

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

Volume 37 • Number 9

Marine

News

SEPTEMBER 2026

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A portrait of Stephen M. Carmel, a middle-aged man with grey hair and a beard, wearing a dark suit, light blue shirt, and patterned blue tie. He is looking directly at the camera. An American flag is visible in the background on the left side.

Stephen M. Carmel

MarAd Administrator says
***"This is a Different
Maritime Revival"***

Fraser Shipyards

Building Now for What Comes Next

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Obituary: Guido Perla

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David Schauer | Fraser Shipyard



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On the Cover

All roads to the much-discussed U.S. maritime revival run to and through the U.S. Maritime Administration, and **Stephen M. Carmel** and his MarAd team are aiming to ensure that this maritime revival has long legs.

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Editor's Note



Greg Trauthwein, Editor,
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Since starting in the maritime industry in 1992 as managing editor of *Maritime Reporter & Engineering News*, I've interviewed more than my fair share of maritime industry leadership globally, and the best interviews are always face-to-face. So while it took longer than I liked to have my first interview with **Stephen Carmel, Administrator, U.S. Maritime Administration**, I respected the fact that he preferred the in-person option. While attending the **American Great Lakes Port Association's** annual meeting in Chicago in late July, I was able to sequester Carmel for more than an hour for a far-ranging conversation and interview on all matters maritime. Trust when I say, he did not disappoint. Previous to our meet in Chicago, I did not know Carmel. But when he was

nominated and confirmed as Administrator, the consensus from some of my most trusted industry insiders was: *"He's the right man at the right time for this job."*

Our interview with Carmel in this edition of *Marine News* starts on page 22, but this is the tip of the iceberg with much more to come across our various channels. Some of his choice insights:

- **On competing with China:** "We cannot out-China the Chinese. We can't beat the Chinese by being a cheaper version of China. That's not how we're going to win. We're going to win by changing the terms of competition ... We have a peer competitor that is focused on dominating the maritime space."
- **On nuclear propulsion:** "SMR-powered nuclear technology will transform trade and shipping every bit as much — or more — than the container did."
- **On the importance of U.S. Inland waterways and the Great Lakes:** The Great Lakes, the inland rivers, the ports, coastal waterways and the Arctic are all components of a single transportation and national-security network. Nowhere is the weakness of that network more evident than on America's inland waterways, which he called "the absolute arteries of American commerce. We need some serious investment in the inland arteries that sustain the lifeblood of America: our ports, locks and inland waterways system. It does no good at all to build out a robust seacoast if we've let the interior of the country fall apart."
- **On America's biggest weakness [in a successful maritime revival]:** "Our biggest weakness — our biggest challenge — is our own attitude. We can revitalize our shipbuilding industry. We can revitalize our maritime industry. But we're not going to get there if we abandon the fight before we take the field."

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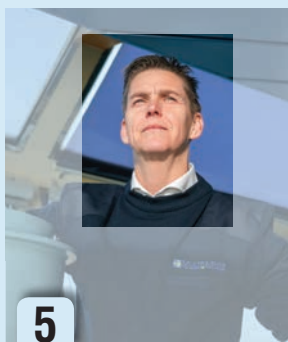
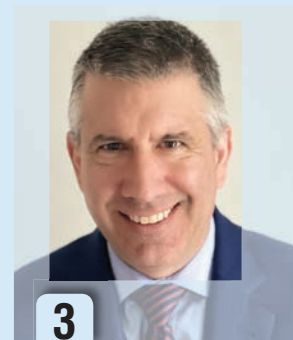
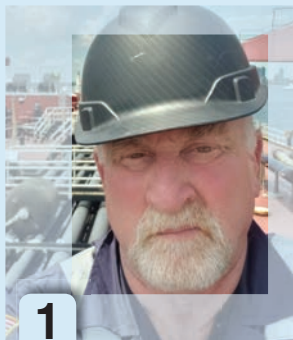
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JONES ACT FLEET FINANCING

*As political chatter centers on rebuilding the U.S. maritime industry, **Brett Hewitt, Executive Director, Marine Finance, Wells Fargo Equipment Finance**, offers a lender's-eye view of a market where vessels are expensive, assets can remain productive for decades and the quality of the operator can be every bit as important as the collateral.*

For lenders, one of the Jones Act market's biggest attractions is remarkably straightforward: boats last a long time. "The collateral has a long useful life," Hewitt said, noting that vessels are documented with the U.S. Coast Guard and subject to inspection, maintenance and regularly scheduled drydockings. "We know that collateral is going to be there to support our deals as we structure them."

The Jones Act itself provides another layer of comfort. The law creates a defined domestic market protected from foreign competition, something Hewitt says can contribute to relatively consistent cash flows for established operators. But collateral is only one piece of the credit puzzle.

Whether Wells Fargo is providing conventional term debt or bareboat charter financing — where the bank owns the vessel, takes the depreciation and charts the asset — Hewitt said cash flow remains paramount. Beyond that, Wells Fargo digs deeply into an operator's safety record, reputation, management team, market position and customer relationships.

Safety, in particular, is hardly a box-checking exercise.

"If you make a mistake, you're at fault, there's a major casualty or significant environmental event, that could take the whole house down," Hewitt said.

Hence, lenders like companies with proven management, pricing power, meaningful market share and long-standing customer relationships. In the marine business, history matters.

Inflation Changes the Math

That history becomes particularly important when the price of the asset being financed keeps climbing.

Shipyard labor, steel, engines, components and tariffs

have driven newbuild prices significantly higher. Hewitt said the important question for a lender is whether those elevated prices represent a temporary spike or a durable shift in vessel values.

After more than six years of inflationary pressure, Wells Fargo increasingly views higher newbuild costs as a structural reality. For familiar assets — hopper barges, ship-assist tugs and dredges, for example — the bank can rely upon decades of experience and established secondary markets. That can translate into surprisingly flexible financing.

"We might like to see 20% down, maybe 10%, maybe 100% financing for the right credits," Hewitt said.

Change the asset to an all-electric tug, wind turbine installation vessel or service operation vessel, however, and the equation changes. With fewer comparable assets and less historical evidence of residual value, Wells Fargo might require 25% to 50% equity.

Simply put: the less the lender knows about the collateral, the more skin it wants the owner to have in the game. That philosophy extends directly into maritime decarbonization.

Diesel-electric propulsion has now accumulated enough operating history to provide lenders with some comfort. Batteries, hydrogen fuel cells, ammonia and other emerging solutions bring greater uncertainty.

Hewitt worries not simply about whether a technology works, but whether today's cutting-edge propulsion system might become tomorrow's Betamax.

"If we have to take something that all of a sudden is the three-year-old model that no one else wants anymore," Hewitt said, liquidating that asset becomes a very different proposition. The answer can be more owner equity, less lender residual-value exposure and shorter financing terms.



That does not mean Wells Fargo is unwilling to finance new technology. Quite the opposite. Hewitt said the bank wants to become involved early and understand why the technology fits an operator's fleet, how it will be deployed and, importantly, whether customers are willing to pay for it.

Follow the Cargo

No discussion of vessel finance gets very far without eventually arriving at cargo.

The inland barge market illustrates why. Commodity cycles can swing sharply from one year to another, but Hewitt said Wells Fargo tries to smooth those fluctuations and evaluate operators over longer periods.

On the dry side, grain remains cyclical, influenced by harvests, global competition and commodity prices. Hewitt particularly likes vertically integrated businesses that control more of the transportation chain and operators with customer relationships stretching 20, 30 or even 50 years.

Tank barges present a somewhat different picture. Hewitt believes high construction prices have actually helped the sector by discouraging speculative overbuilding. "It feels like a good supply-demand balance as of today," he said.

Ship-assist tugs are another bright spot. Large operators still have 40-, 50- and even 60-year-old vessels that eventually must be replaced, while larger ships calling at U.S. ports require increasingly powerful, sophisticated tugs. LNG export facilities are adding another demand driver, with Hewitt estimating that an export terminal will typically support two to four purpose-built tugs.

