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Volume 31 • Number 2

Marine News

FEBRUARY 2020

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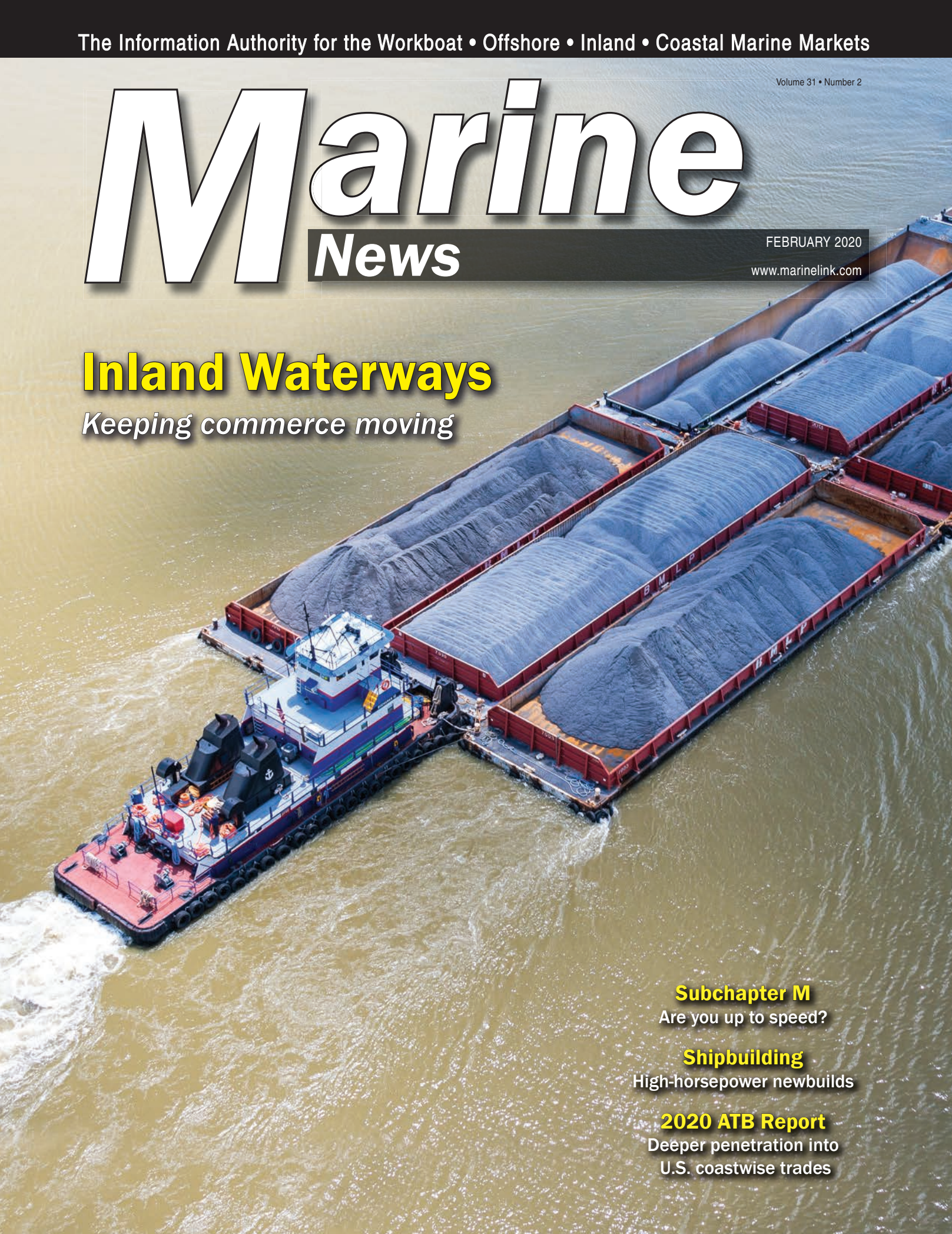
Inland Waterways

Keeping commerce moving



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ON THE COVER

America's inland waterway system is a crucial component of the U.S. economic engine. The vessels that ply its waters keep large quantities of bulk commodities on the move.

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Marine News

(ISSN#1087-3864) (USPS#013-952)
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Subscriptions to ***Marine News*** (12 issues per year) for one year are available for $60.00;
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Send your check payable to:
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Departments & Analysis

Marine News (ISSN# 1087-3864) is published monthly (twelve issues) by Maritime Activity Reports Inc. 118 E 25th St. New York, NY 10010-1062. Periodicals Postage Paid at New York, NY and additional mailing offices. POSTMASTER: Send all UAA to CFS. NON-POSTAL AND MILITARY FACILITIES send address corrections to Marine News 850 Montauk Hwy, #867 Bayport, NY 11705.

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EDITOR'S NOTE

The United States' 25,000-plus miles of navigable waterways provide the safest, most economical and environmentally friendly means for inland transport. The importance of this system and its enormous value to our nation, quite simply, cannot be overstated.

Although this notion may be lost on many, if not most, within the American public, it will always be front and center in this publication – especially in this edition, our first quarter inland waterways report.

The essential role of inland waterways for the American agriculture industry in particular is laid out in this month's By the Numbers, based on a 2019 report, "Importance of Inland Waterways to U.S. Agriculture". Highlighted are the economic impacts of this vital network, as well as the short- and long-term effects of much-needed infrastructure maintenance and improvements.

This edition also features the voices of several industry champions who have made it their work go to bat for the U.S. maritime industry, including, of course, river transport. Longtime AWO staffer Jennifer Carpenter recently took the helm as president and CEO of the trade group, and this month weighs in on all things inland waterways.

Tom Ewing's feature story gives an update on a topic that is crucial – and sometimes challenging – to those operating on U.S. waterways. Subchapter M, Ewing writes, "progresses in waters that aren't yet placid, but surely navigable". Are you up to speed?

While there's plenty more in these pages on inland waterways transportation, Barry Parker turns our attention to the coastwise trade, checking the pulse of the ATB market with updates from some of the industry's largest players.

As always, thanks for reading.

Eric Haun, Editor, haun@marinelink.com

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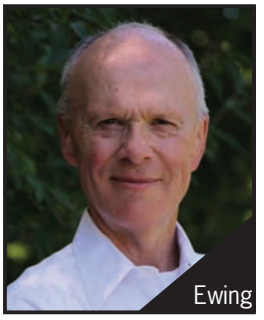
Marine News
February 2020
Volume 31 Number 2


Doyle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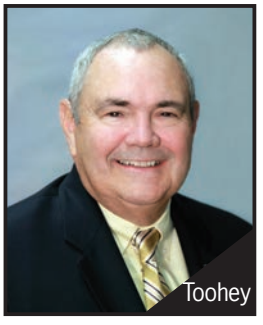
Toohey


Vogel

William P. Doyle is CEO & Executive Director of the Dredging Contractors of America. Twice a U.S. Senate confirmed Presidential appointee to the U.S. Federal Maritime Commission (FMC), Doyle has, over the course of a long and celebrated career, worn many prestigious hats. Prior to his FMC appointment, Doyle served on cabinet and executive level boards and committees under both the Obama and George W. Bush Administrations. Before that, he served as an officer in the U.S. Merchant Marine as a USCG licensed marine engineer aboard numerous classes of vessels.

Tom Ewing is a freelance writer specializing in energy and environmental issues. He contributes regularly to this magazine.

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Barry Parker of bdp1 Consulting Ltd provides strategic and tactical support, including analytics and communications, to businesses across the maritime spectrum. He is a freelance writer and regular contributor to this magazine.

Michael Toohey is President/CEO of Waterways Council, Inc., a position he has held since August 2011. Prior to that, Toohey was a consultant for The Livingston Group from 2007 to 2011. He also served as Vice President, Director of Government Relations, Associate Director of Government Relations, and Senior Washington Representative for Ashland Inc. from 1998 through 2007. Nominated by President George Bush and confirmed by the U.S. Senate, he was Assistant Secretary of the U.S. Department of Transportation from 1992 through 1993.

Jeff Vogel is a partner in Cozen O'Connor's Transportation & Trade Group. He focuses his practice on strategic and operational matters affecting the United States maritime industry and on government contracts across all industries.


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Inland Waterways and Agriculture

America's inland waterway system is a crucial component of the U.S. economic engine, allowing vital commodities coal, petroleum, chemicals and agricultural products, among others, to flow via the safest, most economical and environmentally-friendly means possible.

But, in many places across America, the vast and important inland waterway infrastructure is sliding with age into an escalating state of disrepair. The effects of crumbling infrastructure include less effective and less reliable waterway transport, and are felt across the country and around the globe.

The impact for U.S. agriculture is particularly significant, as outlined by a 2019 report by Agribusiness Consulting for the U.S. Department of Agriculture, Agriculture Marketing Service. The report quantifies the importance of America's inland waterways as well as the infrastructure shortfalls and their far-reaching effects. In addition, the study identifies and quantifies investments needed to fix the problems – short- and long-term – keep cargo flowing smoothly for years to come, and even help boost the U.S. economy.

Note: *All numbers cited here are from "Importance of Inland Waterways to U.S. Agriculture".*

Vital importance

According to the report, 532.8 million tons moved on the U.S. inland waterway system in 2017, and that volume is forecast to rise to 618.8 million tons by 2045.

The total economic contribution of the inland waterways system, after considering indirect impacts, amounts to almost 256,000 jobs and $27.2 billion in gross domestic product (GDP). Every $1 of output from waterways activity results in an additional $1.89 in economic activity across the U.S.

Forecasted growth includes more than 312,000 jobs by 2029 and $37.2 billion for the GDP impact. Then, by 2045 the impact is expected to grow to almost 395,000 jobs and more than $54 billion in GDP.

Inland waterway transport presents a number of advantages over truck and rail shipping, including economy of scale, for one. Due to its efficiency and lower costs, the inland waterways system saves between $7 billion and $9 billion annually over the cost of by other modes. It would require 216 rail cars or 1,050 trucks to move the equivalent volume of a standard 15-barge tow leading to increased congestion of the rail and road systems. In aggregate, this is the equivalent of an additional 21.4 million trucks.

The inland waterways also have an environmental advantage in fuel efficiency and greenhouse gas emissions. Inland towing can move 647 ton-miles per gallon as opposed to 477 ton-miles for rail and only 145 ton-miles for truck. Inland towing CO2 emissions are only 15.62 grams/ton-mile compared to 21.19 for rail and 154.2 for truck. This is an emissions reduction of 2.8 million grams/ton-mile.

Water transport is safer, too. On a million ton-mile basis there are 21.9 rail fatalities and 79.3 truck fatalities for every one fatality on the water. A shift from water to truck would increase fatalities by more than 475 per year, an 11% increase. Injury data show that for every one injury on the water, there were 80.9 on rail and 696.2 on truck.

Infrastructure investment

Simply put, the U.S. economy depends on farmers using inland waterway infrastructure to maintain their competitive position in the global export marketplace. That infrastructure is aging, however, and major rehabilitation and construction is needed to restore its full capabilities, while accommodating opportunities for growth.

Historically, barge traffic has grown, but lagging infrastructure maintenance and improvement needs have resulted in more frequent delays, with the percentage of vessels delayed increasing from 35% in 2010 to 49% in 2017. As lock and dam performance continues to declining under current investment trends, average delays times and percentage of vessels delayed has climbed from 2000 to 2017. The average delay in 2017 was 1.4 times the average of 2000, and these delays can costly: up to $739 per hour for an average tow, or more than $44 million per year.

The report examined three possible investment scenarios:

- **Status quo:** continued current spending trends in the President's budget requests
- **Increased investment:** completion of all approved projects and rehabilitation projects required to increase reliability, resulting in reduced delay time, lower barge freight rates, higher farmer returns, increased export competitiveness and more jobs
- **Reduced investment:** no new construction or rehabilitation, resulting in rapidly increasing delay times, higher barge rates, and lower farmer returns

The report found that greater inland waterways investment would allow for the transportation of increased volumes of commodities with farm products growing from

14% of commodity volumes on the system in 2016 to 25% by 2029 and 29% by 2045.

Under the reduced investment scenario, the economic impact of the waterways system would decrease from 312,000 jobs and a GDP impact of $37.2 billion in 2029 for the status quo scenario to 290,000 jobs and a GDP impact of $34.7 billion.

In 2045, the employment impact of reduced investment would be 323,000 jobs, as opposed to 395,000 jobs under the status quo. The GDP impact of the reduced investment would be $44 billion as opposed to $54 billion under status quo.

For U.S. farmers, in tight competition with other growers globally, increased inland waterways investment would result in a $39 billion increase in corn and soybeans market value from status quo investment levels, while a decreased investment case would lower market value by $58 billion.

According to the report, inadequate infrastructure leads to less effective and reduced transport capacity, which leads to higher freight rates (and higher dependency on rail and truck modes). Higher freight rates hurt farm income (and therefore U.S. economic activity), boost road congestion and create more rail service issues. Ultimately, without proper infrastructure investment, U.S. farmers are less competitive globally.

Direct Economic Contributions by Investment Scenario Timeframe

	Status Quo Investment Trend			Increased Investment			Reduced Investment		
	2016	2029	2045	2016	2029	2045	2016	2019	2045
Employment	60,285	65,734	70,850	60,285	74,810	84,233	60,285	60,062	58,513
Labor Income	$5,232	$7,261	$10,534	$5,232	$8,023	$12,462	$5,232	$6,740	$8,852
GDP	$8,263	$11,372	$16,508	$8,263	$12,504	$19,554	$8,263	$10,594	$8,852
Output	$18,367	$25,623	$37,226	$18,367	$28,231	$44,463	$18,367	$23,883	$31,089

Note: Values in million dollars (Source: Agribusiness Consulting)

Total Economic Contributions by Investment Scenario Timeframe

	Status Quo Investment Trend			Increased Investment			Reduced Investment		
	2016	2029	2045	2016	2029	2045	2016	2019	2045
Employment	255,782	312,121	394,993	255,782	346,129	472,287	255,782	289,916	322,753
Labor Income	$16,606	$22,796	$33,121	$16,606	$25,122	$39,515	$16,606	$21,242	$27,163
GDP	$27,188	$37,226	$54,095	$27,188	$40,977	$64,563	$27,188	$34,716	$44,416
Output	$52,833	$72,757	$104,520	$52,833	$80,176	$125,078	$52,833	$67,847	$85,965

Note: Values in million dollars (Source: Agribusiness Consulting)

Percent of Lockages and Vessel Delay, All Waterways

	Total Vessels	Total Lockages	Percent Commercial Lockages	Average Delay Minutes	Percent of Vessels Delayed
2000	1,140,428	797,137	73.1%	63.6	35%
2010	855,121	641,846	74.5%	79.8	36%
2017	746,095	584,563	78.8%	154.2	49%

(Source: U.S. Army Corps of Engineers) Note: Lockage is the term used by the U.S. Army Corps of Engineers for the act of locking through or passing through a lock. Multiple vessels may pass through a lock in one lockage depending on their size.

See the full report here:
https://www.ams.usda.gov/sites/default/files/media/ImportanceofInlandWaterwaystoUSAgricultureFullReport.pdf

President & CEO, The American Waterways Operators

Jennifer A. Carpenter serves as President & CEO of The American Waterways Operators (AWO), the national trade association representing the inland and coastal tugboat, towboat and barge industry.

Carpenter joined AWO in August 1990 and became President & CEO in January 2020. Before assuming her current position, she worked her way up the hawsepipe from Government Affairs Assistant to Executive Vice President & Chief Operating Officer, holding a series of progressively responsible positions including Manager-Regulatory Issues, Director-Government Affairs, Vice President-Government Affairs, Senior Vice President-Government Affairs & Policy Analysis, Senior Vice President-National Advocacy, and Executive Vice President. She served for 13 years as a member of the congressionally authorized Towing Safety Advisory Committee. She has received two Meritorious Public Service Awards and a Public Service Commendation from the U.S. Coast Guard for her contributions to the Towing Safety Advisory Committee and the Coast Guard-AWO Safety Partnership.

As you start in your role as AWO president and CEO, what are your top priorities?

My top priority is to listen to AWO members – they are the owners of AWO and everything we do is focused on helping them survive, adapt and thrive in a constantly changing business and public policy environment. Over the next year, we're going to go broad and listen deeply to AWO members through a variety of means, soliciting their candid feedback on how AWO needs to evolve to meet their needs, expectations and aspirations for their trade association. Then, later this year, we're going to "go deep" and convene a strategic planning process that draws on that feedback to shape AWO's future directions. Along the way, we are committed to delivering tangible advocacy results and safety resources that make a positive difference for members; more nimble, dynamic communication that is member-focused; excellent stewardship of member resources; and enhanced communication and cooperation with allied organizations to maximize results and leverage limited resources.

Please give your assessment of today's market conditions on U.S. inland waters, touching upon fleet numbers, supply and demand.

2019 was a very challenging year for inland barge operators, especially in the dry sector. As we move into 2020, we see cause for both optimism and continued caution. The tank barge sector is experiencing strong demand, and supply is in a pretty good place. In the dry sector, the picture is more mixed; there is an oversupply of open and covered hopper barges given the tonnage that's moving today. It remains to be seen how weather conditions will impact planting and harvesting and other factors, like the Phase I U.S./-China agreement, will impact the outlook for barge transportation of agricultural products. Coal volumes continue to decline and that's a structural issue, not something that's going to improve materially based on public policy decisions. Passage of the US-Canada-Mexico Agreement could give a boost to domestic steel, which could benefit barge transportation. It's a very dynamic business and operational environment and it's requiring companies to be very nimble as they look to capitalize on opportunities and hedge against negative factors.

