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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

Contributing Writers
Susan Buchanan • Raina Clark • Lawrence R. DeMarcay, III
Frederick B. Goldsmith • Randy O'Neill • Jim Shirley

PRODUCTION
Production Manager Irina Tabakina • *tabakina@marinelink.com*
Production Intern Nicole Ventimiglia • *nicole@marinelink.com*

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

Sales Administration & Office Manager Rhoda Morgan • *morgan@marinelink.com*
Sales & Event Coordinator Michelle Howard • *mhoward@marinelink.com*
Classified Sales Manager Dale Barnett • *barnett@marinelink.com*
tel: 212-477-6700

Advertising Sales Managers
National Sales Manager
Jack Bond • *bond@marinelink.com*
Tel: 561-732-1659 Fax: 561-732-8063

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

Terry Breese • *breese@marinelink.com*
Tel: 561-732-1185 Fax: 561-732-8414

Perry Grant • *grant@marinelink.com*
Tel: 561-732-0312 Fax: 561-732-9670

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

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

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

CORPORATE STAFF
Manager, Accounting Services Rhoda Morgan • *morgan@marinelink.com*
Manager, Public Relations Mark O'Malley • *momalley@marinelink.com*
Manager, Marketing Jocelyn Redfern • *jredfern@marinelink.com*
Manager, Info Tech Services Vladimir Bibik • *bibik@marinelink.com*

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

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BPA WORLDWIDE BUSINESS

On the Cover

Today's workboats and other inland vessel operators are not only seeing business pick up – they are also modernizing their fleets at the same time. Our cover photo (courtesy Sea Tel) shows a modern OSV with full SAT-COM capabilities.

See the Satcom Feature starting on page 50

(Photo: SeaTel)

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EDITOR'S NOTE

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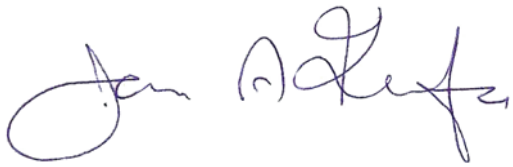
Every once in a while, I get to put together an edition where every single bullet on the Editorial Calendar ties into the other, in some shape, form or manner. This is one of those times. That's because oil spill response and recovery, offshore service operators, marine propulsion and yes – satellite communications all come together when it comes to today's workboat market. Every one of those line items profoundly affects the other. As you read on, you'll understand why.

Our focus on Offshore Service Providers takes a broad look at the current climate in the U.S. GOM and how all of that is shaping what's to come. Hand in hand with that is the renewed focus on safety and preparedness for the next oil spill, should it come to that. The Marine Spill Response Corporation (MSRC), the largest U.S.-based standby oil spill and emergency response company has something to say about that. So does James A. Watson, the New Director of the Bureau of Safety and Environmental Enforcement (BSEE). As one ramps up its footprint in the U.S. Gulf, so too will the other. GOM oil & gas operations will never be the same. Not to be outdone, WQIS, a premier global provider of marine environmental insurance and services, introduces the maritime industry's newest marine pollution knowledge tool: the WQIS Marine Pollution Academy. Read on to find out how, and more importantly, why.

Surprisingly, and in a challenging marine market and economy, SATCOM providers want inland, OSV and shallow draft operators to spend money on upgrading their communications platform(s) to high tech systems that heretofore, only their blue water cousins could afford. But, with less than 10 percent of the inland and coastal markets penetrated by SATCOM to date, it's a natural progression for providers facing an increasingly mature and crowded playing field out to sea. To succeed, they'll need to price their offerings attractively, with a smaller footprint while also demonstrating value and improved operating margins for potential customers. It turns out that all three metrics are in play. Very soon, those operating without SATCOM in brown water may find themselves at a competitive disadvantage.

Our Tech File and Propulsion both have something in common this month, as well. On board DC Grids and new hybrid power applications combine to raise the bar for operators who want to go the extra mile in obtaining better fuel economy, a greener footprint and a more efficient power package. Separately, both systems offer true breakthroughs in the quest to design clean, quiet, environmentally responsible vessels. The one-two punch of a challenging economy and a much stricter environmental operating environment demand no less.

Rounding out this edition is a look at Rhode Island, where maritime business, spread over countless firms, schools and manufacturing efforts, serves notice that the Ocean State is indeed "open for business." This and a raft of usual features make this edition a must-read resource for you and your staff. What are you waiting for?



Joseph Keefe, Editor, keefe@marinelink.com

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Food For Thought: Counting on Waterways

In a recent OP/ED release, Bob Stallman, President of the American Farm Bureau warns consumers, government officials and industry alike: *Update Our Ports, or Miss the Boat.* In his well-written statement, Stallman talks about a lot of things, but his theme of updating and modernizing our ports and waterways hits home for inland and deepsea users alike. And, while he spends a fair amount of time talking about deficiencies in our bluewater transport system, before the grain and agricultural products he advocates for can be loaded onto those deep draft vessels for export, they have to travel – usually by barge – to get there. With only six primary deepwater ports, the intricate U.S. system of inland waterways plays a critical part in our modal and export equation. Stallman also correctly points out that the U.S. exports approximately one-quarter of the grain it produces. According to the U.S. Department of Agriculture (USDA), U.S. agriculture is expected to contribute a whopping $24.5 billion to the U.S. balance of trade in fiscal 2012. That's not all. The USDA's February 2012 publication, *"A Reliable Waterway System is Important to Agriculture,"* reveals a whole lot more:

8,400: the number of domestic jobs supported by every $1 billion in farm exports (Agriculture Secretary Tom Vilsack).

259: millions of dollars that U.S.-flag operators earned In fiscal 2011 shipping 1.5 million metric tons of U.S. humanitarian food aid. Cargo preference helps provide U.S. seafarer and vessel availability in wartime and other national emergencies.

200: carrying capacity in tons lost by a barge (at 9-ft. draft), for each foot of reduced draft due to inadequate dredging.

158: millions of metric tons of U.S. agricultural exports moved by water.

97.2: Fiscal 2011 transfers in millions of dollars from the IWTF.

84: millions of dollars (in 2011) in revenues and investment interest from a 20 cents per gallon tax on diesel fuel for commercial vessels engaged in inland waterways transportation that goes into the Inland Waterways Trust Fund (IWTF) to finance one half the Federal costs of authorized locks and dams projects.

81: the percentage of U.S. agricultural exports (158 million metric tons) that were waterborne.

76.6: millions of dollars requested for fiscal 2012 from the IWTF.

44: percentage of all grain exports in 2007 moved by barge to ports, including corn (55%), soybeans (46%), wheat (28%) and sorghum (19%).

7.2: 2012 Yearend balance in billions of dollars in the HMT.

1.7: billions of HMT dollars estimated for 2012 Requested transfers equate only to $869 million.

0.125: percent paid by U.S. importers and certain domestic shippers to the Harbor Maintenance Tax (HMT), a 0.125 percent ad valorem tax on the value of the cargo.

Source: USDA Publication: "A Reliable Waterway System is Important to Agriculture."

The U.S. agriculture industry – so critical to the U.S. economy itself – depends heavily on the inland waterways for its survival. The waterways are in turn heavily dependent upon the help from the U.S. Coast Guard (security, safety, and aids to navigation), the National Oceanic and Atmospheric Administration (nautical charts and maps, marine weather / river level data, and surveys after disruptions), the Saint Lawrence Seaway Development Corporation (maintaining and operating two U.S. Seaway locks and vessel traffic control in collaboration with its Canadian partner) and the Federal Maritime Commission (regulating oceanborne transportation in U.S. foreign commerce for the benefit of exporters, importers, and the American consumer).

There's more: Forestry, fishery and critical farm inputs such as fertilizer, feed, and fuel move on the waterways, too. Stakeholders depend on authorized port and waterway depths and widths, and locks and dam infrastructure. Sometimes – and with increasing frequency – they are sorely disappointed. And, the USDA also insists that without barge competition, agricultural shippers pay higher rail transportation costs. Beyond this, barge transport has been shown time and time again to be the most environmentally correct way to ship any bulk cargo. And, as we can see "by the numbers," the amount of money paid out by users to maintain our waterways does not always equate to the amount of funds allocated for that task. As a result, inadequate channel depths and widths lead to higher transportation costs because barges may be loaded to less than capacity.

Access the USDA report at www.ams.usda.gov
Access Bob Stallman's OP/ED piece at www.fb.org

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James A. Watson IV,

Director of the Bureau of Safety and Environmental Enforcement (BSEE)

Interior Secretary Ken Salazar Named Rear Admiral James A. Watson IV as New Director of the Bureau of Safety and Environmental Enforcement (BSEE) in November of 2011. Admiral Watson began as BSEE Director on December 1, 2011, and succeeds Michael R. Bromwich. Previously, Watson was better known to maritime stakeholders as the U.S. Coast Guard's Director of Prevention Policy for Marine Safety, Security and Stewardship in Washington, D.C. Prior to that, he also served as the Federal On-Scene Coordinator for the all-of-government response to the Deepwater Horizon oil spill in the Gulf of Mexico.

Your appointment as BSEE Director is a natural progression from your previous billet as USCG Director of Prevention Policy for Marine Safety, Security and Stewardship. What's different about the two positions and where do they mirror one another?

Looking at both positions, I think there are more similarities than there are differences. In both BSEE and the Coast Guard, my top priority has been the safety of the crew members offshore. I want to be sure they are able to return to their family and loved ones when the job is done. That's what keeps me going each day. There are definitely subtle differences within the missions of the Coast Guard and BSEE, and I'm learning a great deal about the offshore oil and gas industry in my current position, but the overarching responsibility for safety at sea stretches between the two agencies and has helped motivate me as the BSEE Director.

What do you hope to bring from the Coast Guard Safety SOP to improve BSEE oversight of the industries they regulate? What can BSEE teach your former employers?

In the Coast Guard, we often talked about our responsibility as the rescuer of last resort. When there is a life threatening situation, the Coast Guard often gets the call. The organization does well to respond to difficult situations and has a bias towards action. If there is anything I have brought with me to BSEE, it's that bias towards action. I want us to acknowledge that we will be placed in difficult situations and that we should prepare for them. We should be leaning forward at all times and be ready to respond, even though the type of response BSEE does is quite different than the Coast Guard. BSEE has an excellent team of very specialized scientists and engineers and we utilize those skills each and every day. The experience they bring makes us more than just a regulator; it also makes us offshore oil and gas experts. I think the Coast Guard can benefit greatly from tapping this skill set from time to time. The exchange of information and training has been ongoing between the two organizations and I

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want to be sure that continues and is strengthened where possible.

BSEE was one of the two agencies to succeed the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) on Oct. 1, 2011. Why were the roles split out? What role does the Bureau of Ocean Energy Management (BOEM) now have?

On Oct. 1, 2011, the Department of the Interior formally established BSEE and BOEM to carry out the offshore energy management and safety and environmental oversight missions that were formerly under the jurisdiction of the Bureau of Ocean Energy Management, Regulation and Enforcement. The establishment of BSEE and BOEM marked the completion of the effort to reorganize the former Minerals Management Service (MMS).

The Deepwater Horizon blowout and resulting oil spill shed light on weaknesses in the federal offshore energy regulatory system, including the potential conflicts in the three missions of MMS: resource management, safety and environmental protection, and revenue collection.

BSEE is responsible for safety and environmental oversight of offshore oil and gas operations, including permitting and inspections. Our functions include the development and enforcement of safety and environmental regulations, permitting offshore drilling and production, inspections, oil spill research and response, environmental compliance, and engineering-oriented research.

BOEM is responsible for managing the environmentally and economically responsible development of the nation's offshore resources. Its functions include offshore leasing, resource evaluation, review and administration of oil and gas exploration and development plans, renewable energy development, National Environmental Policy Act analysis, environmental studies, and environmentally-oriented research.

The maritime industry is concerned about the pace of permitting in the U.S. Gulf of Mexico. How much does the safety oversight work emanating from BSEE affect this pace, what can be done – from industry and/or government – to accelerate it?

In regards to offshore permitting, BSEE will continue to review all applications thoroughly to ensure that our enhanced safety standards are being met. I'm committed to rooting out inefficiencies and making the permitting process as straightforward, predictable, and understandable for industry as possible.

It is in our country's interest to have a robust offshore oil and gas industry, and I'm pleased to see reports of new rigs coming into the Gulf and an industry becoming increasingly optimistic about the short and long-term outlook for their region. However, I will not measure success for BSEE by the rate at which we issue permits. Permitting is an essential part of our safety mission and we are obligated to review each permit carefully to ensure that it meets the requirements for safety and environmental protection and resource conservation. We will conduct thorough reviews that ensure that the applicant is meeting all the enhanced safety standards put in place after the Deepwater Horizon, and that they can respond effectively in the event of a worst case scenario.

BSEE has worked very hard to help industry better understand the requirements and improve the efficiency of the permit application process. Perhaps most significantly, BSEE held permit processing workshops, which has helped the quality and thoroughness of applications to steadily improve. We published a permit application completeness checklist to make it clear to industry what information is required and reduce the frequency with which operators submit incomplete applications. We have established priorities for reviewing permit applications – assigning the highest priority to permits for ongoing operations or emergency operations, such as relief wells. We have also allowed authorized users of our online permit application system to track the status of their applications. This answered the call from many operators for greater transparency in our permitting process. As a result of these steps, and the industry's increasing familiarity with the process, permit review times have decreased significantly in the past year. Rigs that have left the Gulf of Mexico are continuing to return, new rigs are being contracted, and we are starting to see a small inventory of unused drilling permits develop. In an effort to continue this transparency and cooperation, we will hold another workshop this spring to discuss permitting and oil spill response plans.

BSEE and the U.S. Coast Guard recently inspected an offshore rig headed for Cuban waters. Industry stakeholders and environmentalists are worried about the safety of the rig and the readiness of Cuban authorities to respond in the event of a disaster. How did you find the rig's condition?

BSEE personnel found that the rig generally conforms to U.S. safety standards, and that the blowout preventer passed the tests performed on it, including the critical stump test. They did find some minor issues regarding

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safety items, including alarms, signage, personal protection equipment, and equipment placement that required adjustment before the rig would have fully adhered to U.S. regulations. Repsol indicated that it would address all of those items, and in follow-up conversations they have confirmed that they have done so. Moving forward, the U.S. is engaging in continued multilateral engagement with countries in the Caribbean – including Mexico, Jamaica, Cuba, and the Bahamas – as a way to share processes and practices related to oversight of private sector drilling activities to facilitate oil spill prevention and response, and gain information on the progress of drilling plans and activities. Sharing of best-practices is the best way for all countries in the Caribbean to ensure safe operations, and is similar to our interactions with other countries that have active offshore drilling programs.

BSEE is responsible for enforcing safety and environmental regulations for oil and gas operations on the OCS. BSEE's functions include permitting and research, inspections, offshore regulatory programs, oil spill response, and the newly formed training and environmental compliance functions. That's a lot of responsibilities on one plate – tell us about the qualifications of your inspectors.

BSEE inspectors come from various backgrounds, including recent graduates and former industry employees. We are always recruiting subject matter experts to bolster existing expertise within the agency, specifically looking for expertise in well operations, production operations, safety and environmental management systems, accident investigations, measurement systems and deepwater drilling. Our inspectors are our front line employees and are experts in their field. Theirs is a critical job, and they go offshore daily to not only enforce rules and regulations, but also to impress upon operators the importance of safety. To help with this critical mission, we have increased the number of inspectors by 50 percent since April 2010, and the number of engineers, who also perform critical safety functions, by nearly 10 percent.

With so many new inspectors entering BSEE, and with our existing inspectors being asked to do more to ensure that industry is complying with the strengthened post-Deepwater Horizon safety standards, training and continuing education is more important than ever. That is why we established the National Offshore Training and Learning Center, which has so far trained two groups of new inspectors through a core curriculum in offshore inspections. We are also now providing our inspectors with new equipment and tools, including handheld computers, to make our inspection process more efficient and effective. I'm extremely proud of our hard working inspector force. They are all skilled in the different facets of offshore operations and have shown a can-do attitude that is key to excelling in this challenging profession.

The predecessor of the two existing regulatory bodies for the offshore energy industries was roundly criticized in the wake of the Deepwater spill of 2010 for being too close to the industry that they regulated and also for not having the competence to do the job right. Where does BSEE – standing up in October 2011 – differ from that perspective?

The employees of the former Minerals Management Service were, with isolated yet well-publicized exceptions, an extremely committed group of public servants that dedicated their lives to their communities and their nation, often foregoing much higher salaries they could have earned in the oil and gas industry. The need for reform did not stem from the actions of these dedicated professionals. It arose from outdated regulations, an inability to match the pace and scope of the offshore industry's growth, and leadership that was often forced to focus on one of several fundamentally different priorities to the detriment of the others. The reorganization of MMS by Secretary Salazar into BSEE, the Bureau of Ocean Energy Management, and the Office of Natural Resources Revenue was designed to address these issues and allow the employees of each agency to apply their expertise with clarity of mission.

Nevertheless, the isolated examples highlighted potential issues that we chose to take strong action to address. Since the spill, a tough recusal policy was instituted that has reduced the potential for real or perceived conflicts of interest in our enforcement programs. Under the policy, employees must notify their supervisors about any potential conflict of interest and request to be recused from performing any official duty where such a conflict exists. Our inspectors are now required to recuse themselves from performing inspections of the facilities of former employers. In addition, our inspectors must report any attempt by industry or by other BSEE personnel to inappropriately influence, pressure or interfere with his or her official duties. BSEE also has an Investigations and Review Unit, which promptly responds to allegations or evidence of misconduct and unethical behavior by our employees, and aides in the investigations of alleged misconduct by oil and gas companies.