With Fuel, Read the Fine Print

The dramatic increase in diesel prices during 2026 has also reminded lenders that revenue alone does not service debt. Margins do. Fuel exposure can vary radically according to contract structure. A dredging contractor that bid a two-year fixed-price U.S. Army Corps of Engineers job based on significantly lower fuel assumptions can watch its profit disappear as diesel rises.

Conversely, short-duration contracts allow operators to regularly reset fuel assumptions. And some ship-assist contracts include fuel surcharges that effectively pass higher costs through to customers.

Wells Fargo is therefore scrutinizing the cost side of borrowers' income statements to determine whether rising fuel prices are eroding — or, in certain cases, actually enhancing — profitability. It is another reminder that marine lending is about considerably more than calculating loan-to-value ratios.

The potentially larger story, thought, is what comes next.

Hewitt sees unprecedented political and industry enthusiasm surrounding revitalization of U.S. maritime and shipbuilding. Foreign investment and expertise flowing into American shipyards could improve productivity, but financing cannot overcome an inadequate business case.

"The optimism, the amount of discussion, the amount of ideas being traded around both in industry and in the political realm is at an all-time high," Hewitt said. "But at some point the talk needs to convert to action."

For large commercial vessels, that means creating durable policy, tax and cargo incentives capable of surviving election cycles. A U.S.-built vessel costing multiples of its foreign-built competitor cannot simply be dropped into the international market and expected to compete economically.

Hewitt believes the answer will require some combination of Jones Act cargo, government-preference cargo, tax policy, grants and other incentives — backed by a strategy measured not in four-year political cycles, rather in decades. For lenders, that long horizon is familiar territory.

Ultimately, financing a Jones Act vessel comes down to a deceptively simple combination: the right asset, operated by the right company, serving a defensible market with sufficient cash flow to support the debt. The vessel may be the collateral, but the business behind it is what makes the deal bankable.

How Digital Training will Attract ‘Crews of the Future’

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As tug operations become more complex, training needs to evolve with them. By combining digital simulation with practical experience and the knowledge of experienced seafarers, tug operators can give the next generation of crews the skills, confidence and judgement they need for the challenges they will face at sea.

By Bianca Pielaat, Operations Director, Multtraship Tug & Salvage

The very best and most highly skilled seafarers hone their craft through years of intense hands-on training that ensures the most important aspects of their jobs – safety, communication and teamwork – are embedded into every moment of their time at sea. This experience brings sound technical knowledge, practical know-how and an understanding of how to act during times of uncertainty and unexpected moments.

Yet with changing times comes changing training practices. The maritime industry is increasingly turning to new technologies to enhance and improve the operational capabilities of their crews in safe and secure environments that allow for mistakes to be made and scenarios to be mapped out.

This approach is vital for an industry facing the wider issue of seafarer recruitment and retention. The most recent Seafarer Workforce Report 2026 from BIMCO and the International Chamber of Shipping (ICS) highlighted that the industry needs up to 114,000 officers by 2030 to operate an expanding global fleet. Those recruits are, more often than not, going to come from younger generations who are more adept and used to technology as part of their day-to-day lives, and are therefore more likely to thrive

from digital training initiatives.

What the industry needs to do now is understand how to effectively combine its traditional sea-going experience with modern digital training procedures that will welcome and inspire the next generation of crews and seafarers, all while keeping those core aspects of their jobs – safety, communication and teamwork – at the centre of their careers.

Tug Vessel Challenges

We are already seeing this scenario play out for crews of tug vessels.

Over the past 20 years, smaller craft have become much more powerful, more complex and more technologically proficient. Today's tug vessels have become increasingly electronic. This has meant the capabilities of the crew have had to change significantly, with many requiring a greater understanding of digital diagnosis, onboard electrical systems and knowing how to fix an issue with a keyboard instead of a spanner.

The operations these vessels undertake have also become more complex. Harbour towage now involves larger and larger vessels, while tugs and specialised craft are be-



Images courtesy Multratus



ing increasingly called upon to support bigger and more unique projects, such as infrastructure project towage and offshore heavy-lift operations. This means teams need as much preparation as they can upfront before engaging in a real-world scenario.

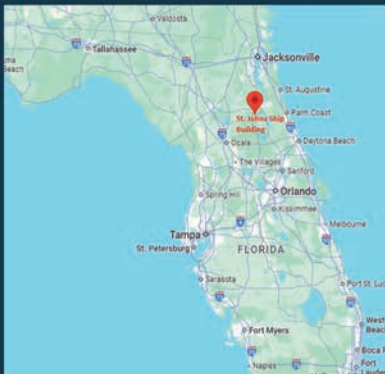
It is because of these two changes that digital simulation training has become a must-have for vessel operators and managers in order to ensure tug crews are sufficiently trained to handle the challenges of modern tug operations. Crucially, they are vital for new recruits and junior seafar-

ers that need to experience the range of complex operations they will undertake throughout their careers, without the risk of damage to their vessel or, most importantly, their crewmates.

Multraship's Digital Simulator

In May 2026, Multraship launched its state-of-the-art tug digital simulator suite at our headquarters in Terneuzen in the Netherlands in collaboration with Wärtsilä. The simulator was built to enable Multraship's crews to

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Insights

Digital Training

train in realistic scenarios that prepare them for complex and high-pressure situations.

One major difference is that this new simulation suite is specifically designed to help tug crews understand the challenges of manoeuvrability. Most vessel simulators are built to train crew for navigational scenarios but modern, powerful tug vessels, operate in confined, shallow and fast-flowing waters. This means tug crews need to be able to adapt to dynamic weather changes and sea conditions, while keeping their vessels under control and safe throughout.

The feedback to Multraship's simulator since launch has been incredibly positive, particularly from our younger crew members. Many have adapted quickly to an immersive and mixed-reality environment that enhances their decision-making skills, builds their confidence in handling realistic scenarios and gives new recruits the opportunity to experience some of our industry's most challenging situations that they may

not experience first-hand until years into their career.

Crucially, Multraship's digital simulator training initiative gives younger recruits a safe and secure space to learn from mistakes without the fear of real-life consequences. Teams work on the simulator together and, after a scenario has played out, our trainers – many of whom are experienced tug captains in their own right – create a safe environment for discussion. They are also encouraged to challenge decisions, learn from experienced seafarers and think more critically. All crew members are asked what went wrong, what they would do differently, and how will this change their next operation. These human discussions are just as important as the technology itself.

That is why this approach has led to many of Multraship's crew members, both new and experienced, choosing to voluntarily undertake more training outside of their mandated requirements. Not only do they understand how simulation training can further their careers much quicker than traditional at-sea training, but they thrive in a digital-first world that puts their skills to the test, builds their confidence and creates greater cohesion between crewmates.

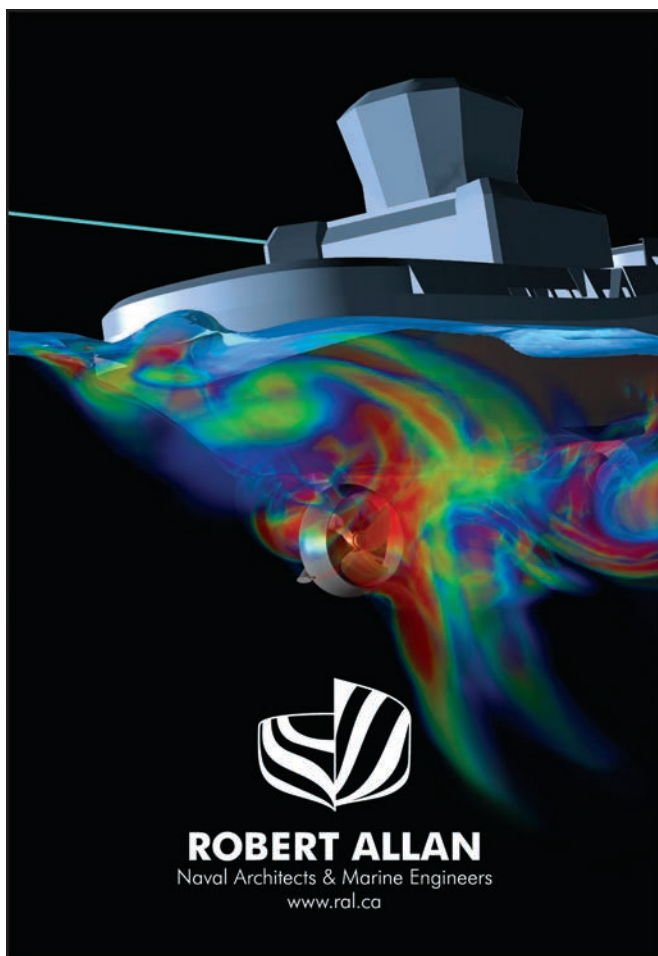
The latest generation of seafarers are always after opportunities. By adopting a digital-first approach to training, many are developing their sea legs quicker, leading to greater retention of high-quality, enthusiastic and dedicated tug crew members built for the future.