What are the most important issues that inland operators face today?

Our industry's survival, success and efficiency rely on four pillars: the Jones Act; a modern, well-maintained waterways infrastructure; a consistent national framework of laws and regulations; and safety, which is our franchise to operate. In terms of public policy priorities, that translates

Credit: AdobeStock © itsallgood

into defending the Jones Act and decisively defeating attempts to waiver, weaken or water down the law; passing a biennial Water Resources Development Act (WRDA) bill and changing the cost-share for inland waterways projects to be consistent with that used for deep-draft navigation; ensuring that the federal government, and not a patchwork of state and local regulations, governs the operations of vessels in interstate commerce; and working with the Coast Guard to ensure that Subchapter is implemented consistency and enforced robustly.

As opponents try to chip away at the Jones Act's fundamentals, where does AWO fit into that discussion, and how are you involved in the debate?

There is no higher priority for AWO than safeguarding the Jones Act, which is the statutory foundation of our industry: it's literally the basis for every job our members provide and every dollar they invest in vessels to serve our nation's domestic commerce. AWO works closely with allied stakeholders through the American Maritime Partnership, the pro-Jones Act industry coalition that brings together vessel owners, shipyards, labor, pro-defense organizations, and others to educate Congress, the Administration, the media and the public about the importance of the Jones Act and the domestic maritime industry to the security of our country. I find it ironic that Jones Act opponents have seized on the 100th anniversary of the law this year to push their case that the law's time has passed. I think a look at today's geopolitical situation supports the exact opposite point: the Jones Act is more relevant than ever to maintaining our ability to keep economically critical commerce flowing.

Many stakeholders tend to focus on the blue water aspect of the Jones Act, but the threat to the inland and workboat sectors is just as great. Would you agree?

Absolutely. The Jones Act is not a blue water issue, it's an issue for the American maritime industry as a whole – of which the inland and workboat sectors are the largest part! Anyone who thinks our strategic competitors wouldn't have an interest – and wouldn't have the ability – to control navigation on our inland waterways needs to do some reading about the Maritime Silk Road, just to give one example. That's not a xenophobic statement – I studied Chinese and Asian studies in college! The fact is that control of the U.S. inland waterways system is vital to the health of the American economy. Our 95,000 miles of coastline and 25,000 miles of navigable waterways are a key reason for our superpower status. We'd be incredibly short-sighed to think other nations don't realize that and wouldn't jump at the chance to establish a foothold in the U.S. maritime industry if we let them.

With Subchapter M in effect for some time now, please describe how Sub M is impacting the value of the Responsible Carrier Program (RCP). How many

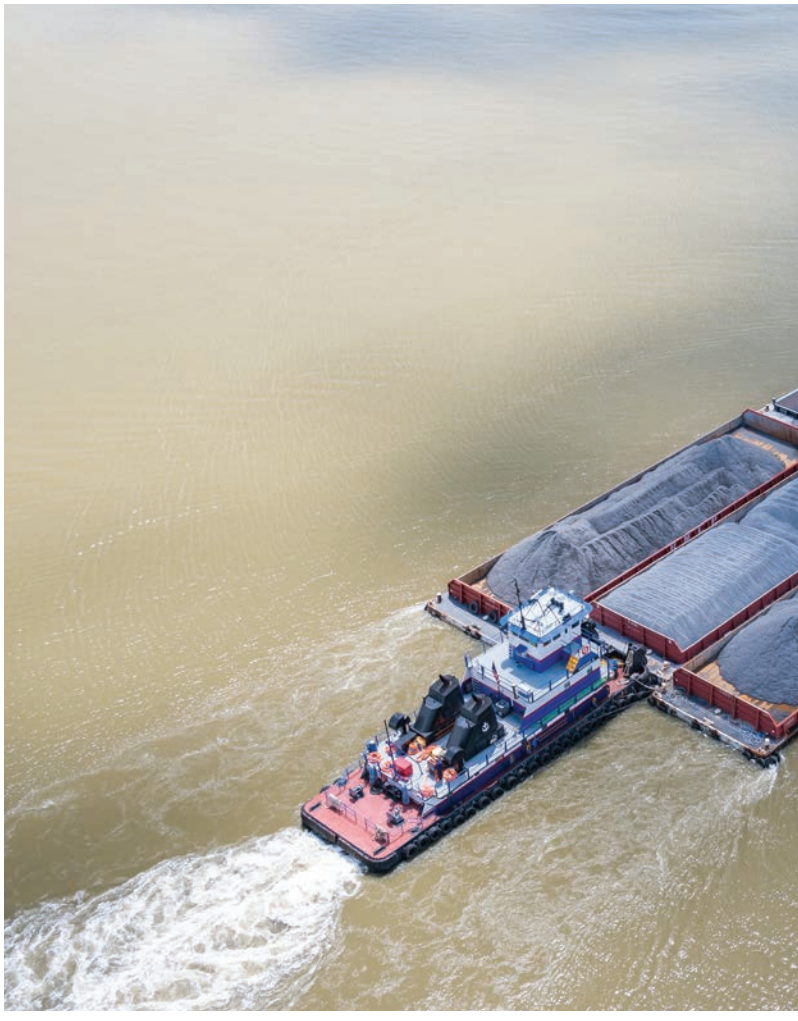
run RCP in parallel with Subchapter M? Does it make any operational or financial sense to do so?

I think the most fundamental question about Sub M is how it's impacting the safety of our industry and achieving the promise of raising the regulatory floor in our industry. Sub M has already had some significant positive effects: it's closed the door on dual Coast Guard- Occupational Safety and Health Administration (OSHA) jurisdiction over towing vessels and reduced our industry's vulnerability to reactive legislation or regulation by given Congress more confidence that there's a comprehensive regulatory framework in place. But the jury is still out on whether the Coast Guard is going to enforce Sub M proactively and hold all operators to its standards, which have been in effect since July 2018 despite the fact that we've got 2.5 years left to go in the certificate of inspection (COI) phase-in process. Our two big messages for the Coast Guard right now on Sub are proactive enforcement and consistent implementation.

As for the RCP, all AWO members, regardless of whether they're using the Towing Safety Management System (TSMS option or the Coast Guard option, comply with either the RCP or an equivalent safety management system, such as the ISM Code. If you're using the TSMS option for Sub M compliance, the RCP doesn't impose any additional requirements or costs beyond what you're already doing for Sub M/TSMS compliance. AWO members have been clear that duplicative audits don't add any value, so our Board of Directors has been deliberate in making sure that the RCP doesn't impose any requirements on a TSMS company or vessel. Now, there are some members who are using the Coast Guard option and asking whether, in this age of customer audits,Ship Inspection Report Program (SIRE), TMSA, etc., it still makes sense for AWO to require RCP or SMS compliance as a condition of membership. That's the kind of tough question we'll need to dig into as we begin this year of deep listening and member dialogue and convene a new strategic planning process. I'm not going to prognosticate about how that or any specific member dialogue is going to come out; what I want to do is set a tone of openness to diverse thinking so that all members feel comfortable putting their perspective on the table. In the end, those decisions will be made by members, for the benefit of members, and while we'll never have unanimity of thinking among such a diverse industry, I'm confident we'll work through differences and come up with good decisions that enjoy broad support from across the AWO membership. And, it starts with respectful listening and candid dialogue.

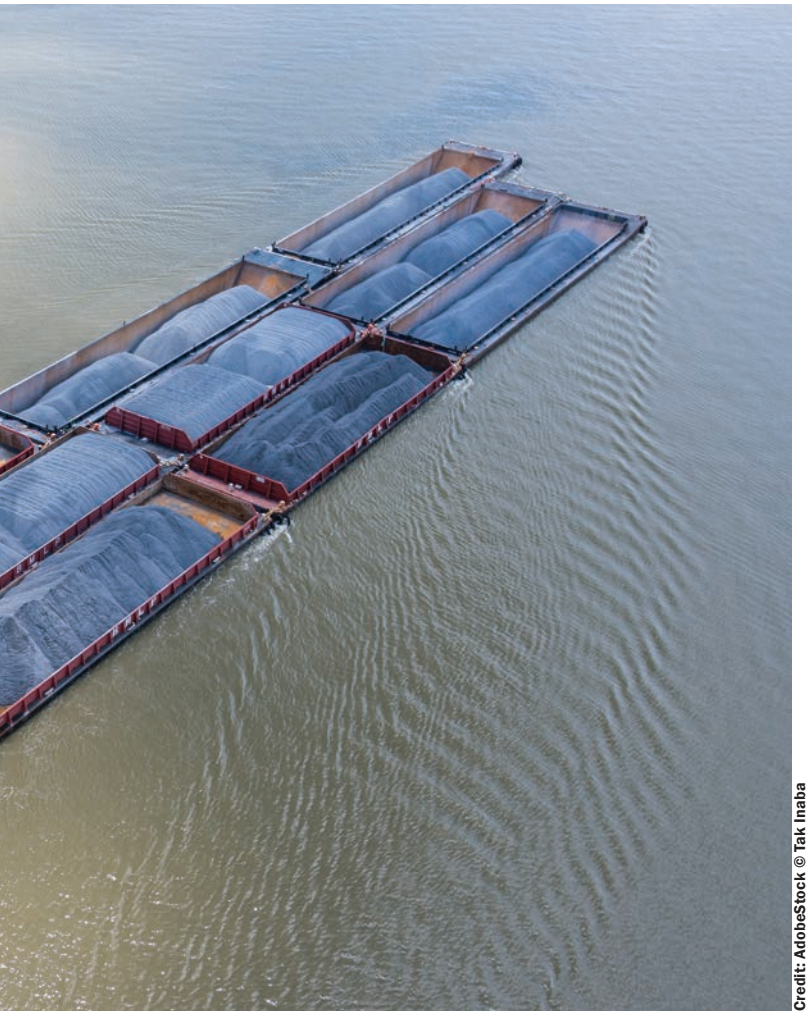
Most stakeholders would agree that at least the very foundation of Sub M rules and SMS systems stems from RCP. That said, now some time into subchapter M, is there a future – a need – for RCP?

There is absolutely a need for industry safety leadership, and for a culture of safety that goes beyond regulatory compliance. AWO's current strategic plan calls for us to "lead and support members in continuously improving safety, security and environmental stewardship." I don't see that changing, because safety is so fundamental to our industry's viability, efficiency and profitability. I think the questions AWO members are going to be wrestling with going forward are: What does that look like today? How do we most effectively demonstrate that safety leadership going forward, and support AWO members in being safety leaders? Times have changed since the RCP was established in 1994, or became a condition of AWO membership in 2000; we need to look critically at everything we do with an eye toward leading and supporting members in their safety journey.



The Vessel Incidental Discharge Act (VIDA) passed and has simplified both the vessel discharge and enforcement schemes. How was AWO involved in this effort and are you generally pleased with the outcome? Did you get everything you wanted?

The passage of VIDA was a landmark achievement for the maritime industry that increases certainty, reduces legal vulnerability for vessel owners and mariners, and paves the way for replacement of the Vessel General Permit and its hundred-plus state conditions imposed by more than two dozen states with a national framework jointly administered by the Environmental Protection Agency (EPA) and the Coast Guard. It also provides permanent regulatory relief for fishing vessels and vessels under 79 feet. AWO led a broad, diverse coalition of stakeholders that included vessel owners, labor unions, shippers, ports and other organizations, and worked with a bipartisan array of friends and champions on Capitol Hill to get this important legislation passed at the end of the 115th Congress.



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Like all complex legislation, it included compromises, but we think it's a win-win for maritime commerce and the marine environment.

Of course, passing VIDA was step one. Step two is implementing it, and we'll soon have our first public opportunity to assess how well that process is going when EPA publishes a notice of proposed rulemaking establishing standards for vessel discharges sometime this quarter. We'll need to give that proposal a critical review and provide detailed comments to help the agency finalize the rule by the statutory deadline of December 2020. Then, the Coast Guard will have two years to publish regulations specifying how the discharge standards must be met, documented, inspected and enforced. It will be important for all the maritime stakeholders who worked so hard to get VIDA passed to now engage the regulatory process to make sure it's implemented practically and effectively.

As the rivers compete against road and rail for federal funding resources, what's AWO's strategy to help secure a bigger piece of the pie for America's inland waterways system?

One: take a big-tent approach to working with allied organizations, shippers and other stakeholders to educate policymakers on the benefits of waterways transportation to our nation's economy, security, environment and quality of life. Two: make sure government policies don't interfere with the inherent efficiency of this industry. Our members know how to run boats and barges safely, securely and efficiently. We need to make sure the actions of government support them in doing that, rather than get in the way.

What do you see as the top regulatory reform needed today that would best help inland waterway operators?

Change the cost-share for inland waterway navigation projects to 75% federal, 25% Inland Waterways Trust Fund. That would create a significant infusion of capital into lock and dam modernization that's needed to keep traffic moving efficiently on the rivers.

U.S. waterways infrastructure is in urgent need of modernization and repair. Where have you seen greatest progress, and where do you continue to see greatest need?

Changing the cost-share will ensure that we have more capital available to deal with the many needs throughout the system, which is why it's so critical, and the Inland Waterways Users Board has served a very important function over the years in helping the Corps to prioritize projects. I

do have to put in a plug for the NESP (National Ecosystem Sustainability Program), which was authorized more than a decade ago to modernize the locks and dams on the Upper Mississippi River system. We are long past due to move this important project forward, starting with allocating the funding needed for pre-construction, engineering and design work.

How were AWO members impacted by sustained high water levels in 2019? What needs to be done to help alleviate the problem in the years ahead?

The wet weather and record-long high water of 2019 did a triple whammy on our industry. First, heavy rainfall delayed spring planting, reducing demand for fertilizer and then reducing output of agricultural commodities. Second, sustained high water conditions disrupted barge transportation and caused significant challenges to navigation. It's an incredible testament to the professionalism and skill of our mariners that they performed as safely as they did in these incredibly challenging conditions. And third, when the water fell, shoaling created acute dredging challenges that threated to close major segments of the river system again. Going forward, we can't control the weather, but we need to work with Congress, the Corps of Engineers and the Coast Guard to plan for foreseeable events: there will be high water, there will be low water, we will need dredging, and we need to have plans in place to activate when they occur. Of course, plans need to be flexible enough to change given changing circumstances, but planning and good communication are essential.

AWO in 2018 released "Cyber Risk Management: Best Practices for the Towing Industry". What did you learn in creating the document, and what do you see as the key takeaways? Put in perspective the cyber security risk faced by your members today.

Cyber risk management is going to be increasingly important to all businesses – and private citizens, for that matter. For the maritime industry, we've got not only the known risks that all businesses face – denial of service, disruptions to business systems and continuity – but we're also operating vessels with safety-critical systems that, if compromised accidentally or maliciously, could cause fatalities, pollution, damage to critical infrastructure – a host of bad consequences. It's important not to be overwhelmed by the magnitude of the challenge and think, "If the federal government or Equifax can get hacked, what can I do to protect my business?" The important thing is to get started, assess your risks, practice good cyber hygiene, and have a framework to build on to address the risks most relevant to your operations.

Many cite an aging demographic working on our waterways and a lack of mid-career talent to bridge the most experienced with the least. When you look at employment opportunities, what do you see? What should companies be doing to present attractive employment opportunities?

Creating a pipeline of well-qualified, well-trained, drug-free mariners to grow through the ranks and take leadership roles on our vessels and in shoreside positions is a long-term strategic imperative for our industry. To do that, we need to think outside the box and 1) look beyond traditional sources of employees for our industry and 2) understand what prospective employees need to make this industry more attractive to them. We have a lot going for us: great pay, excellent benefits, meaningful work, the flexibility to live where you want and work someone else, extended time off – but we need to get the word out to populations segments who may not have heard about us or thought about pursuing employment in our industry, and pay attention to what they're telling us would make them more inclined to stay and build their careers with us.

Please describe the shape and size of AWO's current membership. What portion of the U.S.-flag fleet are AWO members?

AWO has about 330 member companies today: about two-thirds of those are carrier members, companies that operate tugboats, towboats and barges in the U.S. domestic trade, inland, coastal and harbor. The other third are affiliate members, who provide important services to carrier members, from tankering service companies to shipyards to equipment suppliers, insurers, attorneys, consultants, etc. AWO carrier members account for the vast majority of the barge tonnage and a substantial majority of the towing vessel horsepower in the industry. Going forward, we want to take good care of the members we have and also attract new members, because the larger and more diverse our ranks, the more formidable an advocacy fighting force we'll be. This is an exciting time to be an AWO member because over the next couple of years we're going to be working together to co-create our association's future. I want members to know that their voices matter in that process, and that they will be lis-

tened to, heard, and respected as they share their views on how AWO needs to evolve to meet their needs going forward. And, I want non-members to know that not just AWO, but our entire industry, will be stronger, if they join us and become part of that conversation, too. A strong, dynamic AWO is not only good for our industry, I believe it's essential to helping companies and our industry navigate a complex, rapidly changing business and public policy environment.

What are the three primary reasons to join AWO, and what benefits does membership provide?

One: Because the threats to the efficiency and viability of our business are real, and AWO is our industry's advocate with Congress, the Coast Guard, other federal agencies and states. If AWO didn't exist, the industry would need to create it, because the alternative is to fend for ourselves in a perilous public policy environment. Two: Because AWO provides information and education, safety resources and forums, individual member support and the opportunity to learn from industry peers that help you run your business better. And, three, because AWO listens to, respects, and fights for every member, no matter their size. AWO gives small companies a larger voice and small companies make AWO a stronger advocate for the entire industry.