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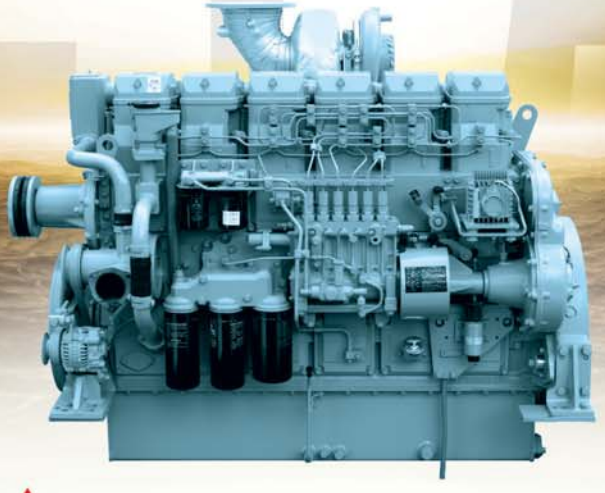

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A Dredging Update on the Lower Mississippi River

By Sean M. Duffy, Sr., Executive Vice President - Maritime Advocate with the Louisiana Maritime Association

The Big River Coalition was created in fiscal year 2011 in reaction to the announcement by the Commander of the Corps of Engineers' Mississippi Valley Division confirming the discontinuation of reprogramming funds to maintain the Lower Mississippi River (LMR) navigation channel. This position change immediately meant the Mississippi River's navigation channel would no longer receive preferential treatment. Shortly after the 1989 grounding of the M/V Marshal Konyev near Pilottown which, in essence, closed the River to all ship traffic, the Corps' Headquarters announced in a position statement that it would maintain the nation's most critical navigation channel. The Big River Coalition's main focus has been to obtain additional funding to supplement the shortfall in the Corps' annual budget, to strive to establish a legislative firewall around the Harbor Maintenance Trust Fund, and to represent members of the Mississippi River navigation industry in matters related to coastal restoration.

The Corps' New Orleans District (NOD) calculates their average annual dredging budget at $110 million to maintain the LMR deep-draft navigation channel from Baton Rouge to the Gulf. The President's Budget for the NOD over the past 5 years has been approximately $60 million. An additional $50 million must be secured to maintain the channel or it becomes deficient. However, the above-mentioned amount of funding is under normal conditions and does not include impacts of tropical events, high-river or flood stages or the impacts of man-made disasters (such as a large oil spill). There are other projects or features that the NOD would also maintain if it had sufficient funding. The approximate annual amount to fund these additional features – various jetties and dikes – and also maintain the authorized channel dimensions is $200 million.

When properly maintained and functioning, jetties, foreshore rock and lateral pile dikes reduce the amount and cost of dredging. Because South Pass and other Passes of the delta reach are not maintained, recreational and commercial fishing vessels and shallow-draft OSV's are forced to share the navigation channel with commercial deep-draft ship traffic. The proper maintenance of these

Passes helps reduce dredging costs and greatly improves navigational safety in the main channel.

Earlier this year, the Big River Coalition released a report it commissioned by Dr. Timothy Ryan containing information on the enormous financial impact that the failure to maintain authorized dimensions on the LMR could have to the nation's economy. Dr. Ryan said, in part, *"If the channel is dredged to 45 feet, the $423.37 million in direct spending, $789.09 million in total spending, $118.15 million in earnings or income for American residents, and $13.55 million in federal taxes lost (See Table 20). For every foot below 45 feet, the losses get larger and larger. If the channel is maintained to a depth of only 35 feet, the losses will be $14.02 billion in direct spending, $27.30 billion in total spending, $3.58 billion in earnings, and $424.32 million in federal taxes."* His full report can be accessed at:

http://bigrivercoalition.org/news.html

The Coalition has made significant progress in educating Congress and navigation stakeholders of the importance of maintaining fully authorized dimensions on the LMR deep-draft channel. The Louisiana Congressional Delegation was very active in helping to secure $90 million in supplemental funding this fiscal year. Notably, the President's Budget for FY 13 included an increase in the NOD's budget of approximately $15 million over FY 12 levels ($68 million vs. $82 million in FY13), despite the 5.4 percent decrease in the Corps' overall FY13 budget.

The HMTF bill in the U.S. House of Representatives (Congressman Boustany's HR-104) has 185 co-sponsors, and Senator Levin's Harbor Maintenance Act of 2011 (S

412) has 35 cosponsors. The estimated revenues of the Harbor Maintenance Tax (HMT) in 2012 are $1.7 billion with requested transfers of $869 million. The remaining $831 million will raise the surplus to nearly $7.5 billion dollars. At a time when our nation's transportation infrastructure is crumbling around us, funds pilfered from deep-draft navigation channels have negatively impacted trade by adding significant costs and portraying our trade arteries as unreliable to global shippers.

The HMT is an ad valorem tax of 0.125 percent paid by importers on all cargoes arriving into the United States. This tax generates approximately $1.5 billion annually. While only half of these funds are appropriated for their intended purpose, the surplus has been used to mask the deficit and fund other projects. Full allocation of these funds is the goal of the previously referenced bills. Indeed, the USACE agrees that full funding from the HMT would produce and maintain full dimensions of our deep-draft channels. As we promote and preserve our nation as a world trade superpower, taxation without channelization must stop.

The Big River Coalition maintains that if HMT efforts are successful, part of the equation will be remedied. The focus would then need to turn toward proper maintenance of the nation's shallow-draft channels and infrastructure. Often when addressing those less familiar with the impact of shoaling, it is necessary to allude to an analogy that all Americans can understand. Deficient channels and deteriorating navigation structures (locks, dams, bridges, jetties) can be related to our dilapidated national roadways. When you see lane closures, think reduced width on navigation channels. When you experience delays on the roadways, relate it to vessel traffic being backed up, and when you hit a pothole, think of an area of reduced depth limiting vessel draft. Imagine the thrill of being stuck in traffic and you can begin to understand the impact on our nation's economic superhighways.

Sean M. Duffy, Sr. is Executive Vice President - Maritime Advocate with the Louisiana Maritime Association. He serves as the Executive Director of the Big River Coalition. Sean specializes in lobbying Capitol Hill for supplemental funds for maintenance dredging and waterway maintenance.

Marine Salvors

Spill Responders of First Resort: Restating the case for salvor's responder immunity.

By Jim Shirley

In prior issues of *MarineNews*, this column, like others writing on the subject, has referred to marine salvors as the first line of defense against oil or chemical pollution resulting from marine casualties. That is because the salvor's efforts are directed either at keeping the oil or other pollutants in the ship or removing them in a controlled lightering operation. Salvors do that as a matter of routine to maximize the salved values, and more and more frequently in modern times they do that because it is a requirement of their services, irrespective of how the cost to perform compares to the values saved. A salvor is not truly an Oil Spill Response Organization (OSRO) in the traditional sense of that term, although as a practical matter there is overlap in performance. In many cases, if the salvor gets to the site of the casualty in time and salvage operations are not hampered by weather or other obstacles, the salvor will be able to prevent spills and therefore obviate the need for traditional OSROs for other than standby and protective measures just in case something does not go well. That is the best case scenario for the environment because, although spills may be cleaned up and their damage minimized through remediation, it may not always be possible to fully restore pre-spill conditions.

Shifting Priorities Create Conflict

This modern role of the salvor is sometimes in conflict with his traditional role of saving property in order to obtain a generous award that is based in part on the value of the property saved. Salvage, whether by contract or common law, has traditionally been a matter between the salvor and the owners of the property successfully rescued from a marine peril. According to the late Geoffrey Brice, Q.C., a noted author and legal scholar on both the English law of salvage and the American law of salvage, this principle has its historic roots in the Rhodian Law of 900 B.C. and its modern roots in English Law developed in the early nineteenth century. Changes came during the twentieth century to add protection of the environment as an important priority.

The first international treaty on the subject, the 1954 International Convention to Prevent Pollution of the Sea by Oil, put restrictions on where and when petroleum products and waste may be discharged into waterways, but exempted from those restrictions many of the very actions that may be taken by marine salvors responding to a casualty, i.e. "for the purpose of securing the safety of the ship, preventing damage to the ship or cargo, or saving life at sea." That is, protection of the environment was the third priority, after saving human life and rescuing property. Subsequent treaties and legislation have moved the priority of environmental protection up one notch to the number two position after saving human life and before saving property. Thus, an economic conflict for the salvor has been created. That is, a salvor may today be required to take actions that protect the environment even if those actions put the property he is there to save in greater peril, thereby putting at risk his opportunity for the generous reward he was seeking by responding to the casualty in the first place. The salvor's reward may be put in peril by the actions of others. Pursuant to the International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties, 1969 (the Intervention Convention) an affected coastal nation may take destructive action against an offending vessel if the relevant authorities are not persuaded the salvor's efforts are likely to result in less damage to the environment. This measure also finds support in Article 9 of the International Convention on Salvage, 1989 (the 1989 Salvage Convention) which also provides for the "right of a coastal state to give directions in relation to salvage operations."

Of course, the most problematic conflicts arise when the salvor is forced into the position of having to decide between conflicting duties. For example, Article 8 of the1989 Salvage Convention imposes on the salvor not only the traditional burden "to carry out the salvage operations with due care," but also, while performing that duty, the burden "to exercise due care to prevent or mini-

mize damage to the environment." If there is a difference between what "due care" requires in the salvage operations and what "due care" requires in respect of environmental protection, the salvor will likely choose to be guided by what he has seen or heard of happening to others in oil spill situations, even when they had no role in causing the spill or worsening it.

The case of the M/T "Tasman Spirit" comes to mind. In that case, the salvage master who responded to refloat the vessel and who is credited with preventing further, perhaps devastating, oil spillage was nonetheless detained for a while by local authorities. An even greater conflict may arise pursuant to the Oil Pollution Act of 1990 (OPA 90) when a stranded vessel, especially a laden oil tanker, lies in the projected path of a storm of sufficient magnitude that it may reasonably be expected to destroy the vessel if left on the strand. Will jettisoning some portion of the cargo sufficient to enable refloating and thereby preventing a worse spill be considered a "willful discharge?" If the salvor knows to a reasonable degree of certainty that jettisoning that portion of the cargo will enable refloating and prevention of the larger spill, might the failure to jettison be deemed a "willful discharge?" In the United States the salvor will require permission from governmental authorities to take either action, but can he be certain he will not be blamed and held liable, at least in part, for the consequences of his action or inaction?

The salvor's award being put at risk in situations in which he may be damned by whatever he does or does not do is one thing. The larger risk of having additional liability imposed, however, highlights the need for "responder immunity" (as has been described at length in prior columns) in these situations where clear answers are not provided, or even possible.

Salvors Recognized as Spill Responders

The 1989 Salvage Convention recognizes the salvor for his pollution response capabilities. In addition to the "exercise of due care" requirements of Article 8, Article 13 includes "the skill and efforts of the salvors in preventing or minimizing damage to the environment" as one of the award criteria. Article 14 goes even further, bypassing the no cure – no pay concept that is common in salvage cases to provide for "special compensation" equal to their response expenses being paid to salvors who respond to vessel casualties that pose a threat to the environment when salved values are insufficient to enable a suitable award. That special compensation may be increased by as much as 30 percent, or in some cases up to 100 percent where it can be shown that the salvor's efforts actually prevented or minimized damage to the environment.

Insurers, salvors, and ship owners have given recognition to the importance of the salvors' pollution response services by devising a scheme that brings contractual clarity to the purposes meant to be served by Article 14. They have done this by substituting the freely negotiated Special Compensation P&I Club (SCOPIC) clause for Article 14 in certain contracts performed pursuant to Lloyd's Standard Form of Salvage Agreement (LOF).

OPA 90 also recognizes the importance of the salvor's role in pollution response. The regulations implementing OPA 90 have always required ship owners to list salvors in their OPA 90 mandated Vessel Response Plans (VRP). This requirement has been tightened by the Salvage and Marine Firefighting regulations that were put into effect for tank vessels in February 2011. These regulations also set forth the criteria by which vessel owners are to be guided in selecting and contracting with salvors in each Captain of the Port zone in which their vessel will be oper-

ating. Also, in connection with their role in the Incident Command System (ICS), salvors selected by ship owners are required to participate in "spill drills" required by the National Preparedness for Response Exercise Program (PREP Drills) as mandated by OPA 90.

New Role, New Risks

Gone are the days described by Noel Mostert in his 1974 Book-of-the-Month Club selection, SUPERSHIP, when ships routinely pumped oily ballast water, bilge water, and cargo tank wash water and sludge over the side into our oceans, amounting to thousands of tons of different varieties of oil every year from each of the largest tankers. Gone, too, are the days when salvors may routinely (or ever?) jettison petroleum bunkers or cargoes in order to lighten and refloat a stranded oil tanker or other vessel. However, the days of ship casualties resulting in threatened or actual oil spills are not gone. There remains a need for responders in these situations, and a special need for the salvors that have taken on the additional responsibility for prevention and/or mitigation of pollution, and have taken that role as their second priority after the saving of human life. Nor are the days gone when lawsuits are filed against responders who come on scene to help with a casualty, to prevent or minimize damage resulting from that casualty. Hence, the lawsuit styled Terry G. Robin, et al v. SEACOR MARINE, LLC, et al in which many Deepwater Horizon responders, some of whom were providing services in the nature of salvage, were named as defendants based on claims that their services were defective and caused damages and personal injury to affected residents of the impacted areas. It is far too early to assess the merits or predict the final outcome, after appeals, etc. of that case. It is not, however, too early to once again state the case for salvor's responder immunity. The salvor, after all, comes on scene voluntarily to help the vessel owner with his problems, not to take responsibility for those problems. Responsibility should remain with the owner or other "responsible party," to whom the salvor's liability, if any, should be channeled in the absence of the salvor's proved gross negligence or willful misconduct. Salvors need this protection if they are to continue in this special role that has been thrust upon them, sometimes at the risk of their own livelihood.

Jim Shirley is a Master Mariner, a former salvage master and retired maritime lawyer who specializes in maritime casualty and salvage matters. He now serves as legal counsel to the American Salvage Association and as Principal Consultant in JTS Marine LLC.

Charterer as Underlying Credit

By Richard Paine

What financial instrument can take soft credit and firm it up dramatically in the eyes of a banker or credit analyst? What can make a good credit even better? What can shave tens of basis points off a term loan rate? What can help you to secure the construction or term loan financing that you need for a new vessel to grow your business? The answer could be as simple (or as difficult, for that matter) as a Bareboat or Time Charter agreement on a vessel or vessels in your fleet. Let's say that you want to build or buy a new boat, but your credit is not quite pretty. You have weathered the storm over the last few years (but only just), have no real huge black marks against you or your company's credit, but the numbers just aren't quite "there," either. Beyond this, you may have had some previous financial difficulties, possibly due to market downturn or other external forces. Your loan may not easily sail through the loan committee at your bank.

If you've had some problems, it's possible you might be what we in the industry would call a "story credit." In banker jargon, it means that you are a potential candidate for a loan, but your company has a mediocre "B" or poor "C-D" implied credit rating. A credit rating is determined by four basic financial ratios taken from your financial statements: Interest Coverage (<1.69), Current Ratio (<1.19), Debt to Tangible Net Worth (>3.81) and Cash Coverage ratio (<1.07). See Standard & Poor's Ratings Criteria for more details: (http://www.standardandpoors.com/ratings/articles/en/us)

What creates the "story" aspect is the ultimate level of comfort or discomfort gained by the lender about the company, after its goals and history, clientele and circumstances (that have resulted in less than stellar financial performance) have been evaluated. Once these are understood and perhaps solutions to problems might be found, the lender may look more positively towards the loan request.

The Rest of the Story

As with any loan request, your financial statements, tax returns, business plan and projections will be under the cautious eye of the lender's credit group. Beyond verbal explanation, be prepared to show, if appropriate, the steps you have taken to improve your company's financial condition. For example: Have you downsized your labor or stacked equipment to compensate for lower utilization or day rates? Have you used available Capex to repair or improve your fleet during the slow down or, have you been actively marketing your company to increase and stabilize your cash flow by securing Time Charter and Bareboat Charter agreements to supplement or replace spot market trading?

In the spot market, your vessels are deployed without a long term contract. It is generally acknowledged by most that here, rates are generally higher than time charter rates might be. If your utilization rates are consistently high, you can probably demonstrate some stability in your revenues. The spot market, however, does not guarantee revenue and depends on market trends and is ultimately uncertain and therefore "spotty." From a lender's standpoint a contract between your company and a strong credit is both a mitigant to negatives found in your story and a credit enhancement, as you now have a guaranteed revenue stream and profit to document in your financials projections. Unless you really mess-up, you have "money in the bank." As lenders we evaluate the two principal types of charter agreements: Bareboat (or demise) and Time charters for their contribution to your cash flow and projected debt service.

Bareboat

In a Bareboat Charter, the shipowner maintains ownership of the vessel with all tax benefits of ownership but without the requirement to crew or provision the vessel. Under what is in effect rental agreement with the charterer, a term is set and amount of rents, termination, recharter and possible end of term purchase of the vessel are all specified. The charterer assumes responsibility for personnel, insurance, fuel, port charges and other operating and maintenance expenses. The monthly rent charged to the charterer of the vessel during the term of the charter is a multiple of the monthly finance payment, taxes, overhead and other costs. Ultimately, the lender will determine if the amount is sufficient to provide revenue that covers

debt service, expenses and profit for the Shipowner.

The lender is assigned, under a blanket assignment of charter, all proceeds of the Charter agreement in the event of a loan default by the shipowner.

