted to senior vice president and chief legal officer. O'Rourke joined Matson in 1992 as vice president and general counsel. Heilmann joined Matson in 2012 as vice president and deputy general counsel, and has managed a number of major legal matters for the Company in the past two years. He has a bachelor's degree in economics from the University of California, Davis and a law degree from Boalt Hall School of Law, University of California, Berkeley.

Larson Boat Group Names New Vice President of Sales and Marketing

Patrick (Pat) J. Blake has been named Vice President of Sales and Marketing of Larson Boat Group (LBG). Mr. Blake comes to LBG with over 20 years of experience in the marine industry - the bulk of which is in sales management and business development. Mr. Blake worked for over 23 years in a variety of senior executive positions at Brunswick Corporation.

Carlile Transportation Systems Names Felix VP

Carlile Transportation Systems, Inc., a TOTE Logistics company, has named Larry Felix as their new Vice President of Business Development. Larry will provide leadership over commercial development in Alaska


O'Rourke


Heilmann


Blake


Felix


Britton

and throughout the Lower 48. Larry joins Carlile from Oak Harbor Freight Lines, Inc., out of Southern California, where he held the position of District Manager of Sales & Operations. Larry attended Boise State University where he received his Bachelor's degree in Business Management.

Pacific Boats & Yachts Welcomes New Yacht Broker

Pacific Boats & Yachts has added Captain Tom Britton to their team. He brings a wealth of experience to his new position, including owning a yacht dealership in Washington for ten years, selling Catalina Sailboats, Monk Trawlers, and a wide variety of used sail and powerboats.

HHI Apprentice School Graduates 137 Shipbuilders

Huntington Ingalls Industries (NYSE:HII) hosted commencement exercises last month for the company's Apprentice School at Newport News Shipbuilding. The graduation celebrated 137 apprentices representing 18 trades and four advanced programs. Forty-four apprentices completed an optional, advanced program, and 44 apprentices graduated with honors. Seven apprentices graduated with high honors, and three graduated with highest honors. Tim Owens received the Homer L. Ferguson Award for earning the highest grade point average in combined required academics and crafts. The Apprentice School accepts about 250 apprentices per year. The school offers four-to-eight year, tuition-free apprenticeships in 19 trades and eight optional advanced programs.

ISS Announces 2014-2017 Board of Directors

The ISS (International Superyacht Society) has announced its 2014-2017 Board of Directors and Past Presidents Council. For the current year and based on a democratic voting system, ISS members have awarded eight Board positions for three years for the 2014-2017 term. The ISS Executive Committee was elected by the Board of Directors last month in Fort Lauderdale. Among them are Ken Hickling, Awlgrip Paint, President, Dieter Jaenicke, Viking Recruitment Limited, Vice President, Bransom Bean, Fine Focus, Treasurer, Rob Carron, Marsh, Secretary, and Norma Trease, Salamanca Marine, Board Representative. Bob Saxon, International Yacht Collection, is Past President.

U.S. Coast Guard Commandant Adm. Papp Delivers Final SOCG Address

U.S. Coast Guard Commandant Adm. Bob Papp delivered his final State of the Coast Guard address at Coast Guard Headquarters last month. Papp provided an overview of programs and issues of the last four years and also looked ahead to what the Coast Guard may face in the future. The commandant also focused on the acquisition of new assets, such as the christening of the fifth National Security Cutter, the James, this summer, and the newest Fast Response Cutter, the Charles Sexton, being commissioned next week. Papp also took a moment to recognize the service's recent loss of Boatswains Mate Third Class Travis Obendorf, who was mortally injured during a rescue operation in the Bering Sea and Senior Chief petty Officer Terrell Horne, who was killed by drug traffickers during drug interdiction operations.

WCI, Inc. Presents 13th Annual Leadership Service Award to Whitfield

Congressman Ed Whitfield (R-KY) (right) has been presented Waterways Council, Inc.'s (WCI) 13th Annual Leadership Service Award for his strong and continued leadership on ports and inland waterways issues. Most recently he served as a champion to introduce, with 31 bi-partisan cosponsors, legislation -- Waterways are Vital for the Economy, Energy, Efficiency, and Environment Act of 2013 (WAVE 4, H.R. 1149) -- in the Water Resources Reform and Development Act (WRRDA), now in conference.