The AWO value proposition is to deliver advocacy results and safety resources that support members in doing the important work of being the nation's safest, most environmentally friendly, most efficient form of cargo transportation. Your membership gives us the strength to deliver results that benefit both your company individually, and our industry as a whole.

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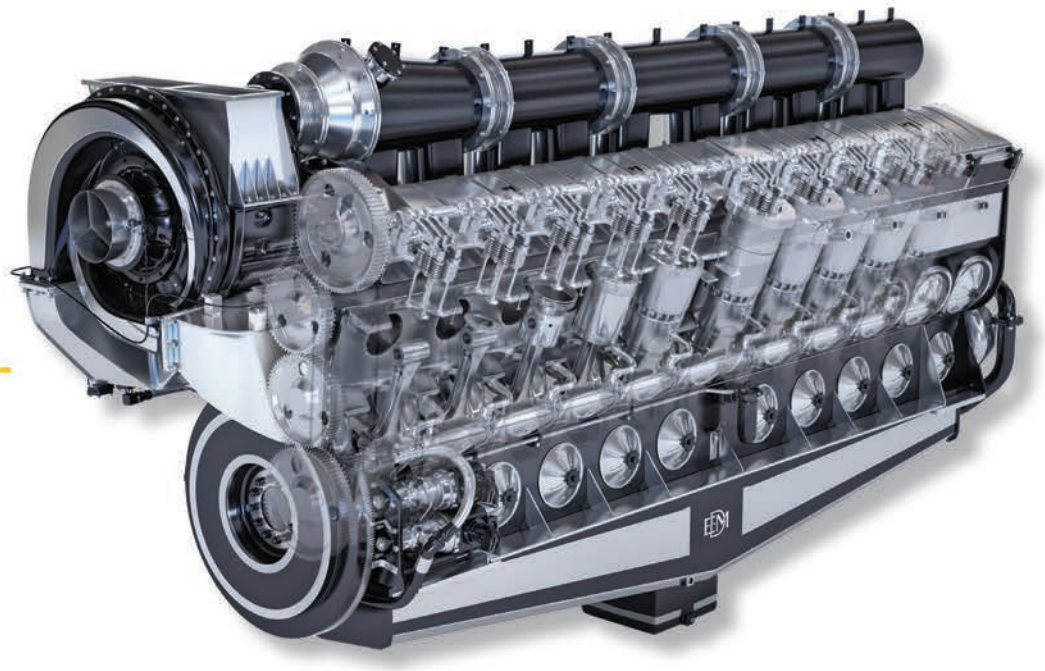

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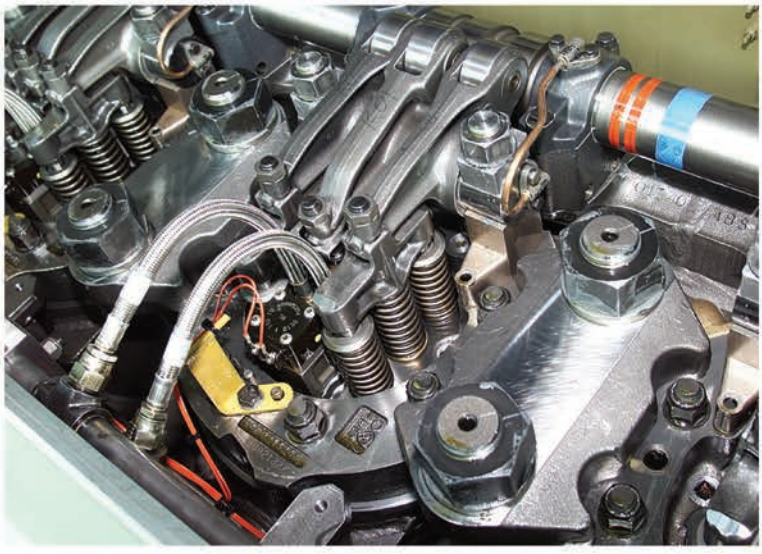

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Robust Dredging on America's Inland Waterways

Inland Dredging Company helps keep commerce flowing on America's inland waterway system.

By William P. Doyle

Doyle

Dyersburg, Tenn. based Inland Dredging Company completed dredging projects spanning eight states and across four U.S. Army Corps of Engineers Districts. Beginning in July and finishing in December (2019), Inland Dredging crews dredged ports and harbors along the Mighty Mississippi River, Ouachita River, Red River, Black Warrior River, Atchafalaya River, Tennessee–Tombigbee Waterway, and the Gulf Intercoastal Waterway from Apalachicola to Morgan City.

Richard Jackson, Inland Dredging's Executive Vice President and Chief Operating Officer, commenting on the successful completion of dredging operations, said, "We enjoyed a productive 2019 completing projects in eight different states for four Army Corps of Engineers' Districts." He continued, "Inland serviced ports and waterways in Kentucky, Missouri, Tennessee, Arkansas, Louisiana, Mississippi, Alabama and Florida."

On the U.S. Army Corps of Engineers side, Jackson said Inland Dredging's primary customers included the Memphis, Vicksburg, New Orleans and Mobile Army Corps Districts. Within those Districts, "we dredged waterways to help hundreds of stakeholders including public and private sector port authorities, harbors, importers, exporters, farmers and railways," he said.

Vickie Watson, operations project manager for the Memphis District, said the contract is for the rental of a fully operated hydraulic cutterhead dredge and attendant dredge plant, including discharge pipeline. Bid items include rental by the hour, towing upstream and downstream by mile, and mobilization and demobilization.

"Every harbor was affected by the high water, but because we have dredged every year over the last four years, it was easy to remove the sediment that was placed," Watson noted. "We didn't have any flood-related damages in our harbors, and that's because of the maintenance work we do every year."

Inland Dredging used the dredge Integrity, a 24-inch cutterhead dredge, along with two tugboats, several barges,

Credit: Inland Dredging Company

new pipeline and a supply boat. Tim Dyer, project manager at Inland Dredging, said the they made modifications to the dredge in order to perform the work. Inland Dredging built an idler, or extension barge, that allowed the dredge to swing wider channels. The dredge is also outfitted with a sliding spud to propel the dredge forward, instead of swinging side to side. The retrofitting of the vessel was performed at Inland Dredging's Mt. Vernon, Ala. ship and repair yard.

"These harbors serve as vital links to rail and highway transportation systems in the region, helping to deliver products and commodities to and from global markets," Army Corps' Watson explained. "Without regular maintenance dredging, barges eventually couldn't make their way up and down the river and in and out of the harbors as needed – this is why we dredge and why it is so important to do so."

U.S. dredging companies do it all. Dredging Contractors of America dredgers make sure America's inland river system is dredged and cleared, ensuring the movement of commerce. American dredging companies are always reinvesting in new equipment with capital investment and securing of fixed assets. Inland Dredging Company is another shining example of America's dredging industry at its best.

Inland Dredging 2019 Work Scope

- Hickman, Ken. with Hickman-Fulton County Riverport serves as the only public port on the east side of the Mississippi River in Kentucky. This port is located on the lower Mississippi at mile 922 in the Elvis J. Stahr Harbor.
- Caruthersville, Mo. - Pemiscot County Port Harbor is located at mile 849 on the Lower Mississippi River between St. Louis and Memphis, Tenn. and connected with the Pemiscot County Port Authority.
- New Madrid County Port Authority, Mo. Typical commodities include milled rice, fertilizers, environmentally Safe Nitrogen (ESN), coke, corn, other agricultural and dry bulk commodities such as cotton seed and rock/gravel.
- Tiptonville/Port Cate's Landing, Tenn. Is considered the nation's newest multimodal inland port, and the deepest dredged harbor on the Mississippi river between St. Louis and Baton Rouge, La.
- McKellar Lake, the Port of Memphis, encompasses approximately 127 operating entities, including major employers as diverse as Mitsubishi, Nucor, Valero, Cargill/Nouritech, TVA, CN Railroad, Electrolux, and Seacor AMH. The port is under the jurisdiction of the Memphis and Shelby County Port Commission.
- Port of Osceola, Ark. on the Mississippi River. The terminal's major commodities are soybeans and corn.
- Port of Helena Harbor, Ark., resides withing the Helena Harbor Industrial Complex ND located on the Mississippi River at mile 652 AH.
- Port of Yellow Bend, Ark. is located directly on the Mississippi just south of Arkansas City.
- Port of Vicksburg Harbor, Miss., which annually handles 14 million tons of freight, is considered the 15th largest port in the country. It handles commodities including metal, steel, aluminum, ores, wood chips, pellets, paper, chemicals, phosphate and fertilizer, grains, beans and meal.
- Port of Greeneville, Miss. specialty involves dry bulk commodities such as liquid fertilizer and grain.
- Port of Rosedale Harbor, Miss. is located at the junction of the Mississippi and Arkansas Rivers. This port handles commodities including coil rod, coil steel and cottonseed and other dry bulk commodities including grain, soybeans, rice, winter wheat and corn.
- Port of Columbus (Lowndes County Port), Miss. handles commodities including carbon scrap, pig iron, HBI, DRI and ferro alloys.
- The Port Lake Providence, La. is considered Louisiana's largest inland port operating as a high-capacity agricultural niche port.
- Port of Lake Charles, La. is the 12th busiest port in the U.S. Its major commodity is crude oil, while the major export is bagged food aid for the world. Other commodities include petroleum coke, calcined petroleum coke, limestone, ceramic proppants, anode butts, gasoline, diesel, jet fuel, caustic soda, styrene monomers and a variety of other combustibles.
- Madison Parish Port, La. handles aggregates, lime, dry and liquid fertilizer, cottonseed, grain and steel.
- Morgan City, La. is located at the confluence of the Atchafalaya River and the Intracoastal Waterway at GIWW WHL Mile Marker 95. There are 200 private dock facilities located in the Morgan City vicinity equipped with barge-mounted cranes with capacities to 5,000 tons, track cranes to 300 tons, and mobile cranes to 150 tons.
- Panama City, Fla. at the Pensacola Naval Air Station –known as the initial primary training base for all U.S. Navy, Marine Corps and Coast Guard officers pursuing designation as naval aviators and naval flight officers.
- Port of Jackson, Ala., located on the Tennessee–Tombigbee Waterway, services barged goods.
- Port of Tuscaloosa, Ala. is located on the Black Warrior River in the area of west-central Alabama that is called West Alabama. The primary products that are transported are dry bulk commodities such as coal and coal coke.

The Federal Government's 2020 Inland Impact

By Jeff Vogel


Vogel

It is often difficult to push through the federal government morass to focus on the issues that actually matter to the inland operator. While 2020 inevitably will be a contentious year in American politics, it is critical to stay focused on the items that will have direct impact on the U.S. maritime industry. From a potential new Water Resources Development Act (WRDA) bill to potential Jones Act challenges, 2020 will be an important year for inland operators to stay politically engaged.

Work on WRDA

January marked the beginning of Congress' work in earnest toward introducing a new WRDA bill. Congress has successfully passed WRDAs in 2014, 2016 and 2018, which authorized numerous studies and projects within the U.S. Army Corps of Engineers (Corps) Civil Works mission areas, to the benefit of U.S. inland operators.

On January 9, 2020, the House Subcommittee on Water Resources and Environment kicked off its work by holding a hearing on proposals for a new WRDA bill. In his opening statement, House Transportation and Infrastructure (T&I) Committee Chairman Peter DeFazio (D-Ore.) continued his call to unlock the existing $9.3 billion balance in Harbor Maintenance Trust Fund calling on his colleagues "to find the political courage to spend" the available funding. Chairman DeFazio's bill seeking to open up the Harbor Maintenance Trust Fund (H.R. 2440) passed the House with bipartisan support in October, and remains under consideration by the Senate Committee on the Budget.

Hearing witnesses R.D. James, Assistant Secretary of the Army for Civil Works and LTG Todd Semonite, Chief of Engineers, highlighted the Administration's focus on building partnerships between the Corps and non-federal stakeholders. Both witnesses pointed to reforms included in the President's Fiscal Year (FY) 2020 budget proposal including the creation of an annual user fee. The proposed fee would supplement the current user-financed 50% share of inland waterway capital investments. Based on the witnesses' testimony, it is reasonable to assume that the President's FY 2021 budget, scheduled to be transmitted to Congress on February 10, 2020, will contain a similar proposal, which may become a central aspect of the WRDA 2020 discussion.

Following up on the hearing, on January 17, 2020, Chairman DeFazio joined other committee leaders in sending a letter to their Congressional colleagues urging them to finalize their priorities for WRDA 2020. The letter noted that the House T&I Committee will "soon be asking House Members to submit project, study, and policy requests for consideration in" a new WRDA bill. The letter further announced that the House Subcommittee on Water Resources and Environment will hold a Member Day hearing on WRDA requests on February 27, 2020. The Subcommittee expects to introduce and consider the WRDA bill later this year.

America's Marine Highway Grants

In addition to a potential WRDA bill, 2020 promises to be an exciting year for America's Marine Highway (AMH) projects. The year started off with a January 6 announcement by Secretary of Transportation Elaine Chao that the Maritime Administration (MARAD) was awarding $7.5 million in grants to nine AMH projects. The awards will support a wide range of projects on all U.S. coasts.

Additional financial support is on the way as the Further Consolidated Appropriations Act, 2020, which was signed into law on December 20, 2019, contained a further $9,775,000 in AMH program funding. This number, of course, represents a tiny portion of the total federal investment in our nation's infrastructure, but nonetheless it should be welcome news that the AMH program continues to have solid bipartisan Congressional support. MARAD will likely issue a Notice of Funding Availability in the spring, given the timing of prior rounds. In the interim, inland operators should watch the President's FY 2021 to see if it contains any funding requests for the AMH program. The President's FY 2020 budget request zeroed out the program, but funding was restored through bipartisan Congressional efforts.

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Challenges for Agricultural Exports

One area that clearly impacted inland operators in 2019 was the reduction in U.S. agricultural exports. For example, according the U.S. Department of Agriculture's January 2, 2020 Grain Transportation Report, "the yearly total for barged grain was 23% lower than in 2018 and 28% lower than the average of the previous three years." The report cited "poor navigation conditions due to flooding [that] slowed barge traffic, particularly through the locking portions of the Mississippi River." Inevitably, however, a portion of the continued reduction was caused by ongoing trade tensions. For example, according to the American Farm Bureau Federation, "as a result of retaliatory tariffs" U.S. agricultural exports to China fell from $19.5 billion in 2017 to $9.1 billion in 2018.

It will be interesting to see how the President's FY 2021 proposed budget responds to these continued reductions. In past years, the Administration has been unsupportive of established levels of federal support for agricultural exports. Indeed, the President's FY 2020 budget proposal zeroed out established food aid programs, including the McGovern-Dole Food for Education Program and Title II Food Aid. These important programs provide not only a stabilizing base for American farmers, but also serve as a valuable source of cargo for inland carriers (and the U.S.-flag international fleet under cargo preference laws). Understanding the strategic importance of these programs, Congress restored $220 million in funding for the McGovern-Dole Food for Education Program and $1.725 billion in funding for Title II Food Aid under the Further Consolidated Appropriations Act, 2020.

The Dawn of VIDA

Additionally, 2020 looks to be the year that inland operators can finally participate in the development of the regulatory framework to implement the Vessel Incidental Discharge Act (VIDA). VIDA was welcomed by many inland operators when it was passed as part of the Frank LoBiondo Coast Guard Authorization Act of 2018, with the goal of replacing piecemeal federal, state and local vessel discharge regulations with uniform national standards. The Environmental Protection Agency (EPA) was directed under VIDA to promulgate federal standards of performance for marine pollution control devices for approximately 30 different categories of discharges incidental to the operation of vessels – including ballast water – by December 4, 2020. To meet this deadline (and legal public notice and comment requirements) maritime stakeholders can reasonably anticipate that the EPA will publish a Notice of Proposed Rulemaking requesting public comments in the coming months.

Jones Act Challenges

Finally, on June 5, 2020, the Jones Act (passed as part of the Merchant Marine Act of 1920) will reach its 100th anniversary. While marking this milestone, inland operators will need to remain vigilant as 2020 will undoubtedly continue the trend of challenges to the Jones Act. Sen. Mike Lee (R-Utah) currently has two bills under consideration by the Senate Commerce Committee that would destabilize the Jones Act. The Open America's Waters Act of 2019 (S.694) would allow any vessel that meets "appropriate safety and security requirements" as determined by U.S. Coast Guard (USCG) regulations to operate in coastwise trade. In addition, the Protecting Access to American Products Act (S.1873) would allow for waivers of the Jones Act for "product carriers." While it appears unlikely that either bill will emerge from Committee, the bills' development should be closely watched by inland operators.

***Jeff Vogel** is a partner in Cozen O'Connor's Transportation & Trade Group. Jeff focuses his practice on strategic and operational matters affecting the U.S. maritime industry. He can be reached at: **jvogel@cozen.com**.*

2020 Vision

By Michael J. Toohey

Toohey

The Congress worked hard and most importantly together at the end of the recently-concluded First Session in December to finalize and pass Fiscal Year (FY) 2020 appropriations that included the Energy & Water Development (E&WD) Appropriations bill that funds the U.S. Army Corps of Engineers' (Corps) work on the nations' waterways.

By law, 60 days after the President signs the E&WD appropriations bill, the Corps must release a Work Plan that shows specific allocations for funding projects. That FY20 Work Plan should be released around February 10, the day the President is expected to release his FY21 budget.

