

THE STATE OF
THE AMERICAN MARITIME INDUSTRY

HEARING
BEFORE THE
COMMITTEE ON COMMERCE,
SCIENCE, AND TRANSPORTATION
UNITED STATES SENATE
ONE HUNDRED SIXTEENTH CONGRESS

FIRST SESSION

MARCH 6, 2019

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SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

ONE HUNDRED SIXTEENTH CONGRESS

FIRST SESSION

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THE STATE OF THE AMERICAN MARITIME INDUSTRY

WEDNESDAY, MARCH 6, 2019

U.S. SENATE,
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,
Washington, DC.

The Committee met, pursuant to notice, at 10:03 a.m. in room SH-216, Hart Senate Office Building, Hon. Roger Wicker, Chairman of the Committee, presiding.

Present: Senators Wicker [presiding], Cantwell, Fischer, Scott, Sullivan, Schatz, Baldwin, and Duckworth.

OPENING STATEMENT OF HON. ROGER WICKER, U.S. SENATOR FROM MISSISSIPPI

The CHAIRMAN. We are here this morning to hear testimony on the State of the American Maritime Industry.

We're delighted to have five witnesses who reflect the breadth of this industry. Mr. Matthew Woodruff, President of the American Maritime Partnership; Mr. Thomas Allegretti, President of the American Waterways Operators; Mr. Matthew Paxton, President of the Shipbuilders Council of America; Mr. Austin Golding, President of Golding Barge Line, based in Vicksburg, Mississippi, with 225 employees in 11 states, and I note that Mr. Golding is joined by his family today and the Mayor of Vicksburg, the Honorable George Flaggs is with us, too, for support for the maritime cause, and Ms. Berit Eriksson, Workforce Development Director for the Sailors' Union of the Pacific.

We're grateful that all of you are able to be with us today and we look forward to your testimony.

The economic and national security of our country depends on a healthy maritime industry. Indeed, our country's independence can be tied to the success of product colonial ships and merchant seamen that were authorized by General Washington to prevent British ships from delivering arms and ammunition.

Today, maritime freight transportation supports about \$4.6 trillion in annual economic activity and the maritime industry supports 650,000 U.S. jobs. According to the Transportation Institute, 22,500 jobs in Washington State and 13,400 jobs in Mississippi are dependent on various elements of the American maritime industry.

Over 1.3 billion metric tons of waterborne merchandise is imported to and exported from the United States each year and almost that much cargo is carried on the 25,000 miles of inland waterways.

Equally important to the economic benefits, a strong domestic maritime industry is essential to national security.

DoD relies heavily on U.S.-flagged commercial vessels and civilian mariners to meet its sealift requirements. The U.S. Coast Guard and the Maritime Administration are critical components to all of our defense and maritime functions and the Committee will be working to reauthorize these agencies.

Federal law supports a strong domestic maritime industry. Notably, the Merchant Marine Act of 1920, better known as the Jones Act, requires that vessels transporting goods between two U.S. points be American-built, owned, crewed, and flagged.

Today, over 41,000 Jones Act-qualified vessels operate in the domestic trades. Properly enforcing the Jones Act is important for economic and national security.

I recently sent a letter to the President, along with several colleagues on this committee, to express support for the Jones Act and to encourage the Administration to convene a meeting of all stakeholders to discuss how the domestic maritime industry can meet new demands and serve new markets.

The American shipbuilding and industrial base is capable of building the vessels necessary to carry the Nation's abundant energy resources, such as LNG and other fossil fuels, anywhere in the world.

Becoming more internationally competitive is important to secure the industry's future. Currently, there are only 81 U.S.-flagged ships operating exclusively in international trade, carrying less than 2 percent of the Nation's annual foreign trade.

This is troubling from a national security perspective because sufficient U.S.-flagged ships and mariners must be available to meet national defense requirements.

As to workforce, MARAD estimates that shortfall of 1,800 qualified mariners needed to sustain a prolonged military sealift mobilization.

As a member of the Board of Visitors for the U.S. Merchant Marine Academy, I would note that Jack Bouno was recently named superintendent there and is working to recruit and train mariners to fill this shortfall. We wish the U.S. Merchant Marine Academy and other training academies well.