AWO Praises Strong Bipartisan Support of National BWT Standard

The American Waterways Operators (AWO) last month praised the U.S. Senate introduction of a bill calling for the enactment of a uniform national standard for the regulation of ballast water and other vessel discharges, legislation widely viewed as essential to ending the existing confusing, costly and ineffective patchwork of state and federal rules. AWO specifically called at-

Apprentice Graduation 2014

Hickling

Jaenicke

Bean

Trease

tention to the instrumental leadership of the bill's lead sponsors, Sens. Mark Begich (D-AK) and Marco Rubio (R-FL), who introduced the bill with twenty additional bipartisan cosponsors. "This significance of this bill, and the strong Senate support behind it, cannot be overstated," said Tom Allegretti, AWO President & CEO. "There is a critical need to enact legislation that protects our nation's waterways while improving the efficiency and effectiveness of marine transportation. This bill accomplishes those objectives."

Harvey Gulf Breaks Ground on LNG Bunkering Site

New Orleans-based Harvey Gulf International Marine (HGIM) last month began construction on its $25 million Phase 1, Slip B, LNG (Liquefied Natural Gas) fueling facility at their Port Fourchon, LA terminal. When operational later this year, HGIM's LNG facility will be the first of its kind in the United States. This technologically-advanced, environmentally-safe, clean energy facility will be a vital addition to the growing national LNG supply infrastructure, supporting critical operations of the oil and gas industry's offshore fleet as well as over-the-road vehicles operating on clean LNG. The LNG facility will consist of two sites each having 270,000 gallons of LNG storage capacity. The LNG tanks will be of stainless steel, Type 'C' construction. Each facility will be able to transfer 500 gallons of LNG per minute.

Cranston Eagle Grows Off-Load Hook Line

Cranston Eagle received approval from the United States Coast Guard for the certification of its new DPR-506-CBH marine off-load hook. The fall-mounted hook is rated at 5,000 kg SWL and bolsters Cranston Eagle's line of USCG certified off-load hooks to five. The new model DPR-506-CBH fulfills the marine market's long-standing request for a five metric ton USCG certified fall-mounted hook.

www.deltatsystems.com

Cargotec Secures Crane Order

MacGregor, part of Cargotec, has secured an order from Wuchang Shipbuilding Industry for a 100-tonne SWL active heave-compensated subsea crane. The MacGregor crane will be installed on the anchor handling tug supply (AHTS) vessel, currently under construction for the offshore specialist, China Oilfield Services Limited (COSL). The Rolls-Royce UT788-design vessel will deliver in March 2015.

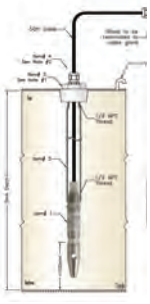
JonRie Unclutched

The JonRie Series 500 Double Drum Towing winch has towing drums independent of each other (unclutched) so if anything happens to one the other has its own motor. Both are powered by one of two pumps so the system is backed up and redundant. When both pumps are clutched in they will produce 400 HP of power to the winch producing extreme speed and line pull.

www.marinewinch.com

American Sensor Technologies' Intrinsically Safe Sensors for Tank Level Monitoring

The AST4510 Submersible Level Sensor is approved to Class I Div 1, Groups C and D for use in intrinsically safe areas. Sealed for submersion, vented to correct for barometric pressure changes, cable conductors are isolated from the outside environment to keep the sensor operational for long-term use. From 0-1 to 0-100 PSI pressure / level measurement, sensors provide an excellent solution to level monitoring.



www.astsensors.com/submersible_level_sensors/AST4500__AST4510

Laborde's New Facility Opens its Doors

To celebrate its new location in San Antonio, Texas, Laborde Equipment Services (LES) opened its doors to customers and associates at an open house. The facility was overflowing as the company welcomed over 125 guests at the event. Participants were given a facility tour, while also learning more about LES and its extensive line of products and services available to the South Texas market.

www.labordeproducts.com

Trojan Marinex BWT System Secures IMO Type Approval

Trojan Technologies Marinex Ballast Water Treatment (BWT) product suite has obtained International Maritime Organization (IMO) Type Approval from DNV on behalf of the Norwegian Maritime Directorate. In addition to the rigorous certification and testing methodologies, the Trojan Marinex BWT system is differentiated in that custom-designed filtration and UV is integrated into in a single, compact unit, with the low installed power draw.

www.trojantechnologies.com

SNAME MARITIME CONVENTION

October 22 – 24, 2014

Hyatt Regency Houston – Houston, TX

Where the International Community of Maritime and Ocean Professionals Meet

DO YOU HAVE KNOWLEDGE TO SHARE?