The FY20 E&WD funding levels the Corps and the Office of Management and Budget (OMB) will be working with as they develop the Work Plan are as follows:

The Corps' Civil Works mission received $7.65 billion, $652 million above the FY19 enacted level and $2.69 billion or 54% above the OMB's insufficient budget request. Congress also agreed to adjust the Construction cost-share for Chickamauga Lock (Tennessee River) as they did in FY19, but in FY20 to 65% General Revenue funding/35% Inland Waterways Trust Fund (IWTF) for one fiscal year. This change enables full and efficient funding of all ongoing construction projects which will advance their delivery completion, drive down final project costs, and deliver benefits to the national economy years sooner.

The Corps' Construction account received $2.68 billion or $1.37 billion more than the President's FY20 request, and $498 million more than the FY19 enacted level. The FY20 bill utilizes full-use of the estimated receipts of the IWTF plus some additional prior-year revenues to yield a lock and dam modernization investment of approximately $335 million (more than tripling the President's FY20 funding request of just $111 million).

The Corps' Operations & Maintenance (O&M) account received $3.79 billion, which was $1.86 billion above the President's FY20 budget request (essentially doubling the amount in the budget request) and which is the seventh consecutive year of record-level funding for the O&M account.

Harbor Maintenance Trust Fund (HMTF) projects received $1.63 billion, which was an increase of $665 million above the President's FY20 request. Congress met and exceeded – by more than 11% – the HMTF target set by the Water Resources Reform and Development Act of 2014.

Mississippi Rivers and Tributaries (MR&T) received $375 million in FY20.

The Investigations account funding level is $151 million, which is $74 million above the FY20 Administration request (roughly double the Administration request) and $26 million above the FY19 enacted level. Included in the President's budget, as well as the FY20 bill, is Preconstruc-

Credit: Jessica Haas, USACE

tion Engineering Design (PED) funding for the Three Rivers Project in Arkansas at $1.5 million. An additional $9.75 million is dedicated to PED and other project-specific study activity for inland projects above the allocation for the Three Rivers project. Senate report language directed $4.5 million for PED for the Navigation & Ecosystem Sustainability Program (NESP) in FY20 and WCI believes that this funding for NESP PED should be included in the FY20 Work Plan.

Until the Corps' Work Plan is released, WCI has announced its Goals & Objectives for 2020 as follows:

Within the upcoming Water Resources Development Act (WRDA) 2020:

• *Conform the cost-sharing for IWTF-financed construction projects to require 25% of the project cost to be derived from the IWTF and the remaining 75% from General Revenues. This is the same formula used for Deep Draft navigation projects to expedite channel maintenance work and dredging to be prepared to receive and capitalize on the economic opportunities of post-Panamax ships calling on U.S. ports.*

• *Authorize for construction all projects completing the Corps of Engineers approval process including the Industrial Lock modernization, the Brazos River Floodgate and Colorado Locks improvements.*

On the issue of imposing additional fees on commercial operators (and therefore shippers):

• *Oppose additional tolling, lockage fees or other charges for the users of the inland waterways system.*

On a potential Infrastructure Package in Congress:

• *Secure additional funding for the infrastructure of the inland navigation system in a comprehensive infrastructure bill.*

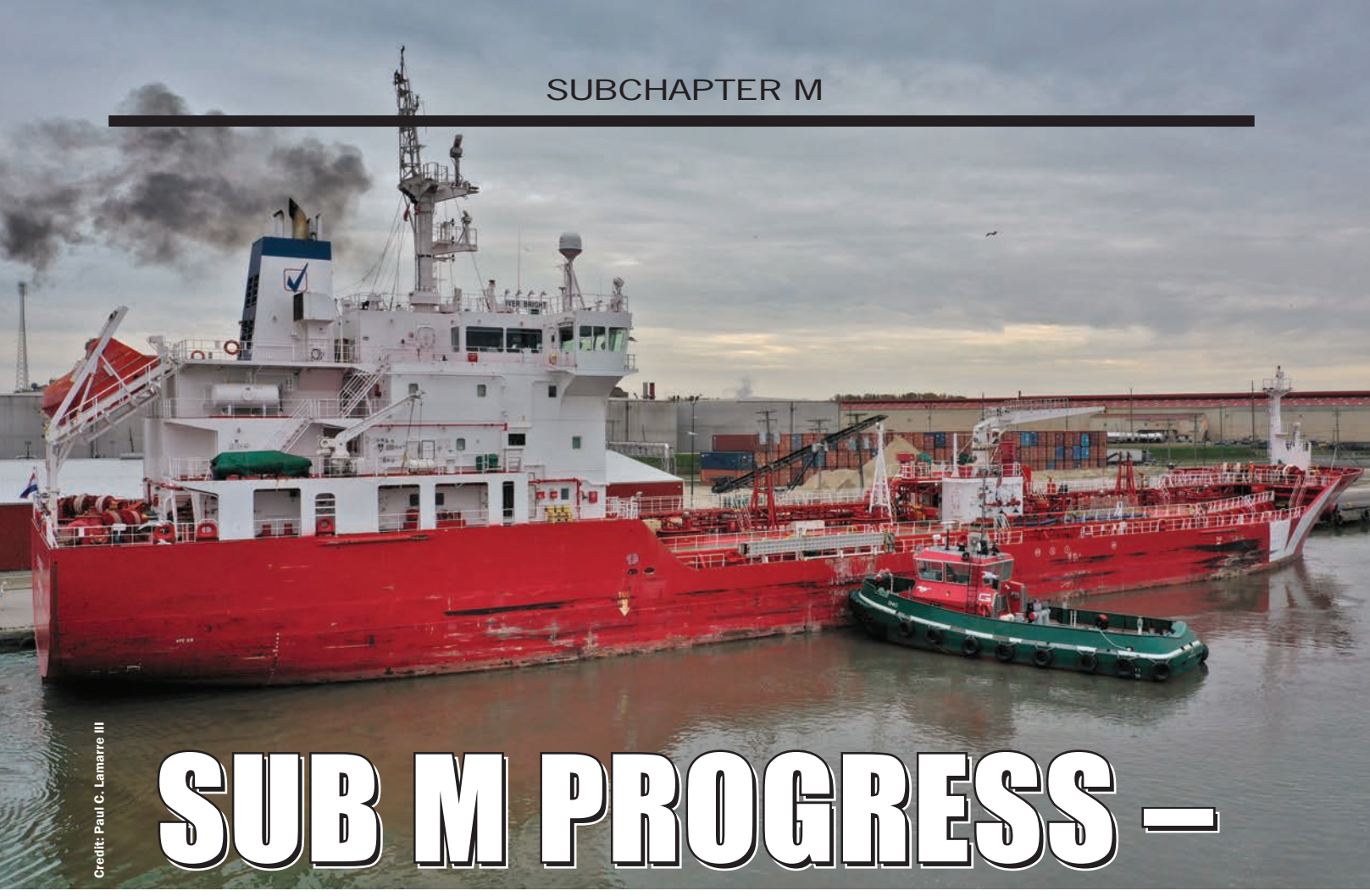
With regard to FY21 Appropriations:

• *Provide for the construction of inland waterways modernization projects at the maximum funding amount supportable by expected revenues into the IWTF.*

• *Increase overall Corps of Engineers' Civil Works Program Operations & Maintenance (O&M) funding (FY20 funding for O&M was $3.79 billion).*

WCI has a plan for 2020 and the opportunities this year for modernizing our inland waterways are as clear as 20/20.

***Michael Toohey** is President/CEO of Waterways Council, Inc., a position he has held since August 2011. Prior to that, Toohey was a consultant for The Livingston Group from 2007 to 2011. He also served as Vice President, Director of Government Relations, Associate Director of Government Relations, and Senior Washington Representative for Ashland Inc. from 1998 through 2007. Nominated by President George Bush and confirmed by the U.S. Senate, he was Assistant Secretary of the U.S. Department of Transportation from 1992 through 1993.*



Credit: Paul C. Lamarre III

SUB M PROGRESS – an update

By Tom Ewing

Subchapter M, the United States regulatory code dealing with towing vessels and requirements for towing vessel safety, has officially been in place since July 20, 2016, when the U.S. Coast Guard finalized Sub M rulemaking.

Since the rules were finalized there have been a couple of important hammer dates. In spring and summer 2018 the first certificates of inspection (COI) were issued. COIs are central within the Sub M program. A vessel needs a COI to legally operate. (All vessels were required to comply with Sub M by July 20, 2018. The COI publicly denotes and registers that compliance.) A COI is valid for five years; then it needs to be renewed. Sub M also requires annual vessel inspections. The USCG's inspection fee is $1,030 per vessel, billed annually.

A second important date occurred this past summer: July 22, when at least 25% of a company's towing vessels were required to have valid COIs. On July 20, 2020, at least 50% of vessels must have COIs. This incremental approach continues to July 19, 2022, when 100% of impacted vessels need to be COI compliant.

On the one hand, this measured phase-in allows an orderly start to a program that the Coast Guard estimated in 2016 would "affect approximately 5,509 U.S. flag towing vessels engaged in pushing, pulling, or hauling alongside, and the 1,096 companies that own or operate [those vessels]."

But make no mistake, Sub M is a complex and complicated program for vessel owners, the Coast Guard and newly allowed third party operators (TPO) who function as a kind of proxy for the USCG. TPOs can issue COIs (although, upon review, the USCG can overrule a TPO's work). The TPO option was included in Sub M to provide an alternate pathway for compliance. The TPO provision greatly expanded

the personnel and resources available to implement – by deadline – Sub M's extensive and expansive demands.

As the Sub M program approaches its next July deadline *Marine News* checks in, to get at least a high-level perspective about how implementation is proceeding.

The Coast Guard's public information on Sub M startup is a bit scattered, and sparse. There are no public-facing websites, for example, with summary information on vessels inspected, or total COIs issued.

In response to *Marine News*' questions, the USCG's Sub M team had only rather general replies.

Thomas "Scott" Kuhaneck is on the Coast Guard's Domestic Commercial Vessel Compliance Staff. He said that "as with any new program, there are going to be some growing pains." He mentioned three areas that needed some smoothing out: vessel audits using the TSMS option; enforcement for harbor assist vessels; and deficiencies in record keeping and reporting, again for vessels using the TSMS option. TSMS refers to "towing safety management system," an opt-in provision that provides a bit more program flexibility.

Kuhaneck said approximately 1,500 COIs have been granted so far, or 27% of EPA's estimated 5,509 vessels. That's an important metric: Sub M is on track.

In response to a question about Sub M and USCG resources, Kuhaneck said, "There have been no issues that I am aware of relating to a lack of personnel or resources."

Top goals for 2020, Kuhaneck said, are to get to the required 50% level for COIs and bringing single vessel owner/operators into the program. Small operators were given extra time at startup; their initial deadline was 2020, not 2019.

The American Waterways Operators (AWO) is the national trade association for the U.S. tugboat, towboat and barge industry. AWO's Responsible Carrier Program served as a model for Sub M development.

AWO is laser-focused on Sub M and regularly updates its members. Last February, an AWO survey showed that the average COI processing time was two to three months. Priority concerns for members included casualty notification and investigation and requirements pertaining to machinery and electrical systems and equipment. AWO members preferred the TPO option.

Caitlyn Stewart is AWO's Senior Director for Regulatory Affairs. In her report to AWO members she references an issue that emerged from the February survey: industry concerns about official communications across Captain of the Port Zones, communications to ensure consistent decision-making among OCMIs – officers in charge of marine inspections. Indeed, from recent discussions with company representatives, this is still a common concern.

In October, in a meeting with AWO, the Coast Guard presented summary data regarding vessel deficiencies and detentions from July to September (the government shutdown at the start of 2019 slowed Sub M's progress).

Of 655 deficiencies, the highest number – 122 – related to the main propulsion engine or propulsion and auxiliary machinery. Thirty-three deficiencies were due to structural conditions, and 21 were related to navigation safety. Other concerns included lifebuoys, lifejackets, firefighting equipment and appliances, and related fire safety requirements. Seven of nine towing vessels detained during this period had excessive oily water in the bilge and/or engine room.

More recently, Sub M was a priority topic at AWO's annual Midwest,

Standing L to R: *Robie Moorhouse , Marine Inspector, USCG; Lindsay Dew, Director of Operations, GLT; Lieutenant Vauna Streeper, Chief of Inspections, USCG; Ken Siford, Jr., Assistant Fleet Engineer, GLT; Scott Tozzi, Principal Surveyor, ABS Cleveland; Joe Starck, President, GLT*
Sitting L to R: *Gregg Thauvette, VP, Operations, Sales & Marketing, GLT; Nick Wallinder, HSSE Coordinator, GLT.*

Ohio Valley and Southern Regions' meeting in January in New Orleans. After the meeting, Stewart was asked to update some of the members' concerns. Again, she cited the issue of trying to meet Sub M requirements that can be interpreted and applied differently in different Captain of the Port zones.

In discussions, individual towboat operators also highlighted this cross-zone issue.

Consider comments from Gregg Thauvette, VP Operations, Sales & Marketing for the Great Lakes Towing Company, based in Cleveland. Great Lakes operates more than 30 tugs stationed in 12 different Great Lakes ports, territory that includes four different CG Sectors and nine CG Stations.

Thauvette's operations clearly demonstrate industry's inter-zone concerns. A tug from Cleveland, for example, may be repositioned to Toledo, thereby moving from Coast Guard Sector Buffalo to Sector Detroit. Thauvette commented that "the interpretation of the requirements of Subchapter M from one Coast Guard Sector or Coast Guard Station to the next can vary significantly," leading to "confusion for both the Coast Guard and industry."

To standardize implementation, Thauvette suggests that Sub M decision making authority needs to be more centralized. He proposes that CG leadership should choose one Sector to be the "law of the land", so to speak.

The Towing Company has met Sub M's initial goal: 25% of its vessels had COIs by the June 2019 deadline and the company is on schedule to meet the 50% requirement. But it hasn't been easy, and scheduling inspections is challenging. Thauvette commented, however, "that (our TPO) and our local USCG have been very accommodating. There has been a real sense of 'we are all in this together' at this level."

Another concern that emerged from AWO's January regional meeting pertains to equitable compliance, or more bluntly, that some operators may be skirting the program. Central to this is what the COI number count actually means. Recall that by July 22, last year, 25% of a company's vessels needed a COI. That's not the same as 25% of all vessels on a waterway.

AWO's Stewart said the CG is working to clarify COI numbers. There could be a mismatch between total vessels with COIs in a port versus COIs granted to singular operators. Consider: in a port zone with 100 vessels 25 may have a COI. Yes, that's 25%. But if eight vessels are owned by one company, five owned by a second and 12 are owned by two or three other companies, that aggregate total doesn't mean that 25% of each company's fleet has a COI – Sub M's fundamental demand.

Mary McCarthy is Director of Safety and Quality Systems for Canal Barge Company, Inc., based in New Orleans.

For Canal Barge, "startup was pretty much what we expected and planned for," McCarthy said, "mostly because the industry and the Coast Guard had collaborated on the regulation for a decade."

She cited three issues: again, initial challenges across different Coast Guard sectors and different COI application

Caitlyn Stewart
Senior Director – Regulatory Affairs, The American Waterways Operators

David Orme
Chief Operating Officer with Carlisle & Bray Enterprises

requirements. A second concerned a USCG Policy Letter regarding whether certain inspection decals would remain valid, thereby satisfying a COI inspection requirement. Third, initial uncertainties about returning a vessel to service after an accident.

For Canal Barge, McCarthy said "these issues have mostly been resolved due to continued open dialogue between industry and the Coast Guard."

David Orme is Chief Operating Officer with Carlisle & Bray Enterprises, a full services marine company with 23 vessels based in Covington, Ky., across from Cincinnati on the Ohio River. Orme said Sub M startup has proceeded smoothly. The company has been able to align the inspection process with C&B's operational needs, and half the company's vessels are in compliance with Sub M. C&B works with the CG for COI inspections.

Orme commented that Sub M's annual inspection fees are rather excessive given the "substantial costs already associated with maintaining equipment consistent with requirements and costs associated with downtime/loss of production." He suggests an inspection every five years unless a company has a history of violations.

Orme suggests a re-look at other Sub M regs. He questions, for example, whether the same requirements should apply for brown water operations versus blue water. But he expects Sub M to evolve "as experience and common sense are evaluated and applied."

Sub M progresses in waters that aren't yet placid, but surely navigable. But keep watch: revised inspection fees are on the horizon. We'll update.