Crews of the Future

Of course, we must not underestimate the importance of everyday and practical experience. Translating the skills built on a simulator into a real-world environment is not straightforward. It requires judgement, confidence and leadership to take decisive actions when conditions change or the operation needs to be adapted, and this only comes with real-world experience that can take years to accomplish.

However, by giving younger crew members a head start with technology they are more comfortable using and training environments in which they can thrive, we can better support the recruitment, development and retention of tug crews of the future.

The crews of tomorrow are out there and shipping is going to need them. We need to do our part by creating a modern and effective training environment that gives the next generation the skills and confidence to build long and fulfilling careers and prepare them for every eventual scenario.



The Gulf of America Remains the World's Offshore Innovation Laboratory

For generations, the Gulf of America has served as the proving ground for offshore innovation. Every major chapter in modern offshore energy has depended upon American engineers, geoscientists, mariners, fabricators, regulators, and offshore workers to solve problems many believed were beyond reach.

By Erik Milito, President of National Ocean Industries Association (NOIA)

From the earliest fixed platforms to deepwater production, subsea systems, floating facilities, and today's 20,000 psi reservoirs, the Gulf of America has consistently demonstrated that producing more American energy safely requires constant technological advancement.

The foundation built through decades of offshore energy innovation will support not only the next generation of oil and gas production, but the next generation of offshore industries.

Over the past decade, the offshore energy industry quietly achieved one of its most remarkable engineering milestones: safely unlocking oil and natural gas from reservoirs approaching 20,000 pounds per square inch (20k). Fields once considered commercially unattainable are now pro-

ducing tremendous volumes of U.S. oil supplies, with additional projects advancing toward first production. The ingenuity of our industry consistently continues to impress and build upon the most recent generation of technology to keep the energy flowing. The same is true for 20k systems as the industry has engineered a new generation and class of offshore technologies.

New generations of drillships, well control equipment, subsea trees, manifolds, completion systems, digital monitoring technologies, and containment capabilities all had to be designed, tested, certified, and deployed before the first barrel could be produced. Operators, contractors, manufacturers, and regulators spent years working through new challenges that had not yet been solved at a



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Washington Watch

NOIA

commercial scale.

Each new frontier requires advances in engineering, safety systems, and operational expertise. In meeting those challenges, the industry has expanded both America's energy production and the capabilities of the offshore sector itself.

Innovation is how offshore energy advances. That is why the Gulf of America remains far more than one of the world's most productive offshore basins. It remains one of the world's premier offshore innovation laboratories.

Beyond Traditional Offshore Energy

Importantly, the capabilities developed there rarely remain confined to a single project or even a single industry. They compound over time. The same expertise in offshore geoscience, subsea engineering, marine operations, remote inspection, digital monitoring, and environmental management that supports oil and natural gas production

increasingly provides the foundation for entirely new offshore opportunities.

Carbon capture and storage is an obvious example. Offshore operators are applying decades of experience managing complex reservoirs, drilling wells, monitoring subsurface formations, and safely operating in challenging marine environments to permanent carbon storage projects.

Now, federal policymakers are beginning to recognize just how broad that offshore innovation ecosystem has become.

This summer, the Bureau of Ocean Energy Management (BOEM) initiated the first step toward evaluating offshore critical mineral resources off Virginia, recognizing the potential for America's offshore expertise to support a new strategic industry.

BOEM also announced it is evaluating the Outer Continental Shelf as a potential location for offshore space launch and recovery infrastructure, exploring whether the same offshore engineering capabilities that have supported energy development for decades could help expand America's commercial space capacity and strengthen national security.

Meanwhile, the Marine Minerals Administration and the Nuclear Regulatory Commission recently signed a memorandum of understanding establishing a framework for coordinating potential future offshore nuclear energy projects, another indication that policymakers increasingly view the Outer Continental Shelf as a platform for multiple strategic industries.

Whether or not those efforts ultimately lead to commercial development, they reflect something larger: policymakers increasingly recognize that America's offshore engineering capabilities extend well beyond traditional oil and natural gas production.

An Offshore Industrial Ecosystem Built Over Decades

The vessels, ports, fabrication yards, engineering firms, subsea contractors, environmental specialists, and highly skilled workforce that support today's offshore energy industry represent decades of accumulated expertise. They are not easily replicated, nor were they built overnight. They constitute an industrial ecosystem that has continually adapted to new technical challenges while maintaining some of the highest safety and environmental standards anywhere in the world.

Importantly, none of this diminishes the central role of offshore oil and natural gas - quite the opposite. Oil and



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natural gas remain the foundation of America's offshore economy and will continue to supply reliable, affordable energy for decades to come. The technologies being developed today are helping unlock resources that strengthen U.S. energy security while supporting jobs, investment, and manufacturing across the country.

But history suggests something equally important. The technologies developed to solve one offshore challenge rarely remain confined to that challenge alone. Advances in drilling, subsea engineering, marine operations, digital monitoring, environmental science, and reservoir management continue to strengthen offshore oil and natural gas while creating capabilities that can be applied to emerging opportunities: from carbon capture and storage and offshore critical minerals to autonomous systems, commercial space infrastructure, offshore wind, and other

industries still taking shape. The offshore sector has long shared expertise with industries ranging from aerospace to defense, and that exchange continues as engineering challenges grow more complex.

The Gulf of America has never simply been a place where America produces offshore energy. It has been the place where America learns how to produce offshore energy better: more safely, more efficiently, and in environments once thought impossible – for the benefit of American consumers and economies throughout the world. As new offshore industries emerge alongside traditional energy development, that culture of innovation may prove to be one of the Gulf's greatest long-term contributions.

The next breakthrough may look different than the last one. But if history is any guide, there's a good chance it will begin in the Gulf of America.

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Destination Agent Compliance Under the Shipping Act

By J. Philip Nester, Partner, Transportation & Logistics Practice Group

Foreign non-vessel-operating common carriers (NVOCCs) increasingly rely on U.S.-based logistics companies to serve as destination agents. These arrangements involve a domestic provider handling cargo receipt, warehousing, customs coordination, and last-mile delivery on behalf of an ocean transportation intermediary headquartered abroad. The revenue opportunity is real, but the regulatory, financial, and operational risks demand careful assessment before committing to this framework.

Regulatory Framework.

The Shipping Act and the Federal Maritime Commission's (FMC) implementing regulations govern ocean transportation intermediaries (OTIs) in the foreign commerce of the U.S. Under 46 C.F.R. § 515.2, the two principal OTI categories are ocean freight forwarders (OFFs) and NVOCCs. NVOCCs provide ocean transportation and issue their own bills of lading but do not operate the vessels. Even without a permanent U.S. office, foreign NVOCCs must comply with FMC registration and bonding requirements under 46 U.S.C. § 40901 and 46 C.F.R. § 515.21. Many operate through destination agents where domestic companies handle the receipt and processing of inbound cargo.

Agent Versus Principal.

The fundamental regulatory question is this: at what point does an agent's conduct cross from agency into principal liability? A destination agent exercises too much autonomy if it sets rates, issues its own bills of lading, or makes independent shipping decisions risks, which can draw FMC scrutiny to deem the agent to be acting in its capacity as a co-carrier or as an NVOCC. A true agent acts under the principal's direction, by performing delegated functions without assuming independent carrier obligations. If an agent exercises discretion over pricing, routing, or terms of carriage, the FMC may view it as a de facto NVOCC, triggering independent registration, bonding, and tariff publication requirements. Destination agent agreements should delineate authority, confirm that transportation decisions

remain with the NVOCC, and avoid language suggesting agent discretion over rates or service terms.