Are you a student, educator, designer, builder, manufacturer, operator, recycler, or forensic professional

THIS IS THE PLACE TO SHARE YOUR **KNOWLEDGE**

We need your:

Technical Paper Abstracts

Panel Discussion Abstracts

Product Display Plans

Product, Technology, or Technique Demonstration Plans

SNAME Papers Extended Abstracts Due: March 23, 2014
Authors Notified of Acceptance: April 5, 2014

SPS Papers Abstracts Due: June 3, 2014
Authors Notified of Acceptance: June 24, 2014

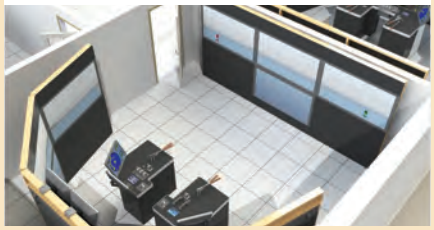
See www.sname.org/smc/program-presentations

ANY PROPOSAL THAT WOULD INTEREST THE INTERNATIONAL COMMUNITY OF MARITIME AND OCEAN PROFESSIONALS WILL BE ENTERTAINED.

The Future of Simulation Technology in Paducah

The Seamen's Church Institute (SCI) has signed a contract with Kongsberg Maritime for a complete overhaul of maritime simulator technology at its Center for Maritime Education campus in Paducah, KY. Installation begins in August to replace existing wheelhouse architecture with entirely new mechanisms and navigation tools that more closely mirror contemporary equipment and construction of modern vessels. The new simulators strengthen service to American mariners.

www.seamanschurch.org



Kongsberg at San Jacinto College Maritime Technology and Training Center

At the site of the region's newest maritime training facility, the industry's most sought after training technology – the newest versions Kongsberg's Polaris 7.2 ship simulation software – has arrived. San Jacinto College received three interactive, full-mission, ship bridge simulators, thanks to a collaborative agreement with the Houston Pilots. They will be moved to the 45,000-square-foot Maritime Technology and Training Center once it opens in mid-2015.

www.sjcd.edu

20,000 Lumens of Pure Power

Commercial workboats demand durable lighting capable of withstanding punishing conditions. The new HypaLUME LED floodlight from Hella marine is specifically designed to meet the rigors of any marine work environment. The most powerful floodlight ever offered by Hella, high performance HypaLUME also delivers energy efficiency. While comparable to a 400 W metal halide fitting in light output, it consumes just 240W (10 amps at 24V).

www.hellamarine.com

KEP to Distribute for Orlaco

Kessler-Ellis Products (KEP) has been selected as the Americas distributor of Orlaco's specialized commercial marine camera solutions. Effective immediately, KEP will sell, support and locally warehouse Orlaco's full line of marine monitoring systems that include compact, self-cleaning, zoom, PTZ zoom, and thermal imaging cameras. The new improved Orlaco camera series is the most robust in the industry – ideally suited for extreme marine conditions the series provides a crystal clear view around any vessel in any situation.

www.kepmarine.com

Atlas Copco's WEDA Small Pump Range

Atlas Copco's WEDA electric submersible pumps are rated at 1 hp and under, C-UL-US approved, 60 Hz single-phase drainage, sludge and residual pumps. Each of the WEDA electric submersible pumps is now available in a 50Hz and a 60Hz version. The WEDA 04 and WEDA 08 are single-phase electric submersible dewatering pumps with flow rate capacities of 66 to 86 gpm and maximum heads of 37 to 50 feet.

www.atlascopco.us

Axis launches nitrogen-pressurized stainless steel HDTV PTZ dome cameras

The new top-of-the-line AXIS Q60-S PTZ Dome Network Cameras in nitrogen-pressurized stainless steel casings are ideal for surveillance and remote monitoring applications in marine and oil and gas environments. The rust-free cameras can resist the corrosive effect of sea water and cleaning chemicals, and withstand high-pressure steam cleaning. Pressurized nitrogen prevents internal condensation. Axis Communications cameras enable 360° coverage of wide areas in resolutions up to HDTV 1080p.

www.axis.com


SMM
smm-hamburg.com
53° 33' 47" N, 9° 58' 33" E
hamburg
keeping the course
9 – 12 september 2014
hamburg
the leading international
maritime trade fair
new in 2014:
the SMM
theme days
8 sept
finance day
9 sept
environmental protection day
10 sept
security and defence day
11 sept
offshore day
12 sept
recruiting day
scan the QR code and view the trailer
or visit smm-hamburg.com/trailer
Hamburg Messe
ufi
Approved
Event

Marine Marketplace

Powered by www.maritimejobs.com

Mate

Job Location: USA, Seattle, WA

Manson Construction Co. is looking to hire a Mate or Master of Towing Vessels (100 Tons or larger) to operate coastwise and inland waters of the Gulf of Mexico and the Atlantic Coast of the United States. Rotational schedule is 3 weeks on and 3 weeks off with one day of transportation paid at the full day rate and transportation allowance paid by the Company.