Time

In a standard Time Charter Agreement, a vessel is under employment to a charterer for a term specified within the agreement, usually one to three years. Under most circumstances, the shipowner is guaranteed at least 350 days of employment. Ideally, the Time Charter will include two important provisions: (1) Assignability of the charter (as above) to the lender or its designates in the event of an incurable default by the shipowner to the lender; and (2) a "Hell and High Water" or "Take or Pay" provision that obligates the charterer to pay the agreed daily rate under all circumstances. The charterer cannot withhold payment under any circumstance including fatal accidents, work stoppages, seizures, or strikes regardless of what happens to the Shipowner or the vessel under charter.

The Underlying Bottom Line

Both Bareboat and Time Charters with strong charterers are game changers for a "story" or weaker credit. To be of real value in a credit analysis of your loan request, the charterer should be rated significantly higher than you as the shipowner to be of any effect on your business's implied credit rating.

If revenue streams and debt service are effectively guaranteed by a highly rated third party (your charterer), upon approval by the lender, a considerable amount of risk for the lender has been removed from the loan or lease with the proposed borrower. By mitigating the level of risk associated with the transaction, and in consideration of the strength of the underlying credit of the charterer, you may enjoy some of the benefits of a higher credit rating than you would normally bring to market.

So the trade-off is higher rates from the unreliable spot market or guaranteed rental revenue and cash flow (albeit at a possibly lower rate) from an established, high(er) quality credit. Guess which we lenders want to see.

Richard J. Paine, Sr. is a recognized authority on U.S. commercial marine lending and leasing. He can be reached at rpaine@optonline.net

Voyage Planning '101'

Calculating Under Keel Clearance & Minimum Air Draft Requirements

By Captain Katharine Sweeney

Companies carrying oil for the oil majors are familiar with the scrutiny that goes into every detail of their operations, not to mention the least of which; voyage planning. But even vessels transporting non-hazardous or dry cargo need to review their voyage planning policies and procedures frequently.

Ask yourself a few questions:

Does your vessel safety management system address requirements to maintain a minimum amount of water under the keel while underway and while alongside a dock? How does your management system require this to be calculated and is it part of the voyage planning for the vessel? How about your minimum air drafts for transiting under bridges? Or, your policy on maintaining minimum distances off shallow areas (think: Costa Concordia)? And, just as important — how well-known are these policies amongst the wheelhouse personnel?

Nowhere is the old adage more true: Failing to plan is planning to fail. As an auditor, I am always asking, "What is the company's minimum Under Keel Clearance (UKC) required while underway and while alongside a dock?" I get a range of responses, and too often, the response is not what the company had in mind. Maintaining positive buoyancy is a good thing — going aground can ruin your whole day. Planning to stay afloat should be part of your voyage plan.

Calculating UKC

How you expect the UKC to be calculated should also be documented in your procedures. A common practice is to use a template for the voyage or passage plan which lists the least depth along a voyage leg (or route traveled between waypoints), as well as the waypoints, course and distance between waypoints. The UKC can then be calculated using a formula of subtracting this least depth from the maximum value of the vessel's (or barge's) draft and allowing for other factors such as squat and bank effect, as appropriate.

If your vessel is towing a barge, other considerations could include the catenary in the tow wire. Does your voyage planning procedure address how to allow for and/or handle this added depth? Using a template such as an excel spread sheet works well, however, any formulas or constant values used should be password protected to ensure they are not inadvertently changed or written over.

Do your vessels routinely navigate under bridges? The voyage planning procedure should also include the air draft of the vessel (or the barge), how it is to be calculated for each voyage, as well as the air draft clearance of any bridges on the trip. What about shoals or shallow areas your vessels' transit? Your crew should know how far off such shoals you expect the vessel to be navigated. Remember, it isn't just the captains who should be reading the management system manual(s), it's also the junior officers, who, I have found, are normally the ones actually putting together the plans, with the captain's input, and look to the procedures for guidance. Clearly communicating your company's requirements to someone who has 30 years of allision-and-grounding-free experience is still a good thing, but not everyone in your fleet will have such 30 years of experience to fall back on.

Mainstreaming No-Go Areas

Another noted requirement for oil major vettings is the marking of "no-go" areas on charts using a highlighter. When I first saw these markings I thought it was sacrilegious to violate a chart this way. However, no-go areas, outlining the 10 fathom curve and marking shoals or reefs, calls attention to these areas and is considered a requirement by some. Using a highlighter to raise awareness of areas in locations that are hazardous indicates that the chart was actually looked at prior to laying down waypoints and track lines. These no-go areas can quickly indicate points that are available or should be avoided in the case of a steering or propulsion casualty. This also sends a

clear message to the watch officers what navigable areas are expected to be transited. Perhaps the cruise line Industry will be the next to embrace marking the no-go areas on their charts.

Voyage Planning: the Big Picture

Sending a clear message through your management plan of how you expect your vessels to be navigated and under what conditions, is just one area of "operational control" that the International Safety Management Code requires. Calculating the minimum amount of water that is under the keel for the transit and recording it on the passage plan is one way of documenting that the company's minimum standard is being adhered to. Auditing your Captains and Mates to make sure they understand the company's requirement in maintaining the minimum under keel clearance as well as auditing the voyage plans to ensure it is being calculated is another. Summing up: verify operational control of the vessel in a standardized fashion and prevent groundings. Now, that's a Voyage Plan.

Captain Katharine Sweeney is CEO of Compliance Maritime, provider of independent internal auditing of security, safety, quality and environmental management systems for vessel operators. Captain Sweeney is an experienced Master Mariner, safety expert and federally licensed pilot with over 25 years in the Maritime Industry. Contact her at captsweeney@compliancemaritime.com.

Rhode Island

On the East Coast & "Open for Business"

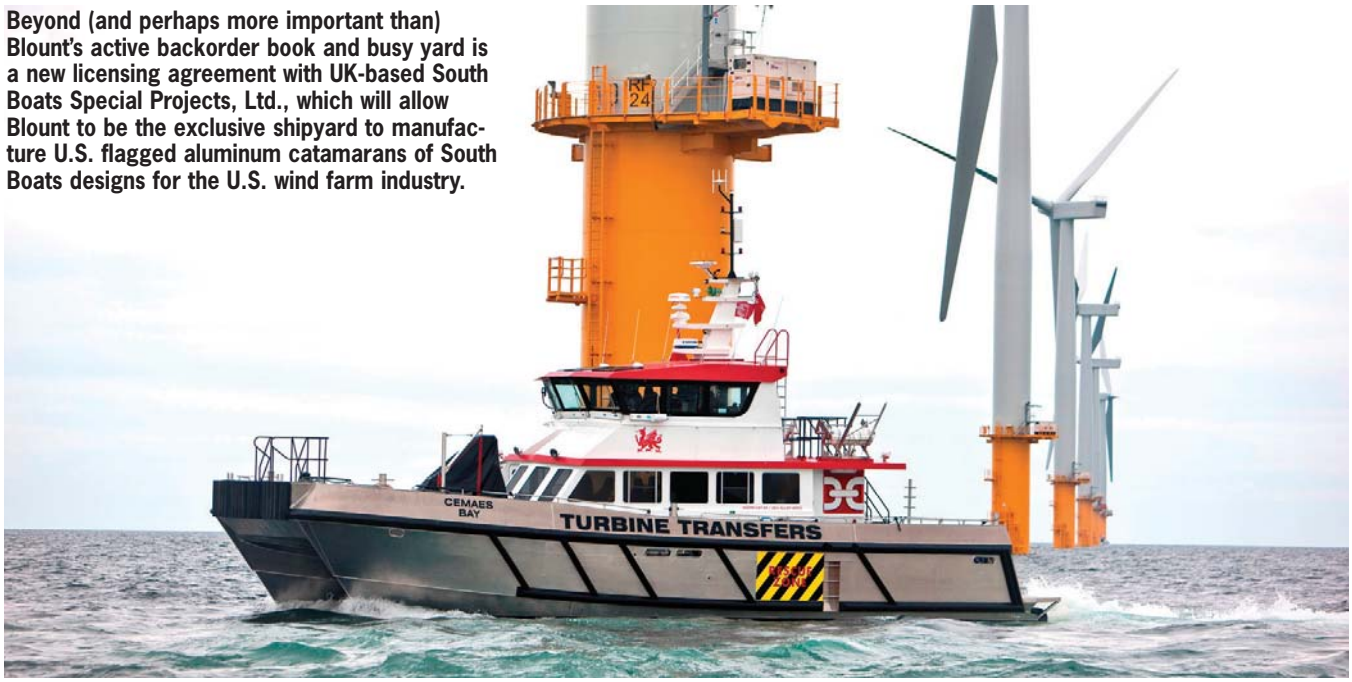
Rhode Island's economic assets include a surprising number of prominent and lesser known maritime firms. A recent media tour hosted by the Rhode Island Economic Development Corporation (RIEDC) highlighted the Ocean State's key role(s) in the nation's maritime industry.

By Joseph Keefe

As the state of Rhode Island – along with everyone else, so it seems – works to revitalize a struggling local economy, it has become increasingly apparent that the marine industry will play a prominent role in that revival. In March, the Ocean State's marine trade industry opened their doors to national trade media, showcasing the important work being done here in the ocean state. MarineNews Editor Joseph Keefe spent two full days there, visiting a raft of maritime businesses, marine research centers and government contractors. The primary take-away from all of that was this: Rhode Island is indeed open for business.

Rhode Island's Economy: Maritime is Key

The two-day event focused on the state's vast marine-related industries. Rhode Island's 400 miles of coastline boasts a strong cluster of marine-related industries, with numerous shipping terminals, marinas, docks and marine industrial sites. Beyond this, the University of Rhode Island – home to world-class oceanographic research by military and private sector firms – is joined by well-known maritime firms such as Blount Shipbuilding, Electric Boat, Hall Spars, Hinckley Yachts, Hunt Yachts, KVH Industries, New England Boatworks and Pearson Composites. A well-known and respected maritime train-



Beyond (and perhaps more important than) Blount's active backorder book and busy yard is a new licensing agreement with UK-based South Boats Special Projects, Ltd., which will allow Blount to be the exclusive shipyard to manufacture U.S. flagged aluminum catamarans of South Boats designs for the U.S. wind farm industry.

ing resource, the Non-Profit 501c (3) Maritime Simulation Institute (MSI), operates out of Middletown, RI. A burgeoning high-tech maritime security sector exists here as well, anchored by ASA Science, Rite Solutions, and the Naval Underwater War College (NUWC).

At the heart of Governor Chafee's revitalization efforts is his recognition that the marine trade industry will play a key role in Rhode Island's future. In March, the Governor told gathered journalists that he believes these industries, which carry great potential for high-skilled manufacturing, will be crucial, just as they have been throughout the state's history. Rhode Island, he says, is a logical choice for marine industries and research, not only because of its coastal infrastructure, but because the state has a strong supply chain, over 12,000 workers employed in the industry, and access to world-class marine building and technology partners and an active Rhode Island Marine Trades Association (RIMTA).

Out & About

Drilling down, the specific parts of Rhode Island's maritime business climate are arguably even more impressive than the whole. A whirlwind two-day tour of the state's waterfront provided several notable highlights:

The Rhode Island's Naval Undersea Warfare Center (NUWC) is the U.S. Navy's full-spectrum research, development, test and evaluation, engineering and fleet support center for submarines, autonomous underwater systems, and offensive and defensive weapons systems associated with undersea warfare. One of the corporate laboratories of the Naval Sea Systems Command, NUWC is headquartered in Newport. NUWC employs more than 4,400 civilian and military personnel around the world, with budgets of over $1 billion.

The University of Rhode Island's Graduate School of Oceanography offers a "Blue MBA" which prepares students for management careers in energy, ocean technology and engineering, and marine navigation. The program works across disciplines ranging from observation-based research, modeling, and instrument development, which translates into initiatives funded by organizations such as the NSF, DOC, USAID, U.S. Navy, DOE, U.S. Air Force, EPA, and others. The work ranges

Governor Chafee met with the owners of Blount Boats. From left to right: Nancy Blount, Marcia Blount, Eric Beidel (National Defense magazine), Governor Chafee, Joseph Keefe (Marine News and Maritime Professional magazines), Julie Blount, Luther Blount.

from collecting micro-organisms in deep sea environments for DNA mapping and drug discovery research to collecting mineral samples for gas and oil discovery. The Graduate School of Oceanography's Special Area Management Program (SAMP) has mapped approximately 5% of the world's ocean floors and works on mining and wind farm planning projects.

Blount Boats, located in Warren, RI, proved to be one of the more interesting venues of the week. The tour and presentation at their boatyard included a personal visit from Governor Lincoln Chafee, who told ***MarineNews***, "I'm more concerned with rising energy costs here in Rhode Island than I am with taxes. We also need to focus on job training." Looking out over four brand new, Blount-built U.S. Army 75-foot, passenger vessels scheduled for immediate delivery, Chafee also held forth on the current challenging federal budget discussions. "Defense will take a hit. Rhode Island will, however, aggressively protect its piece of the shrinking pie." Fortunately, Blount also does more than its fair share of commercial work, too.

A recently signed contract with Wendella Sightseeing

Company, Inc. to construct a third 89 x 30 foot steel excursion boat will be a sister ship to the M/V Wendella (Hull 320) and M/V Linnea (Hull 330) built by the Blount shipyard in 2007 and 2010. Blount Boats was also awarded a contract by the Maine Department of Transportation to build a 110-foot passenger ferry for the Casco Bay Island Transit District. The proposed 399 passenger, Sub-Chapter K vessel will operate year round ferry service to islands in Casco Bay, Portland, Maine. Featuring the latest in electronically controlled diesel engines that meet EPA standards, Blount Hull number 335 will mark the ninth vessel built for the Casco Bay Island Transit District. Further fattening the Blount backorder book is yet another contract to build a sister vessel to the 75-foot aluminum passenger vessel, LA PRINCESA. Contract signing for the 149 passenger vessel is now underway.

Beyond (and perhaps more important than) Blount's active backorder book and busy yard is a new licensing agreement with UK-based South Boats Special Projects, Ltd., which will allow Blount to be the exclusive shipyard to manufacture U.S. flagged aluminum catamarans of South Boats designs for the U.S. wind farm industry. At least 45 South Boats-built wind farm service vessels, in five classes are now in operation. Blount executives told *MarineNews* in March that they were to start building a "spec" wind farm vessel as early as this summer. Out in front of Rhode Island's aggressive push to bring the first U.S. offshore wind farm to the Ocean State, Blount also aims to be the first supplier of Jones Act compliant, domestically built service vessels to the industry.

Also based in Rhode Island and a part of the tour was Rite Solutions, a firm engaged in analysis technology that spans the realm of DOD/U.S. Navy work (75% of revenues) and commercial efforts, too. Rite-Solutions' accomplishments include participation in Navy Undersea Warfare programs, commercial entertainment contracts and child safety programs. In 2010, Rite-Solutions was awarded a $73 million Phase III SBIR contract for work on the Combat Systems of the Future. The company's customers include the Naval Undersea Warfare Center, Naval Sea Systems Command, Office

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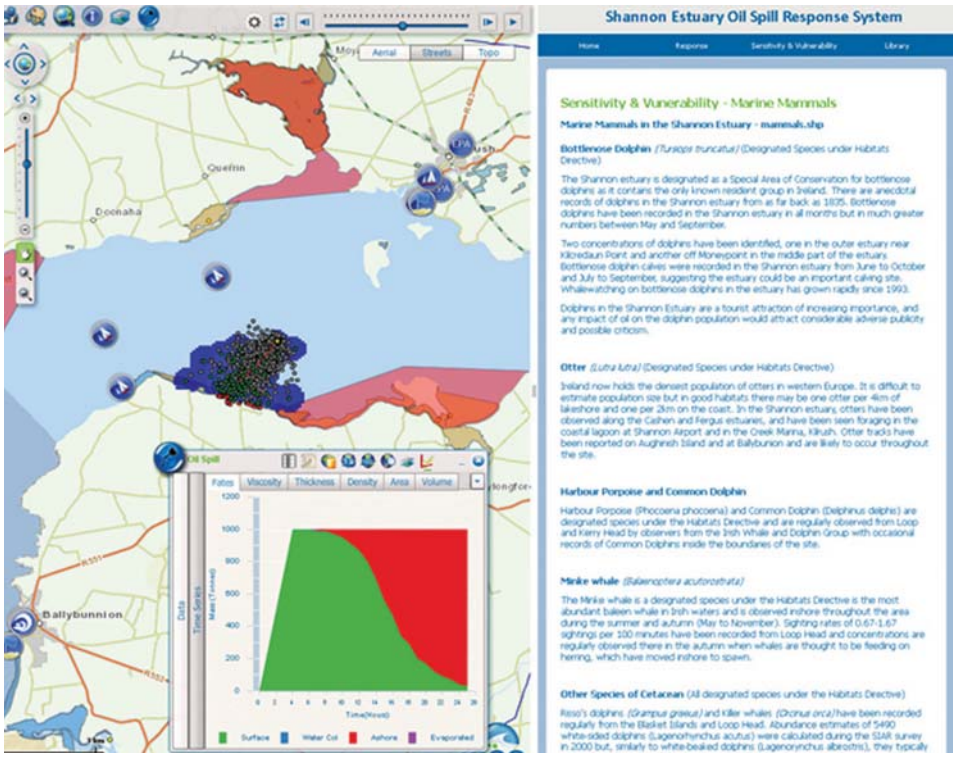
of Naval Research, Raytheon, and many others. Significantly, they also provide simulation software for the Massachusetts Maritime Academy's Emergency Management graduate degree program.

Rounding out the week was a visit to ASA, also a global science and technology firm that notably markets the OilmapWeb system, a web-based version of ASA's OILMAP software for oil spill response training and planning. Using OILMAP, a user can then run the oil spill model, entering the location of the accident, and amount and type of oil that is released. Using this data, the software provides key response strategies for responders.