Ongoing Compliance Obligations.

Foreign NVOCCs must maintain valid FMC registration and a surety bond of at least \$150,000 pursuant to 46 C.F.R. § 515.21. For destination agents, this creates monitoring obligations such that if the principal's registration lapses or bond is cancelled, the agent may be engaged in facilitating the performance of unlicensed ocean transportation. Best practices include verifying FMC registration before engagement and then periodically thereafter, establishing contractual requirements for maintained registration with prompt notice of changes, and including termination rights triggered by compliance lapses. Under 46 U.S.C. § 40501, foreign NVOCCs must publish tariffs and may not deviate from published rates and destination agents collecting freight charges should do so ministerially with set procedures to verify that charges match the NVOCC's tariff. Service contracts must be filed with the FMC pursuant to 46 U.S.C. § 40502, so destination agents must avoid assuming "shipper" obligations such as volume commitments, and all carrier-facing communications should identify the NVOCC as the contracting party.

Financial and Liability Exposure.

Freight collection timing presents significant financial risk. Destination agents typically receive cargo, release it to consignees, collect freight charges, and remit funds to the NVOCC on periodic settlement terms. This creates cash-flow exposure where the agent might have to advance payments to carriers, terminal operators, and drayage providers before collecting from consignees, potentially carrying accumulated receivables for weeks. Ocean carriers and terminal operators assess demurrage and detention charges against the "party of record," which may include the destination agent, creating cross-border collection challenges if the agent needs to recover U.S.-paid charges from a foreign principal or a disputing consignee. A destination agent that takes physical

custody of cargo also assumes liability for loss, damage, or delay while the cargo is in its care, which is distinct from the NVOCC's carrier liability under its bill of lading. Agents should model cash-flow exposure, establish consignee credit limits, negotiate contractual protections allocating non-payment and ancillary charge risk, confirm cargo legal liability insurance covers destination agent activities across all custody modes, verify adequate policy limits, and establish clear indemnification provisions and claims-handling protocols.

Transition Planning.

When a foreign NVOCC seeks a new destination agent, the timeline is frequently compressed, with active service commitments for cargo that is in transit. This urgency creates compounding risks, including incomplete due diligence on the principal's regulatory status and financial health, ambiguous contract terms, insurance gaps, inadequate systems for tracking receivables and payments, and tariff compliance errors. Best practice dictates that agents resist timeline pressure and insist on adequate diligence, proper documentation, and system readiness before accepting such responsibilities. A phased transition beginning only with new bookings can significantly reduce risk.

Conclusion.

Destination agent arrangements can be commercially attractive, but companies should approach them with structured diligence that address agent-principal status, FMC registration verification, tariff and service contract compliance, freight collection economics, ancillary charge allocation, cargo insurance adequacy, and transition planning. With a clear-eyed view of the regulatory landscape, these arrangements can be structured to benefit all parties while maintaining compliance with the Shipping Act.



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Feature

Fraser Shipyards

All photos courtesy of David Schauer | Fraser Shipyard



FRASER SHIPYARDS

138 YEARS IN, BUILDING FOR WHAT COMES NEXT

By Greg Trauthwein

Part of a group of companies that make up Fraser Industries, Fraser Shipyard is a 138-year-old on Lake Superior, an organization which makes equal revenue from newbuild and ship repair, able to work in both steel and aluminum. Recently it signed a collaboration agreement with HD Hyundai to help migrate process and technology from one of the world's biggest and best shipyard to the shores of Lake Superior. **Patrick Kelly, CEO, Fraser Shipyard**, discussed the importance of this agreement, as well as the shipyard's plan to invest in and build the 'Shipyard of the Future.'

There is no shortage of discussion today surrounding the need to rebuild U.S. maritime and shipbuilding capacity. New government initiatives, foreign investment, workforce development and advanced manufacturing technologies are increasingly converging around a simple objective: America needs to build more ships, and it needs to build them faster and more efficiently.

Sitting on the shores of Lake Superior in Superior, Wisconsin, Fraser Shipyards offers an interesting case study in how that renaissance could unfold.

Fraser is hardly a newcomer. Continuously operating since 1888, the shipyard has spent 138 years supporting the Great Lakes maritime industry. But according to Kelly, its history may simply provide the foundation for its next, potentially much larger chapter.

Fraser Shipyards is part of **Fraser Industries**, which also includes **Lake Assault Boats** and **Northern Engineering**. Its home in the Duluth-Superior Harbor Complex puts it inside one of North America's major bulk transportation hubs, historically supporting the movement of taconite, grain and other commodities and the Great Lakes vessels carrying them.

Today, the business is remarkably balanced.

"We're really about fifty-fifty between repair and new construction," said Kelly. "Same is true between steel and aluminum."

That diversity has become one of Fraser's strengths. Its portfolio includes Great Lakes vessel repair, commercial new construction, police and fireboats, research vessels and U.S. Navy work.

Northern Engineering adds machining capabilities serving maritime as well as rail, pipeline, grain and paper industries.

Fraser By the Numbers

The numbers help put the operation and its growth potential in perspective. Fraser employs approximately **200 people year-round**, but during the Great Lakes winter repair season in January, February and March, employment can surge to **600** as Lakers enter the yard for maintenance and repair. In 2026, Fraser expects to deliver **30 new vessels** around the country, including police and fireboats, research vessels and vessels associated with four U.S. Navy contracts.

Since 2021, Fraser Industries has **doubled its revenue** and doubled its new-construction production footprint.

Perhaps the most eye-catching number, though, is **85 acres**. Fraser currently uses just 15 acres of approximately 100 acres of industrial-zoned property it owns in Superior. That leaves an unusually large physical runway for expansion at a time when waterfront industrial property is a precious commodity for U.S. shipbuilders.

But Kelly points to another asset that may prove even more valuable: people.

At the end of the winter repair season, Fraser currently has to release roughly 400 skilled workers because there isn't enough work to keep the expanded workforce employed throughout the remainder of the year.

"They're fantastic welders, electricians, pipe fitters," Kelly said. "All the folks that are in short supply in maritime and shipyards around the country, I have in surplus here. We have to find a way to utilize their skills year round in ship repair, ship construction."

In the context of America's shipbuilding discussion, that's significant. Across virtually every conversation on expanding domestic shipbuilding, workforce is cited as a primary constraint. Fraser already has access to a skilled labor pool; the challenge is creating enough sustained production to retain it.

Enter HD Hyundai.

HD Hyundai: A Catalyst for Growth

Fraser's recently announced partnership with South Korean shipbuilding giant HD Hyundai potentially puts a very different scale of development within reach.

According to Kelly, HD Hyundai evaluated shipyards across North America for six to nine months before selecting Fraser as a partner. He attributes that decision to the Superior site's combination of expansion acreage, work-



**PATRICK
KELLY, CEO,
FRASER
SHIPYARD**



Watch the full video
interview with Patrick Kelly,
CEO, Fraser Shipyards, on
Maritime Reporter TV:



force, electricity and natural gas infrastructure.

The vision is not simply to expand Fraser using conventional U.S. shipbuilding methods. Rather, Kelly sees the opportunity to leapfrog existing manufacturing practices by incorporating next-generation shipyard technology already being developed and deployed overseas.

HD Hyundai's work with Siemens on advanced shipyard technology factors prominently into that strategy.

"What we are now able to say to prospective lenders, investors, grant money around the country is we partnered with some of the best technology providers in the world, if not the best," said Kelly.

The goal, he said, is to create a new production footprint around current best practices rather than incrementally modernizing yesterday's yard.

"We're leapfrogging technologies already deployed," Kelly said. "If we're trying to out-compete the Chinese, next technology, next generation technology will get us there. Fraser's just part of the solution, but if we can be a demonstration facility, bring it on."

Importantly, Fraser doesn't envision expansion as exclusively commercial or military.

Kelly sees both. That mirrors the broader challenge

confronting U.S. shipbuilding. Sustained industrial capacity cannot easily be switched on and off according to individual government programs. A healthier shipbuilding industrial base arguably requires steady demand across commercial and defense markets, spreading infrastructure, workforce and supply-chain investment across a broader portfolio.