In that regard, let me express my support for the Trump Administration's new initiative to help Active Duty military and veterans transition to maritime careers. The initiative will build on the successful military-to-mariner program managed by the Coast Guard and MARAD.

During today's hearing, I hope witnesses will address issues, such as the laws and regulations affecting the operation and competitiveness of industry, the current and future impact of the Vessel Incidental Discharge Act, legislation that many of us sponsored last Congress was included in the 2018 Coast Guard reauthorization bill.

Like so many issues, getting VIDA signed into law would not have been possible without the coordination of the Committee's Ranking Member, Senator Cantwell, and I also salute the efforts of Senator Sullivan in this regard.

Also, members might want to comment on strategies to grow the maritime workforce and improve education and training programs.

America is a maritime nation. We have a distinguished history of using our abundant maritime resources to expand commerce and protect our country. A strong merchant marine, shipbuilding, and maritime industrial base are the marks of a great power.

I look forward to working with my colleagues to ensure America's maritime industry has a vibrant future.

And I now turn to my friend, the Ranking Member, Senator Cantwell, from another great coastal state of Washington, for her comments.

**STATEMENT OF HON. MARIA CANTWELL,
U.S. SENATOR FROM WASHINGTON**

Senator CANTWELL. That is why we call them the Seattle Mariners, by the way.

Thank you, Chairman Wicker, and thank you for holding this important hearing today, and welcome to the witnesses. Thank you for being here to bring more attention to the needs of investment in our maritime sector.

I'm happy to welcome our witness from Washington, Ms. Eriksson. Thank you so much for being here. You've been a part of the maritime economy in our state for a long time and representing the Sailors' Union of the Pacific today. We thank you for that.

I know we are going to talk about workforce, the Chairman mentioned it, but I'm sure you'll bring a particular perspective to that in your testimony.

The United States maritime transportation system is critical to our Nation's economy and to our security with 90 percent of overseas trade entering or leaving the U.S. by ship, contributing \$650 billion annually to our GDP. This is a very important part of our economy with 13 million jobs nationwide.

The large freight network supports more than 40 million jobs nationwide and these jobs fuel an entire economy supporting trade and the movements of goods.

In the state of Washington, we know this because we have nearly 70,000 direct jobs. The Chairman mentioned the indirect jobs also associated with that sector and so you see the large economic footprint that we've had in the past.

So whether it's ports connecting to freight corridors, warehouse sector, maritime, shipbuilding, cruise operations, we know the value of the maritime sector in the state of Washington.

But despite the importance of moving freight and investing in freight infrastructure, that investment continues to lag.

According to the National Association of Manufacturers 2019 Building to Win Report, more than 70 percent of manufacturers do not believe our infrastructure can respond to the competitive needs of a growing economy.

Americans are losing thousands of dollars every year because of crumbling infrastructure and the American Society of Civil Engineers rates our infrastructure at D+. Accordingly, the World Economic Forum report ranks the United States ninth in infrastruc-

ture quality. Other countries know the importance of infrastructure investment and we need to keep pace.

The 2015 FAST Act took a big step toward addressing our freight infrastructure challenges with the Multimodal Freight Program and I thank Senator Thune and others for helping to get that done.

However, we need to do more in this area. We must support our domestic maritime industry with a strong U.S. maritime workforce. I look forward to working with the Chairman on this particular issue.

The mariners are an essential part of our economy and they are critical to meeting our transportation needs and our military needs. In recent years, the merchant marine has also provided essential support for the Department of Defense missions during devastating storms, like Hurricane Katrina, Rita, and Super Storm Sandy, but despite the benefits the merchant marine has provided, it's at a crossroads.

The U.S.-flagged fleet has experienced a decline and we are facing serious shortage of mariners and we need to make sure that we're making investment in the workforce of mariners a key priority.

In addition to the strong support of the Jones Act, this committee should consider supporting investments in vessel recapitalization programs. The Pacific Northwest fishing fleet has begun efforts to rebuild its vessels in American shipyards which supports thousands of jobs and obviously rebuilding and capitalization of both the Coast Guard and NOAA fleets is another big area of infrastructure need that we need the workforce.

One particular point I want to make is that while we have secured the first heavy Polar Icebreaker funding in decades, I want us to authorize even more. It's imperative that our Nation understand that we are an Arctic nation, that this is an entire new transportation path with many opportunities for us to forge new relationships, but to do that, we will have to have an icebreaking fleet.