The Ocean State: the case for Maritime Business

Two days in March, hosted by the Rhode Island Economic Development Corporation, opened a lot of eyes to Rhode Island's current business climate and its future potential to host additional marine business opportunities. "Rhode Island has a long-standing history of Marine industries that have continued to innovate and evolve to grow," said Keith Stokes, Executive Director of the Rhode Island Economic Development Corporation (RIEDC). The RIEDC is a business resource to businesses looking to expand and relocate to Rhode Island, we offer financing options for the marine industry, including business loans through the Small Business Loan Fund, as well as tax incentives and other workforce development assistance. Also, no sales tax is levied on boats registered in the State."

The many and varied maritime businesses dotting the Rhode Island coastline show no apparent signs of a sluggish economy. In fact, most showed growth within a difficult period and all exhibited ongoing business and the prospects for more. The smallest state with a long coastline and a big maritime footprint may also be poised to be the nation's first to dip their toes into the offshore wind power game. And, that's because Rhode Island is open for business.



ASA's OILMAP software screenshot

Photo courtesy Greater LaFourche Port Commission

OSVs

Demand is Growing in Deepwater Gulf of Mexico

By Susan Buchanan

As the feds issue more drilling permits for the Gulf, demand for offshore support vessels in the GOM deepwater sector has accelerated, industry members say. Anger about the government's spill-related, drilling moratorium--which ended a year and a half ago--has given way to optimism recently. The region's shallow-water sector, nevertheless remains slow and gives little cause for cheer.

Paul Candies, president and chief executive of Otto Candies, LLC, in Des Allemands, La., said "we're seeing good demand for large, high-quality OSVs now and for the next couple of years. The industry has seen the value of first-rate equipment--OSV and Construction/Dive Support/ROV vessels--and is willing to commit to some long-term contracts." But he added "we're not seeing much improvement in demand for midsize and small equipment." Otto Candies is a marine transportation and offshore services company.

Taking Stock:

What's behind the renewed need for deepwater vessels? Don Briggs, president of the Louisiana Oil and Gas Association, said "We've slowly, surely gotten back to work in Gulf. We're not at pre-Macondo levels yet but we're coming back. Today's count in the GOM is 43 rigs and that's up from 25 a year ago," he said in late March. However, that compares with 148 rigs in 2001.

Chett Chiasson, executive director of Port Fourchon in Louisiana, said the government has been approving more drilling permits, and "BSEE, the Bureau of Safety and Environmental Enforcement, anticipates another ten rigs will be operating in the Gulf by the end of this year. That's good news for vessels." Port Fourchon services 90 percent of all U.S. Gulf deepwater projects. Chiasson continued, "Activity at Port Fourchon started to improve at the end of last year and has continued to get better. Port activity is 90 percent of what it was prior to the moratorium and that number is constantly rising." He added enthusiastically, "you can feel the change in activity at the port. Things are looking up for our tenants. Companies have announced plans to build offshore vessels, and some are agreeing to build for the deep end as more rigs come on line. It takes a year and a half to get a rig on line."

Robust Volume Gives Way to Increasing Optimism

Shane Guidry, chairman and CEO of Harvey Gulf International Marine, LLC in New Orleans, said in late March "there are no boats available to rent, and it's the busiest I've seen it in two decades." Separately and In Morgan City, David Barousse, business development director at Fleet Operators, Inc., agreed that OSV demand is on the rise. "Vessel operators are very optimistic that 2012 will be busy because of the feedback they're receiving from their customers" – a mix of oil and gas operators

"There are quite a few new, large deepwater rigs scheduled to work in the Gulf in the next few years. We're optimistic about deepwater activity in the coming year."

Boysie Bollinger, President & CEO, Bollinger Shipyards Inc.

and service companies, he said. Fleet Operators owns and charters supply vessels for offshore oil and gas.

Bollinger Upbeat about Deepwater

Boysie Bollinger, president and CEO of Bollinger Shipyards Inc. in Lockport, La., said demand for future, deepwater vessels is increasing, and he pointed to recently announced orders for deepwater vessels from Hornbeck Offshore Services and Harvey Gulf International. "There are quite a few new, large deepwater rigs scheduled to work in the Gulf in the next few years," he said. "We're optimistic about deepwater activity in the coming year."

Photo courtesy Harvey Gulf

We've slowly, surely gotten back to work in the Gulf. We are not at pre-Macondo levels yet, but we're coming back. Today's count in the GOM is 43 rigs and that's up from 25 a year ago.

Don Briggs, president of the Louisiana Oil and Gas Association


Photo courtesy Greater Lafourche Port Commission

That said, Bollinger cautioned, "demand for vessels should continue to increase but could be offset by U.S. flag vessels that were deployed overseas in the last two years returning to the Gulf." Bollinger Shipyards builds OSVs, tug boats, ocean barges, rigs, liftboats, patrol boats and inland push boats and barges.

Elsewhere, in a $720 million program announced in November, Hornbeck Offshore Services in Covington, La., plans to build sixteen, 300-class offshore supply vessels, and has contracted eight of them to VT Halter Marine in Pascagoula, Miss. and eight to Eastern Shipbuilding Group in Panama City, Fla., with options to build more. Robert Socha, executive vice president for sales and marketing at Bollinger, said "demand for deepwater support vessels in the 4,500 to 6,000 DWT range has increased in the Gulf over the past year with announcements of future, deepwater oil and gas exploration. Several announcements have been made for newbuild programs at various shipyards, filling Gulf Coast shipyard capacity. The demand for OSV's is targeted towards larger capacity vessels with DP 2."

Socha added "our repair groups continue to see demand for our larger dry-docks that are capable of servicing larger support vessels." Bollinger, the top volume vessel-repair company in the GOM, has twelve shipyards and 31 dry docks in Louisiana and Texas.

Gulf Investment Climate Improves Versus Two Years Ago

Don Briggs told *MarineNews* in March, "After the

Macondo accident, the Gulf of Mexico suffered a sharp decline as an attractive place to drill a well, according to a Fraser Institute survey" of petroleum industry executives. The GOM dropped from 11th out of 133, to 60th out of 135 in the Fraser Institute's fifth annual survey, released in June 2011, about barriers to investment in oil and gas exploration and production around the globe. But industry is more hopeful now, said Briggs. "The important thing is to have real, continued consistency in the government permitting program. As everyone gets more comfortable with the program, certainty comes back."

He added "with rigs going back to work, supply vessels and support activities on the drilling side are experiencing some upside and new business. We'll see more drilling, more investment and more opportunities for the vessel industry."

Increased Safety Focus

In reaction to the BP spill, the Bureau of Ocean Energy Management (BOEM) required that all deepwater drilling contractors in the GOM meet new safety and environmental rules and install well-containment systems in case of an accident. As for rigs that left the Gulf for Brazil and Africa, "They're under long-term projects and may not be coming back soon," Briggs said. "But that doesn't mean that other rigs in other parts of the world won't make their way to the Gulf."

Shallow Water Remains Slow

Chiasson said "we're not seeing a big uptick in shallow-water activity or in internal movement of goods. We hope shallow-water rig permitting will improve." In its most recent analysis, GNO Inc. in New Orleans noted that an average of 4.7 shallow water permits were issued monthly in the Gulf from November to January, 34 percent below the monthly average in the year before the BP spill. Boysie Bollinger agrees, saying, "Shelf activity has increased, but very slowly. We don't see a lot of increased activity on the shelf, based on new-build requests for those types of vessels."

The Inner Continental Shelf extends from the coastline and gradually slopes to depths of 360 feet. In Louisiana, the federal Outer Continental Shelf starts 3 1/2 miles offshore. Both shallow and deep

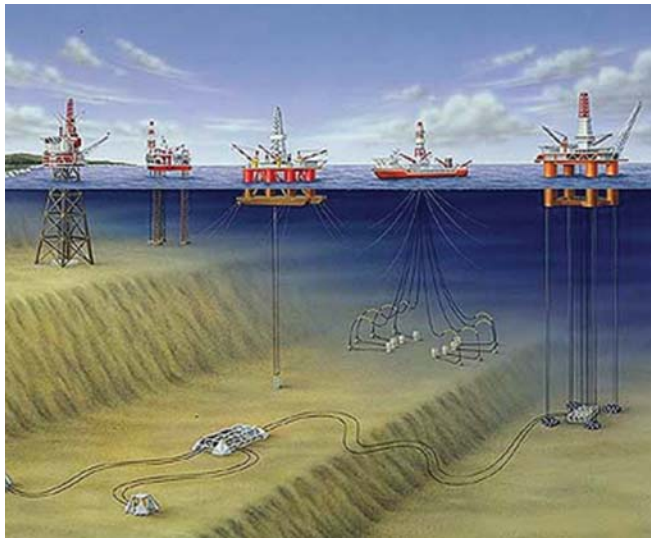


Photo courtesy Dept. of Interior

water permitting in the Gulf lag pre-spill rates. Only three deepwater permits were issued monthly from November to January, down 48 percent from the average of 5.8 permits per month prior to the spill. Approval times for plans are much longer than before the spill, and detailed, environmental assessments are required now for deepwater drilling plans. It's not getting any easier, most agree.

Wind Power: A Way To Use Depleted Fields

Some of the Gulf's shallow water wells are starting to run dry, driving the industry into deeper water. As oil becomes more expensive to extract, companies are looking to adapt old fields for offshore wind energy. Baryonyx Corp. in Austin, Texas plans to build two wind farms, 5 and 10 miles offshore respectively from Port Isabel, Texas. Power will be delivered to the Electric Reliability Council of Texas or ERCOT transmission grid. Offshore wind farms can also help oil and gas companies – who ship diesel fuel to run generators on their platforms and rigs – save on fuel costs.

New, LNG-Powered OSVs For The Gulf

Most vessels fueled by liquid natural gas more than meet current U.S. Environmental Protection Agency emission standards, and LNG is cost effective. "But LNG is still new and slow to catch on," Guidry of Harvey Gulf said. "I have only four of them being built." That said, Harvey Gulf arguably remains ahead of the pack in building increasingly redundant safety systems out in front of coming regulations for their growing, ultra-modern fleet of workboats.

As announced this past February and October, Harvey

Above: Various types of drilling operations exhibited.

"Port activity is 90% of what it was prior to the moratorium and that number is rising. You can feel the change in activity at the port. Things are looking up for our tenants. Companies have announced plans to build offshore vessels, and some are agreeing to build for the deep end as more rigs come on line.

Chett Chiasson, Executive Director, Port Fourchon, LA

Gulf contracted Trinity Offshore, LLC, in Gulfport, Miss. to build four LNG-fueled OSVs. Those ecologically-friendly boats will meet American Bureau of Shipping ENVIRO+ standards. They will have dual-fuel capabilities and when running in gas mode, will produce no sulphur oxide emissions since gas doesn't contain sulphur. Nitrogen oxides will be slashed compared with diesel operations, and CO2 emissions will be lowered. Natural gas produces almost no particulates.

In January, President Obama said that his administration is opening another 38 million acres of the central Gulf of Mexico to exploration and development with June 20 oil & gas lease sales in New Orleans.

Those sales, however, were scheduled in the 2007-2012 Outer Continental Shelf Leasing Program, planned in 2007. Thankfully, they weren't canceled, industry members said. Today, increased drilling activity has allowed measured optimism in a recovering, GOM maritime economy.

More drilling in an environment of heightened government oversight and increased safety points to a better year for OSV operators and their clients.

West Coast Responders

Weaving the safety net

By Raina Clark

The world of oil spill response is complex and nowhere is it more complex than on the U.S. West Coast. Not only are federal and state regulations sometimes out of sync, the liability involved with supporting the transport of oil is huge. A company can be devastated by a single mistake. So, in addition to building accident prevention into operations, industry must weave a very complex safety net. That's easier said than done.

Vessel and facility operators can reduce costs and complexity by joining a cooperative and avoiding having to contract with oil spill response organizations (OSROs) individually. Co-ops are separate corporations that don't perform spill response, but collect funds from their members and pay contractors to be ready to respond should the need arise. Contract OSROs, such as the National Response Corporation (NRC), conduct oil spill response when called upon by the co-ops and also subcontract to smaller OSROs with regional focuses and capabilities. In this way, large nationwide contractors can cache equipment and access personnel across the country and the world, enabling them to respond quickly no matter where an incident may occur.

PENCO personnel provide emergency marine oil spill response and related environmental services from offices in Hawaii and Alaska.

The Washington State Maritime Cooperative (WSMC) is a co-op that provides oil spill contingency plan coverage and an emergency response system to vessels in Puget Sound. WSMC utilizes the services of a primary contractor, NRC Environmental Services Company, a subsidiary or NRC, to maintain a response network of equipment and personnel. The response may include deployment of vessels, boom equipment, skimmers, a qualified incident commander and response personnel, among other resources.

Co-ops are just one mechanism potential spillers can use to protect themselves, their people and the environment. Many big companies have joined forces to create member-owned and operated, non-profit oil spill response organizations which function as both co-op and contractor. These organizations perform spill response with their own equipment and personnel as well as using subcontractors where appropriate.

Some member-based organizations cover specific regions such as those OSROs in Alaska, including Alaska Clean Seas, providing response services to the North Slope crude oil producers, and the Ship Escort Response Vessel System (SERVS), covering Prince William Sound and the Valdez Marine Terminal. Other Alaska OSROs include Alaska Chadux Corporation, Southeast Alaska Petroleum Resource Organization (SEAPRO) and Cook Inlet Spill Prevention & Response, Inc. (CISPRI).

Inside OSROs, Large & Small

Steve Candito has been with the National Response Corporation since its beginnings in 1992 and has served as its president since 1999. "NRC is

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"There is a tendency to throw everything but the kitchen sink into contingency plan requirements: that more is better.
But sometimes more is just more!
This kind of oil spill response overkill doesn't benefit anybody. We need to look at what works and focus on enhancing those proven tools and methodologies."

Charlie Costanzo, VP - Pacific Region, the American Waterways Operators (AWO)

unique in that it is the only commercial oil spill response provider with a nation-wide focus," he said. By "commercial," Candito means NRC is not a member-owned non-profit OSRO. These are often well-funded by large oil companies. "We have to figure out a way to do this stuff cost competitively. Our costs are often actually lower, because we have to be so innovative and smart about what we do and still make some money."

Customers pay a retainer fee to use NRC in their response plan which they file with the Coast Guard, EPA and state agencies. If an incident occurs, NRC's response fleet includes aircraft as well as 20 large, dedicated oil spill response vessels around the country. A network of dedicated and non-dedicated equipment helps NRC stay cost effective, Candito says.

"We have networks of equipment that we can bring in, but don't have to own and maintain," Candito said. NRC's network includes about 140 independent contractors and access to over 57 million barrels of temporary storage throughout the U.S. EEZ. Some of these smaller companies store and help maintain NRC-owned equipment and in the event of a spill, provide personnel to deploy and operate the equipment as directed by the spill manager through NRC.

As part of these networks, smaller companies like the Pacific Environmental Corporation (PENCO), serving Hawaii and Alaska, subcontract to NRC and other large OSROs. Rusty Nall, Executive Vice President at PENCO,

said the biggest challenge for small response companies is finding and keeping good people. Nall began with PENCO as a commercial diver and tug operator when the company formed in 1973 and will be receiving a Legacy award at the Clean Pacific Conference in May. Employees with companies like PENCO are the boots on the ground and must be experienced, technically capable and be good leaders.

As subcontractors, "we're often the first ones on scene," Nall said. "We have to have a well-trained, well-vetted, responsible group of employees." Drug screening, background checks, fitness and range of motion tests are all part of the comprehensive screening process potential PENCO employees go through.

"Safety is our first priority," Nall said. "We've got a really good base of people," and he added, "We have loyal employees because we treat them well."

State of Washington Contingency Plan Changes

In 2011, the Governor of the State of Washington passed a law mandating the Department of Ecology to enhance requirements under the state oil spill contingency plan rule by December 2012. This mandate was in response to reports that came out of the Deepwater Horizon spill in the Gulf of Mexico. NRC is a major environmental contracting firm on the West Coast and has voiced concerns regarding the proposed changes to Washington State's contingency plan.

"We're generally not opposed to new regulations," said Steve Candito, "but what we are opposed to is requirements that are really not cost effective. And that's what we're seeing with the vessel of opportunity and new technology proposals being put forth. If these things are really shown to work and the safety issues are addressed, then we would be more supportive." But Candito is concerned that some of the new requirements proposed are just "knee jerk" reactions, coming out of the Deepwater Horizon spill.

Specifically, Candito is concerned about a proposed requirement to have technology that detects oil spills at night or in fog. "We generally do not pick up oil at night," Candito said. "There are some nighttime ops, but we're really not physically out their skimming and doing complicated

operations at night," because of the risk to personnel. So spending a lot of money on this technology doesn't make sense, he said. And before the cost has to be passed on to his customers, he wants to know, "Does this technology work as well as the manufacturers say it does?"

Charlie Costanzo, Pacific Region Vice President of the American Waterway Operators (AWO) has also been involved in the conversation over the proposed changes. "There is a tendency to throw everything but the kitchen sink into contingency plan requirements • that more is better. But sometimes more is just more. This kind of oil spill response overkill doesn't benefit anybody. We need to look at what works and focus on enhancing those proven tools and methodologies."

Another concern with Washington State's proposed rulemaking is a requirement to maintain a vessel of opportunity system focused on small boats, such as fishing vessels. "The concept is OK, because in a crisis you do need to use additional people," said Candito, "but in this case the proposal is so prescriptive that the cost would just be astronomical."