Fraser already has a foot in both camps.

Over the next 12 to 24 months, Kelly sees the potential for a 100,000-sq.-ft. expansion facility, followed by a larger production center for Navy vessels, all at the existing Superior location. Longer term, he sees opportunities to expand beyond Superior to other Great Lakes locations as demand develops. For a 138-year-old shipyard, that's a decidedly forward-looking agenda.

Niigaan Enaazhek: Built for the Great Lakes

If the HD Hyundai relationship illustrates where Fraser wants to go, the recently delivered MV **Niigaan Enaazhek** demonstrates what its workforce can already accomplish.

Built for the **Beausoleil First Nation**, the double-ended roll-on/roll-off ferry provides year-round transportation between Christian Island and Cedar Point, Ontario. Designed

for Georgian Bay's demanding winter environment, it operates 365 days per year and makes 12 daily round trips.

The ferry accommodates **150 passengers and 36 cars or trucks**, with RoRo loading simplifying the constant movement of people, vehicles and supplies between the island community and mainland.

Technically, its defining feature is its propulsion system.

Niigaan Enaazhek is equipped with **two Voith Schneider Propellers**, positioned to give the double-ended ferry exceptional maneuverability and rapid thrust control in virtually any direction. The arrangement is particularly suited to a ferry that spends its life repeatedly approaching and departing terminals and operating in confined waters.

It is also engineered for ice.

The vessel carries an **Ice Class 1A rating**, with the VSP installation designed to maintain propulsion performance in the harsh winter conditions encountered on Georgian Bay. Fraser describes Niigaan Enaazhek as the only double-ended ferry operating on the Great Lakes equipped with two Voith Schneider Propellers.

Kelly calls it "the most technically advanced ferry boat operating on the Great Lakes today."

"The captain can literally turn on a pinwheel if he or she so chooses to do," said Kelly. "Incredible maneuverability. We're really proud of that vessel."

More importantly, it is doing precisely what it was designed to do: keeping an island community connected to the mainland throughout the year.

That combination — practical commercial shipbuilding, specialized engineering and a skilled Great Lakes workforce — provides a useful window into Fraser's potential future.

Amid the increasingly urgent national conversation surrounding U.S. maritime industrial capacity, Fraser possesses several ingredients that cannot easily be manufactured: 138 years of experience, an existing workforce, established customers, waterfront infrastructure and considerable room to grow.

Now add the shipbuilding technology and production expertise of HD Hyundai.

The opportunity, if the pieces come together as envisioned, is not simply to make an old shipyard bigger. It is to use an established American shipbuilder as a platform for a more modern production model — one capable of serving commercial and military customers while putting hundreds more skilled tradespeople to work year-round.

For Kelly, the immediate priority is straightforward: "It's about sticking the landing with all the things we're talking about with HD Hyundai."

If Fraser does, those unused 85 acres on Lake Superior could become an important piece of America's effort to rebuild its shipbuilding muscle.

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Shipbuilding

Rebuilding the U.S. Icebreaking Fleet

U.S. Coast Guard photo by Petty Officer 2nd Class Briana Carter

An Update on Plans for the



U.S. Coast Guard Cutter Polar Star (WAGB 10) transits the Puget Sound enroute to Coast Guard Base Seattle following a 146-day Antarctic deployment in support of Operation Deep Freeze, April 13, 2026. The Polar Star is the United States' only surface asset capable of providing year-round access to both Polar Regions. It is a 13,500-ton, 399 x 84-ft. heavy polar icebreaker with a 34-ft. draft, commissioned in 1976.

U.S.'s ICEBREAKING FLEET

By Philip Lewis, Research Director Intelatus Global Partners

The U.S. is expanding its icebreaking fleet to strengthen Arctic and domestic access, and support commercial shipping, seabed resources, sub-sea cables and fisheries. Current plans include 1–3 heavy Polar Security Cutters (PSCs), 11 medium Arctic Security Cutters (ASCs), seven Homeland Security Cutter (HSC) HSC-L (light) icebreakers, 11 HSC-Ms (medium) and one additional heavy HSC-H (heavy). But as delays and cost overruns on the Polar Security Cutter (PSC) Program shows, while major opportunities exist for the U.S. supply chain in icebreaking construction and sustainment, many challenges also exist with the complex projects.

Extending the Service Lives of Existing Vessels

The United States Coast Guard (USCG) operates a small, aging icebreaking fleet comprising Polar Star (heavy polar icebreaker, built 1992), medium polar icebreakers Storis (built 1992) and Healy (built 1999), Antarctic research vessel Sikuliaq (built 2014), nine 140-foot Bay-class inland icebreakers (built between 1979 and 1988) and Great Lakes heavy icebreaker Mackinaw (2006 built). The Edison Chouest-owned Antarctic research vessels Nathan-

iel B. Palmer and Laurence M. Gould are currently idle following lease cancellations, while a proposed ~\$1 billion Antarctic Research Vessel remains unfunded. Given the long lead time for new icebreakers, the Coast Guard is extending existing vessels through its In-Service Sustainment Program, including completing Polar Star's life extension in 2025, extending Healy from 2026–2029, and completing 15-year extensions for the nine Bay-class vessels in 2023.

Planning for a Larger Fleet

The February 2026 Maritime Action Plan (MAP) calls for further polar capability, while an October 2025 Presidential Memorandum identified insufficient icebreaking capacity as a national-security risk and supported building up to four ASCs in Finland.

Under a December 2025 agreement, Bollinger and Rauma Marine Constructions (RMC) will build six ASCs, with two delivered from Finland in 2028 and four from the U.S. from 2029. The final delivery is scheduled for 2031. The ~\$3.3 billion contract was finalized in early July 2026. Seaspan-Railotech (formerly Aker Arctic) is supplying its proven MPI design and project management, which, in theory addresses

Shipbuilding

Rebuilding the U.S. Icebreaking Fleet

some of the lessons learnt from the PSC program delays.

Davie Defense companies Helsinki Shipyard (Finland) and Davie Gulf Copper Galveston (USA) will respectively build two and three ASCs. In an effort to use commercially available and proven designs, Helsinki Shipyard is supplying the Multi-Purpose Support Ship (MPPS) design for the project. The \$3.5 billion contract was finalized in May 2026. The first vessel is scheduled to be delivered in 2028, with all five vessels delivered by February 2035.

The PSC program continues to face major delays and cost growth (see next section): the lead ship's cost target has risen to \$3.4 billion, while delivery has been delayed by nine years.

The Coast Guard also issued a June 2026 RFP for seven HSC-Ls to replace its aging 65-foot icebreaking tugs with dual-purpose platforms capable of operating year-round in smaller ports across the Great Lakes and Northeast and Mid-Atlantic coastal waters, from Maine to Virginia, including the Chesapeake and Delaware Bays and adjacent navigable waterways, and varying ice conditions while providing aids-to-navigation services.

Plans for 11 HSC-Ms will replace the 140-foot Bay-class fleet, to provide icebreaking, maritime safety and security, and missions such as search and rescue across the Great Lakes and Atlantic coast.

The Coast Guard is also proposing the construction of one additional homeland security cutter-heavy icebreaker (HSC-H) to complement Mackinaw in keeping Great Lakes shipping channels open and mitigating ice-related disruptions.

Whilst the ASC program focuses on rapid delivery of proven icebreaker designs leveraging world class overseas icebreaker construction capabilities, the challenge for the

USCG remains how to embed lessons learnt from the PSC program into the HSC-L, -M, and -H programs.

Delays and Cost Overruns on the PSC Program

The U.S. Government Accountability Office (GAO), "DHS Annual Assessment: Dynamic Environment Affects Efforts to Manage Acquisition Risks" report, published June 9, 2026, highlighted significant cost, schedule and design risks in the Polar Security Cutter (PSC) program, originally baselined in 2018 and awarded to VT **Halter Marine**, now **Bollinger Mississippi Shipbuilding**, in 2019.

Following revisions in 2021 and 2022, the Coast Guard raised the lead PSC's (Polar Sentinel) cost target to \$3.4 billion. Originally planned for delivery in 2024 the lead PSC's delivery is delayed delivery to March 2033. nine years later than planned. The original full operational date was scheduled for September 2029 and has been revised to March 2039.