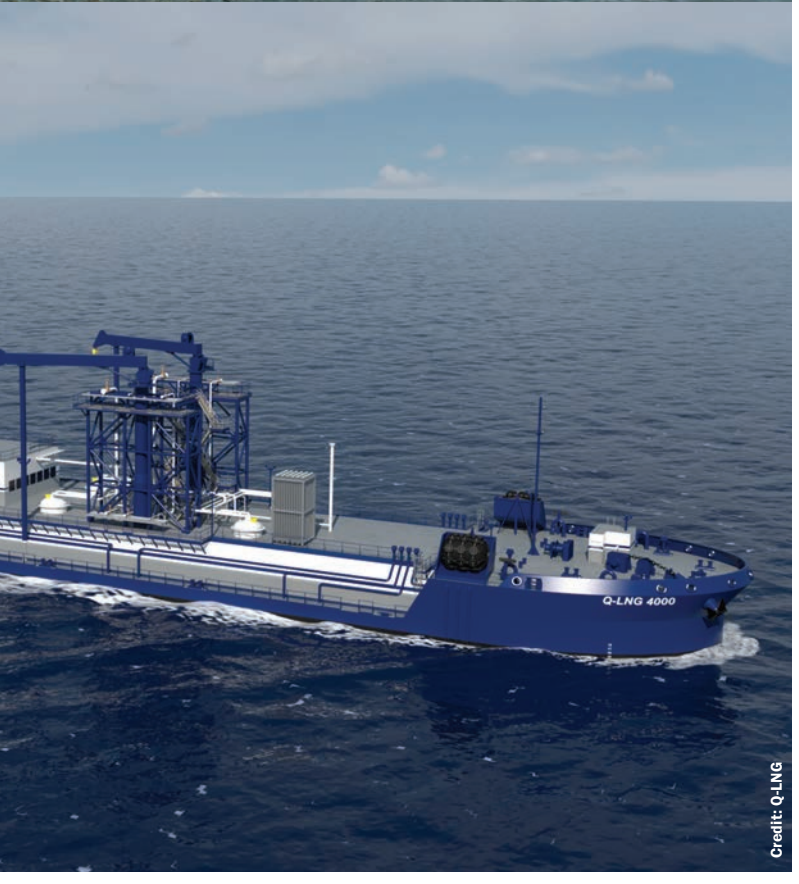
Tom Ewing is a freelance writer specializing in energy and environmental issues.

Marine News' 2020 ATB Report

Credit: Crowley

Credit: Vane Bros.


Credit: Fincantieri



Credit: Q-LNG

There's a barge full of reasons why many operators turn to ATBs.

By Barry Parker

A mainstay of the U.S. coastwise dirty and refined products trades, articulated tug barges (ATB) have increasingly filled a void left as the fleet of Jones Act tankers (with crew complement requirements exceeding that of tugs) has aged out. With the cargo capacity of the larger ATBs – some with barges exceeding 300,000 barrels capacity – rivalling that of workhorse tankers that had served oil consuming regions, the concept certainly makes sense from a supply and distribution perspective.

With 50,000- to 150,000-barrel-capacity ATBs now widespread, the units have also gained share as substitutes for towed barges. The reasons are simple; Vancouver, B.C. based naval architects Robert Allan Ltd. explains, "For many tug-barge applications, an ATB system offers better efficiency, higher speeds, and improved control and maneuverability."

Crowley Maritime, a leading operator in the coastwise trades, says, "…the ATB has an articulated or 'hinged' connection system between the tug and barge. This allows movement in one axis, or plane, in the critical area of fore and aft pitch."

From the owners' business side, the advantages of standardization are important. Capt. Rick Iuliucci, Vice President, Operations, at Vane Brothers, commented to *Marine News* about three ATBs delivered from Conrad Shipyard, during 2018 and into early 2019. These are the ATB tugs Assateague, Chincoteague and Wachapreague, partnered with three 80,000-barrel barges (the "800 Series" Doubleskin 801, 802 and 803).

Capt. Iuliucci stressed the importance of "sister" units: "The addition of these three ATB units to the Vane fleet has provided us the opportunity to support our customers' requirements with enhanced safety and efficiency."

In describing the three newbuilds, he says, "Each ATB has been built to the same specifications, enabling Vane to capitalize on standardization within the Assateague Class of vessel, and increasing our flexibility to respond rapidly to changes in the marketplace."

ATB capabilities can also be the result of retrofit, Vane Brothers explains, "Along with the three Conrad units, Vane also recently received two ATB tugs from St. Johns Ship Building in Florida. The Jacksonville and Charleston are

"Entry into the U.S. LNG transportation vessel market has been a strategic interest of our organization. As domestic natural gas continues to rise, LNG has quickly become both a clean and competitively priced fuel alternative."

– Todd Thayse

Credit: Fincantieri

4,200-horsepower Elizabeth Anne Class vessels that have been fitted with an innovative Beacon Finland JAK-400 Hydralok AT/B coupling system." Towing winches (found on six other Vane tugs built at St. Johns) are removed when the tugs are configured for pusher capability.

The newbuild tugs can work with existing barges that have been modified. Referring to the JAK-400, Vane says, "This system allows the ATB tugs to be securely linked to 50,000-barrel 500 series barges," and explains further that two barges (both built in 2009) were modified as ATB barges at Lyon Shipyard in Virginia. "The success of our retrofit program has afforded us the ability to improve the operational performance of our existing fleet of Elizabeth Anne Class tugs and 50,000-barrel barges," Captain Iuliucci says. "The recent addition of these tug/barge combinations has been well received by our customers, crews and regulators."

The Vane Brothers fleet of 130 vessels also includes two ATBs (6,000-horsepower tugs – Brandywine and Christiana – and 144,000-barrel barges DS 141 and DS 143) that have been in service since 2007.

In the coastwise trades, privately held Crowley Maritime is a well-known name. Crowley says, "We maintain an extensive fleet ranging in size from 20,000 deadweight tons (DWT) to 45,800 DWT. This enables us to offer a wide range of transportation options to our petroleum and chemical customers." Its ATBs range in size from 155,000 barrels (the "550" class) through 327,000 barrels (the "750" class). The larger units trade within the U.S. Gulf and play a vital role in bringing refined products into Florida, dominated by runs into Tampa, Port Everglades and Jacksonville (Crowley Maritime's home base). Its medium sized ATBs are active in the U.S. Gulf and East Coasts, but also move products from refineries to terminals in the Pacific region. The "550" class ATBs ply routes along the West Coast.

Kirby Corporation, perhaps better known for its inland barge fleets, also operates ATBs, in the Gulf/Atlantic and along the Pacific coasts, with barge capacities reaching 185,000 barrels. Its recent newbuild Paul McLernan, linked to the barge Kirby 155-02, has been trading between ports in Texas and the southeastern U.S.

Moran Towing, based in Connecticut with locations around the U.S. Gulf and East Coast, operates a fleet of 10 ATBs in the products and easy chemicals trades. Its vessels include the tug Barbara Ann Carol Moran/barge Louisiana and Leigh Ann Moran/barge Mississippi. The tugs are 6,000 horsepower and 5,100 horsepower, respectively, with the barges capable of transporting 110,000 barrels of cargo. Its 5,100-horsepower tug Barney Turecamo pushes its barges regularly along Long Island Sound.

Overseas Shipholding Group (OSG), headquartered in Tampa, Fla., operates three ATBs in Jones Act trades (two just under 240,000 barrels, one of 346,000 barrels), one in Delaware Bay lightering service, tug OSG Horizon/ barge OSG351 (346,000 barrels) and has two barges (204,000 barrels) on order from the Gunderson Marine yard (now rebranded as Greenbrier Marine), on the West Coast, for delivery in 2020. OSG is a listed company, and its financial reports provide insights into earnings of ATBs. For the first nine months of 2019, its ATBs earned an average of $21,565 per day when working under contracts of affreightment, and $18,573 per day when working under spot chartering arrangements.

Reinauer, an East Coast mainstay (and owner of the Senesco shipyard in Rhode Island) also operates ATBs. In mid-2018, the yard delivered the Tier 4 tug Bert Reinauer (8,000 horsepower)/barge RTC-165 (150,000 barrels), which trades from refineries in Texas into receivers in Florida. Three other ATBs, Nicole Leigh Reinauer, Christian Reinauer and Meredith Reinauer, all 7,200 horsepower, are linked with 140,000- to 150,000-barrel barges, while its Dylan Cooper (4,000 horsepower) is mated with RTC 108 (100,000 barrels). Other ATB operators include Genesis Energy, active on inland and coastal waters, with two ATBs Genesis Eagle and Genesis Patriot, linked to 135,000-barrel barges trading in U.S. Atlantic waters. West Coast outfit Centerline Logistics (formerly Harley Marine Services), also operates several ATBs, with barges ranging up to 83,000 barrels, serving the Pacific Northwest as well as Alaskan waters.

The advantages of ATBs are applicable beyond coastwise oil trades. One need only look at the orderbook of Bay Shipbuilding (a unit of Italian shipbuilding group Fincantieri), in Sturgeon Bay, Wis. for evidence that ATBs are finding their way into other trades. In late summer 2019, NorthStar Marine (linked to Jax LNG, a smallscale liquefied natural gas (LNG) producer located in Jacksonville, Fla.) announced a deal with Bay Shipbuilding to build a 5,400-cubic-meter LNG barge, (with the possibility of building two sister barges) for transportation of LNG along the East Coast. In a statement, the yard said, "Utilizing a suitable tugboat, the barge will operate as an ATB that will initially run along the East Coast of the U.S. providing

Credit: Moran Towing

LNG bunkering solutions to NorthStar's customers."

The yard's CEO, Todd Thayse, told *Marine News*, "Entry into the U.S. LNG transportation vessel market has been a strategic interest of our organization. As domestic natural gas continues to rise, LNG has quickly become both a clean and competitively priced fuel alternative. More and more domestic industries are looking to LNG as their future fuel source, and we are extremely excited to be able to construct vessels that help our customers deliver LNG to parts of the United States in both an economical and safe manner." He added, "Partnering with NorthStar and its affiliate companies on their latest project gives us the opportunity to be part of this exciting emerging industry and related market growth. The project draws upon the expertise of Fincantieri and allows us to bring our own designs to the LNG market."

ATB configurations are being used elsewhere in the LNG realm. Q-LNG, a company owned by Harvey Gulf CEO Shane Guidry, is building the tug/barge combination Q- Ocean Service/Q-LNG 4000 (4,000 cubic meters), which will be delivered from VT Halter Marine in early 2020. The barge will be used for bunkering LNG fueled cruise and commercial vessels. According to the company, its trade will be "…commencing with a long-term contract with Shell Trading (U.S.) Company to deliver LNG as a fuel source to various ports in Florida and the Caribbean." The yard has also been discussing a second, larger 8,000-cubic-meter barge with Q-LNG.

Historically, VT Halter, with its Pascagoula, Miss. location, has been very active building ATBs, including the 650 Class series for Crowley Maritime (10,500-horsepower tugs/178,000-barrel cargo capacity), for Bouchard Transportation, and a handful of units for OSG, including the vessels above.

Fincantieri's Bay Shipbuilding has built ATBs for leaders in the petroleum trades. Recently, ATBs have been delivered to Kirby Corporation (6,000-horsepwer tugs and 155,000-barrel barges,) including Paul McLernan mentioned above. Moran Transportation has also built units at the yard, including the two mentioned earlier. In prior years, barges with 150,000-barrel capacity were delivered to U.S. Shipping Corp. (Petrochem Producer, Petrochem Trader, Petrochem Supplier). A new entrant to the transport arena is WAWA, the convenience mart chain, which uses its 2017-built tug Millville (8,000 horsepower)/ barge 1964 (185,000 barrels) to deliver gasoline from refineries in Texas to outlets in Florida.

Elsewhere on the Lakes, VanEnkevort Tug & Barge, Inc

Credit: Vane Bros.

operates four ATBs, with tugs paired with barges trading drybulk raw materials around the Lakes. One unit, tug Joyce L. VanEnkevort, married to the self-unloading barge Great Lakes Trader, was built in 1998 by Bay Shipbuilding. The Sturgeon Bay yard is set to deliver an additional ATB, also with a self-unloading barge, to VanEnkevort in mid-2020.

ATBs have also provided a solution in the dredging business. Eastern Shipbuilding, in Panama City, Fla. delivered an ATB-configured trailing suction hopper dredge Ellis Island (mated with tug Douglas B. Mackie) to industry leader Great Lakes Dredge and Dock. In the coming years, we will likely see continued penetration of ATBs deep into the U.S. coastwise business, and potentially into markets abroad, as well, where the tug offers economic advantages compared to a ship.

Profiles in Training:

Credit: Greg Trauthwein

Staten Island Ferries

By Greg Trauthwein

When James C. DeSimone, Deputy Commissioner, Ferry Division, New York City Department of Transportation, signed on to run the Staten Island Ferries in 2003, the organization was still in the aftermath of one of the most significant accidents in its history: the ferry Andrew J. Barberi allision of October 2003, an accident which included a number of fatalities and serious injuries. DeSimone, who had long-tenures in both the commercial and public end of the marine business, brought a unique perspective to the organization.

"For the city to go outside the system to hire (me) was huge," said DeSimone. "At the time, both the mayor and city council had a strong mandate to improve ferry operations, and to make changes in the wake of this accident."

By the Numbers

The Staten Island Ferry is an iconic part of New York City's history and future, carrying more than 25.2 million passengers per year on a 5-mile, 25-minute trip, for free, courtesy of about 40,404 trips made annually between Whitehall Street in lower Manhattan to the St. George Ferry Terminal on Staten Island. The system operates eight vessels on the route, from the largest, 5,300-passenger Barberi class vessels (two), down to the smaller 1,100-passenger Austin class vessels (two), with a trio of 4,400-passenger Molinari class vessels; and the 3,000-passenger, 1965-built Kennedy. There are also three 4,500-passenger Ollis class ferries currently under construction, with the first scheduled to be delivered in Autumn 2020.

Helping to ensure the vessels and terminals keep operating 24/7/365 is a workforce of about 650, including 400 vessel personnel; 100 in maintenance covering all trades with the balance in administration and terminal staff.

The Staten Island Ferry is run by the City of New York for one pragmatic reason: to transport Staten Islanders to and from Manhattan. "In the private sector, businesses exist for one purpose: to make a profit … and there's nothing wrong with that," said DeSimone. "Government exists to provide services."

A Time for Change

The October 15, 2003 incident provided a wake-up call for the historic ferry service, and DeSimone and his

"When I started here, [training] was based on mentoring and shadowing. Since then, all of the training, mentoring and shadowing has been standardized. Today we have three mates that do all of the training for new marine employees to ensure that training is as consistent as we can possibly make it."

– James C. DeSimone,
Deputy Commissioner,
Ferry Division, New York City
Department of Transportation,
Staten Island Ferries

crew set about making changes, from the foundation of a new safety management system (SMS) that took nearly 18 months to devise and implement, to a top to bottom review of maritime training and education.

"When I started here, [training] was based on mentoring and shadowing," said DeSimone. "Since then, all of the training, mentoring and shadowing has been standardized. Today we have three mates that do all of the training for new marine employees to ensure that training is as consistent as we can possibly make it."

Standardized training for Captains and Assistant Captains is docking in every slip – from Manhattan to Staten Island to the organization's maintenance piers – on every class of ferry and then signed off on by the captains.

In addition, Staten Island Ferries has worked with Marine Learning Systems on a blended learning program. "John Garvey and I were sitting at a conference presentation given by Murray Goldberg, CEO, Marine Learning Systems, and when he was done John and I looked at each other and said, 'This is exactly what we're looking for,'" resulting in a new blending training platform for new deckhands and mates.

Staten Island Ferries owns and operates its own simulator, with another due to enter service soon, that is geared toward bridge resource management (BRM) and electronic chart display and information system (ECDIS) training. It seeks to maximize its training return by, for example, outfitting the new simulator with the actual equipment that will be featured on the newbuilds. It also sends crew to SUNY Maritime for training as needed, with MITAGS carrying the heavier workload for Staten Island captain and assistant captain training courses in and out of the simulator.

"MITAGS has the Navigation Skills Assessment Program (NSAP), with all of our operating officers participating," said DeSimone. In today's world, before anyone gets moved up to an assistant captain or captain, they must complete the NSAP program in addition to evaluations from other captains and administration.

"When it comes to promoting a captain and assessing their skills, human evaluation is subjective, and some of that's ok," said DeSimone. "But we were looking for a solution that would be as objective as possible." NSAP, combined with human evaluation, provided the solution.

MarTID 2020: Global Maritime Training Survey is Open

The third annual global Maritime Training Insights Database (MarTID) survey is officially open through February 29, 2020.

Take the MarTID 2020 Survey

To facilitate a broader response globally, the MarTID steering group again opted to both shorten the survey and to offer three, targeted versions for these three stakeholders:

- **Vessel Operator survey:** *https://www.surveymonkey.com/r/2020MarTIDOperator*
- **METI survey:** *https://www.surveymonkey.com/r/2020MarTIDMETI*
- **Seafarer survey:** *https://www.surveymonkey.com/r/2020MarTIDSeafarer*

Why is MarTID Important?

This MarTID initiative is the first of its kind in the world. There is broad agreement that roughly 80% of maritime accidents involve human factors causes. As such, vessel operators and maritime training centers are pouring significant resources into creating best practice and innovative training programs. The MarTID database will grow in breadth and depth annually with your participation, shining a light on the training approaches and successes of global vessel operators and training centers. Insightful, hard-to-get information inside the report include global trends in training budgets, average training amount spent per seafarer and trends in training technologies and training models.

What's in it for me?

As was the case in the past two surveys, the 2020 survey will be followed by a series of publicly-available reports, broadly published. These reports will provide both high-level and deep-dive information covering both broad trends as well as deep coverage of the 2020 special topic. Although MarTID was founded and run by the three partner organizations, it requires community involvement to succeed. Your participation, approximately 30 minutes of your time, helps to broaden the depth of information.

- ***Vessel owner/operators will have a means to benchmark their own training initiatives.***
- ***Maritime training institutions will be able to better gauge future needs.***
- ***Seafarers will potentially have a clearer picture of evolving skills requirements.***

What is MarTID?

MarTID is a non-commercial, joint initiative of the World Maritime University, Marine Learning Systems and New Wave Media. Its core principles include ethical integrity, objectivity and confidentiality. It was launched in 2018 with the completion of the inaugural survey and publication of the 2018 Training Practices Report, which can be found, along with the 2019 report, at www.MarTID.org.