Brandi Burdon
Manson Construction Co.
P.O. Box 24067
Seattle WA 98124 USA
Email:bburdon@mansonconstruction.com

Summer Sea Term - Crew 2014 - Various

Job Location: USA, Bronx, New York

About SUNY Maritime College: SUNY Maritime College located on a 55-acre scenic waterfront property on the outskirts of New York City on the Throggs Neck peninsula where the East River meets Long Island Sound. The campus blends the best of two worlds: a comfortable college-town feel with the greatest city in the world. An impressive view of the sound extends toward the North Atlantic, yet only a few miles away are Yankee Stadium and midtown Manhattan. SUNY Maritime offers an array of employment opportunities stemming from entry level to professional positions which encourage growth and development among its employees.

Job Description: The State University of New York Maritime College is currently looking to employ officers for this year's summer training cruise aboard T.S. EMPIRE STATE. Positions for watch standers and instructors are available for both Deck and Engineering. The opportunity to assist with the at-sea, practical training of future mariners and the chance to participate in a great itinerary offered. Salary commensurate with experience. This appointment will begin May 2014 and end August 2014. Naval orders can be issued for MMR Officers.

Requirements: Senior licenses preferred, and recent sea experience required along with medical clearances.

Application Instructions:
For those desiring information please contact:
Ms. Joann Sprague
Office Manager
Regimental Affairs
(718) 409-7352
jsprague@sunymaritime.edu

and/or

Captain Richard S. Smith
Master, Training Ship EMPIRE STATE
Commandant of Cadets
(718) 409-7350
rsmith@sunymaritime.edu

Apply Here: http://www.Click2Apply.net/ggjtsmw

Joann Sprague
Maritime College

Bronx NY 10465 USA

VESSELS FOR SALE / BARGES FOR RENT

NEW PRODUCTS

Marine Marketplace

NEW PRODUCTS

Marine Marketplace

NEW PRODUCTS

PROFESSIONALS

ADVERTISER INDEX

Page	Company	Website	Phone#
50	Ahead Sanitation	www.aheadtank.com	(337) 237-5011
43	Aluminum and Stainless, Inc.	www.aluminumandstainless.com	(337) 837-4381
45	Aurand Manufacturing	www.aurand.net	(513) 541-7200
44	Baier Marine	www.baiermarine.com	(800) 455-3917
15	Bay Shipbuilding	www.bayshipbuildingcompany.com	(920) 743-5524
23	Biobor Fuel Additives	www.biobor.com	(800) 548-9166
47	Breaux Bay Craft	Please call us at	(337) 280-1431
25	Centa Corporation	www.centa.info	(630) 236-3500
27	Continental Underwriters Ltd	www.cultd.com	(985) 898-5300
11	Cummins Recon	www.cecoteam@gdms.com	Please visit our website
37	Don Jon Marine Co., Inc.	www.donjonshipbuilding.com	(908) 964-8812
19	Eastern Shipbuilding Group	www.easternshipbuilding.com	(850) 763-1900
50	Environmental Solution, Inc	www.totalbiosolution.com	(919) 740-0546
45	F&M MAFCO, Inc.	www.fmmafco.com	(513) 367-2151
35	GP Link LLC	www.gplink.com	Visit us online
31	Great American Insurance	www.GreatAmericanOcean.com	(212) 510-0135
49	Halimar Shipyard	www.halimarshipyard.com	(985) 384-2111
30	Incat Crowther	www.incatcrowther.com	61 2 9450 0447
1	John Bludworth Shipyard, LLC	www.jbludshipyard.com	(361) 887-7981
23	Kidde-Fenwal, Inc	www.kiddefiresystems.com	(508) 881-2000
3	Kohler Power	www.kohlermarine.com	(973) 696-3208
31	KRAL AG	www.kral-usa.com	(704) 814-6164
18	LevelCom	www.levelcom.net	(503) 285-8947
9	Louisiana Cat	www.louisianacat.com	(866) 843-7440
C2	Lufkin Industries, Inc	www.lufkin.com	Please visit us online
29	Marine Group Boatworks	www.marinegroupbw.com	(619) 427-6767
55	Mariner's House	www.marinershouse.org	(617) 227-3979
53	McDonough Marine Services	www.mcdelevators.com	(504) 780-8100
17	MTU	mtu-online.com	Visit us online
50	NABRICO Marine Products	www.nabrico-marine.com	Please visit our website
10	New York State Canal Corporation	www.canals.ny.gov	(518) 471-5349
7	Patterson Company	www.pattersonmfg.com	(800) 322-2018
C4	R.W. Fernstrum	www.fernstrum.com	(906) 863-5553
39	Ribcraft USA, LLC.	www.ribcraftusa.com	(781) 639-9065
34	Robert Allan LTD.	www.ral.ca	(604) 736-9466
46	RS Roman Seliger	www.rs-seliger.de	Visit us online
5	Scania USA Inc.	www.scaniausa.com	(210) 403-0007
29	Seaspan ULC	www.Seaspan.com	Please visit our website
45	Selco USA	www.selcousa.com	(770) 455-9110
27	Senesco Marine	www.senescomarine.com	(401) 295-0373
45	Smith Berger Marine	www.smithberger.com	(206) 764-4650
59	SMM - Media Barter	www.smm-hamburg.com	Visit us online
57	SNAME	www.sname.org	Visit us online
33	St John's Shipbuilding	www.stjohnsshipbuilding.com	(386) 328-6054
49	Suny Maritime College	www.sunymaritime.edu	(718) 409-7341
18	Tampa Yacht Manufacturing, LLC	www.tampa-yacht.com	(727) 954-3435
C3	Tuflex Rubber Products	www.tuflex.com	(813) 870-0390
47	Tutor Saliba	www.tutorsaliba.com	(818) 362-8391
21	Vigor Industrials	www.vigorindustrial.com	(855) 844-6799
39	Virginia Ship Repair Association	www.virginiashiprepair.org	Please visit us online
13	Volvo Penta Americas	www.volvopenta.com	Please visit our website
38	W&O Supply	www.wosupply.com	(904) 354-3800