According to the GAO, cost growth reflects poor program management, limited visibility, design delays, inexperience, COVID-19 and inflation, while further risks include workforce expansion, incomplete design and the absence of a joint baseline review. The GAO review points out that revised schedule remains subject to significant risks, including a construction period of up to eight years, a planned 40% workforce increase at the shipyard by mid-2026, and the absence of a joint baseline review with the shipbuilder.

The lead ship's contract value subsequently increased by nearly \$1 billion, while costs for PSCs 2 and 3 (tentatively named Polar Bear & Polar Glacier) remain under negotiation. \$4.3 billion in One Big Beautiful Budget Act funding is expected to cover the first two ships and long-lead materials for the third.

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One-on-One

Stephen M. Carmel, U.S. Maritime Administrator



U.S. Maritime Administrator Stephen M. Carmel took more than an hour @ the American Great Lakes Ports Association annual conference in Chicago to discuss the depth, breadth, plan and progress on the U.S. maritime revival.

“This is a Different Maritime Revival”

Stephen M. Carmel & MarAd are aiming to make this U.S. Maritime Rebuild Stick

By Greg Trauthwein

For anyone who has spent a career in the U.S. maritime industry, the past two years have been unusual by any metric. Maritime has moved from the far margins of federal policy discussions to center stage, with rebuilding American shipbuilding, the Merchant Marine and the maritime industrial base elevated a national priority. Action to shore up the big ship, military portion of the equation has been rapid and measurable. But beyond the top echelon of defense contractors, many mid- and small-tier yards and suppliers have been left waiting. For the builders and operators of the towboats, tugs, barges, ferries and workboats that populate America’s waterways, however, there is an understandable response: *‘Enough talk. Where is the work?’*

Stephen M. Carmel, Administrator of the U.S. Maritime Administration (MARAD), understands the skepticism. He also believes this maritime revival is fundamentally different from its predecessors.

“I think everyone alive has been through at least two, if not more, maritime revivals,” Carmel said, describing previous initiatives that “last until the next appropriation

cycle and die. This is a different maritime revival,” he said.

The difference, according to Carmel, starts with geopolitical competition: ie. China’s aim to dominate global maritime; and extends to bipartisan political support and the willingness to provide funding. “There is a coalescence of national will around it that has not existed, if ever, in my lifetime,” he said. As with previous efforts to ‘revive U.S. shipbuilding’, ultimately, time will tell.

A Commercial Maritime Industry First

For *Marine News* readers, perhaps the most important element of Carmel’s agenda is his insistence that rebuilding American maritime cannot simply mean building more Navy ships. It requires rebuilding a commercial shipbuilding and operating base. “When we start seeing the transition from MOU signings and champagne toasts in Washington DC to shovels turning dirt at potential shipyards in the next year, that’s how we’ll know we’re making progress. I’m certain that is possible.”

“Our job in the Maritime Administration is to rebuild a civilian commercial shipbuilding enterprise,” Carmel said.

“First and foremost, that’s all I talk about. That’s all I do. That’s where our investments will be.”

Carmel argues that allowing America’s commercial shipbuilding base to erode ultimately damaged military shipbuilding, too. Once the commercial market disappeared, so did much of the supplier base, industrial depth, volume and innovation that accompany it.

“A strategic vulnerability is when you are the only customer for a critical vendor,” he said. When government becomes the sole customer keeping suppliers alive, the result is neither economically healthy nor particularly resilient.

Commercial maritime requires an ecosystem, Carmel argues, not simply a collection of isolated yards. That includes equipment manufacturers and suppliers, and ultimately domestic production of major machinery that today must be imported. “We need a robust ecosystem,” Carmel said. That argument resonates particularly strongly in the smaller commercial yards that build America’s workboats, towboats and coastal vessels. Carmel noted specifically that MARAD’s Title XI financing program is not solely intended for large oceangoing ships. “Title 11’s for smaller stuff too,” he said.



Carmel calls the inland waterways **“the absolute arteries of American commerce,”** but argues that their condition remains unacceptable. **“We need some serious investment in the inland arteries that sustain the lifeblood of America. That’s our ports and locks and inland waterways system. It does no good at all to build out this robust seacoast stuff if we’ve let the interior of the country fall apart.”**

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One-on-One

Stephen M. Carmel, U.S. Maritime Administrator

The problem is that too many potential users have historically looked at the program and walked away because of its complexity. Carmel said MARAD is working to streamline Title XI and turn it into a modern vessel-construction financing tool that commercial operators actually want to use. **"We cannot build with scale if we cannot finance at scale,"** Carmel said.

MARAD is similarly rethinking shipyard grants, emphasizing investments that "significantly increase their productivity" and capacity rather than simply distributing in-

dividual grants without considering how they strengthen the broader maritime system.

The Great Lakes: Not an Afterthought

Carmel's definition of American maritime strength extends well beyond the coastal deep-sea ports that typically dominate Washington's maritime conversation. "The Great Lakes, the inland waterways, the ports. We actually have five coasts," Carmel said.

That fifth coast is the Arctic, and Carmel argues that both the Great Lakes and Alaska need to become integrated into everyday thinking about American maritime power rather than appearing as regional afterthoughts. "When the Great Lakes start being part of the mainstream conversation of what maritime dominance looks like, then I know we've made progress," he said.

Similarly, "We are an Arctic nation and we better remember that."

For Carmel, that means treating the Great Lakes, inland rivers, ports, coastal waterways and Arctic as components of a single transportation and national-security network. Nowhere is the weakness of that network more evident than on America's inland waterways.

Carmel calls them "the absolute arteries of American commerce," but argues that their condition remains unacceptable. "We need some serious investment in the inland arteries that sustain the lifeblood of America," he said. "And that's our ports and locks and inland waterways system."

It is a particularly relevant message for the towboat and barge industry. Building new vessels, modernizing fleets and strengthening coastal ports accomplishes little if the locks and wa-

terways connecting the nation's interior are allowed to deteriorate.

"It does no good at all to build out this robust seacoast stuff if we've let the interior of the country fall apart," Carmel said.

He points to the Soo Locks as a textbook example of infrastructure that can become a single point of national economic failure. Citing a government study, Carmel said a six-month closure could cause between \$1.2 trillion and \$1.4 trillion in economic damage, put 11 million people out of work and inflict potentially unrecoverable damage on the U.S. steel industry.

"One lock," he said. "That should scare anyone."

His prescription is simple in concept, if difficult in execution: "We need to find out where the single points of failure are and fix them."

Cargo Creates Ships

Ultimately, no amount of shipyard investment matters without customers. For Carmel, the entire commercial-maritime equation therefore starts with cargo. "The U.S. Merchant Marine is first and foremost here to carry the nation's commerce and then carry the nation to war when we need to," he said.

Government-impelled cargo alone, he argues, is insufficient to rebuild the industry. The objective must be to put more normal U.S. commerce aboard U.S.-flag vessels, creating the demand signal that encourages operators to invest in ships.

The proposed U.S. NPR mechanism starts by reserving 3% of the nation's commerce for U.S.-flag vessels, according to Carmel, before ramping upward and eventually transitioning toward U.S.-built ships. "The first

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One-on-One

Stephen M. Carmel, U.S. Maritime Administrator

fundamental thing we have to do is address the root of everything, which is cargo,” he said.

But that does not absolve American shipbuilders of responsibility. Carmel pushes back against yards that simply say they need a demand signal before investing. “There’s some responsibility on the part of the shipyards to get down a cost curve and demonstrate how,” he said. Government can help through grants, financing and cargo policy, but the yard must ultimately have a credible plan for becoming more productive.

Nuclear: Don’t Miss the Next Revolution

While much of Carmel’s agenda deals with repairing America’s existing maritime system, his most ambitious idea is aimed squarely at changing its future: commercial nuclear propulsion based on small modular reactor technology. **“SMR-powered nuclear technology will transform trade and shipping every bit as much or more than the container did,”** Carmel said. “It is going to revolutionize the very architecture of trade.” MARAD has signed an MOU with the Port of Long Beach to deploy SMR technology for shore power, which Carmel views as a stepping stone toward nuclear ship propulsion. More recently, MARAD and CORE POWER (US) Inc. signed an agreement to accelerate the commercial, industrial, and regulatory pathways for U.S.-flagged nuclear-powered commercial ships.