"A major concern AWO has regarding the vessel of opportunity system is the crew safety standards," said Costanzo. "We are worried about the safety of vessels and their crews and we're concerned that unforeseen issues could delay or hinder response activities. Our member companies focus on safety and environmental protection every day. Every member company of AWO participates in the Responsible Carrier Program (RCP). We believe that this regulation must include an equivalency to the RCP and include Best Management Practices for participating vessels in the rulemaking • including training that matches the task of the responding vessel of opportunity and drug and alcohol testing policies for crews."

Luckily, Costanzo reported that "to date, the Department of Ecology has been responsive to our concerns and the maritime industry has been deeply involved in the rulemaking process and the Rulemaking Advisory Committee."

California has seen court cases which pit state laws against federal laws, but Costanzo said, "I haven't

seen initiatives in other Pacific states that relate directly to Deepwater Horizon. I think the connection between Deepwater Horizon and the Washington law is not realistic. Nobody's drilling for oil in Washington State waters. That said, oil spill response is an evolving field and it's important to periodically re-evaluate our methods and practices to respond to the risk. AWO members support a robust oil spill response system that is commensurate with our risk profile. The Oil Pollution Act of 1990 (OPA-90) is an excellent law and we've seen dramatic improvements since its enactment in reducing oil spills from vessels."

The Best Web: Adapt to change but Stay Involved with the Process

The mechanisms for managing oil spill response are living and changing and adapting to different situations, different regions and different and evolving regulations.

The safety net is complex and thick because it has to be, but we can also run into trouble when lawmakers and other stakeholders aren't well enough educated in maritime realities.

If oil spill response companies and vessel owners and operators stay involved in the process, it is then likely that the best web possible will be built.

Crowley's Oil-Spill Response Vessels

Supporting Shell's Energy Project in Beaufort Sea this Summer

Crowley Maritime Corporation's barges, Arctic Endeavor and Klamath, and tugboats, Point Oliktok and Guardsman, are preparing to join the Shell Venture fleet to support drilling operations in the Chukchi and Beaufort Seas this summer. In late April, the Arctic Endeavor will depart from Seward, Alaska, and the Klamath from Portland, Oregon, towed by the Point Oliktok and Guardsman (respectively), for an early May arrival in Valdez, Alaska.

Once in Valdez, the tug-barge pairs will join the rest of the Shell support fleet for training and preparedness drills. The crews of the support vessels will participate in classroom trainings on the topics of safety, procedures and protocols, and will also demonstrate proficiency in on-water drills for spill response and preparedness. Additionally, because crew changes will be done via helicopter transport once in the Arctic, crewmembers will undergo Helicopter Underwater Egress Training (HUET) to prepare for aircraft emergency procedures should an incident occur. Shell is working with Crowley as a resource to develop the Shell safety and oil-spill response training programs.

After training, the entire fleet will head north, transiting Dutch Harbor and passing through the Bering Strait, and on to the Chukchi and Beaufort Seas. Drilling in the Arctic is expected to begin in July and will complete in October.

The ice-class Arctic Endeavor is outfitted with oil-spill response equipment that would be operated by ASRC Energy Services in the event of an incident. The Klamath, an ex-petroleum vessel currently in drydock in Portland, will be modified with ice belting (ice-class steel) on its bow and will be equipped with two special Transrec skimmers. In the event of a spill, the Arctic Endeavor and Klamath are capable of skimming and collecting spilled oil and safely containing it within holding tanks located on board. The Point Oliktok has been designed with a ice-strengthened hull for Arctic support work and offers capability for pushing or towing small- to medium-sized barges. The Guardsman is an Invader class vessel, which as a class is known for its versatility, maneuverability and towing capabilities.

Keeping the Deep Blue in Deepwater

MSRC's GOM Expansion Deepens Gulf Coast Response Capabilities for the Offshore Deepwater Region.

When the Marine Spill Response Corporation (MSRC) announced in late February that it had completed its Gulf of Mexico expansion program known as Deep Blue, few industry stakeholders were surprised that this capable spill responder had stepped up to enhance capabilities well in advance of any new regulatory requirements. The scope of MSRC's new response capabilities created under this program, on the other hand, now position this non-profit, dedicated spill responder to respond to virtually any oil spill incident, if and when necessary. The same organization that worked with BP during the Macondo spill – dispatching no less than four ships on scene within 24 hours – now boasts a significantly more capable organization, and response capability.

Key to the expansion program were achievement of the following metrics:

- *Increased effectiveness of mechanical recovery through expanded number of dedicated oil spill response and recovery platforms in the Gulf of Mexico;*
- *Increased ability to utilize commercial Platform Supply Vessels (PSVs) and Multi-Purpose Support Vessels (MPSVs) to reinforce MSRC's existing dedicat-*

HOS Centerline

"The Deepwater Gulf of Mexico is a vital source of domestic crude oil. MSRC's Deep Blue expansion, ahead of any changes in spill planning regulations, demonstrates our customer's desires to continue to enhance response capability in the aftermath of the Deepwater Horizon incident."

Steve Benz, President & CEO, MSRC

ed platforms;

- *Enhanced ability to find and encounter oil on the water's surface; and*
- *Increased effectiveness of other response tools (dispersants / controlled burning.*

Speaking to MSRC's recent Gulf Coast enhancements, MSRC President and CEO Steve Benz told *MarineNews* in March, "The Deepwater Gulf of Mexico is a vital source of domestic crude oil. MSRC's Deep Blue expansion, ahead of any changes in spill planning regu-

lations, demonstrates our customer's desires to continue to enhance response capability in the aftermath of the Deepwater Horizon incident."

Deep Blue Specifics

MSRC has repositioned one of its 210 ft Oil Spill Response Vessels (OSRVs), now renamed the Deep Blue Responder, from the Atlantic Coast to its newest equipment site in the all-important, strategic oil services Port Fourchon, LA. A total of seven Responder Class OSRVs are now pre-positioned within 60 hours of the Deepwater Gulf of Mexico operations. Additionally, MSRC pre-engineered its five storage barges in the Gulf of Mexico as dedicated skimming barges. Staged from Ingleside, TX, to Tampa, FL, these barges have (on average) approximately 48,000 barrels of temporary storage capacity, as well as newly enhanced on-board skimming capability.

MSRC has also contracted with Edison Chouest Offshore (ECO) and Hornbeck Offshore Services (HOS) to modify five PSVs and MPSVs for potential use as OSRVs. MSRC's contracts with these two premier offshore operators recognize that commercial PSVs and MPSVs can contribute to effective spill response, if properly outfitted in advance with pre-engineered skimming equipment on board and if vessel personnel are trained and certified in advance to respond appropriately. These PSVs and MPSVs vessels have each been equipped with permanently installed skimming systems, ocean boom and a boom-tending vessel. They have modified below-deck storage capable of handling recovered oil, thus taking advantage of the significant storage available on board these vessels, and providing for the safe collection of oil. MSRC has also made other program enhancements as part of its Deep Blue program. To enhance the ability of skimming vessels to locate oil, and to enhance the encounter rate for removal, MSRC has invested in X-Band and Infrared technology on each of the marine platforms in the Deep Blue project. This technology has the potential to better locate oil in low visibility conditions. In addition, MSRC has invested in an additional 65,000 feet of ocean boom to potentially expand encounter rates through enhanced skimming techniques. Under appropriate and approved conditions, dispersants and controlled burning are equally important tools in a large-scale release. To that end, MSRC has increased the number of its dispersant spray and spotter aircraft to a dedicated total of six aircraft nationwide. Two of these planes are located in the Gulf of Mexico, which complement new Federal requirements and

MSRC's Deep Blue expansion program. Additionally, MSRC has acquired 21,000 feet of fire boom to pre-stage in the Gulf of Mexico, which is estimated to be the largest single inventory of fire boom owned by any spill response company in the world.

How it Works

MSRC modifications to certain tonnage, along with the large capacities of these vessels, provide a significant reinforcement to MSRC's already impressive fleet of dedicated OSRVs. Under normal circumstances, the five PSVs and MPSVs will continue to support the companies to which they are chartered; however, in the event of a significant spill incident, the intent is that they would be released from such service and mobilize to respond for MSRC's customer. With the addition of these vessels, MSRC can support customers with 17 open ocean response and recovery vessels. MSRC also has other open ocean response capabilities that can be cascaded during a significant release, as occurred during Deepwater Horizon in 2010.

Setting MSRC apart from other responders is perhaps its dedicated response mission. The organization has no other business sectors. "MPA Members have always been committed to funding comprehensive spill response programs to ensure the availability of robust response capabilities beyond base regulatory requirements," said MPA President and CEO, Brett Drewry. Steve Benz, added, "We appreciate the commitment of the MPA member companies operating in the Gulf to fund this substantial increase in capability. Without question, MSRC continues to have the largest capability in the Gulf and nationwide.

The commitment extends not only to the initial investment in these new capabilities, but the on-going operating costs and added personnel necessary to sustain our operations."

Deep Roots & Bright Future

MSRC is the largest standby oil spill and emergency response company in the United States. Founded in 1990, it is a not-for-profit entity that is solely funded by the Marine Preservation Association (MPA) through its member companies.

These companies include Gulf of Mexico operators: Anadarko, Apache, BP, Chevron, Cobalt, ConocoPhillips, Energy Resource Technology, ExxonMobil, Murphy, Nexen, Noble, Shell and Statoil. Focused solely on and directing 100 percent of its efforts towards response, MSRC meets and exceeds all regulatory requirements.

In the choppy wake of the EXXON VALDEZ oil spill, and in an effort to improve the safety and environmental protections in connection with bringing such products to market, Congress enacted the Oil Pollution Act of 1990 (OPA-90).

The Act's numerous provisions, including specific requirements for those engaged in the handling, storage, and transport of oil and petroleum products to "ensure by contract . . . private personnel and equipment necessary to remove to the maximum extent practicable a worst-case discharge," are at the heart of the MSRC mission.

Now, and in the roiled wake of another similar incident, MSRC finds itself out and in front of the regulatory process with Gulf Coast capabilities that are arguably unmatched anywhere else in the world. If the GOM Deepwater stays blue in a post-Macondo world, then MSRC will probably be part of the reason why.

Satcom Arrives in Brown Water

Evolving needs of workboat and inland operators and a largely untapped market both point to SATCOM's next big target.

The North American brown water operator has officially grown up. As firms embrace new technologies to run a more efficient, cost-effective and profitable fleets, this involves upgraded equipment, better trained personnel and software to streamline management functions. Tying all of it together is new and improved SATCOM communications. Market penetration in this sector is estimated to be less than 10 percent of all self-propelled vessels, in marked contrast to the deep sea markets where some estimate coverage to have reached 70 percent of all hulls.

With most inland operators ramping up with management software solutions to USCG subchapter M regulations, more than 5,000 vessels will be affected in the United States alone. All of that data and recordkeeping will, of course, need to be transmitted back and forth in a timely and secure manner between boat and shore. As data demands increase, so will the demand for more robust ways to move that information. Up until now, SATCOM has been perceived to be too expensive, and frankly, somewhat of a mystery. That's changing.

Iridium's OpenPort Solution – and more

Ted O'Brien is Vice President, Americas at Iridium Communications Inc., a satellite communications company that offers global voice and data coverage. O'Brien, responsible for customer accounts in the Americas, as well as defining Iridium's targeted markets. He counts the rapidly burgeoning inland market as a key niche for his firm.

Selling through distributors to achieve maximum market reach in selected markets, Iridium lists more than 523,000 global customers. According to O'Brien, Iridium boasts a unique satellite environment – truly global coverage to every point on earth. He explains, "We're the only provider to do so. You can dial one number to get a particular ship, no matter where it is on the planet." Today, O'Brien and Iridium are actively studying traffic patterns and volume to determine where coming trends are and to understand business opportunities. The largely untapped inland market is one of them.

O'Brien touts his firm's reliability, global reach and its ongoing modernization program, Iridium NEXT. Fully financed and launching soon, Iridium NEXT will maintain the existing Iridium constellation architecture of 66 cross-linked low-Earth orbiting (LEO) satellites covering 100 percent of the globe. Iridium NEXT will substantially enhance and extend Iridium mobile communications services. The massive billion dollar infrastructure upgrade is planned to begin launching satellites commencing 2015, with all intended to be operational by 2017. This will allow more robust data transfers and regional coverage will commence sooner as the birds go up.

O'Brien says that Iridium will not try to be all things to all people. At the same time, he points to Iridium's newest offering, Iridium Pilot, powered by the Iridium OpenPort

Today, Iridium are actively studying traffic patterns and volume to determine where coming trends are and to understand opportunities. The largely untapped inland market is one of them.

Ted O'Brien is VP, Americas, Iridium Communications

Workboat with Sea Tel equipment installation.

broadband service. For the price sensitive smaller vessel/fleet market, it is attractively priced with up to three handsets that ensure that crew is not interfering with the operations of the boat. OpenPort's advantages include a package that has no moving parts and always looks for strongest signal. Beyond that, its smaller antenna provides smaller platform operators with a less intrusive addition to their already crowded hulls. With an inexpensive installation price and start-up costs, it follows on with lower operating prices. In other words: just the ticket for the cost-conscious inland operator looking to dip his toes in the SATCOM waters.

O'Brien describes Iridium's business philosophies by saying, "We use a network of global, reliable and knowledgeable distributors, all with access to targeted markets. We're always looking to meet the evolving needs of various markets." He adds, "There is no 'maritime' market – it's a series of individual markets within that broad category."

Boatracs – SATCOM, Software and an Inland Focus

Another provider of integrated satellite communications and software solutions for the commercial maritime industry is Boatracs. Boatracs offers multiple communications solutions ranging from its core Qualcomm OmniTRACS product line to newer multi-mode broadband and voice capabilities, all powered by BTConnect, Boatracs' web-based messaging and mapping software to provide access to fleet-wide data from anywhere on any device. Today, Boatracs delivers products and services to thousands of vessels in the offshore, inland, commercial fishing and government markets.

Boatracs CEO Irwin Rodrigues told MarineNews recently, "We see opportunities for growth in three primary areas. The first area is in small to medium size fleets. Roughly two thirds of the North American workboat market consists of fleets with less than 20 vessels, and there is growing demand for affordable, simple satellite communications solutions that help these

"Some of these customers pay less than $100 per month per vessel for airtime using our narrowband solution bundled with mapping and messaging fleet management software. At that price point, satellite becomes an affordable tool for companies of all sizes to be more competitive, efficient and profitable in a down economy."

Irwin Rodrigues, President & CEO, Boatracs

companies stay competitive and compliant. The second area is around compliance and making it easier to collect, manage and retrieve critical vessel data. Finally, we see demand for affordable and scalable fleet management software that integrates a variety of data – fleet positions, messaging, navigational, regulatory, AIS – into a single visual interface that is hardware agnostic. Scalability is an important factor – today, Boatracs has fleets that range from 1 vessel to over 200 – solutions need to be able to address the business challenges for a spectrum of fleet sizes today and as they change over time."

Noting the sometimes vast differences between blue and brown water operators, Rodrigues says, "Some programs take millions of dollars and multi-years to install. How much time to get value? Inland operators typically can't afford either. And typically, customers don't have IT departments." And, as provider of both operating software (adaptable to subchapter M applications for small vessels) and SATCOM, Rodrigues knows both sides of the equation well and adapts his solutions to meet those challenges.

Sea Tel: Performance & Choice

Atul Chawla, Sea Tel's Product Marketing Manager, also weighed in. He says, "Only about 7 percent of the 17,000 inland vessels around the world have VSAT communications. It is a cost and they have to ask themselves, why do I need it? However, for many of these vessels, it is truly their home and their office, so broadband communication is important. VHF communication and cellular communications is fine to a point, but there is a growing need in this market. Previously, there weren't that many solutions available."

Sea Tel has a full range of low cost, high performing systems that are easy to install in a few hours, in some cases. These include a 24-30" reflector for this market. A newer product – their 3011 – is a newer product for those going a little further out. Chawla also says that one size does not

fit all. "I don't necessarily think the blue water model will work for brown water because their needs are very different and inland operators don't want to pay for broadband."

Sea Tel makes the antenna and has a system of dealers and the dealers will buy an antenna and package it. Chawla explains, "Our system integrators will put the package together – the air time, the modem, the installation. The good news about VSAT is that it's a very simple solution in that you know what you are going to pay for." According to Atul, inland operators are getting more sophisticated, enterprise-oriented, and as corporate as their blue water cousins. He adds, "But, price is one thing – value is another. Seatel brings the hardware – the antenna. Performance is important. That antenna has to last a long time." Companies can buy the hardware and then shop around for the service OR very often, they'll do a multi-year contract and they'll pay X dollars per month and never buy the hardware. They lease the equipment and they buy the air time for so many years. Both models are prevalent in the market today.

Sea Tel works with modem manufacturers to make sure the equipment works with just about any satellite modem out there. Chawla says, "We try to make our equipment as agnostic as possible so that it can easily integrate with any solution. With Sea Tel, the end-user gets the highest ROI on service. Your communications system is only as good as your hardware – you can have a great network but if you don't have an antenna that's listening and talking, then you don't have the full solution." He adds, And, I would caution users that any time you have someone telling you that this is the hardware, this is the software and the network, you really don't have a choice – you're being forced into a solution."

Why Sea Tel for the brown water and/or inland markets? Chawla answers, "Performance – we provide the most number of dealers, different antennas. We're all about choice. We don't box you into a solution. The antenna needs to last a long time. Our solution is scalable. My biggest problem today is that some of my antennas have been out there since 2000."