Featured Newbuilds: Hines Furlong Line

By Eric Haun

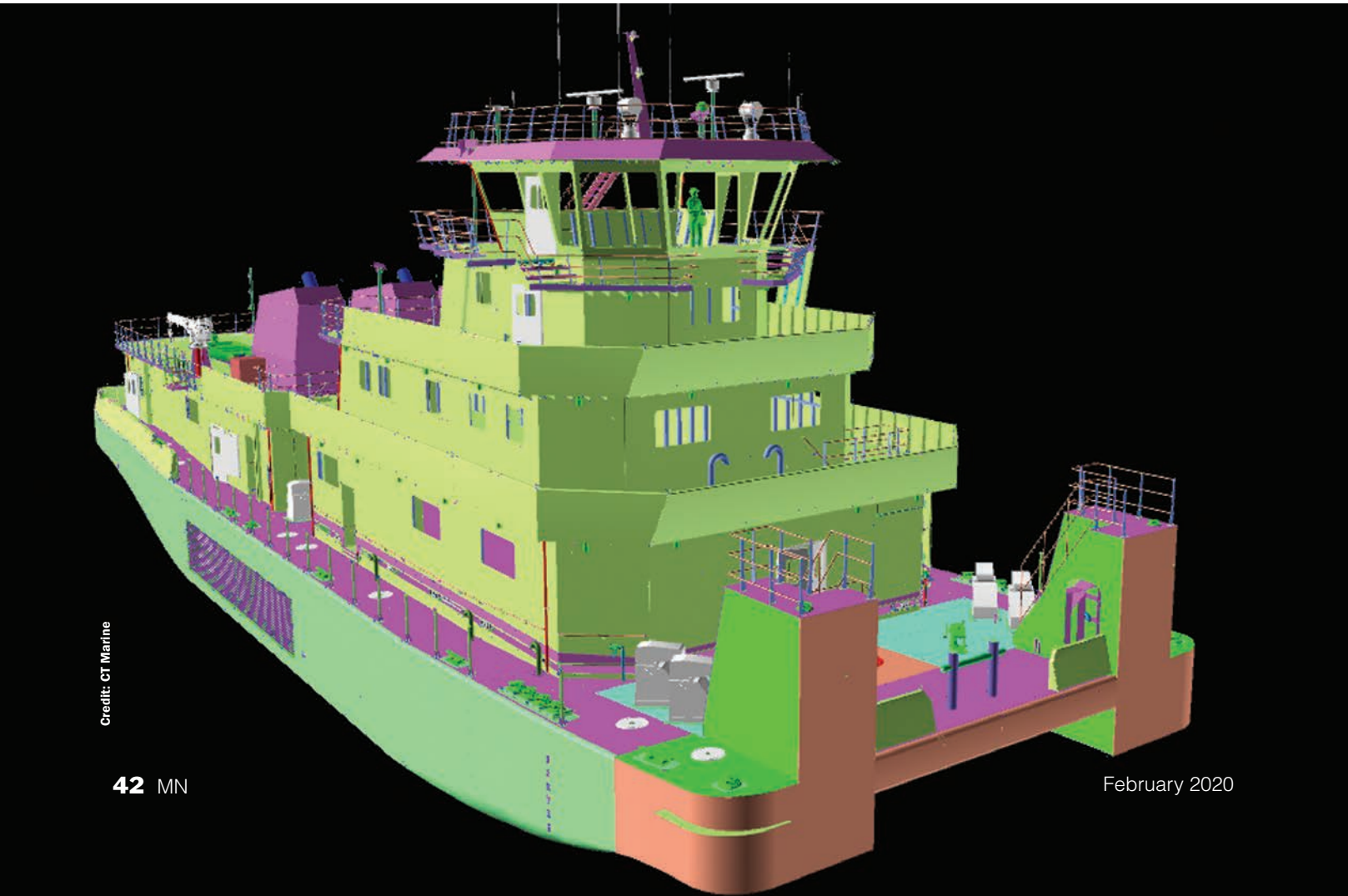
Hines Furlong Line currently has a trio of identical 6,000-horsepower towboats on order at C&C Marine & Repair in Belle Chasse, La.

The timing is right to order the high-power newbuilds, said Kent Furlong, president and founder of Hines Furlong Line (HFL), citing the long-term implications of Subchapter M and the industry's aging higher horsepower line haul fleet as key drivers behind the decision. "Many of the high-horsepower vessels in the HFL fleet are among the oldest," he said. "And many of the 6,000-horsepower vessels on the market are decades old, and not many have been ordered in the last 30 years."

In addition, "My age and desire for HFL vessels to ply the inland waterways for many years to come also drove the decision," Furlong said. "These high horsepower boats, if designed and built right, and properly maintained over their life, are 75+ year assets."

But the main driver to order the vessels now, Furlong said, has to do with engine tier ratings.

The CT Marine-designed HFL 6000 newbuilds each fea-



Credit: CT Marine

ture three Tier III Cummins QSK60 main engines, turned down to 1,600 revolutions per minute, at 2,000-horsepower each for longevity purposes, Furlong said.

Each newbuild will be equipped with three generators for redundancy.

"CT Marine strives to innovate on every project that leaves our desk," said Christian Townsend, owner and CEO of CT Marine. "The HFL 6000 was born from the dozen AEP and Pine Bluff 6Ks that were built about a decade ago. We started with this proven design of more than a million hours and incorporated our latest technologies to the project. Included is our patented Twin-Diff steering system and CT28sl Kort Nozzle, which is the second iteration of our Line Haul Nozzle."

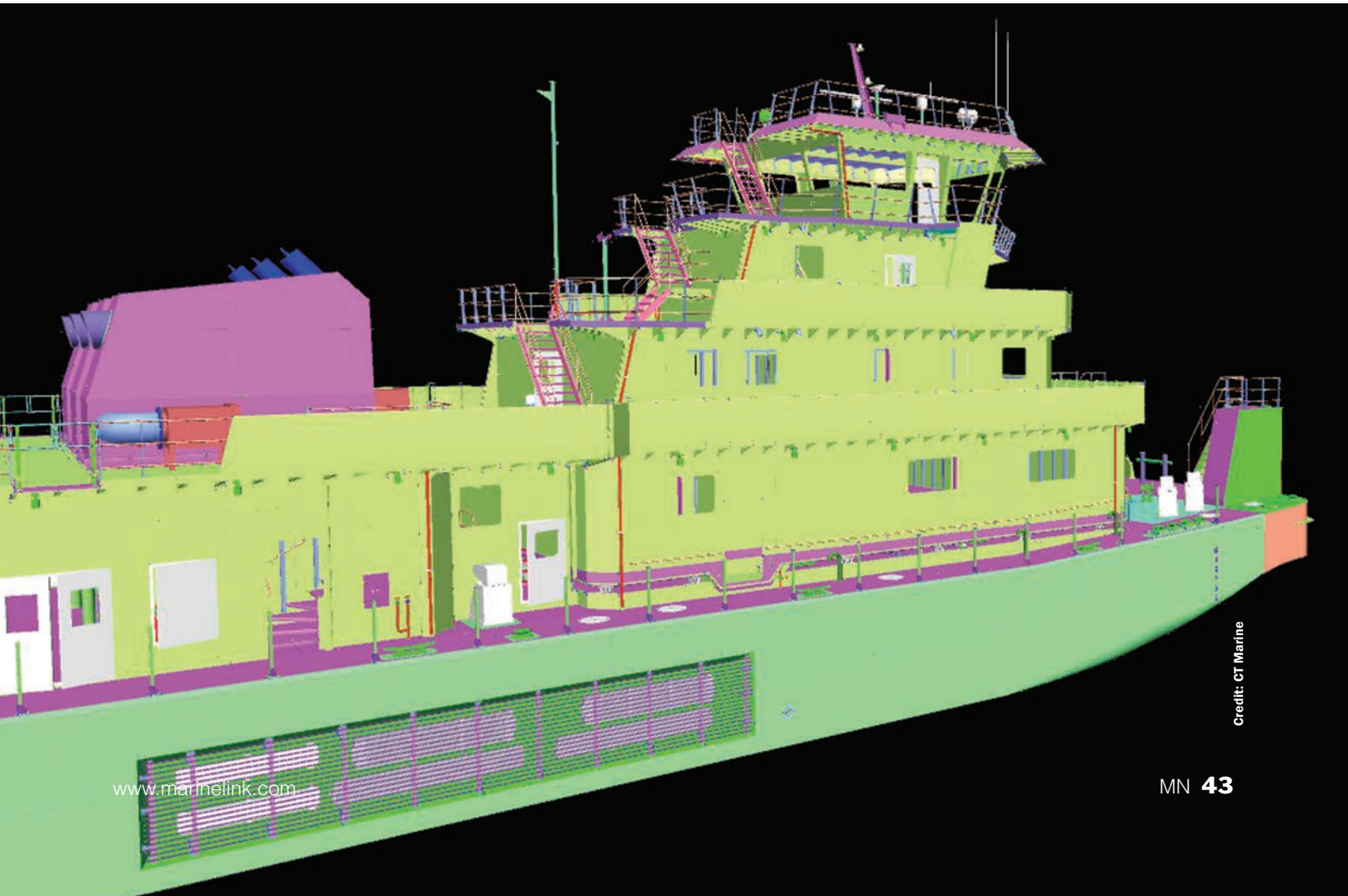
Each vessel will be outfitted with triple screw, 100-inch wheels that will be interchangeable with two of HFL's late model 4,000-horsepower boats, longer, ST Louis Ship type kort nozzles.

The towboats will be equipped with three REINTJES WAF 1173 reverse reduction gearboxes at 7.429:1 reduction, configured with internal hydraulic multidisc shaft brakes and supplied by Karl Senner, LLC, whose President, Karl Senner, said the gearboxes are designed with offsets to best accommodate the main machinery space and keep ideal spacing of the three propellers (one vertical offset, one horizontal-left and one horizontal-right offset gearboxes). Karl Senner is also supplying the electronic throttle and gear control system.

Furlong said the vessels will be first in the HFL fleet to be built by C&C Marine, as well as the first to feature double steering rudders behind each wheel (six in total on each vessel), which will improve maneuverability.

Townsend explained, "The Twin-Diff flanking and steering rudders offer tremendous steering advantages over a barn door or flapped rudder and yields nearly the same side thrust as a Z-drive. On a modification, we reduce vibration, save 10-15% in fuel over a single barn door, enable the head of the tow to be brought around without the use of flanking rudders and increase steering forces considerably. We do this utilizing the same pumps and rams as a single rudder system."

"Our latest steering, we feel, is the most important advancement that we have achieved since opening 55 years ago," Townsend said. He noted that CT Marine has been



Credit: CT Marine

testing double steering rudders with Ingram for about two years and now has approximately 100 ordered in 2020.

Furlong said, "We wanted the durability of a conventional vessel with both stellar northbound and southbound performance. At the same time, we fully acknowledge the superior maneuverability that Z-drives offer. With all of this in mind, we are convinced that this conventional, kort nozzled setup with the double steering rudder arrangement gets us the best of both worlds."

"The only Tier III engines we could get were 2,000 horsepower each, forcing us to go with a triple screw design," Furlong continued. "The triple screw arrangement is a blessing in disguise as it adds increased capability and redundancy especially for tank barge trades. These vessels are designed and built to run the lower Mississippi River, but they are set up to work on locking rivers as well."

Asked about any design challenges overcome, Townsend said, "The entire project, as any, is a challenge. It takes very little to throw a large wrench in the works, but with the nearly 25,000 engineering hours that we put into the conceptual, detail and production design, we solved every challenge thrown our way. We feel this to be the most engineered vessel to float the rivers of the U.S."

The first of the three 170' x 50' newbuilds is on track to be delivered by July this year, followed by the second due for handover in December and third in Spring 2021. By the time the trio is delivered, HFL will be running about 20 vessels in its fleet (including a CT Marine-deigned 4,000-horsepower newbuild series under construction at Steiner Shipyard in Bayou La Batre, Ala.).

"These vessels, along with the others we are building, represent a significant capital investment. Moreover, adding brand new, large vessels like this to our fleet make a statement to our existing and future mariners," Furlong said. "Building the boat is just the start of the process. These vessels represent our continued investment in our steersman program and our ability to promote from within the organization and recruit from the outside. Without a professional crew and the right shoreside team towboats are just a hunk of steel."

Build activity is progressing at C&C Marine and Repair.

Credit: C&C Marine and Repair

Eastern Delivers, Launches for E.N. Bisso

Credit: ESG

Eastern Shipbuilding Group, Inc. has delivered the first vessel and launched the second in a series of two 80-foot 5,100-horsepower tugs for Bisso Offshore, LLC, a division of E.N. Bisso & Son, Inc.

C.D. White, handed over on January 8, 2020, and A. Thomas Higgins, launched on January 31, are RAL RApport 2400 Z-drive ship-handling tugs designed by Robert Allan Ltd.

C.D. White and sister vessel M/V A. Thomas Higgins – currently under construction at Eastern's Allanton facility in Panama City, Fla. – have been customized by the designer, builder and owner to provide specific operational features including a high bollard pull forward and aft, enhanced maneuverability and escort performance, better fuel economy, crew comfort, safety under the new USCG Subchapter M requirements and reduced emissions meeting the new EPA Tier 4 emissions regulations, Eastern said.

The C.D. White has completed its bollard pull testing witnessed by the American Bureau of Shipping (ABS) and received its USCG Subchapter M Certificate of Inspection (COI).

Main Engines: Two LA CAT, Caterpillar 3512E Tier 4 EPA/IMO III marine propulsion diesel engines
Main Propulsion: Two Kongsberg/Rolls Royce US205 P20 Z-Drives
Main Generators: Two Kennedy Engines Co. John Deere 4045AFM85 Tier 3 EPA certified Marine Auxiliary Diesel Generator Set, each rated at 99kW @ 1,800 RPM
Firefighting: Counterfire ES-125-400, 1,500 gpm at 100 psi, diesel engine driven and 4" Stang remote controlled fire monitor
Forward Hawser Winch: Markey Machinery, Inc. Model DEPCF-42 HS, Single Drum 40HP, Render/Recovery, Line Tension Display, Electric Escort Hawser Winch
Aft Capstan: Markey Machinery, Inc. CEPB-40 5HP Tow Bitt Capstan
Tow Hook: Washington Chain & Supply 90 Ton SWL tow hook, electric-air remote control, manual or remote release.

Osage Takes Delivery

Master Marine, Inc. has delivered the first of two vessels to Osage Marine Services, Inc. The newbuild has obtained all of its USCG certificates for Subchapter M compliance.

Both vessels in the series are 67' x 28' Entech Designs, LLC., each powered by a pair of Laborde Products, S6R2-Y3MPTAW Mitsubishi 803-horsepower Tier III diesel marine engines to be operated at 1,400 RPM coupled to Twin Disc 5321 gears. Laborde Products, Inc. is also providing electrical power with two Northern Lights M65C13.2S 65KW Tier III electronic controlled generators with RW Fernstrum, Inc. keel coolers throughout. A pair of Sound Propeller Services, Inc. 70" X 48" X 7" 4-blade stainless steel propellers will provide thrust through two J & S Machine Works Inc. 7" ABS Grade 2 propeller shafts with all Thordon Marine Industries Corporation bearings, Thorplas bushings and shaft seals. RIO Controls and Hydraulic, Inc. will be supplying the steering system for the two 7" main and four 7" flanking rudders. Gulf Coast Air & Hydraulics Inc. to provide a pair of Quincy F325 reciprocating air compressors and ventilation fans. Schuyler Maritime, LLC will provide all 18" x 12" rubber fendering around the entire perimeter of the vessel and push knees. Outfitters International will provide a Daiken mini-split heat pump HVAC system in all interior spaces with Blakeney Marine providing all custom woodwork and interior finishes. Donavon Marine to provide the large Bomar aluminum windows and Dales Welding and Fabricators, LLC will supply the aluminum exterior doors. Wintech International, LLC provided a pair of 40-ton deck winches and New World, Inc. will provide all of the electronics and communications. Unlimited Control & Supply, Inc. to supply the alarm system.

Each boat will have 10,400 gallons of fuel, 4,359 gallons of potable water and 9,500 gallons of ballast water along with providing a maximum 7'-9" working draft. Each vessel will have three crew staterooms for six crewman, 1.5 baths and a full galley arrangement.

SLSDC Orders 60' Harbor Tug

The Saint Lawrence Seaway Development Corporation (SLSDC) has placed an order for a newbuild ASD (Z-drive) harbor tug to be delivered by Washburn & Doughty Associates, Inc. of East Boothbay, Maine.

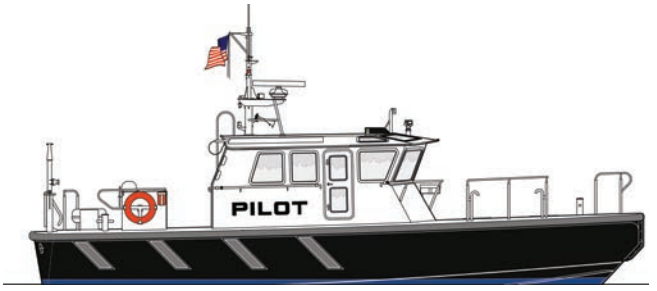
Craig Middlebrook, Deputy Administrator of the SLSDC, said, "This new vessel will be used to carry out a variety of construction and maintenance duties for the US portion of the St. Lawrence Seaway, including routine maintenance of lock gates, maintenance and positioning of aids to navigation, ice management and removal of accumulated ice from lock walls."