Importantly, he does not view the primary obstacle as reactor technology. The challenge is creating the surrounding commercial ecosystem — liability structures, infrastructure, regulation and port acceptance —

that allows the technology to work in the real world.

The lesson is NS Savannah, which Carmel described as an “elegant piece of engineering but a commercial failure. We don’t want to repeat that,” he said.

Carmel sees nuclear working in tandem with artificial intelligence, potentially changing ship size, port design, economies of scale and the fundamental architecture of transportation.

“SMR has the potential to transform the way trade happens,” he said. “AI will actually execute it.” Together, he believes the technologies could “shape the way trade works for the next 50 to 100 years.”

Building the Entire System

Perhaps Carmel’s most relevant message for the coastal, inland and Great Lakes audience is that the current maritime discussion cannot be allowed to devolve into another narrow exercise centered exclusively on large ships and large coastal shipyards.

The industry is a system.

It includes the Gulf Coast yard building a towboat, the operator pushing barges through aging locks, Great Lakes vessels hauling raw materials,

coastal ports, commercial mariners and an Arctic coastline that Carmel believes America ignores at its peril.

“If I could advocate for anything,” Carmel said, “it would be for a bigger understanding of what the maritime ecosystem is. It is a system. And it does no good to treat one part and ignore the rest.”

There is plenty of reason for skepticism. The maritime industry has heard revival speeches before, and the distance between Washington rhetoric and shipyard orderbooks remains considerable.

Carmel, though, believes the biggest barrier may ultimately be one of attitude. **“Our biggest weakness, our biggest challenge is our own attitude,”** he said. **“We can revitalize our shipbuilding industry. We can revitalize our maritime industry, but we’re not going to get there if we abandon the fight before we take the field.”**

For America’s commercial maritime industry — from the inland rivers to the Great Lakes, coastal waters and Arctic — the opportunity is considerable.

Now comes the difficult part: turning the talk into steel.



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Built to support a wide range of marine operations, the M 1242-R provides customers with the equipment and capabilities needed to efficiently move personnel, vehicles, heavy equipment and materials between shore and water. “Whether the job requires reliable access, heavy equipment transportation or a capable work platform, the M 1242-R is ready to get the job done,” said McDonough Marine Service.

C&C Delivers New Walking-Spud Idler Barge

C&C Marine and Repair delivered a new 160-foot idler barge to Orion Marine Construction, Inc. Designed by The Shearer Group, Inc., the unmanned steel barge will support Orion Marine’s dredging operations by connecting with new and existing dredges in the company’s fleet. The barge features an integrated walking-spud system designed to advance the combined dredge and idler barge unit in increments of approximately 30 feet. The system incorporates a traveling spud carrier, a fixed stern spud, dedicated spud towers and electrically driven hoisting winches. A push-pull winch controls the longitudinal movement of the walking-spud carrier, allowing the barge to reposition the connected dredge efficiently during operations. Construction of the idler barge was completed in approximately eight months.



ASENAV to Build Glosten-Designed RV

Chile’s ASENAV won the contract to build its first oceanographic research vessel for export to the United States, signing an agreement to build a 38-meter hybrid-

electric research vessel for the University of California San Diego’s Scripps Institution of Oceanography. Designed by Glosten, the vessel will join the U.S. Academic Research Fleet as a Coastal Class Research Vessel, replacing the aging Robert Gordon Sproul. Construction is expected to take 24 months, with delivery scheduled for July 2028. The 38-meter monohull will feature hybrid battery-electric propulsion, twin azimuthing L-Drive stern thrusters, a bow thruster and dynamic positioning capability, enabling precise station keeping for scientific operations. The vessel is designed to support a broad range of oceanographic disciplines, including biology,

chemistry, geology, geophysics and physical oceanography.

Its scientific outfit will include multibeam and sub-bottom mapping sonars, Acoustic Doppler Current Profilers, fisheries acoustics, USBL navigation for autonomous underwater vehicles (AUVs), and heavy-duty handling systems capable of deploying scientific equipment and remotely operated vehicles (ROVs) to depths of 4,000 meters.

Particular emphasis has been placed on acoustic performance. Glosten’s subsidiary, Noise Control Engineering, will lead airborne and underwater noise analysis to ensure the vessel meets stringent underwater radiated noise requirements that minimize interference with scientific measurements and marine life.

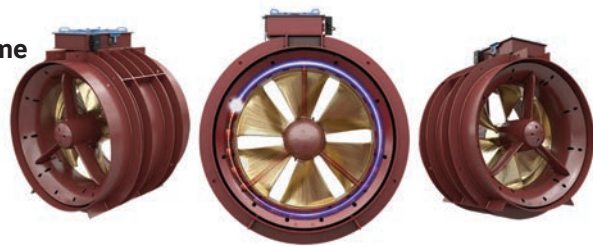
The vessel will be built to American Bureau of Shipping (ABS) class and comply with U.S. Coast Guard and other federal, state and local regulations required for service in the U.S. Academic Research Fleet, marking a significant milestone for Chilean shipbuilding in the international research vessel market.

Products

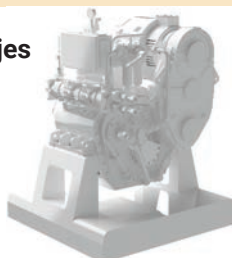
1 VETUS Maxwell



2 Kongsberg Maritime



3 Reintjes



4 Anschütz



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<https://webshop.vetus.com/en/products>

2. Kongsberg Rim-Drive Tunnel Thruster

Kongsberg Maritime is expanding its Rim-Drive Tunnel Thruster (RD-TT) range with the introduction of two new larger models, featuring propeller diameters of 2300 mm and 2600 mm. The range has been developed in response to growing demand from the offshore sector for higher-powered thruster solutions that combine superior dynamic positioning (DP) performance with low noise and high efficiency.

The RD-TT 2300 and RD-TT 2600 models extend the upper end of the existing product range, enabling

operators to specify Rim-Drive technology for larger vessels and applications which require greater thrust and enhanced station-keeping capability. The thrusters are rated at 2100 kW and 2700 kW respectively.

3. Reintjes TME Hybrid System

"Our plan was to create a compact hybrid unit. To achieve this, we've integrated the electric motor/generator onto the gearbox," says Klaus Deleroi, Managing Director of Reintjes, in announcing the new TME Hybrid System.

Integrating the electric motor onto the top of the gearbox brings several crucial advantages. Installation now requires just a single unit. And the space saved for freestanding installation is considerable. In addition to the more compact design, efficiency is also a key factor.

On the one hand, the electric motor feeds its power directly into the gearbox and operates in parallel with the diesel engine (PTI mode), which reduces emissions and noise levels. On the other hand, electricity can be generated (PTO mode) and additional power can also be provided (boosting) when required.

4. Anschütz's New Gyrocompass

Anschütz will present a new-generation gyrocompass at SMM, introducing the Standard 100 MF to the market for the first time. The new system applies proven vibrating gyro principles derived from established gyrocompass systems based on the Hemispherical Resonator Gyroscope (HRG), such as the Standard 30 MF.

The Standard 100 MF aims to deliver the benefits of maintenance-free Coriolis Vibratory Gyro (CVG) technology to a broader commercial fleet. It is designed for robust heading performance in daily operation, enabling long-term stability, durability and efficient life-cycle operation without maintenance.

The Standard 100 MF can be seamlessly integrated into newbuild and retrofit projects. It uses the same CAN bus as the Standard 22 NX and the Standard 30 MF, allowing integration into existing gyrocompass systems with minimal installation effort. Standardised interfaces and straightforward commissioning ensure efficient deployment within existing bridge environments.

Obituary

Guido Perla

Guido Perla

Remembering a Vessel Design Legend



For more than five decades, Guido Perla stood among the most respected naval architects in the world. As founder and president of Guido Perla & Associates (GPA), he helped redefine commercial ship design through innovation, practical engineering, and an unwavering commitment to his clients. His influence can be seen in off-shore support vessels, fishing vessels, research ships, ferries, and specialized government vessels operating around the globe.