Delta Wave Communications

You can't really talk about SATCOM providers without mentioning those who put together the packages and install the systems. Delta Wave is a service provider who sells equipment and provides airtime and billing for various providers. With FCC-certified field technicians, the firm is a Gold accredited Inmarsat Partner. The ABS-cer-

tified firm offers the latest in Inmarsat, Iridium and VSAT mobile satellite solutions. Tom Clark, Delta Wave President, views the emerging SATCOM business in brown water from a different angle, with the same goals. In terms of the brown water market, Clark had a lot to say. "VSAT in particular has become much more affordable now than it was 10 years ago. While mobile satellite equipment and services such as Inmarsat and Iridium are still prevalent, broadband solutions are increasingly in demand. Alternative technologies include Inmarsat's new Wimax service which is an ideal alterative for companies operating in the GOM." He adds, "Newer technologies are about to become introduced which will offer even greater bandwidth (Inmarsat's Global xPress, for example), which will be a game changer. This will provide even greater bandwidth than what is seen today along with competitive pricing structures. Current broadband suppliers will have to remain competitive and thus, current usage rates based on existing technologies should lower due to the increased bandwidths available via the new technologies." All of that should be music to the ears of inland and OSV operators. With a nod towards his brown water customers, Clarks adds matter-of-factly, "We put together custom solutions for customers who don't want something right out of the box. There's no silver bullets – no be-all/end-all."

SATCOM: Soon, you won't be able to afford NOT to have it

Boatracs CEO Irwin Rodrigues perhaps puts it best when he says, "In a down economy, the focus turns to lowering operational costs, increasing vessel productivity, increasing human productivity and generally doing business smarter, often with fewer resources. Because of this, we actually saw an increase in the number of vessels using our satellite communications services as well as an increase in software subscriptions. This was driven by the fact that mission critical data can be sent cost effectively through satellite, particularly using a narrowband solution. We serve a

broad range of fleet sizes, with a specialty in working with small to medium size companies. Some of these customers pay less than $100 per month per vessel for airtime using our narrowband solution bundled with mapping and messaging fleet management software. At that price point, satellite becomes an affordable tool for companies of all sizes to be more competitive, efficient and profitable in a down economy."

It doesn't matter where you operate; offshore, inland or coastal waters. That makes sense.

"VSAT in particular has become much more affordable now than it was 10 years ago. While mobile satellite equipment and services such as Inmarsat and Iridium are still prevalent, broadband solutions are increasingly in demand. Alternative technologies include Inmarsat's new Wimax service which is an ideal alterative for companies operating in the GOM."

Tom Clark, President, Delta Wave

WQIS Marine Pollution Academy

A premier industry training guide – available to all regardless of affiliation – and for all the right reasons.

By Joseph Keefe

In 1971, oil spill response and cleanup was a simple process. Not so anymore. Now, and 40 years later, spillers are vilified and criminalized. That's just one of these reasons operators carry a myriad of insurance coverage products. In reality, industry is doing a remarkably good job these days. Dagmar Schmidt Etkin of Environmental Research Consulting, in her report entitled 40-Year Analysis of US Oil Spillage Rates, claims, "…twenty years after the 1989 Exxon Valdez spill, which spurred regulatory changes and industry initiatives to prevent oil spills, a comprehensive analysis of US spillage rates shows significant progress in reducing spills." She adds, "Seventy-seven percent less oil is spilling since the 1970s and 46% less since the decade previous to the last decade." Nevertheless, spills can and do happen.

"Marine Pollution used to be a relatively simple and low key matter," says Richard Hobbie III, President of WQIS. "Since 1990 the proliferation of regulations, new state and federal laws and response requirements has made spill response and pollution insurance coverage far more complex. In response to these sweeping changes, WQIS has created an Academy to assist all professionals-both new and veteran-by providing a better understanding of our industry's details. We believe this will have a positive, far-reaching impact on the marine industry as a whole."

Spills, although less frequent today than 30 years ago, do happen. Hobbie insists, "But, it does happen, and you want to be prepared to deal with it when it does." Enter WQIS, whose mission and vision includes being the premier global provider of marine environmental insurance and services, providing the best possible coverage and service to industry, and makes a profit for subscribers. That's a tall order for any provider. Beyond providing a market solution for its clients, however, Hobbie boils it down to one common denominator: "We represent our subscribers." As it turns out, this involves a lot more than just insurance.

Hobbie is a graduate of Columbia University, a former U.S. Coast Guard officer and additionally serves in a leadership role for any number of professional maritime organizations. As an advisor on the U.S. delegation to the International Conference on Liability and Compensation for Bunker Oil Pollution Damage of the International Maritime Organization; he has also been an instructor at

"Marine Pollution used to be a relatively simple and low key matter. Since 1990 the proliferation of regulations, new state and federal laws and response requirements has made spill response and pollution insurance coverage far more complex." –

Richard Hobbie III, President of WQIS

the U.S. Coast Guard OSC Crisis Management School and is currently serves on the Faculty of School of Risk Management, Peter J. Tobin College of Business, St. John's University. In short, the ideal candidate to roll out the maritime industry's newest marine pollution knowledge tool: the WQIS Marine Pollution Academy.

Compelling Reasons

Under construction for three years, the new industry resource has now been up for more than two months. As a prominent part of Hobbie's mandate to educate industry and those who would aspire to be a part of it, the Academy and WQIS track regulations and statistics, updating data regularly and continuously work towards making the Academy the most complete resource available to industry today. Marine pollution and insurance professionals new to the industry and chiseled veterans of many years alike can use this guide to gain or refresh a solid understanding of the complex and widespread world of marine pollution liability. Hobbie adds enthusiastically, "The more knowledgeable our clients are; the better. But, knowledge base is only one part of the solution."

The comprehensive resource includes a narrative on the History of WQIS and Marine Pollution Liability, Underwriting Guidelines, a Law Directory that details state and federal laws, White Papers, Technical Knowledge, Industry Resources and even a Broker Questionnaire that helps brokers understand key differences between marine pollution liability coverages, and to decide what coverage to offer clients. Curriculums expose learners to in-depth knowledge of the history and legislation, underwriting guidelines, laws, authoritative reports, industry terms, and helpful resources as they pertain to marine pollution.

Compiled by WQIS from over 40 years of deeply rooted experience, the resource is available to anyone from their WEB site.

We asked Hobbie if he had any reservations as to giving away proprietary information or losing competitive advantage by making such a rich trove of information available to all. He insists, "Educating our competitors is not a bad thing." And, he added, "It is important that people take this seriously. We urge people to study and pay attention."

WQIS Teaches a New Generation "the Ropes"

As a pioneer and now the largest provider of marine pollution liability insurance in the United States, WQIS introduced the Marine Pollution Academy as a comprehensive guide to all things related to the marine pollution industry.

Designed to help the new generation of the marine industry gain a solid understanding of the complex, and widespread world of marine pollution liability, that's not to say existing professionals can't gain similar metrics, too.

"It used to be that everyone in marine pollution insurance came up through the marine industry," says Hobbie, "that's not so much the case anymore. A lot of talented and ambitious brokers are entering the field but they just haven't had the same level of exposure that we have, so we created this academy, which is basically a primer on marine pollution. After 40+ years in the industry, WQIS has acquired a wealth of knowledge that others will find helpful, and a smarter industry benefits us all."

Out in Front & Behind the Academy

Today, Water Quality Insurance Syndicate is the largest underwriter of pollution liability insurance for marine vessels in the United States. WQIS focuses tightly on protecting the sea, the owners/operators of marine vessels, and cargo owners.

Founded in 1971, WQIS has over 40 years of experience as an absolute specialist in the industry, focusing on the issues of marine pollution insurance. Dedicated to providing the broadest coverage in marine pollution liability and creating the most responsive organization to serve the needs of its clients, WQIS, together with the Marine Pollution Response Group (MPRG), WQIS boasts some of most skilled and best-equipped teams for spill cleanup in existence. According

to WQIS, MPRG handles more spills in a year than any of its competitors combined.

Beyond this, WQIS is backed by 16 of the largest marine insurance companies in the world.

Through WQIS's technology developer, Greenfish Software, MPRG uses a sophisticated spill management and cost accounting system. Used widely by government agencies, the software improves decision making and minimizes costs for the client-both in cleanup expenses and third party claims.

WQIS provides water pollution liability insurance for over 40,000 vessels operating in U.S. waters or traveling in international waters between U.S. ports.

WQIS also provides COFR guarantees for over 2,500 vessels to the U.S. Coast Guard. And, vessels everywhere have been issued a WQIS Bunker Convention blue card.

Is it any wonder, then, that the largest underwriter of pollution liability insurance for marine vessels in the United States is also out in front of a broader effort to educate the industry that they serve and the professionals that populate it?

WQIS Marine Pollution Academy on the WEB:
http://www.wqis.com/marine-pollution-academy/

Rutter's Oil Spill Response Solution

Integrating X-Band Radar and IR Camera

Among a variety of radar frequency bands, only X-band frequency is capable of detecting oil spills. X-Band radar detects oil slicks as thin as 0.1 µm in conditions that include moderate rain and wind forces of 2 to 14 m/s and wave heights of 0.2 to 4 m (or Beaufort scale 2 to 6). Radar is able to detect oil on water because oil dampens capillary waves generated by wind, and the dampening effect is almost entirely independent from the oil slick thickness. It is the absence of radar reverberation returns from oil covered areas that enable radar to visualize and process the radar image.

Several specialized oil spill detection (OSD) radars are available on the market. These specialized OSD radars are capable of not only detecting suspected oil slicks, but also auto-outlining oil slicks, alerting the operator with visual and audible alarms, automatically tracking oil slicks, and predicting their trajectories. Some of these specialized OSD radar systems use image processing techniques for extracting information as part of its display processing. The Rutter sigma S6 Oil Spill Detection system uses a radar target tracker optimized for detecting area surface "targets". Boasting a lower false alarm rate compared to other OSD radar systems, the Rutter sigma S6 OSD system can detect oil spills at up to 4 nautical miles, at wind

speeds over 2 m/s, and from vessels at a speed of over 10 knots.

Even though radar has been proven to provide critical aid to an oil spill response operation, the established method for indicating relative differences in oil slick thickness is by scanning a reported oil spill with a cooled thermal-infrared (IR) camera. The oil covered sea surface has a different temperature than the surrounding waters, because of the insulating property of oil. When viewed through cooled IR camera with a wave length of approximately 4-5 µm and high sensitivity, the image color turns from light grey to dark grey on approximately 5 µm thickness of the oil slick, and the color turns to white on thick oil slicks of up to some millimeters in thickness. IR cameras are not well suited for examining thin layers of oil because there are only marginal or no temperature differences between thinly covered areas and the surrounding sea.

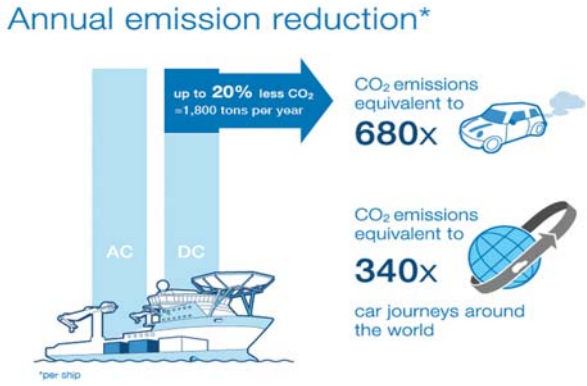
IR cameras cannot be used for automatic oil spill detection and outlining in real-time because they must be focused on fairly small beam angles, consequently illuminating only a small area at any given time.

An optimal solution for oil spill detection and response is the integration of the automatic detection and real-time image display functions of the radar, the oil spill verification and thickness classification functions of the cooled IR camera, and a daylight camera and a search light for day and night operation support. This solution is currently offered by Rutter with its complete Oil Spill Response and Management system. To date, Rutter has sold many sigma S6 Oil Spill Detection systems to responders; including 12 MSRC.

Onboard DC Grid

Breakthrough for DC Technology

A step forward in electric propulsion increasing vessel efficiency up to 20%



Imagine a ship with an efficient and modern propulsion system. This electric, state-of-the-art ship boasts up to 20% increased efficiency and at the same time, a markedly reduced footprint of electrical equipment. The ship's designers have full freedom to integrate and combine different energy sources – gas and diesel – and greater flexibility in placing system components in the vessel design. You've just described the ABB Onboard DC Grid.

Launched in May 2011, the ABB Onboard DC Grid represents a significant step forward. Developments in power distribution technology have made this new concept fully practical. Onboard DC Grid enables the advantage of AC components with a new smart DC distribution. Just as variable speed drive allows the electric propulsion motors to be run at their optimum working point, Onboard DC Grid allows the diesel engines to run at variable speed for top fuel efficiency at each load level. And, the Onboard DC Grid enables full flexibility in combining energy sources, including renewables. In the Onboard DC Grid solution, energy storage may be included to improve the system's dynamic performance. Diesel engines are slow to handle large, quick load changes. By using batteries or super capacitors to provide power for a short time, the ship's control capabilities can be improved. This espe-

cially benefits vessels with Dynamic Positioning. Energy storage can also be used to absorb rapid power fluctuations seen by the diesel engines, thereby improving their fuel efficiency.

The Onboard DC Grid is an open power platform which easily allows reconfiguration in number and types of power sources and consumers, power levels and other modernizations. Alternative energy sources that will become significant during a typical vessel lifetime of 20+ years will be easier to adopt in a vessel with Onboard DC Grid because they will not be bound to an AC system, nor will they require redesign of a main switchboard.

Design Principles

By far the largest proportion of the total power load on board a vessel is for propulsion and thrusters. This power must be processed as a DC input to the variable frequency inverter that performs the speed control of the motor. Actually distributing at a DC level allows the losses in a switchboard and transformer to be eliminated from this power flow. - When diesel-electric generators run at constant RPM with control of the power delivered, fuel efficiency is compromised.

In a DC distribution system the generator and diesel speed can be varied to achieve the optimum fuel efficiency at every power level.

Each power source and consumer on the Onboard DC Grid is an AC or DC "island" and the only connection between them is the DC bus. This yields two advantages: Each power source and consumer can be controlled and optimized independently. Complex interactions that can arise between units that share an AC connection will never occur. Consumers fed by the Onboard DC grid are designed not to interact even under fault conditions.

Available Now

As *MarineNews* went to press, ABB had recently won an order from ship owner Myklebusthaug Management to supply the first ever direct current (DC) power grid on board a ship. ABB will provide its full onboard DC system, including all power, propulsion and automation systems for the 93 meter long, 5,000 ton multi-purpose oil field supply and construction vessel, which is scheduled for delivery in the first quarter of 2013.

www.abb.com/marine

Engine Room Redefined

Northern Lights Refines Hybrid Propulsion for Marine Applications

Northern Lights, Inc. has redefined the traditional engine room with a hybrid-marine solution that combines its high-performance Lugger propulsion engines with BAE Systems' HybriDrive Propulsion System. With more than 3,500 applications now in use worldwide, the system can be customized to fit a myriad of marine applications.

Using a Propulsion Control System (PCS) to direct power produced from the electric generator for immediate use, or holds it in the Energy Storage System (ESS) to provide clean, quiet power without the engine, the propulsion motor meanwhile provides power to the prop. Because its components are fully scalable, the NLI hybrid-marine system provides for greater flexibility in engine room layout. It runs not only as a standard electric propulsion system, but also as an auxiliary power kit to provide ship's service AC power without the waste and pollution associated with underloading. It can even be outfitted for accessory power, adaptable to complex thruster and winch systems. HybriDrive, a highly reliable, versatile and green solution to the marine environment, is the result of the collaboration between BAE Systems, a well-known manufacturer of hybrid power and control systems; and Northern Lights.

Based on a tested, reliable Lugger propulsion engine and a traction generator, energy is held in a battery pack and metered through a power control system. The traction motor provides power to the prop, while energy is stored for its most efficient usage. Available in 3 phase, 60 or 50 Hertz configurations, the amount of power produced and stored can be customized to fit a particular vessel's requirements. The entire package is designed to be clean, quiet, environmentally responsible and will reduce both energy waste and fuel costs.

www.northern-lights.com

Key Advantages

Optimized Performance	Optimized Components	Fuel Efficient & Flexible
Operates at optimal point on fuel curve at all times.	Proven hybrid components	Meeting or exceeding all current emission standards
Maximum fuel efficiency	Sealed electric components	power all of your vessel's equipment and machinery
Reduces engine usage	Modular component replacement(s)	electric propulsion only
Lowers maintenance requirements	Shown to save million gallons of diesel fuel	electric propulsion with ship board power


Gartshore


Sydness


Thorstensen

SCAA Directors


Kehlenbach

Pharos Offshore Names Gartshore CTO

Pharos Offshore Group announced the addition of Scott Gartshore as Chief Technical Officer (CTO) to the executive team. A marine industry veteran, Scott's previous roles include Project Manager and Senior Engineer, as well as Trenching Systems Sales Manager at IHC Engineering Business Ltd. Pharos Offshore Group CEO Phil Walker says, "Pharos Offshore Group is expanding to meet the growing need for our ITAT 800, MENTOR 800 and UTV subsea trenching systems. Scott's depth of technical knowledge and experience makes him a valuable addition in leading our engineering and operational teams." He will lead Pharos' subsea trenching equipment development programs, while providing technical oversight to all operational marine contracting projects.

Thome Offshore Bolsters Management

Thome Offshore Management (TOM) and Thome Oil & Gas (TOG) appointed John A. Sydness, as Managing Director for Thome Offshore and Thome Oil & Gas. He was previously Managing Director of TOG and prior to that he worked for major international companies in the offshore services and energy industries. He takes over from Claes Eek Thorstensen, who is moving into a group role in TSMI – the holding company of the Thome Group of companies. Claes will be supporting the development of all companies including commercial and marketing activities. In addition, Thome Offshore announces the internal promotion of

- Paul Schaab, to General Manager, Offshore Fleet;
- Manfred Mueller, as General Manager, Commercial, Thome Offshore;
- Cynthia Surin Harris, as Finance Manager of Thome Offshore and Thome Oil & Gas;
- Gaurav Gupta joins as Head of Marine HR, Thome Offshore and Thome Oil & Gas.