So I look forward to working on that issue with many of my colleagues on this committee.

The United States must also provide certainty for a workforce by developing a national maritime strategy that identifies the increase in the availability of U.S. ships to ensure that merchant mariners and qualified men and women are there to help with the challenges of increasing cargo and capacity.

We must continue to bolster and support the ship-building industry on this infrastructure issue, which I know many of the witnesses will address today.

So, Mr. Chairman, whether it's developing the workforce, focusing on infrastructure, supporting shipyards, supporting the Coast Guard or new shipbuilding for the fishing sector, I know there's a lot our Committee can do to help this particular sector of the U.S. economy.

So I look forward to hearing from the witnesses today. I'm looking forward to suggestions on how we help this transportation sector of our economy.

The CHAIRMAN. Thank you, Senator Cantwell, and I do particularly appreciate your mentioning the national security role fol-

lowing storms and other disasters. Thank you for bringing up NOAA icebreakers and the fishing sector. I think we are on the same page on so many of these issues.

Mr. Woodruff, we're delighted to ask you to begin. We'll just go down the table. Please limit your remarks to 5 minutes and full statements will be placed in the record.

Mr. Woodruff.

**STATEMENT OF MATTHEW WOODRUFF, PRESIDENT,
AMERICAN MARITIME PARTNERSHIP**

Mr. WOODRUFF. Thank you, Mr. Chairman, Madam Ranking Member, and Members of the Committee.

I'm Matt Woodruff. I work for Kirby Corporation. We're based in Houston but our West Coast operations are headquartered in Seattle.

We're the largest American operator of tank barges with a fleet of over a thousand barges and over 300 tugboats and tow boats operating throughout the United States.

I'm here today, though, as President of the American Maritime Partnership or AMP. AMP is the voice of the domestic maritime industry. It includes shipping companies, dredgers, shipyards, mariners, and pro-defense organizations.

Our singular focus is the Jones Act, the foundational law of the domestic maritime industry, and I hope that you will remember two words from my testimony today: security and certainty.

As you said this morning, Mr. Chairman, and as the President said on Monday, a robust merchant marine is vital to the national and economic security of the United States. For us to continue to successfully serve in that role, we need legislative and regulatory certainty surrounding the Jones Act.

To defend our nation, we must be able to build ships, not just warships, but cargo ships to move material to the battlefield. The Jones Act maintains that shipyard industrial base, but ships are no good without crews to man them.

Increasingly, the domestic fleet is being relied upon by war planners to supply the mariners needed to man our sealift assets in a mobilization. They ensure our ability to protect and sustain forces globally.

Monday's Executive Order will make it easier for us to hire more veterans for a second career as mariners.

Homeland security is another important benefit of the Jones Act. Our coastlines are our longest borders. Open American waters equals open American borders. The Jones Act ensures that the mariners aboard the 40,000+ American vessels that ply our coastal and inland waters are security-screened Americans.

The Jones Act is also critical to economic security. It means that foreign interests cannot control the internal movements of petroleum and other vital cargos. It ensures that the just-in-time supply chains that serve Alaska, Hawaii, and Puerto Rico are American-controlled and could not become a bargaining chip in a trade war.

It's worth mentioning that the domestic industry receives no Federal appropriations or subsidies. We just ask for one thing from our Government: certainty.

Today, our industry is strong and optimistic. There are now four new LNG-powered ships serving Puerto Rico, Mr. Chairman, you probably know that two of those ships were built in Pascagoula, Mississippi. Ocean-going barges to transport LNG as cargo are also under construction in Mississippi.

Container ships for Hawaii service are currently under construction in Brownsville, Texas. These are just examples and there are many more, but when there's talk of Jones Act repeal, long-term waivers and the like, it has a chilling effect on the willingness of people to commit to this industry and invest in assets that last for 30 years or more.

Will qualified students still enroll in our maritime academies when some of our Nation's leaders say it's their goal to replace them with foreigners? Can we continue to offer returning veterans a well-paying career in an industry that recognizes and values their skills?

The standard for a waiver under the law is clear and unambiguous. The requested waiver for Puerto Rico and other waivers rumored to be under consideration fall far short of that standard.