Yet those who knew Guido understood that his greatest legacy extended far beyond the ships themselves. He believed engineering was ultimately about people—the relationships forged with clients, the opportunities created for young engineers, and the satisfaction of turning bold ideas into working vessels.

Born in Barranquilla, Colombia, Guido developed a fascination with ships while growing up along the Caribbean coast. His dream of becoming a naval architect led him to the United States in 1971 to study naval architecture and marine engineering at the University of Michigan. It was a leap of faith that would shape the rest of his life.

Throughout his career, Guido often credited his father with instilling the philosophy that guided both his engineering and his life:

“It is better to be wrong than to be average.”

To Guido, innovation required courage. He believed progress came from thoughtful risk-taking rather than complacency. As he explained in a 2003 interview, people learn by “making a move and taking risks,” not by standing still. That mindset became a defining characteristic of every vessel and every business decision throughout his career.

After beginning his career at **Jacksonville Shipyards** and later designing offshore supply vessels and shrimp boats in Texas, Guido moved his young family to the Pacific

Northwest in 1977, drawn by the booming commercial fishing industry. At **Joseph Martinac Shipbuilding**, he fulfilled a longtime ambition to design tuna seiners, which he admired for their elegance and efficiency. He described them simply as “sleek, good looking boats”—the kind of vessels he had always wanted to create.

The defining moment of his career came on December 28, 1979, when shipbuilder Peter Schmidt asked a simple question: “Do you want to be in business?” Guido answered yes, and **Guido Perla & Associates** was born.

Years later, Guido never forgot that opportunity.

“I owe the credit to the beginning of GPA to Peter Schmidt.”

That first contract launched what would become one of the world’s premier independent naval architecture and marine engineering firms.

From its earliest days, GPA distinguished itself by combining conceptual design with detailed production engineering. Guido believed that investing in engineering paid dividends throughout construction. He frequently observed that every hour spent thinking through the engineering process saved multiple hours during production, because “the engineering is the thinking.” That philosophy helped shipyards build vessels faster, more efficiently, and with fewer costly surprises.

Guido also became an early champion of computer-aided shipbuilding. In the early 1980s, he introduced CAD/CAM-based production methods and numerical-control steel-cutting programs to many small and medium-sized American shipyards, making advanced manufacturing techniques available to builders that previously lacked access to such technology. He considered this one of his proudest professional achievements because it strengthened the competitiveness of independent U.S. shipyards, which he believed formed the backbone of American shipbuilding.



His engineering innovations extended well beyond production methods. Under his leadership, GPA became internationally recognized for advanced offshore support vessel designs featuring diesel-electric propulsion, azimuthing Z-drives, and highly efficient hull forms. Landmark projects included Crowley's **Prevention and Response tugs** and the **SWATH research vessel *Kilo Moana***, developed in partnership with Lockheed Martin for the U.S. Navy and the University of Hawaii. These vessels demonstrated Guido's willingness to embrace emerging technologies long before they became industry standards.

Despite his technical accomplishments, Guido rarely measured success by awards or high-profile projects. Instead, he spoke repeatedly about relationships.

"I approach jobs not because of business, but through relationships," he said. He chose projects because he respected the people behind them, not because they promised the greatest financial return. In another memorable analogy, he explained that designing a ship was like tailoring a custom suit: every vessel should reflect the owner who commissioned it rather than becoming a generic "stock design."

That philosophy earned Guido extraordinary loyalty from clients throughout the maritime industry. Many returned to GPA repeatedly over decades because they knew he viewed each project as a partnership rather than simply another contract.

He also lamented the gradual disappearance of the

handshake agreements that had characterized much of his early career. While acknowledging the realities of modern business, he believed trust and honest dialogue remained the foundation of successful engineering relationships.

Inside GPA, Guido became known as a mentor who challenged engineers to think independently, question assumptions, and pursue practical solutions. He encouraged innovation but insisted that every new idea ultimately had to serve the shipbuilder, the operator, and the crew.

His personal motto — "**Engineering Ideas into Reality**" — captured the essence of his life's work. It reflected not simply technical expertise, but a belief that engineering exists to solve real problems through imagination, discipline, and collaboration.

Today, Guido Perla's legacy lives on in hundreds of vessels operating worldwide and in the generations of engineers whose careers he helped shape. His designs continue to serve fishermen, mariners, researchers, offshore energy operators, and governments across the globe.

More importantly, his philosophy endures: pursue excellence instead of mediocrity, embrace innovation with courage, invest in relationships, and never stop learning.

For Guido Perla, every ship told a story. Together, they tell the story of a remarkable engineer whose vision transformed modern naval architecture and whose influence will continue to sail the world's oceans for generations to come.

Personal Reflection: In Memory of Guido Perla

I met Guido Perla in early January 2007, walking into his office at GPA in the Columbia Tower in the heart of downtown Seattle for my interview. I was young, fresh out of college, and had no idea how much that moment would shape my life. His desk was covered in ship plans — a landscape of ideas waiting to be built — and from the very first conversation, I understood that this would not be an ordinary job, and he was not an ordinary man.

At one point he mentioned that he lived on **Vashon Island** near Seattle. I smiled and said, "Oh, so you take the

ferry every day." He looked at me with complete seriousness and replied, "No. I fly."

Professionally, Guido was a giant in the maritime world — a designer whose influence reached across fleets, continents and decades. His work shaped modern vessel design, and his name became synonymous with innovation, integrity, and engineering excellence. He brought people together from across the world in his projects, uniting cultures, expertise, and perspectives. Despite all he accomplished, he remained deeply human.

To me, Guido was more than a boss. He was a friend and a mentor — someone whose voice and presence carried real weight in my life. Even from across an ocean, he stayed connected and supportive. I will forever be grateful for how deeply he cared and how genuinely invested he was in my life.

Guido Perla leaves behind a legacy that transformed the maritime industry — but for me, his greatest legacy is the way he made me feel capable, valued and seen.

— By Inga Scholz

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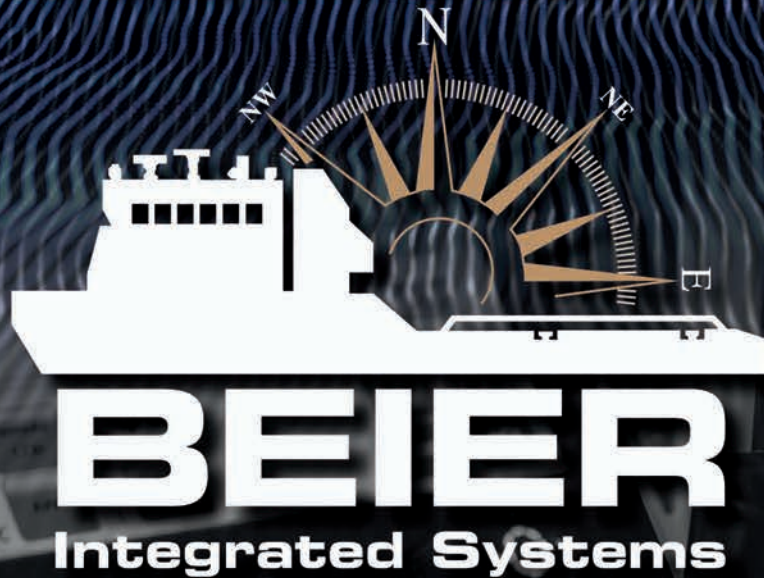
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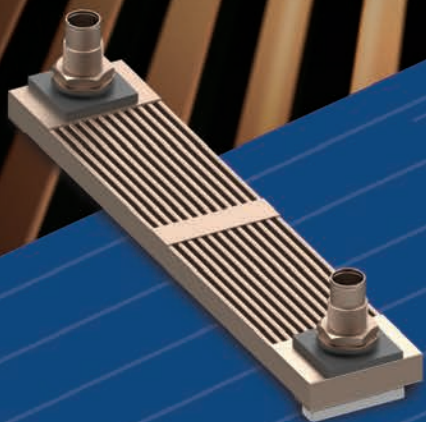
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