SCAA Names New Directors at Annual Meeting

Spill Control Association of America (SCAA), a professional association representing oil spill removal organizations (OSRO), spill managers/qualified individuals, consultants, equipment and material manufacturers, distributors, insurers, and educational and governmental organizations, announces the appointment of three new SCAA Directors and the renewal of a fourth Director for another two-year term. The appointments were announced at the Annual Meeting on March 8 in Alexandria. The new Directors are Harry Bedrossian, SPC Brady; Michael Gallagher, CI Agent Solutions; and Devon Grennan, Global Diving & Salvage, Inc. The Board of Directors extended John Parker, a sitting Director and a past SCAA President, an additional two-year term. SCAA was founded in 1973 as an industry non-profit association to represent the collective interests, and professional experience and contributions of the spill response industry, keeping SCAA members current on regulations, technology advances and important national and international events.

Sea Tow's Tom Kehlenbach Named to CT Marine Trades BoD

Sea Tow Services International Inc., an on-water assistance provider, announced that Captain Tom Kehlenbach, owner of Sea Tow Central Connecticut, has been named to the Board of Directors of the Connecticut Marine Trades Association (CMTA) for a three-year term, starting July 1, 2012. The appointment was made on March 14th during CMTA's 58th Annual Meeting at the Foxwoods Casino in Mashantucket, Connecticut. Capt. Kehlenbach has been a CMTA member since 1990, when he founded Sea Tow Central CT.

Resolve Maritime Academy Opens Simulation Training Center

Resolve Maritime Academy opened its new Simulation Training Center on Monday, March 12 with a ribbon-cutting ceremony at the Fort Lauderdale, facility adjacent to Port Everglades. The 7,000-sq. ft. facility is designed to provide leading edge simulation-based training programs to enhance safe navigation at sea for cruise line and commercial shipping personnel and other maritime professionals worldwide. The Academy designed and developed the $6.5 million Simulation Training Center which features a Class A Full Mission Bridge Simulator with fully functional attached Bridge Wing with independent visual system, Electronic Chart Display & Information System (ECDIS) Classroom and Navigation Lab with a suite of advanced "mini" bridges. The Academy's curriculum utilizes state-of-the-art simulation technology and will initially include: Ship Handling; Bridge Resource Management (BRM); Operational Use of ECDIS; and RADAR/Automatic Radar Planning Aids (ARPA) programs. Customized programs also will be offered, including: Integrated Bridge Systems (Sperry VisionMaster and NACOS Platinum); Dynamic Positioning Systems; and Communication & Leadership Development for all ranks and employees.

J.F. Lehman Acquires National Response Corporation

J.F. Lehman & Company has completed the acquisition of National Response Corporation and its affiliated businesses NRC Environmental Services, SEACOR Response, and SEACOR Environmental Products from SEACOR Holdings Inc.

NWF: Barges Superior in all Ways

The National Waterways Foundation (NWF) has released an update of a 2007 study comparing selected societal, environmental, and safety impacts of utilizing inland river barge transportation to highway and rail transportation. Titled "A Modal Comparison of Freight Transportation Effects on the General Public," the study was conducted by the Texas Transportation Institute's Center for Port and Waterways at Texas A&M University. The February 2012 update incorporates data through 2009, the most recent year for which complete data is available for all the modes. It compares cargo capacity of trucks, trains and inland river barges. One standard 15-barge river tow has the same capacity as 1,050 trucks and 216 rail cars pulled by six locomotives. 2005 and 2009 data was the same for this category, which compared dry cargo and liquid cargo capacity. River barges were shown to be more efficient in terms of fuel efficiency, safety, and environmental performance. The mission of the National Waterways Foundation is to develop the intellectual and factual arguments for an efficient, well-funded and secure inland waterways system.

Seaway Opens 54th Navigation Season; Traffic Increase Predicted

The St. Lawrence Seaway Management Corporation (SLSMC) predicted that cargo shipments would rise by about three percent to 38.6 million tons for 2012 as it marked the official opening of its 54th navigation season at Lock 3 of the Welland Canal. Exports of coal are expected to be a bright spot, as producers in Montana route their product by rail to Great Lakes ports, where the cargo is loaded onto lakers and brought to the Port of Quebec via the Seaway. The coal is subsequently transshipped to ocean vessels destined for Europe, avoiding congested coastal ports. Canadian and international carriers are in the process of building new vessels, with some scheduled to begin transiting Seaway waters in 2012. A recently published economic impact study demonstrates the significant role that the Great Lakes / Seaway system plays in supporting the Canadian and U.S. economies. Some 227,000 jobs and $34 billion in economic activity are supported by the movement of goods within the waterway.

Vessels Depart Bay Shipbuilding

Seven ore carriers departed the Port of Sturgeon Bay in late March to begin the 2012 sailing season. The

Sault Locks opened Sunday, March 25, traditionally marking the start of major Great Lakes shipping efforts. The vessels scheduled to leave have been in lay-up and maintenance mode at Bay Shipbuilding since early January.

Of the seven vessels scheduled to depart, three are 1,000-footers and four are the 700- to 800-foot- class ore carriers. Over-winter repairs at Bay Shipbuilding ranged from steel renewals to machinery overhauls and scheduled United States Coast Guard/American Bureau of Shipping inspections.

Great Lakes Shipyard Completes Contract with Canadian Company

McKeil Marine of Hamilton, Ontario contracted Great Lakes Shipyard to provide winter layup and repair work on their tug and barge, John Spence and Niagara Spirit. The Shipyard completed general steel work on both the tug and barge and installed a winch system for the cover of the Niagara Spirit. The completion of this contract marks the first major repair contract that Great Lakes Shipyard has had with a Canadian company.

Seaward Services to Operate and Maintain Superferries for U.S. Navy

Seaward Services (SSI), a HMS Global Maritime (HMSGM) company based in New Albany, Indiana, announced that it has been awarded a contract through Military Sealift Command (MSC) to operate and convert the former Hawaii Superferry vessels HSV Alakai and Huakai for MSC. HMSGM has been managing these vessels since overseeing their construction and was the operator during the use of Alakai in Hawaii as an inter-island fast ferry.

U.S. Lakes Fleet Back to Work

The U.S.-flag Great Lakes fleet is returning to service. The first vessel to get underway was the tug/barge unit Dorothy Ann/Pathfinder on March 5. The vessel will spend the month shuttling iron ore within Cleveland Harbor. Next to sail was the cement carrier Samuel de Champlain/Innovation.

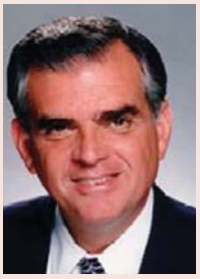
The tug/barge unit left its winter berth in Cleveland on March 7 and sailed to Alpena, Michigan, where it loaded cement to resupply silos in Chicago. More vessels will be getting underway in the days and weeks ahead, and many will time their departure with the March 25 opening of the locks at Sault Ste. Marie, Michigan. U.S.-flag Great Lakes operators moved 93.8 million tons of cargo in 2011, an increase of 5.7 percent over 2010. This winter saw carriers spend more than $75 million at Great Lakes shipyards and repair facilities to maintain and modernize their vessels for the season just begun.

Lucius Spar Mooring Contract

First Subsea Ltd has been awarded a contract by Technip USA to supply the mooring line connectors for a new spar platform moored in 7,000ft (2,134 m) of water in the Lucius field, Keathley Canyon block 875 in the Gulf of Mexico. The Lucius spar will be moored by nine Ballgrab ball and taper mooring connectors attached to polyester mooring lines. The Ballgrab connector comprises a male connector and female receptacle. The Series III male connectors will comply with the new ABS Mooring Guide 2009. Anadarko Petroleum operates the Lucius field (35%), and its partners are Plains E&P, ExxonMobil, Apache, Petrobras and Eni.

DOT: $10m in Shipyard Grants

U.S. Transportation Secretary Ray LaHood announced $9.98 million in grants to 15 small shipyards throughout the U.S. to pay for modernizations via the U.S Maritime Administration's (MARAD) Small Shipyard Grants Program. MARAD received 141 grant applications requesting $123 million in assistance. The grants fund a variety of projects, including infrastructure improvements and modernizing equipment to increase the efficiency, competitive operations, and quality construction of vessels in U.S. shipyards. Among the grant recipients were Allen Marine, Inc. ($163,500), Bludworth Marine, LLC ($610,266), Bollinger Shipyards ($188,887), Chesapeake Shipbuilding Corporation ($423,752), Conrad Shipyard, LLC ($1,117,019), Detyens Shipyards, Inc. ($1,176,776), Foss Maritime Company ($578,402), Duclos Corporation DBA Gladding-Hearn Shipbuilding ($389,195), Gulf Marine Repair Corporation ($1,083,055), Kvichak Marine Industries ($987,307), LEEVAC Shipyards, LLC ($667,324), Liquid Waste Technology, LLC ($558,843), Navatek Ship Construction ($248,805), Great Lakes Towing Company DBA Great Lakes Shipyard ($1,068,474) and Trinity Industries ($718,395).



LaHood

PRODUCTS

GE LM Gas Turbines Re-Emerge

GE Marine's LM aeroderivative gas turbines are poised to re-emerge in the commercial marine market, especially for natural gas applications such as fast ferry, liquefied natural gas (LNG) tanker or FPSO. GE's LM gas turbine fleet has logged more than 13 million hours in service, proving their reliability and advantages over diesel technology. In the mid 2000's, Marine Gas Oil (MGO) burned in gas turbines experienced a significant price increase versus the heavy fuel oil used by diesels. Today, gas turbines are worth another look. LM gas turbines are more cost effective than diesels, especially considering pending 2014 and 2016 IMO.

www.ge.com/marine

Weather Charts for Raytheon Anschütz ECDIS

Navigation specialist Raytheon Anschütz offers an integrated weather chart overlay for the Synapsis ECDIS, developed in close cooperation with meteorological experts. The new feature combines sea chart and weather chart in one display. All weather parameters are presented as values or symbols on a separate layer and can be switched on and off any time. The system can show all available weather forecasts for the next days. If individual weather values exceed the preset limits, the values are shown graphically as weather warnings. The Synapsis ECDIS imports the weather data via a standardized GRIB-file from a weather data provider.

www.raytheon-anschuetz.com

FuelTrax Provides Activity Logging

Nautical Control Solutions, LP (NCS) announced that its FuelTrax system now provides the ability to enter activity codes for automatically coupling fuel usage numbers to location, date, and time. Wind and sea states are included. The ABS Type Approved FuelTrax system helps improve the performance of vessels through tighter management controls, accurate fuel accountability, and optimized vessel operations. FuelTrax monitors fuel flow, measures and alarms fuel tank levels, and proves bunker fuel densities and quantities. Live wheelhouse monitoring features include BestSpeed and BestEconomy for real-time throttle adjustments that can help reduce fuel consumption.

www.fueltrax.com

Continuous Duty DC Blower Clears the Air

Even small vessels can have big exhaust issues in engine rooms and other enclosed spaces. To prevent dangerous fumes from accumulating, Delta "T" Systems offers its compact but powerful new 3" DC Blower. The 12 volt blower provides extreme air volumes at very high static pressures, rated at 125 cfm. The model is continuous duty rated for long-term reliability. Ideal for gasoline engine applications, it is fully ignition protected. Its rugged, marine-grade, ABS plastic housing resists corrosion. The stainless steel shaft and bronze bearings provide smooth, quiet operation and is assembled in the USA.

www.deltatsystems.com

Marine Exhaust Systems Quiets Panama Canal Workboats

With each component selected for function and reliability, Marine Exhaust Systems was chosen to dampen sound on six new specialty craft for the Panama Canal Authority. The all-welded aluminum vessels are part of ALMAR by North River's Sounder designs, built to ABS high speed craft standard. These powerful propulsion systems, often idling all day, can produce substantial noise with sound abated to 75 dB at wide open throttle. Established in 1973, Marine Exhaust Systems manufactures complete diesel exhaust system packages, from turbo to transom.

www.marine-exhaust.com

Laborde Repowers Inland Waterways Pushboat

Plant Recovery Company (PRC) recently turned to Laborde Products to repower the M/V Victoria, a pushboat used for transporting barges through inland waterways. Laborde installed Mitsubishi S12R-Y1MPTA engines, rated 1,180 hp at 1,600 rpm, and Twin Disc MG 540 transmissions and new RW Fernstrum grid coolers. Excellent for heavy-duty tug and push boat applications, Mitsubishi engines offer larger displacement and more mass. Each cylinder has its own head and the engine has large inspection covers. Another advantage with Mitsubishi is that they are EPA compliant, but with mechanical governors. No complex electronics are required to meet emission standards.

www.labordeproducts.com

11M Patrol Boat Fitted With UJ305 Ultrajets


SIRPA Gendarmerie/F. Balsamo

Raidco Marine has delivered 4 of the first of a series of 11 Patrol Boats to the Gendarmerie Nationale. This new patrol boat has achieved speeds in excess of the required 33 knots. The UFC 11.00 Alu is powered by twin Yanmar 6 LPA STP 315 hp engines @ 3800 rpm coupled to twin Ultra Dynamics' UltraJet UJ305s waterjets via ZF63 reduction gearboxes; during sea trials the patrol boat reached a speed of 34 knots. Reverse and steering is via an Ultra Dynamics hydro-mechanical control system.

www.ultradynamics.com

Raymarine Navigation Display Streams to Androids

Raymarine has released its Raymarine Viewer app, RayView, for Android tablets and Smartphones. The new app joins the previously released RayView app for Apple iOS devices. Taking advantage of the built-in Wi-Fi networking in its new c-Series and e-Series Multifunction Displays, the RayView app enables boaters to view the screen from their multifunction display right on their mobile device. The RayView app is free and is compatible with Android Smartphones and Tablets running version 2.2 or higher, with 1GHz or faster processors. RayView for Apple iOS devices works with iPhone 3GS or newer, iPod Touch 3rd generation or newer and iPad.

www.raymarine.com

'Instant Brake' Grinders from Metabo Revolutionize Safety

Metabo Corporation, a manufacturer of professional grade portable electric power tools and abrasives for heavy duty metal-working, industrial, construction and welding applications, has introduced two new angle grinders that are designed to stop wheel rotation in two seconds or less when the Deadman safety switch is released, greatly reducing the likelihood of injuries. Each tool also features the Metabo 'S' Automatic safety slip clutch that helps to prevent kickback in the event that a wheel is bound or pinched, further enhancing the overall safety of these angle grinders.

www.metabousa.com

New Video Inspection Systems Fully Waterproof

New SeaScopes from General Tools & Instruments (General) are the only fully waterproof video inspection systems on the market. Users can perform worry-free inspections of flooded or submerged structures and environments easily and safely. The SeaScope 660 (DCS660) and SeaScope 600 (DCS600) include IP67-rated waterproof grips, monitors and camera-tipped probes. Fully buoyant and watertight to a depth of 1m, each will resist leaks at depths up to 2m for up to one hour. Both models also have Video Out jacks for viewing images on a remote monitor, and each is powered by four AA batteries.

www.generaltools.com

Livorsi DTS Controls

Livorsi Marine, Inc. has obtained a license from Mercury Marine which allows combination of DTS (Digital Throttle and Shift) technology with the options and quality of Livorsi controls. These controls provide consistent precise control using Smartcraft DTS technology, which enables smooth and safe shifting. Direct drive of throttle position sensors results in faster response times. These controls are designed to work on all Mercury I/O, OB and Cummins DTS engines. Single, twin triple and quad configurations are available in a variety of styles and colors.

www.livorsi.com

Voith Turbo Announces First Voith Linear Jet Order

Voith has announced the first Voith Linear Jet order with Turbine Transfers UK for a 19 meter Wind Support Vessel. The Voith Linear Jet (VLJ) provides a substantially higher bollard pull without a requirement for increased installed power and allows the safe transfer of personnel up to higher sea states. The VLJ, a new ship propulsor, gives Naval Architects new ways to optimize vessel designs. Employing the simplicity and efficiency of a conventional propeller installation, it delivers the possibility to design for 40 knot speeds without the shaking of an extreme power-dense propeller.

www.voithturbo.com

PRODUCTS

Rustibus Marine Surface Preparation

The Rustibus product line has been a dependable provider of surface preparation equipment to the maritime industry for over 30 years. Now, in 2012 they have introduced an ATEX EX approved product line for descaling rust in the marine industry. All certifications apply to this new product line which is now black in color as opposed to the usual red color of the machines. Rustibus EX equipment can be used in hazardous areas with no worries of the machines causing an incident.

www.rustibus.com

Imenco Quad CCTV System

The Imenco Quad Video CCTV system is designed for robust and easy use monitoring, primarily for the offshore and marine industry. The system is set with 4 waterproof cameras with the Power & Quad unit as the heart of the system. Each camera is easily connected to the Power & Quad unit and the little control unit is used to set preferred zoom and focus positions for each camera, and is not needed for normal use. The Imenco Quad CCTV System is the easiest way to get a CCTV system with four cameras in operation.

www.imenco.com

Loading Dock Safety Gate Offers OSHA Compliance

Diversified Fall Protection recently unveiled an improved loading dock safety gate. This OSHA-compliant rolling safety gate protects personnel from loading dock falls and is available in 6 ft., 8 ft. and 10 ft. stock widths. The barrier system's pivoting design utilizes a rolling wheel, providing accessibility to the dock's overhead opening. The pivot and roll feature of the safety barrier eliminates lifting and removing heavy sections of portable guard rail, keeping loading docks gated and OSHA compliant when not in use. A floor-based, pin lock feature also reduces tripping hazard.

www.fallprotect.com/improvedgate

Kleenblast's Blast & Vacuum System

The new KBV-86 Blast and Vacuum System is an economical, efficient, environmentally safe "plug and play" surface preparation system for Coatings repair & rework. Deployed with reclaimed materials, the KBV System is environmentally responsible and may qualify for Greens Credits. KBV-86 features Easy one man set up and breakdown, compact light weight components and an environmentally safe / Green solution, all packaged in two fully portable main components – a Vacuum System and Pressure Blast Unit. Capable of up to 150 square foot per hour on thin coatings, the nozzle and cone in the blast head are tungsten carbide for wear resistance.

www.kleenblast.com

Water-Cooled TIG Torch

Weldcraft's new WP-280 water-cooled TIG torch is designed with the company's Super Cool Technology to provide consistent, dependable cooling performance. This results in less downtime due to overheating and a longer lasting torch. The torch body also includes an anti-rotation feature to prevent handle movement during welding and improve operator control. Adding to maneuverability is the torch's Tri-Flex hose and cable assembly, designed to remain flexible in cold weather, improve operator control and prevent cracking. ColorSmart hose and cable sets differentiate input water, water/power cable and gas hoses to simplify installation.

www.weldcraft.com

New Wire Offers Low Hydrogen Deposits, Superior Properties

Hobart Brothers has introduced a new welding wire to improve weld quality, particularly on offshore drilling rig applications and jack-up rig fabrication. The Hobart FabCO 712M gas-shielded flux-cored wire features less than 4 ml of diffusible hydrogen per 100 g of weldment, which decreases the chance of underbead cracking and can lessen the amount of preheating needed. The wire also has a very low moisture pickup, so there is less chance of hydrogen entering the weld after exposure to the atmosphere.

www.hobartbrothers.com

MARITIME REPORTER AND ENGINEERING NEWS

NEW WAVE MEDIA

Second Annual
Don Sutherland Memorial

Maritime Photo Contest

See your image on the cover of the world's largest maritime magazine

Your photo could be on the cover or in the pages of the most widely read publication in the global maritime industry. Enter as many photos as you like, in each of the five categories. Entries can be submitted and viewed at:

www.maritimephotographs.com

All images must be entered by May 11, 2012 to be considered. The winners will be published in the June 2012 issue of Maritime Reporter and Engineering News, with the Grand Prize Winner featured on the front cover of the magazine.