Mr. Chairman, our industry eagerly looks forward to putting Americans to work to implement legally compliant American solutions to American transportation challenges for energy or for anything else.

A long-term waiver would simply ship those jobs and with them American security overseas and they would never come back.

Thank you again for the opportunity to speak for the over 650,000 Americans whose jobs depend on our domestic maritime industry, and I'm happy to answer any questions.

[The prepared statement of Mr. Woodruff follows:]

PREPARED STATEMENT OF MATTHEW WOODRUFF, VICE PRESIDENT, PUBLIC AND GOVERNMENT AFFAIRS, KIRBY CORPORATION; AND PRESIDENT, AMERICAN MARITIME PARTNERSHIP

Mr. Chairman, Madame Ranking Member, Members of the Committee. Thank you for the opportunity to be with you today. I am Matt Woodruff, Vice President of Public and Government Affairs for Kirby Corporation, a large, American domestic shipping company. We are based in Houston but operate vessels throughout the United States.

I am here today in my capacity as president of the American Maritime Partnership ("AMP"). AMP is the largest maritime legislative coalition ever assembled. Our organization includes all elements of the American domestic maritime industry—shipping companies, ship construction and repair yards, mariners, and pro-defense organizations. Our singular focus is the Jones Act, the foundational law of the domestic maritime industry. As everyone in this room should know, the Jones Act requires that cargo moved by water between two points in the United States be transported on American vessels. Notwithstanding what you sometimes read people saying in the paper, it does not apply to cargo coming or going from a foreign country to any point in the United States, including Puerto Rico or Hawaii.

If there were one word to describe why we have a Jones Act in our country it would be "security." The Jones Act provides important national, economic and homeland security benefits throughout our country. The national security and homeland security benefits have been well-documented through writings and statements by the Defense Department, Coast Guard, and Customs and Border Protection officials, as well as independent experts like the Lexington Institute. For example, recently former Defense Secretary James Mattis referred to the U.S. Merchant Marine as our Nation's "Fourth Arm of Defense." I submit to you that in these volatile times, with potential trade wars on the horizon, our economic security as a nation should not be subjected to the risk of a foreign power low bidding to buy the job of moving our coastwise commerce, then holding us hostage to gain a trade advantage else-

where. In every case, the policy rationales for our Jones Act can be summarized in the phrase “American security.” This Committee this year created a subcommittee that is primarily focused on maritime issues and named it the “Security Subcommittee.” We believe that subcommittee is perfectly named because nearly every policy issue that comes before it will in some way involve our Nation’s security.

Summary of Key Points

I could spend my entire time talking about the security benefits of the Jones Act, and will happily address any questions you may have in this regard, but I wish to focus my time on two main points. First I will provide you a brief update on the state of the American domestic maritime industry. In short, the state of our industry is strong. Second I will talk about a threat to that strength, and that is a long-term waiver of the Jones Act for liquified gas cargos, which would require wholesale changes to longstanding interpretations of the Jones Act administrative waiver process. Nothing is more essential to the long-term investments that are necessary for success in our capital-intensive industry than a reliable, predictable, and consistent legal framework. Every time we have a discussion of waivers or repeal of the Jones Act, it has a chilling effect across our industry. It makes vessel owners less willing to invest in vessels and bankers less willing to lend money for them. It makes young people think again before choosing the maritime industry for their career. These are people we will need in the event we must mobilize and move our armed forces in a national emergency. Threats to the Jones Act threaten American security.

State of the American Maritime Industry

The American maritime industry is strong—growing, innovating, and thriving. A recent study by PricewaterhouseCoopers for an AMP board member, the Transportation Institute, shows that ours is an industry that supports total American employment of about 650,000 and has a total economic impact of more \$150 billion annually. There are approximately 40,000 vessels in the U.S. fleet distributing 877 million short tons of cargo annually in a highly efficient, cost-effective and environmentally friendly manner.

Most exciting, the study shows significant growth in our industry between the previous PricewaterhouseCoopers study, which used 2011 data, and the new study, based on 2016 data, the most recent figures available. For example, the number of American jobs related to the domestic maritime industry has increased by 30 percent over that period.