The HT-60, the smallest in the Harbor Tug series developed by naval architecture firm Glosten, is slated for delivery in 2021. According to Glosten, the HT-60 is designed to capitalize on the operating advantages afforded by a broad bow form with a semi-raised foc'sle deck and full visibility and winch controls from a single operating station in the pilothouse. To perform its intended work functions in ice, the hull has been ice-strengthened to ABS Ice Class C0 standards. At 60' overall, the tug is right-sized

for maneuvering inside lock chambers, with a wide 28' beam to improve performance in ice and enhance stability for deck crane operations, Glosten said.

The Z-drive units are powered by a pair of EPA Tier 3 diesel engines turning carbon fiber shafts for a combined 1,320 BHP at 1,800 RPM.

Gladding-Hearn Builds for Maryland Pilots



The Association of Maryland Pilots has ordered a new class of pilot boat from Gladding-Hearn Shipbuilding, Duclos Corporation. Called the Baltimore Class after the pilots' operations base at the Port of Baltimore, the vessel's delivery is scheduled for April 2021.

With a length overall of 48.5', beam of 15.6', and draft of 4', the all-aluminum pilot boat features the Ray Hunt Design deep V hull. It will be powered by twin Volvo Penta D13, EPA Tier 3-compliant diesel engines, each delivering 600 horsepower at 1,900 rpm with a top speed of 29 knots. A Humphree interceptor trim-tab control system, with its Automatic Trim Optimization, will be installed at the transom.

The engines will turn five-blade Bruntons NiBrAl propellers via ZF400A gear boxes. The launch will be equipped with a 6kW Northern Lights genset.

The wheelhouse, flush-mounted to the deck amidship, features a center-line helm station, five NorSap shock-mitigating reclining seats, a bag rack, refrigerator and a 16,000 Btu reverse-cycle HVAC unit. A second 12,000 Btu HVAC unit will be installed in the unfinished forecastle, which includes a porta-potty, tool box and storage for safety gear.

Outside of the wheelhouse will be wide heated side decks and hand rails, side and rear doors, and boarding platforms on the roof. A Harken safety rail will be installed on the sides and around the front of the wheelhouse. A control station, along with a powered rescue system for pilot rescue operations, is at the transom.

All American Marine Building Alaska Tour Boats

All American Marine, Inc. (AAM) won a contract to build a pair of quad-jet sister vessels to expand Seward, Alaska-based Major Marine Tours' fleet of wildlife and glacier cruise vessels that visit Kenai Fjords National Park. These 87- by 32-foot Teknicraft Aluminum catamarans, will be certified USCG Subchapter T for 150 passengers.

These semi-displacement catamarans were developed by Nic de Waal of Teknicraft Design in Auckland, New Zealand. The design integrates the signature Teknicraft symmetrical and asymmetrical combined hull shape. The advanced hull design is complemented by Teknicraft's signature integration of a wave piercer positioned between the catamaran sponsons to break up wave action and ensure reduced drag while enhancing passenger comfort. The vessel's design offers all passengers a smooth ride and comfort as the hull provides a cushioned effect when encountering waves. The catamaran is highly stable and has outstanding seakeeping ability, AAM said.

The propulsion package includes quad waterjets, powered by Scania DI16 082 engines, each rated at 788 bhp at 2,100 RPM. Onboard the vessel, passengers are indulged in the spacious comfort of the two-deck cabin, as well as a covered, open-air top deck in addition to a large stadium standing bow area. Interior amenities include high quality Beurteaux seats, maximizing passenger comfort. The entire main deck is wheelchair accessible allowing guests to travel from the bow to the stern.

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RIBCRAFT to Supply US Navy RIBs

Rigid inflatable boats (RIBs) manufacturer RIBCRAFT said it secured a five-year indefinite quantity contract to provide the 11-meter RIBs for the U.S. Navy.

Under the contract, RIBCRAFT will build and deliver the 11-meter Expeditionary Mine Counter Measure Boat. RIBCRAFT has also been providing the U.S. Navy with 7-meter shipboard RIBs since 2014.

A critical component of the Expeditionary Mine Countermeasures Company, the 11-meter RIBs will serve to support explosive ordinance disposal mine counter measure platoons in both shallow and deep water operations. To achieve this, RIBCRAFT will build two configurations for mine counter measure operations; one with an open aft deck for stowage and deployment of two combat rubber raiding craft and the other featuring a launch, recover, and handling system for deployment and retrieval of an unmanned underwater vehicle (UUV) which will have the capability to launch, recover and handle two UUVs using a single davit.

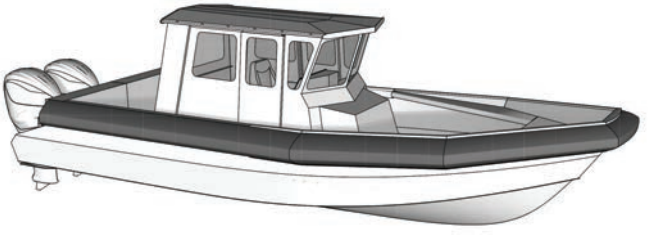
Each vessel, with an overall length of 39', will be equipped with twin Cummins QSB-6.7 473-horsepower diesel engines, twin Hamilton Jet 292 water jets, and Shockwave shock mitigating seating for improved crew comfort in all conditions. A critical operational requirement for these boats is that they must be transportable around the world by land, air or sea and be able to be readily deployed from a variety of U.S. Navy ship classes.

Santa Cruz Pilots Order from Moose Boats

Moose Boats, a boat designer and manufacturer in the San Francisco Bay Area, was awarded a contract from the Santa Cruz Port District for the construction of a Moose Boats M3 Walk Around Cabin 34-foot patrol boat for Santa Cruz Harbor Patrol.

Twin Yamaha 300-horsepower four-stroke outboard engines will power the aluminum monohull, which features a redesigned cabin to offer optimal visibility and ergonomics for a two-person crew with frequent requirement to transit all deck areas. The new walkaround cabin variant features full standing height sized side sliding doors on both the port and starboard sides, forward raked windshields and overhead pilot windows for coming alongside piers and large vessels.

Rescue notches with retractable self-stowing rails will be incorporated into the port and starboard bulwarks adjacent to the cockpit to facilitate boarding and recoveries. Moose Boats' high freeboard bulwarks and deep collar profile provide a dry ride in heavy weather and Santa Cruz Harbor Patrol selected the M3 over its competition for its minimal trim change while transitioning from displacement through to planing speeds. Widely offset 12" x 18" Lenco trim tabs will enable the crew to tune the M3 for optimal ride at any point of sail.



Navigation electronics will consist of a Raymarine multifunction display, radar and Seastar EPS steering will allow Santa Cruz Harbor Patrol to integrate an Optimus 360 maneuvering system in the future. Dual Electroguard impressed current anti-corrosion devices will protect the M3's hull in Santa Cruz Harbor's electrical environment.

The new M3 monohull walkaround cabin, co-developed with Santa Cruz Harbor Patrol, encapsulates the signature profile, ergonomics, fit and finish of the Moose Boats M1 and M2 catamarans in a more compact and nimble platform. With its molded beam of 9.5 feet, the M3 provides a generous walkaround area while still enabling transit between the helm and navigator seats.

Credit: C&C Marine & Repair

Better Blasting:

Send in the Robots

By Eric Haun

When designing and constructing a new blast and paint facility at its yard in Belle Chasse, La., C&C Marine and Repair set out to create a safe, efficient and environmentally friendly worksite that would deliver a high-quality product.

Fifteen months and 131 barges later, C&C Marine has nearly doubled its capacity as the facility and its robotic blasting technology continually meet and exceed expectations, says Tony Cibilich, president and owner of C&C Marine and Repair, who sees a long list of benefits for customers, the environment and the yard itself.

Robotic blasting, although a crucial component of the facility today, wasn't always part of the picture. "Initially, the plan was to build a new indoor blast and paint facility with a state-of-the-art filtration system with the blasting done by hand," Cibilich says.

Sometimes plans change. C&C Marine, while researching blast techniques, discovered Blastman Robotics, a Finnish company that manufactures robots to blast rail cars and containers. "After meeting with Blastman, we

quickly realized there was an opportunity to adapt this technology for the barge industry," Cibilich recalls. "We were determined to create a process of blasting and painting barges that would be better for the environment, safer for our employees and more efficient."

Cibilich says C&C created the conceptual design (patent pending) and worked with Blastman to design and build the site's custom, state-of-the-art mobile blasting unit.

"The robotic blasting process consists of an upper system and a lower system, that can work simultaneously or independently. Although the upper robots employed Blastman's typical blast technology, our system was twice the size of anything Blastman had ever built. The bottom robot became the more challenging system because the technology to blast the bottom of barges was nonexistent."

The facility was designed and built specifically to perform blast and paint jobs for the marine industry, including hopper, tank and deck barges, Cibilich says, but adds, "We can blast virtually anything subject to size constraints. On occasion, the facility has been used to blast structural components and assemblies for C&C projects."

"With all the system modifications, our capacity has nearly doubled," Cibilich says.

The site is currently operated by a staff of 16 with the capacity to operate 24 hours a day. About 90% of the work is repair, but all barges newly constructed by C&C are blasted in the new facility.

Cibilich says the steel grit media used onsite provides a superior profile finish over conventional media, resulting in improved paint adhesion to steel with fewer required paint jobs during the life of the barge.

"The paint facility can perform a full range of marine coatings and applications, including anti-fouling, epoxy, non-skid deck application and any customer-supplied specification and applications," Cibilich says. "And due to our superior blasting and painting processes, C&C is currently in discussions with paint manufacturers to guarantee their coatings for a to-year period."

Being able to work indoors provides a number of benefits – for customers, the environment and the yard itself.

"The indoor facility prevents overspray, contamination and runoff of paint and blast media into adjacent waterways. The facility's state-of-the-art air filtration system collects and encapsulates over 99% of all airborne particulates associated with the blast and paint process. The nontoxic steel shot blast media can be filtered, separated and reused approximately 150 times over in subsequent blasting operations, reducing waste typically sent to landfills."

"Because we are operating in a controlled environment, overspray is minimal. We estimate that we reduce paint consumption by 20%, a cost savings recouped directly by the customer as they typically provide the paint. Additionally, the controlled environment of our fully enclosed facility allows us to spray a single coat over the entire barge as opposed to spraying in sections as is typically done when painting outside."

Another benefit is a safer work environment for employees. "During the blasting process, operators oversee and control operations safely from a segregated air-conditioned control room. Additionally, by eliminating the need to erect scaffolding to perform blasting operations, the dangers associated with manually operating a blasting hose at multiple elevations are eliminated."

And by taking projects indoors and out of the elements, the facility helps to keep C&C Marine's projects running smoothly and on schedule. "The facility is un-

"With all the system modifications, our capacity has nearly doubled."

Tony Cibilich, President and Owner, C&C Marine and Repair

affected by inclement weather," Cibilich says. "We can provide uninterrupted service resulting in faster turnaround times."

The new facility has even helped to increase the volume of work coming through the yard. "The facility has had the unexpected benefit of attracting new customers who are impressed with the overall quality provided by C&C Marine and Repair for both repairs and newbuilds," Cibilich says.

And barges that go through the blast and paint facility regularly receive other services while on site. "Existing customers often request additional repair services," Cibilich says. "C&C Marine and Repair offers customers a wide range of repair services including ISE work, topside repairs, hull damage repairs, bottom replacement, barge coatings and tank liners. Most of our customers understand that by performing all their repair needs at one location, they will save time and it is the most cost-effective approach to managing their fleets."

Cibilich says 2020 capacity is currently 60% booked, but because blasting and painting is scheduled to accommodate the barge schedule, availability exists throughout the year. He notes C&C Marine has the ability to increase capacity to meet customer needs.

Credit: C&C Marine & Repair

Spending More Time at Sea

By Andreas Glud, Group Segment Manager, Marine, Dry Dock, Hempel A/S

Margins are tight for vessels that operate offshore or in coastal waters. Take the global offshore support vessel (OSV) market for example, it looks set to be yet another challenging year which has concerned senior executives preparing for a sixth year of downturn. Many had hoped that 2019 would be the year that marked a turning point in OSV fortunes, but the uptick hasn't materialized, and there is renewed anxiety about what could potentially be the worst market since the 1980s.

It comes as no surprise that costs associated with vessel maintenance or taking them out of cold layup have shown to be much steeper than expected, so it makes sound business sense to keep a vessel in tiptop shape. As with all offshore and coastal vessels it is vital that they spend as much time as possible in the water and actively engaged in operations which naturally translates to owners and operators wanting the minimum maintenance requirements.

Maintaining a vessel can be costly, so owners and operators need solutions that meet strict budget restrictions. Marine coatings can play a significant part here. By investing in the right hull and drydock coatings vessels can be protected with fast turnarounds and without compromising on quality.

Saving time – saving money

Seatruck is the only dedicated freight ferry company operating in the Irish Sea and cannot afford to have a vessel out of service for any length of time. With a fleet of 12 modern roll-on roll-off freight ferries, ranging in capacity from 65-150 unaccompanied trailers, Seatruck knows that time is essential to maximize its operations. When the company needed to bring two of its roll-on roll-off freight

All photos: Hempel

ferries into drydock within two weeks of each other, they needed a very fast turnaround to ensure both vessels could be back in service as quickly as possible.

The two vessels needed repairs to their anti-corrosive topside coatings and worldwide coatings manufacturer Hempel had just the solution comprising Hempadur Easy and Hempadur 47182. The first is a heavy-duty epoxy coating that dries in as little as little as two hours and cures to a hard and tough coating with good resistance to abrasion and sea water. The latter is a combined anti-corrosive primer and tie-coat sealer that eliminates one step in the coating process. This solution was a win-win as it not only offered corrosion protection but returned the vessels to service quickly.

Standing idly by

Many coastal and offshore vessels spend time lying idle and have variable operating patterns which is challenging when trying to maintain a fouling free hull. Technology in hull coatings has advanced and exceled in recent years and there are now solutions that remain effective even during idle periods of up to 120 days and in waters of varying temperatures. One such example is Hempel's Hempaguard X7.

Rix Sea Shuttle provides shuttle services to offshore wind farms and adopted Hempaguard X7 for its Alicat-class support vessel Rix Cheetah. The hull was already coated with an antifouling product, but Rix was not satisfied with its performance so decided to switch to Hempaguard X7.

The unique Hempaguard X7 can be applied on top of an existing hull coating which meant that time and costs in drydock were significantly reduced. This coating solution is one of the most highly developed hull coatings to date and is a market leading solution for offshore vessels thanks to its unrivalled operational flexibility. Not only does it deliver on average six per cent fuels savings across the entire docking interval but also continues to perform if a vessel changes its operating patterns.

Long-term planning gives long-term benefits

Coastal and offshore vessels operate in environments in which oysters, mussels, seaweed and barnacles can all cause macro-fouling. Additionally, their operating patterns can mean that they are more prone to fouling. If the appropriate coatings are carefully selected and applied, the hydrodynamic drag and subsequent fuel expenditure are both reduced significantly, as well as saving time in drydock.

To ensure that a vessel remains in prime condition, Hempel's FROSIO/NACE certified coating advisors can perform a vessel inspection in order to identify potential maintenance requirements and establish a comprehensive maintenance plan. The plan includes maintenance manuals and posters, as well as detailed advice on surface preparation. A full evaluation is also given to determine the best coating for the job.

Naturally, owners and operators should be working with their coatings partner to reduce the amount of time spent in drydock and maximize the time they spend in the water. They can do this by choosing the best coatings solution for their vessel and their business needs. However, this cannot be done by focusing all attention on the cheapest or most readily available products on the market. With the challenging year that lies ahead, OSV and coastal vessel owners and operators should be more selective, and find a solution that will enhance operational efficiency, improve bottom line and protect assets in the long term.


Smith


Inhofe


Christian

Busch Named Tidewater CEO

Tidewater Transportation & Terminals named Todd Busch as president and CEO and member of the board of directors. Busch succeeds Bob Curcio who has retired and served as president and CEO since 2013. Busch has over three decades of senior and executive leadership experience with Crowley Marine Corp., last serving as senior vice president and general manager in Jacksonville, Fla.

Harley Marine is Now Centerline

Following an equity ownership change in July 2019, Harley Marine Services has changed its name to Centerline Logistics Corporation and rebranded its regional operations in parallel to reflect the change.

Smith Joins IRPT

Trade association Inland Rivers, Ports & Terminals, Inc. (IRPT) has welcomed Dede Smith as its new Deputy Director. Smith was previously Director of the Arkansas Waterways Commission for 2.5 years and was Waterways Manager for the Oklahoma Department of Transportation for the last six of her 32 years with ODOT She has served as Vice-Chair on the American Association of State Highway Transportation Official's Counsel on Water Transportation, the Board of Directors for IRPT, the Maritime Transportation Research and Education Center Board with the University of Arkansas, the Executive Committee for the National Waterways Conference; the Governor's Levee Task Force for the State of Arkansas, and Metroplan's Transportation Committee for the City of Little Rock, Ark.

WCI to Honor Sen. Inhofe

U.S. Senator Jim Inhofe (R-Okla.) will receive The Waterway Council's (WCI) 19th Annual Leadership Service Award on February 13, on Capitol Hill. Senator Inhofe is Chairman of the Senate Armed Services Committee, and a senior member of the Senate Committee on Environment and Public Works (EPW). He is a committed supporter of infrastructure and the inland waterways.