This contest was established to honor the memory of the late Donald S. Sutherland, renowned maritime photographer and writer, who passed away in 2010.

Categories:

Ships and Boats
Offshore Structures
People
Maritime Scenes
Weather Systems

Contest runs until
May 11, 2012

Sponsored By:

Photo by Scott Pittman

For complete contest rules go to http://www.maritimephotographs.com/rules-and-terms.asp

MARINE PROPULSION PRODUCTS

ABT-TRAC Arcturus Marine
517-A Martin Ave.
Rohnert Park, CA 94928
www.thrusters.com
Eric Folkestad
tel: 360-835-7910
fax: 360-835-7878
email: efolkestad@thrusters.com
Descr: Manufacturer of marine products
Products: Thrusters, stabilizers, hydraulics

Bailar Marine Consulting, LLC
PO Box 4741
Palmer, AK 99645
www.bailarmarine.com
Jim Bailar
tel: 907-355-4219
email: jim.bailar@bailarmarine.com
Descr: Design, modify and assess rotors used in propulsion (propellers) and energy recovery

Binsfeld Engineering Inc.
4571 W. MacFarlane
Maple City, MI 49664
www.binsfeld.com
Bob Holden
tel: 231-334-4383
email: bob@binsfeld.com
Products: Torque & horsepower measurement systems; TorqueTrak 10K, TorqueTrak Revolution

Bosch Rexroth Corporation
1953 Mercer Rd.
Lexington, KY 40511
www.boschrexroth-us.com
Tim Rockidge
tel: 859-281-3405
fax: 859-281-3487
email: tim.rockidge@boschrexroth-us.com
Descr: Drive and control company
Products: Electronic and pneumatic marine propulsion controls

Caterpillar Marine Power Systems
3535 Factoria Blvd., SE, Suite 350
Bellevue, WA 98006
www.cat-marine.com
Art Diekman
tel: 425-373-5184
email: diekmaa@cat.com
Descr: Engine manufacturer
Products: Marine propulsion and auxiliary equipment

Centa Corporation
2570 Beverly Dr. #128
Aurora, IL 60502
www.centa.info
Bob Lennon
tel: 630-236-3500
fax: 630-236-3565
email: info@centacorp.com
Products: Over 20 styles of flexible torsional damping couplings and drive line shafting and carbon fiber shafting systems

Corvus Energy Limited
13160 Vanier Place, Unit 110
Richmond, BC V6V 2J2
Canada
www.corvus-energy.com
Telephone: 604-227-0280
email: info@corvus-energy.com
Description: Corvus Energy designs and manufactures high power lithium polymer batteries for hybrid marine propulsion systems.

Cummins Inc.
PO Box 3005
Columbus, IN 47202-3005
www.cummins.com
tel: 800-343-7357
Descr: Marine engine packages
Products: Diesel engines for recreational and commercial applications

Deutz Corp.
3883 Steve Reynolds Blvd.
Norcross, GA 30093
www.deutz.com
Ragnar Radtke
tel: 514-694-8772
email: radtke@deutzusa.com
Descr: Manufacturer
Products: Diesel engines, propulsion systems, diesel generator sets

Diehl Engineering Company
PO Box 1573
Kingston, WA 98346
www.diehlengineering.com
Paul Diehl
tel: 360-297-8781
fax: 360-297-8784
email: pdiehl@diehlengineering.com
Descr: Professional engineering firm specializing in marine propulsion power transmission
Products: Propulsion shafting, gear and bearing design; alignment, troubleshooting and failure analysis

Governor Control Systems Inc.
3101 SW 3rd Ave.
Ft. Lauderdale, FL 33315
www.govconsys.com
Rod Myers
Tel: 954-462-7404
email: contact@govconsys.com
Description: Control & monitoring systems specialists for turbines & engines; engineered solutions; upgrades, service & spares.
Products: Woodward, Dynalco, TDI air starters, DCL Emissions, Kral and Spinner II.

Hawboldt Industries (1989) Ltd.
220 Windsor Rd.
Chester, NS BOJ 1J0
Canada
www.hawboldt.ca
Glenn Durnford
tel: 902-275-3591
email: glenn.durnford@hawboldt.ca
Products: Custom winches, propellers

Industrial Power Systems, Inc.
3010 Powers Ave. #16
Jacksonville, FL 32207
www.ipsswitchgear.com
Glenn Beaupre
tel: 904-731-8844
fax: 904-731-0188
email: glenn@ipsjax.com
Descr: Manufacturer of switchboards for the marine industry
Products: Marine switchboards, panel boards, motor controls

John Deere Power Systems
3801 West Ridgeway Avenue
P.O. Box 5100
Waterloo, IA 50704-5100
www.JohnDeere.com/marine
jdpower@JohnDeere.com
Telephone: (800) 533-6446
Description: John Deere Power Systems manufactures and markets 30 kW to 448 kW (40 hp to 600 hp) industrial diesel engines and 56 kW to 559 kW (75 hp to 750 hp) marine diesel engines, as well as drive train components for use in a variety of off-highway applications.

Konrad Marine
1421 Hanley Rd.
Hudson, WI 54016
www.konradmarine.com
Fred Sparling
tel: 715-386-4203
fax: 715-386-4219
email: sales@konradmarine.com
Descr: Designer and manufacturer of high output propulsion systems
Products: Sterndrives

MCR Engineering Co., Inc.
15 Spruce St.
North Attleboro, MA 02760
www.mcrengineering.com
John Murphy
tel: 508-699-6992
fax: 508-699-5401
email: mcr@mcrengineering.com
Descr: Marine propulsion service and parts
Products: Propulsion system service, repair, retrofit - control systems, CPP, thrusters, propellers, shaft seals, hydraulic couplings, waterjet

Mercury Marine
PO Box 1939
Fond du Lac, WI 54936
www.mercurymarine.com
Jeff Krueger
tel: 866-408-6372
fax: 920-924-1488
email: mmobgovsales@mercmarine.com
Descr: Marine propulsion products
Products: Mercury outboards and MerCruiser stern drive packages

MTU
13400 Outer Dr. West
Detroit, MI 48239
www.mtu-online.com
Jeff Sherman
tel: 313-592-8345
email: jeff.sherman@mtu-online.com
Descr: Worldwide provider of diesel engines and propulsion systems

Northern Lights
4420 14th Ave. NW, Seattle, WA 98107
www.northern-lights.com
Scott Putnicki
tel: 206-789-3880
fax: 206-782-5455
email: info@northern-lights.com
Descr: For 50 years Northern Lights|Lugger has produced reliable, durable and simple to use power and propulsion solutions in the marine industry
Products: Marine generator sets and diesel propulsion engines

PowerTech Propellers
8101 Kingston Rd.
Shreveport, LA 71108
www.ptprop.com
Marcus Clements
tel: 318-688-1970
fax: 318-686-7082
email: marcus@ptprop.com
Descr: Manufactures marine propellers and investment casting

Propeller Solutions
11852 Caminito Corriente
San Diego, CA 92128
www.propellersolutions.com
Contact: Roger Hart
Roger@PropellerSolutions.com
Telephone 858-354-1684
Products: Design, sales and service of marine propellers

Renold Hi-Tec Couplings
100 Bourne St.
Westfield, NY 14787
www.renold.com
Andrew W. Broadbent
tel: 716-326-7218
fax: 716-326-8229
email: andrew.broadbent@renold.com
Descr: Design and manufacture of torque transmitting shat couplings for main propulsion, power take off and generator set applications
Products: Flywheel mounted, shaft to shaft couplings and drive shafting

Rice Propulsion
Av. Rios Espinoza #88 Col. B Juarez
Mazatlan, Sinaloa 82180
Mexico
www.ricepropulsion.com
tel: +52-669-983-6552
fax: +52-669-984-2533
email: rice@ricepropulsion.com
Descr: Rice Propulsion has a full line of propellers to meet any requirements

Scania USA Inc.
121 Interpark Blvd., Suite 601
San Antonio, TX 78216
www.scaniausa.com
Per Backteman
tel: 210-403-0007
fax: 210-403-0211
email: per.backteman@scaniausainc.com
Descr: Engine manufacturer
Products: Diesel engines for marine applications

Scandic Diesel Services Inc.
Notre Dame East 6360
Montreal, QC H1N 2E1, Canada
www.scandiserv.com
Mikkel Elsborg
tel: 514-228-1299
fax: 514-256-8237
email: sales@scandiserv.com
Descr: Marine supplier and service facility
Products: Turbochargers, fuel equipment, governors, four stoke components and repairs

Schottel, Inc.
190 James Drive East, Suite 100
St. Rose, LA 70087
www.schottel.com

Nils Moerkeseth
tel: 504-471-3439
fax: 504-471-3443
email: nmoerkeseth@schottel.com
Descr: Schottel is a group of companies specializing in the development, design, production and marketing of azimuth propulsion and maneuvering units, as well as complete propulsion systems for vessels of all kinds and sizes
Products: Schottel rudder propellers in single and twin propeller version, navigators, combi-drives, pump-jets, transverse thrusters, controllable-pitch propellers

Simplex Americas LLC
20 Bartles Corner Rd.
Flemington, NJ 08822
www.simplexamericas.com
Donald Vogler
tel: 908 237 9099
email: info@simplexamericas.com
Descr: Propulsion equipment, service, engineering
Products: Simplex seals, Simplan seals, Turbulo bilge separators, Nakashima propellers, Terresolve environmental lubricants

Stewart & Stevenson LLC
8631 East Freeway
Houston, TX 77029
www.stewartandstevenson.com
Bill Hardy
tel: 713-671-6180
fax: 713-671-6184
email: b.hardy@ssss.com
Descr: Worldwide marine propulsion systems distributor and packager
Products: MTU, EMD

Thomas Electric Control, Inc.
889 Broadway, Suite 6B
New York, NY 10003
www.thomaselectriccontrol.com
Stephen Wright
tel: 212-982-7037
fax: 212-358-0829
email: sales@thomaselectriccontrol.com
Descr: Propulsion & automation systems Integrator
Products: Medium voltage motors and drives; PLC controls; marine engineering services

Thordon Bearings Inc.
3225 Mainway
Burlington, ON L7M 1A6, Canada
www.thordonbearings.com
Lorraine Higham
feedback@thordonbearings.com
Telephone: 905-335-1440
Fax: 905-335-4033
Description: Manufacturer of seawater lubricated propeller shaft and rudder bearings, as well as marine shaft coatings and deck equipment bushings.
Products: COMPAC, SXL, XL, RiverTough, ThorCoat, ThorPlas.

Thrustmaster of Texas
P.O. Box 840189
Houston, TX 77284-0189
www.thrustmastertexas.com
Joe Bekker
tel: 713-937-6295
fax: 713-937-7962
email: jbekker@thrustmastertexas.com
Descr: Thrusters and DPS propulsion solution
Products: Hydraulic tunnel thrusters, retractable Azimuthing thrusters, Z and L drive propulsion, diesel hydraulic and electric propulsion for manual and DPS 1, 2, and 3 class vessels

Transmission Engineering Company
1851 North Penn Rd.
Hatfield, PA 19440
www.tecoinc.com
Phillip Watson
Telephone: 215- 997-3491
email: pwatson@tecoinc.com
Description: Power train component solution providers.
Products: Transmissions (marine, constant variable, infinitely variable, hydrostatic, power shift, shuttle shift), pump drives, axles, pto, clutches (over-center, hydraulic), controls.

Woodward
1000 E. Drake Rd.
Fort Collins, CO 80525
www.woodward.com
Patrick Hewitt
tel: 970-498-3838
fax: 970-498-3040
email: dennis.pearson@woodward.com
Descr: Manufacturer of power management and engine controllers
Products: DSLC/MSLC, EGCP-3, EGCP-2, easYgen-3000, GCP-30, LS4, AGLC & LSM generator controls, SPM-A & SPM-D synchronizers, & 2301A, 2301D, 723+, & 733 speed controls

WPT Power Transmission Corp.
1600 Fisher Rd.
Wichita Falls, TX 76305
www.wptpower.com
Lane Brock
tel: 940-761-1971
fax: 940-761-1989
email: lane@WPTpower.com
Descr: Manufacturer
Products: Heavy duty clutches/brakes/PTOs with air, hydraulic, mechanical actuation

ZF Marine LLC
15351 SW 29th St. – Suite 300
Fort Lauderdale, FL 33027
www.zf.com
Telephone: 954-441-4040
Description: ZF Marine is a world leader in propulsion system technology.
Products: Transmissions, controls, propellers, surface drives, shafting.

2012

SNAME Annual Meeting & Expo and Ship Production Symposium

OCTOBER 24 -26, 2012

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For more information visit
www.sname.org
Annual Meeting: alana@sname.org
Expo: howard@marinelink.com

MASSACHUSETTS MARITIME ACADEMY

Founded in 1891, the Massachusetts Maritime Academy is the nation's oldest and finest co-ed maritime college. The Academy prepares young women and men for exciting and rewarding careers on land and sea. Our graduates have been at the very top of seagoing, engineering, environmental, and international business professions.

POSITIONS AVAILABLE

Chief Wastewater Treatment Plant Operator,
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The Academy is located in Buzzards Bay at the mouth of the scenic Cape Cod Canal and is a special mission college within the Massachusetts university college system.

For information about this positions and how to apply, visit the employment quick link on our web page at **www.maritime.edu.**

Massachusetts Maritime Academy is an AA/EEO employer. Under-represented groups are encouraged to apply.

Aluminum Boatbuilding Fabrication Manager
Job Location: USA, Seattle

First line supervisor of a skilled production labor workforce. The job typically requires specialized training in supervision and 5+ years of job related training and experience managing people in welding and aluminum boat fabrication. Other requirements include experience in the work of the department, or equivalent of a custom aluminum boat manufacturing company. Under management guidance, schedules work, assists with employee selection, reviews employee performance, administers work rules and recommends compensation, unless it is governed by contract. Other responsibilities include productivity and quality management to the extent that it falls within department's control. Recommends equipment upgrades, staffing adjustments, process modifications and may recommend product or service modifications.

Additional skills required:
1.Work with management or workers to resolve worker problems, complaints or grievances.
2.Inspect materials, products, or equipment to detect defects or problems.
3.Confer with other supervisors to coordinate operations and tasks within or between departments.
4.Direct and coordinate the activities of employees engaged in production.
5.Plan and establish work schedules, assignments, and production sequences.
6.Have an understanding of safe rigging of large objects and how to handle them with cranes and forklifts.
7.Guide workers in efficient techniques in fitting, welding, bending, or other fabrication methods in producing quality products
8.Maintain and implements NWM welding procedures and standards updated
9.Oversee welder certifications and testing.

The qualified applicant must be proficient with the Microsoft suite, Including Outlook, Word and Excel. Proficiency with Microsoft Projects a big plus

All positions also require the following:
• Demonstrated ability to communicate and understand instructions and safety criteria, provided in English.
• Have a proactive, positive attitude and a strong sense of self-motivation, accountability and reasonability.
• Excellent attendance history
• AN IN COMPANY WELD TEST may be required

In addition, production and other shop-related positions require the ability to:
• Work any shift needed to support production (day, swing, grave shifts)
• Proficient shop math skills (accurate with decimals & fractions geometry and algebra)
• Manual dexterity and mechanical aptitude
• Ability to read and understand manufacturing planning, precision measuring equipment, detailed drawings and sketches. Communications skills include giving and receiving verbal instructions in English
• Must be a United States Citizen
• Other requirements
• Proper safe usage of power tools such as grinders, drill, saws ETC.
• Work and communicate with people from diverse backgrounds in a positive manner.
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