Many members of this Committee represent major domestic maritime states, including you, Mr. Chairman, and you, Madame Ranking Member. Both Mississippi and Washington are home to a robust domestic maritime industry, with thousands of jobs in each state. The same is true for many other members of this Committee. We welcome an opportunity to visit with your individual offices to describe in more detail the economic impact of our industry on each of your states, as well as nationally.

The Core Element of Continued Success—Legal Certainty

We have one primary request when it comes to the Jones Act and that is *legal certainty*. We exist in a highly capital-intensive business and our investments in vessels and other infrastructure are long-term. We make those investments in reliance on U.S. law as it stands today and as it has generally stood for nearly 100 years. Our biggest single concern is unanticipated changes to the rules “in the middle of the game.” It is critically important that the legal, regulatory and administrative framework that serves as the foundation for the American maritime industry remains predictable and certain. Hundreds of thousands of Americans depend on that.

In that light, our greatest concern today would be changes to longstanding, consistent interpretations of the Jones Act administrative waiver rules. As you know, administrative waivers of the Jones Act are exceedingly rare and are granted only under the specific requirements of 46 U.S.C. § 501, a law not specific to the Jones Act but permitting waivers of “navigation or vessel-inspection laws” under certain extremely limited circumstances. The *core requirement* of § 501 is that Jones Act waivers must be “necessary in the interest of national defense.”¹ “Necessary,” of course, means an action that is “essential or required.” As such, the applicants for this waiver must demonstrate that approval is required or essential for national defense. In fact, Customs and Border Protection (CBP), the agency within the Department of Homeland Security with initial responsibility for managing administrative waiver requests, has recognized that the burden for approval of an administrative

¹ 46 U.S.C. § 501.

waiver is high and has ruled that there must be a showing of an “immediate and adverse impact to national defense.” Indeed, CBP has repeatedly held in their rulings that a Jones Act waiver cannot be issued solely for economic reasons or economic benefit. The Defense Department has historically analyzed administrative waivers by asking if there would be an “immediate adverse impact on defense operations” absent the waiver.

Into this long-standing statutory regime governing administrative waivers of the Jones Act has come the Government of Puerto Rico, which in December filed a request for an unprecedented 10-year administrative waiver under §501 to import LNG from domestic sources. There are many reasons why this administrative waiver should not be granted. There is no precedent for a waiver of anywhere near that length. Puerto Rico already enjoys a legislative waiver to move LNG in certain circumstances, a waiver it has never used. Puerto Rico currently lacks the infrastructure to receive the gas in the quantity and location that it desires. Puerto Rico has not executed any contracts for domestic supplies of LNG, and international LNG is nearby and available. But the principle reason the waiver request should not be granted is because Puerto Rico’s request does not qualify under the only allowable standard for a Jones Act waiver—when it is “necessary in the interest of national defense.”

There is no national defense interest here. Puerto Rico government officials have repeatedly described their interest in LNG in economic terms. Puerto Rican officials have emphasized that an administrative waiver is needed to lower electricity prices, which is an economic issue. Puerto Rican government statements and actions about natural gas use on the island far predate the administrative waiver request and have focused on presumed economic benefits. The chief executive officer of the Puerto Rico Electric Power Authority (PREPA), Jose Ortiz, and Gov. Ricardo Rosselló have touted natural gas as the best option to cure the island’s reliance on oil and to lower the price of electricity on the island. In an article in Puerto Rico’s largest newspaper announcing the Jones Act waiver request recently, Gov. Rosselló is quoted as saying that LNG use could result in “hundreds of millions of dollars in savings for Puerto Rico and in profits for the U.S. economy.” In fact, the Puerto Rico request is nothing more than the type of request CBP has said should not be permitted under the law—an economic waiver.

AMP appreciates the desire of Puerto Rico to reduce its energy costs and AMP members are actively engaged to find solutions that are compliant with all laws, including the Jones Act, to achieve that goal. No one is better positioned than the leading participants in the domestic shipping industry to assess the economics of moving LNG to Puerto Rico, and already Jones Act carriers are importing LNG into Puerto Rico in ISO containers. We are confident that solutions can be developed that will comply with American law, provide hundreds of family-wage skilled jobs to Puerto Ricans and other Americans, and achieve the substantial savings touted by Puerto Rico’s leaders. Stated otherwise, Puerto Rico can fully realize the benefits of shifting to an LNG energy supply without bypassing Puerto Rican and other American workers in the American maritime industry. We as an industry have reached out to Puerto Rico government officials in an attempt to stimulate that dialogue.