The listings above are an editorial service provided for the convenience of our readers.
If you are an advertiser and would like to update or modify any of the above information, please contact: productionmanager@marinelink.com

Insist on Tuflex Rubber Flooring for Your Fleet

- Superior sound dampening
- Unparalleled durability
- Ease of installation and maintenance
- Slip resistant and nonporous
- Cushioned support under foot
- Also proudly offering IMO Certified products

RUBBER Tuflex FLOORING

"All our customers appreciate the sound absorption of Tuflex."

– *Jim Tabor* –

Quality Shipyards
(A Tidewater Company)

"We've used Tuflex for 10 years. We've not had one problem."

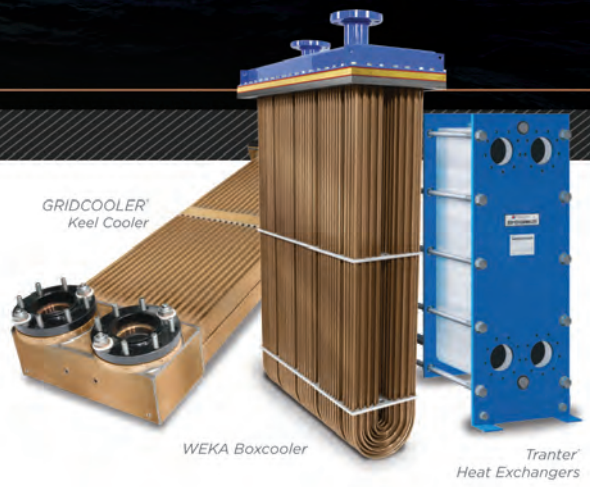
– *Mike O'Connor* –

Surface Systems, Inc.

Tuflex Rubber Products, LLC
Sports & Marine Division
World Trade Center Tampa Bay
1101 Channelside Drive, Suite 244, Tampa, Florida 33602 U.S.A.
T: 800.770.6008 | E: marine@tuflex.com

ENGINEERED COOLING SOLUTIONS.

Photo courtesy of Bordelon Marine



GRIDCOOLER® Keel Cooler

WEKA Boxcooler

Tranter® Heat Exchangers

OVER 65 YEARS COOLING THE MARINE INDUSTRY

R.W. Fernstrum is committed to providing long-lasting, quality cooling systems. Our sales and engineering team work with you to custom design a solution that meets the needs of your vessel and operating conditions.

fernstrum.com
906.863.5553
sales@fernstrum.com

FERNSTRUM™
R.W. Fernstrum & Company