"Waterways Council is honored to have the opportunity to recognize Senator Inhofe for his leadership and commitment to America's inland waterways and its lock and dam infrastructure," said Michael J. Toohey, President/CEO of Waterways Council, Inc. "WCI's Leadership Service has long lauded America's inland waterways and port champions, and Senator Inhofe is so deserving of our recognition this year."

Propeller Club Honors Christian

The Propeller Club of the U.S. Port of New Orleans honored Port of New Orleans (Port NOLA) President and CEO, Brandy Christian, as its 2019 Maritime Person of the Year at its 86th Annual Maritime Person of the Year Gala on January 29. Christian is the first woman ever to be honored with this recognition.

"Brandy Christian is well deserving of this honor as the Propeller Club Maritime Person of the Year," said William J. Baraldi, committee chairman for the Maritime Person of the Year, and the ex-officio of the Propeller Club of the U.S. Port of New Orleans. "She was selected for her foresight, proactive leadership, and focus on results in bringing the Port of New Orleans into the 21st century and the future."

AMP Names New Officers

Michael Roberts, a senior vice president at Crowley Maritime Corp, has been elected as president of the American Maritime Partnership (AMP). Roberts has represented Crowley on govern-


Crowley Maritime Corp.

Andreini van Gundy Sesnon


Van Dijk


Engelmann


Dunn

ment matters since first joining the company's DC office in 1991. He has more than 30 years' experience in Washington, both in-house and with top DC law and lobbying firms. Outgoing AMP president Matt Woodruff of Kirby Corporation completed his two-year term as president, and will serve going forward as vice president Ku'u Park of the Matson Navigation Company and Matthew Paxton of the Shipbuilders Council of America will continue in their roles as AMP treasurer and secretary, respectively. Elected officers will hold their positions for a two-year term.

OMSA Adds Board of Directors

The Offshore Marine Service Association (OMSA) announced the nominated slate of its Board of Directors for 2020 – 2021, led by incoming Chairman, Minor "Tony" Cheramie, III and the following new Directors: Ashton Laborde, President, Laborde Marine; Garrett Rice, CFO, Master Boat Builders, Inc.; Caitlin Sause, Vice President, Sause Bros. Ocean Towing Co., Inc.; and Karl Senner, President, Karl Senner, LLC. The slate of nominations will be considered for confirmation by OMSA's membership at the organization's upcoming Spring Conference.

Crowley Realigns Its Marine Services Group

Crowley Maritime Corp. announced it has realigned its marine services organization and introduced new leadership. Crowley Marine Services, part of the company's shipping arm, will now be comprised of three segments: offshore services, ship assist and tanker escort and engineering services. Jeff Andreini, Porter Sesnon and Coulston "Cole" van Gundy have been appointed to top leadership positions in each of these units respectively.

Svitzer Appoints Americas MD

Maersk's towage operator arm Svitzer has appointed Arjen Van Dijk as its new Regional Managing Director (MD) for the Americas region, taking over from Marc Niederer, who has decided to step down. Van Dijk joined Svitzer in July 2019 as regional CCO.

Torqeedo Hires Sales VP

Torqeedo appointed Jochen Engelmann as vice-president sales for Europe, the Middle East and Africa (EMEA), effective January 1. Engelmann comes to Torqeedo from Volvo Penta, where he was head of sales, central Europe for the industrial engine division. He previously worked in the engine development department at Stihl as a technical project manager.

Harvey Gulf Hires Dunn

Harvey Gulf International Marine hired John Dunn as Vice President of Subsea Vessel Operations. Dunn, formerly of Oceaneering, has been hired as a member of Harvey Gulf's executive management team to assemble and manage Harvey Gulf's subsea vessels, team and operations. He was previously the director of operations at Meridian Ocean Services. He is also an unlimited USCG chief engineer and worked for Chevron Shipping's tanker and FPSO fleets.

Mirdha Named TWG President

Tulsa Winch Group, a Dover company, has appointed Arjun Mirdha as President. He was most recently Chief Commercial Officer for the Genie brand, Terex Corporation.

Matson Promotes Three

Matson announced the promotion of three executives to the company's senior leadership team. Branton "Bal" Dreyfus, Vice President, Alaska, has been promoted to Senior Vice Presi-


Mirdha


Dreyfus


Sullivan


Kinney

Matson


Lehtovaara


Unger

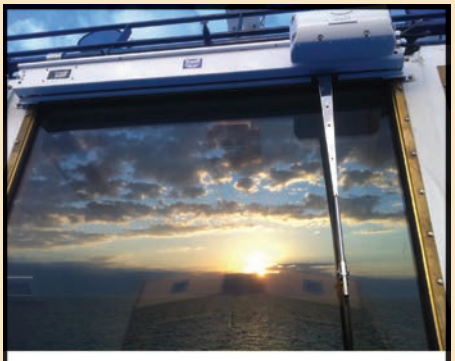
dent, Alaska. Capt. John "Jack" Sullivan, Vice President, Vessel Operations and Engineering, has been promoted to Senior Vice President, Vessel Operations and Engineering. Richard "Rich" Kinney, Vice President, West Coast Terminals and Purchasing, has been promoted to Senior Vice President, Network Operations.

Lehtovara Named ONE SEA Chairman

ONE SEA, the maritime autonomy industry alliance, has appointed Capt Eero Lehtovaara as its new Chairman. Eero, a Master Mariner and Associate Fellow of the Nautical Institute, is Head of Regulatory & Public Affairs at ABB Marine & Ports.

Unger to Head Britannia NY Branch

Britannia P&I has established a new exclusive North American correspondent, B Americas P&I, to be based in New York. B Americas P&I will be headed by Michael Unger, a maritime lawyer with extensive litigation and arbitration experience, who has been known to the Club for many years. Further recruitment is underway, with the office to be operational by the beginning of April.



In-Mar Solutions: Wynn Marine Type C & Type D, Heavy Duty Straight Line Wipers

Wynn Type C (internal motor) and Type D (external motor) Straight Line Wipers offer the most advanced design of linear action window wiping systems for marine and other specialized applications. Optimum window coverage can be achieved and enhanced by utilizing a twin-bladed or dual-arm/blade design.

www.inmarsolutions.com

EVATS

EVATS (Emergency Vessel Attachment & Towing System), sold by Samson, was developed in response to a request from the Alaska Maritime Prevention & Response Network, by Glosten and with technical support by Samson. Deliverable from a towing vessel or helicopter, it is designed to make the towing connection to a disabled vessel at sea safer and more efficient. Since most vessels aren't outfitted with dedicated strongpoints and emergency towing arrangements, the EVATS system is designed to have near-universal compatibility, accounting for known differences in vessels. The primary strength members, high-performance synthetic rope designed by Samson, allow for easy handling, quick deployment and low system weight.

Link-It

Link-It is a button-knot soft shackle made from Samson's Amsteel-Blue, providing an easy to use, lightweight connection method. Replacing steel shackle or other connection types, Link-It will not corrode or rust, has short connection lengths, floats, and can even be used as an overload indicator. Link-It comes with attached tag and certificate of conformity. Link-It is available in strengths ranging from 37t to 610t and in 1 and 2 loop configurations for management of knot diameter. Applications include pendant/mainline connection, pendant eye handle, messenger/pendant connection, emergency bridle connection and backer/mainline connection.

Endura 12

Endura 12 from Teufelbrger is high strength, low stretch and has low creep. It utilizes the latest ultra high molecular weight polyethylene fiber in a 12-strand construction. This high-tech fiber and construction provide an extremely high strength, lightweight rope that is non-rotational and easily spliced. Endura 12 is suited for wire rope replacement applications where size, strength and stretch are the main design considerations. All Endura 12 ropes come with Teufelbrger's proprietary abrasion resistant coating that is specially formulated to yield higher strength and more durable and water-resistant lines.

Electric Wire Rope Hoists

Harrington Hoists released two new capacities, 7.5 Ton and 10 Ton, in its RY Electric Wire Rope hoist line. The ultra-low headroom trolley hoists have an H4 duty rating for high demand applications and standard configurations are certified and listed to UL 1340 "Standard for Hoists" and CSA 22.2 No. 33. These hoists come standard with dual speed variable frequency drive (VFD) control on both hoist and trolley for optimum speed adjustability. Also standard is a no load high speed function that allows hoist operation at 1.5 times the standard high speed with a load less than 25% of rated capacity.

Two-color SOS Distress Light

The U.S. Coast Guard has approved the use of Sirius Signal's flagship electronic visual distress signal device (eVDSD) as a nighttime distress signal. The C-1002 two-color distress light is approved for carriage, and legally replaces the need to carry marine pyrotechnic flares and includes features that enhance its functionality to the level of an alert and notification system. The Bluetooth-enabled C-1002 flashes the internationally known SOS distress signal using a two-color plus infrared SOS flash pattern (red/orange and cyan) that has been found more effective against shoreline background light clutter, according to studies conducted by the U.S. Coast Guard R&D Center.

Plasma Cutter

Thermal Dynamics launched its Cutmaster 40 manual plasma cutting system, successor of the Cutmaster 42. The power source weighs 22 lbs., has the flexibility to use 115-230V primary power and delivers a rated output of 40 amps at 40% duty-cycle or better. On 230V primary, it delivers a recommended cut and pierce capacity on 1/2-in. steel and can sever steel up to 1 in. On 115V primary, it delivers a recommended cut and pierce on 3/8-in. steel. To use 115V, simply connect the supplied 115V adapter to the hardwired 230V plug.

Exhaust Gas Analyzer

Bacharach introduced the Monoxor XR (extended range) handheld exhaust gas analyzer for measuring carbon monoxide (CO) in ambient air or directly from the exhaust pipe of forklifts, floor burnishers or other equipment burning propane, gasoline, diesel or compressed natural gas. The Monoxor XR XR provides visual and audible alarming for instant alerting of personnel to dangerous CO levels. It can also be used for engine tuning and diagnostics, resulting in improved equipment efficiency and fuel savings. Bacharach's Combustion mobile app allows the user to quickly and easily create and send customizable emissions reports from smartphones or tablets.

3D Printed Spares

Online e-procurement portal for marine spares and equipment ShipParts.com is investigating how additive manufacturing (3D printing) could revolutionize the way in which spare parts are procured and delivered. The company says digitalizing procurement processes can cut order processing time for spare parts by 80%, and then parts can be produced on demand, close to demand location, bypassing time-consuming logistics, storage, shipping and customs procedures.

Reciprocating Saw Blades

The L.S. Starrett Company launched its new series of "3X Power" Bi-Metal Reciprocating Saw Blades featuring teeth that cut more efficiently, enabling users to make up to three times the number of cuts than conventional blades, and are engineered for use on corded and cordless saws. Starrett 3X Power blades are also highly resistant to breakage and feature a reinforced shank. The Starrett line of 3X Power Bi-Metal Recip Blades includes blades for cutting wood, metal, multiple materials and heavy-duty cutting.

Thread Sealant Applicator

Thread sealants, lubricants and rust inhibitors manufacturer Fluoramics introduced a new application tip for its 100-gram tube of Formula-8 thread sealant, enabling easier one-hand application. The extended tip also makes it easy to access hard-to reach areas. Suited for use in oxygen and fuel systems, hydraulic cylinders, and natural gas applications, Formula-8 is a shear-sensitive paste that sheets out into PTFE strings when torqued and delivers exceptional sealing performance on all threads sizes. It maintains stability in environments of -400° F to +500° F, and is solvent-free and non-hazardous.

Ferry – Emergency Response – Chile

In July 2019, Resolve mobilized to safely stabilize, remove hazardous materials, hydrocarbons, cargo and dewater a stranded ferry in Puerto Laguna, Chile. Working with the owner and the Chilean Maritime Authority, Resolve prepared and executed plans for vessel salvage, hazardous material removal, water removal and treatment. Resolve's recovery teams worked in association with local agency and logistics; tug and barge; waste management; and diving contractors. Operations included casualty surveys; extensive underwater welding; removal treatment, and disposal of hazardous material, fuel, and floodwater; cargo removal; and towage to a foreign destination for disposal.

Marine News

	Edition	Market	Technical	Product	Reports	Event Distribution
JANUARY (Ad Close: Dec 16)	Passenger Vessels & Ferries	Training & Education	Batteries & Electric Propulsion	Water Treatment	SPECIAL REPORT: Ferry Report: state-of-the-industry REGIONAL FOCUS: U.S. Gulf Coast	PVA Maritrends: [Feb 3-6,Tampa, FL]
FEBRUARY (Ad Close: Jan 17)	Pushboats,Tugs & Assist Vessels	ATB Report	Hull, Deck & Tank Coatings	Cordage & Wire Rope	Special Supplement **Q1 Inland Waterways Market Report**	NACE Corrosion [Mar 15-19, Houston, TX]
MARCH (Ad Close: Feb 14)	Workboat Conversion & Repair	Green Fuels & Lubricants	Deck Machinery	Pumps, Pipe & Valves	SPECIAL REPORT: Workboat Engines and Emissions Compliance Technology	CMA Shipping: [Mar 31 - Apr 2 Stamford, CT] Clean Waterways: [Apr 7-9, Indianapolis, IN]
APRIL (Ad Close: Mar 16)	Autonomous Workboats	Shipbuilding Report	Desalination Systems	Radars/Electronics	SPECIAL REPORT: Fireboats & Spill Response technology	AWO Spring Meeting: [Apr 21-23, Washington, DC]
MAY (Ad Close: Apr 16)	Inland Waterways	Barges	Barge Material Handling Equipment	Thrusters & Z-Drive	Special Supplement **Q2 Inland Waterways Market Report**	OTC: [May 4-7, Houston, TX] IMX: [May 18-20, St. Louis, MO]
JUNE (Ad Close: May 15)	Combat & Patrol Craft Annual	Multi-Mission Workboats	Outboard Engines	Stabilizers & Trim Control	SPECIAL REPORT: Workboat Comms	Seawork: [Jun 9-11, Southampton, UK] MACC: [July 15-16, Baltimore, MD]
JULY (Ad Close: Jun 15)	Propulsion Technology	Workboat Engines	Hybrid Drives	Lubricants & Fuels	SPECIAL REPORT: Training & Retention	
AUGUST (Ad Close: Jul 17)	MN 100 Market Leaders	Workboat Builders	Marine Lighting	HVAC & Ventilation	Special Supplement **Q3 Inland Waterways Market Report**	SMM [Sep 8-11, Hamburg, Germany]
SEPTEMBER (Ad Close: Aug 14)	Offshore Annual	Workboat Conversions	Naval Architecture	Dynamic Positioning	SPECIAL REPORT: Offshore Wind REGIONAL FOCUS: U.S. East Coast	SNAME [Sep 29- Oct 3, Houston, TX]
OCTOBER (Ad Close: Sep 15)	Shipbuilding & Repair	Interior Outfitting	Coatings & Corrosion	Shafts, Seals & Bearings	SPECIAL REPORT: Filtration & Water Treatment	SHIPPINGInsight: [Oct 15-17, Stamford, CT] Commercial Marine EXPO: [Oct 23-24, Providence, RI]
NOVEMBER (Ad Close: Oct 16)	Workboat Annual	Outfitting Today's Workboat	Workboat Propulsion	Deck Machinery Winches and Cranes	Special Supplement **Q4 Inland Waterways Market Report**	Clean Gulf: [Oct 27-31, San Antonio, TX] Workboat Show: [Dec 2-4, New Orleans, LA]
DECEMBER (Ad Close: Nov 16)	Innovative Boats & Products	RIB's from Fire & Patrol to Escort Craft & Offshore Wind Support	Simulation & Training	Fire & Safety	SPECIAL REPORT: Top 10 Stories for 2020	

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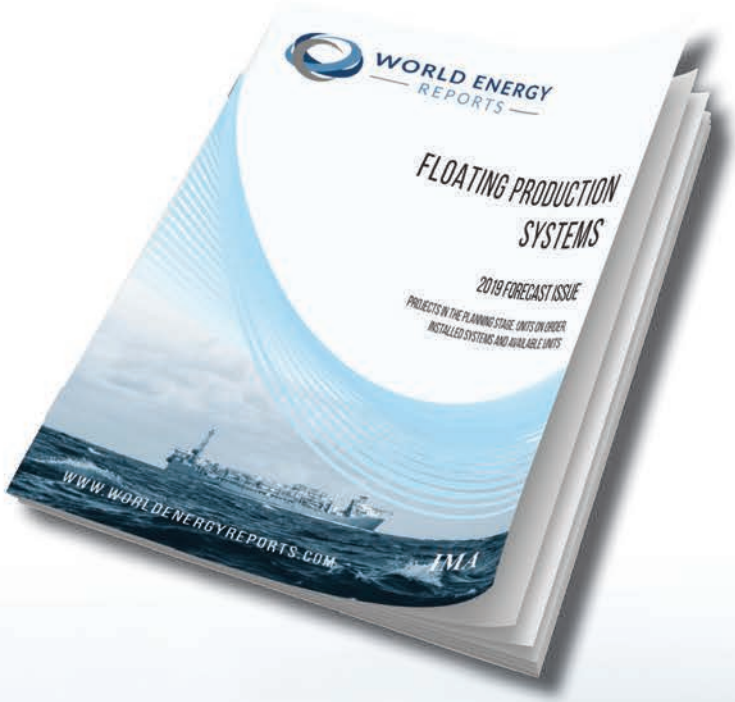

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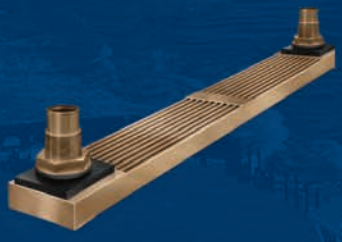

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