There have been other recent discussions regarding waivers to move LNG to the Northeast. In addition, one prominent oil and gas executive has publicly called for a national waiver to move LNG. But a waiver under these circumstances would face the same challenge as the Puerto Rico waiver—they would require a complete administrative reinterpretation of the waiver statute and its unambiguous “interest of national defense” requirement. As we have said previously, there are no precedents for long-term waivers and no precedent for economic waivers.

Given the growth in the U.S. supply of natural gas, there is a strong interest by many in the development of a coastwise-qualified domestic vessel fleet to transport gas to Puerto Rico and elsewhere in America, as needed. Many observers believe that the construction of such a fleet is inevitable. Within the U.S. domestic shipping and shipbuilding industry, there is a strong interest in the construction of a domestic LNG tank vessel fleet, which would represent a new market.

However, just like pipelines, LNG liquefaction facilities and other energy transportation infrastructure, most marine vessels are traditionally not built “on spec” but rather built to meet the needs of a customer, backed by a long-term contract. Contracts to move goods not only provide stability for financing but also help the shipping company establish the size and other characteristics of the vessel to best meet the needs of its customers. Unfortunately, gas shippers or developers have been unwilling to enter into the types of contracts or commitments that would be necessary for American shipping companies to finance domestic LNG vessels. In fact, several years ago, three coastwise-qualified U.S. built LNG tankers were fully

available in the American Jones Act markets but were unable to find adequate domestic work and eventually went overseas for work.

As markets develop, if the price of domestic natural gas remains low and pipeline capacity remains constrained, customers and developers are highly likely to enter into the types of long-term gas supply contacts that will bring state-of-the-art Jones Act LNG vessels into those markets. Granting this administrative waiver, however, would be a significant setback, if not a death knell, to the effort to develop a domestic LNG market. An extended administrative waiver would be devastating. Domestic shipping markets with capital-intensive assets that operate for more than 30 years depend on certainty. An administrative waiver of the type proposed by Puerto Rico would add massive volatility and disruption to the market and would undercut efforts to build a domestic LNG fleet. In fact, the novel use of the § 501 authority for an extended LNG administrative waiver could destabilize the entire American domestic shipping industry by introducing extreme uncertainty and volatility into the market. Again, our singular request to this Committee is certainty.

The points we have made above are true not only for LNG but for LPG and for that matter, any cargo in any trade. Certainty is essential to our success.

Conclusion

Again, thank you for allowing us to be with you today for one of the first Commerce Committee hearings under your leadership. We are grateful for the chance to tell our story and to emphasize to you the exciting growth of our industry. Our industry is a great American success story, and the key to our continued success is a predictable, sound, consistent legal framework so that we can “deliver the goods” for our Nation.

The CHAIRMAN. Thank you very much, Mr. Woodruff.
Mr. Allegretti, on behalf of the Operators.

STATEMENT OF THOMAS ALLEGRETTI, PRESIDENT, AMERICAN WATERWAYS OPERATORS

Mr. ALLEGRETTI. Good morning, Chairman Wicker, Ranking Member Cantwell, Members of the Committee. Thank you for the opportunity to testify today.

I'd like to use my time this morning to discuss the four pillars that comprise the foundation of our industry's health and viability and the critical role that Congress, and especially this Committee, plays in providing the certainty and preserving the strength of that foundation.

Those pillars are the Jones Act, Federal preemption, infrastructure, and marine safety.

First, the Jones Act. The Jones Act is the basis for every dollar that AWO members invest in American-built vessels and every job they provide to American men and women. It allows our industry to provide the family wage jobs and the ladders of career opportunity and support hundreds of thousands of jobs in related industries across the country.

The human dimension of the Jones Act is equally compelling. High school graduates and military veterans can work their way up from the deck to the wheelhouse, becoming captains on towing vessels, and making six-figure salaries that provide for their families and support their communities.

Many of our member companies are still owned by the third, fourth, and even fifth generations of the same families. These are things worth protecting.

The Commerce Committee has long been a deep reservoir of bipartisan support for the Jones Act and we thank you for that and we ask you to continue to maintain that vigorous posture in support of the law.

Second, Federal preemption. American farmers, energy producers, manufacturers depend on our industry to move their products to market and to carry the raw materials on which they rely, and because vessels can pass through the waters of a dozen states on a single voyage, our industry depends on a coherent and consistent regulatory regime that is administered and enforced by knowledgeable Federal agencies.

The principle of Federal primacy is not new. It's the foundation of the U.S. Constitution and has been consistently applied to interstate commerce for more than 200 years and it has been recently reflected in thoughtful bipartisan policymaking by Congress, from the landmark Oil Pollution Act of 1990 to, most recently, last year, your passage of the Vessel Incidental Discharges Act.

Thank you for your leadership in passing VIDA. It is important both for the maritime industry, which needs the national uniformity that only Federal regulations can provide, and for the marine environment, which will benefit as the highest standards economically achievable are implemented nationwide.

We urge the Committee to continue to ensure the primacy of Federal laws governing vessel operations and to hold Executive Branch agencies accountable for actively defending Federal authority in this field.

The third pillar is waterways infrastructure, which is in urgent need of modernization and repair. Critical failures and unscheduled closures have occurred at locks across the system. If left untended, these problems are going to compound, increasing the cost of marine transportation and calling its very reliability into question. That would be devastating not only for our industry but for the shippers who rely on us.

Congress can continue to support waterways infrastructure by keeping the Water Resources Development Act on a 2-year reauthorization cycle and opposing additional taxation on vessel operators. We already pay our fair share.

The fourth pillar is marine safety. Our industry's franchise to operate. This responsibility falls primarily on us but Congress also has an important role to play. A quarter century ago, AWO members came together and developed the Responsible Carrier Program as a code of best practices for member companies, and we subsequently instituted a third party audit mechanism to enhance the integrity of that process. We then helped the Coast Guard put in place comprehensive new regulations that govern towing vessels.

AWO members remain committed to being safer every day. Our goal is not simply to comply with the regulations but to institute a genuine culture of safety industry-wide. Please hold us accountable for the commitments that we make to you and, in addition, please help the Coast Guard incentivize a culture of safety by ensuring that regulations, policy, and user fees don't disincentivize the use of safety management systems.

Thank you for the long record of support that this committee has provided to our industry. I look forward to your questions.

[The prepared statement of Mr. Allegretti follows:]

PREPARED STATEMENT OF THOMAS ALLEGRETTI, PRESIDENT AND CEO,
THE AMERICAN WATERWAYS OPERATORS

Good morning, Chairman Wicker, Ranking Member Cantwell and Members of the Committee. I am Tom Allegretti, President & CEO of The American Waterways Operators. AWO is the national trade association for the inland and coastal tugboat, towboat and barge industry. On behalf of AWO's over 300 member companies, thank you for the opportunity to testify at this important hearing on the state of the U.S. maritime industry.

You have already gotten an introduction to our industry this morning from Mr. Woodruff and Mr. Golding, but please allow me to supplement that. The tugboat, towboat and barge industry is the largest segment of the domestic maritime fleet. We operate more than 5,500 towing vessels and over 31,000 dry and liquid cargo barges on the commercially navigable waterways that run through America's heartland; along the Atlantic, Pacific and Gulf coasts; on the Great Lakes; and in ports and harbors around the country. Each year, towing vessels and barges safely, securely and efficiently move more than 760 million tons of critical cargo, including agricultural products for export, coal to electrify our homes and businesses, petroleum products to fuel our cars, chemicals for manufacturing facilities, cement and sand for construction projects, and other building blocks of the U.S. economy. Tugboats also provide essential services in our Nation's ports and harbors, including ship-docking, tanker escort and bunkering.

My colleagues at the witness table today offered insightful perspectives on the importance of the domestic maritime industry. And, I would compliment Austin Golding for taking it a step further by vividly showing you the face of the towing industry in the State of Mississippi. In fact, Mr. Golding's statement provides an excellent launching point for my testimony today. As he described in detail, the work that tugboat and towboat operators do in states like Mississippi, Washington, and dozens of others has a national impact. With that in mind, my objective today is to discuss the four pillars that, taken together, comprise the foundation our industry's health and viability. Those four pillars are the Jones Act, Federal preemption, infrastructure, and marine safety.

I would also like to emphasize the critical role that Congress, and especially this Committee, plays in preserving the strength of that foundation. The sound state of our industry, and the strength and resilience of our members to persevere through the ups and downs of the commercial market, are directly reliant on the certainty that those four public policy pillars provide. Were those pillars to erode, the sound state of our industry would be threatened. With that in mind, I would like to talk briefly about each.

I. The Jones Act

The Jones Act is foundational to the tugboat, towboat and barge industry. It is the basis for every dollar American companies invest in American-built vessels and every job they provide to American men and women. The Jones Act allows our industry alone to provide family-wage jobs and ladders of career opportunity for more than 50,000 Americans—including nearly 39,000 positions as mariners on board our vessels—and support more than 300,000 jobs in related industries across the Nation. As Mr. Woodruff has explained, the domestic maritime industry in total supports nearly 650,000 jobs and almost \$155 billion in economic output nationwide.

There is also a really important human dimension behind the statistics. In the tugboat, towboat and barge industry, many high school graduates and veterans of the U.S. Armed Forces have worked their way up from the deck to the wheelhouse, becoming captains on towing vessels and making six-figure salaries that allow them to provide for their families. Those salaries result in purchasing power that supports local economies in the communities where mariners live. And as Mr. Golding mentioned in his statement, our industry is a rarity in that many of our member companies are still owned by the second generation, or even the third, fourth and fifth generations, of the same families that have deep roots in their communities. This is a testimony to the enduring strength of our members and the work they do. It is also something we see less and less of in our country nowadays and is a really special and powerful thing.

The Commerce Committee has traditionally been a deep reservoir of bipartisan support for the Jones Act, and as I look around the dais this morning, I am gratified to see that this continues to be the case. Chairman Wicker, Ranking Member Cantwell, and Members of the Committee, if you seek a single reason why the Jones Act remains critical to America as it approaches its centennial, look no further than the tugboat, towboat and barge operators in your states. Their valuable work bears daily witness to the wisdom of a law that has sustained a vibrant industry—past,

present, and future. I would urge the Committee to please continue vigorously supporting the Jones Act.

II. Federal Preemption

An efficient marine transportation system is essential to a healthy American economy. American farmers, energy producers, and manufacturers depend on the tugboat, towboat and barge industry to safely, securely and efficiently move their products to market and to carry the inputs and raw materials on which they rely. In turn, this economic powerhouse relies on a nationally consistent regulatory regime administered by the Federal Government.

Like other modes of transportation, the tugboat, towboat and barge industry operates nationwide: AWO member vessels can pass through the waters of a dozen states in the course of a single voyage. The smooth and uninterrupted interstate movement of cargo between U.S. ports is a centerpiece of our members' value proposition to their customers. As such, a coherent and consistent regulatory regime that is administered and enforced by knowledgeable Federal agencies—including the U.S. Coast Guard and the Environmental Protection Agency—is vital to the efficiency and the viability of the tugboat, towboat and barge industry. Federal primacy in the regulation of maritime transport allows Federal agencies to take input from all stakeholders, including states and the public, to establish rules based on vessel operational experience that have been analyzed from a national perspective.

Federal primacy is not a new concept. It is settled law that served as a foundation for the U.S. Constitution and has consistently been applied to interstate commerce for more than 200 years. The Constitutional Convention of 1787 unanimously adopted the Supremacy Clause, cementing the Federal Government's position as the supreme law of the land when regulating interstate commerce.

Key to that supremacy is Congress' power to regulate commerce under Article I of the Constitution. The Federalist Papers cite this authority and the ability to regulate interstate navigation without intervention from individual states as one of the reasons for adopting the Constitution. Likewise, in 1824 the Supreme Court ruled that the power to regulate commerce undoubtedly included the power to regulate interstate navigation.

Today, Federal primacy over navigation remains just as important to commerce as it was at the founding of our country. I would like to highlight two recent examples in which Congress worked in a bipartisan way on Federal preemption legislation beneficial to both the maritime industry and the American public.

The first is the Oil Pollution Act of 1990, which was bipartisan policymaking that enabled vessel owners to plan for and make multi-billion dollar investments in state-of-the-art, environmentally friendly tank barges and tankers to carry the Nation's vital energy cargoes. The phaseout of single-hulled vessels and transition to an all-double-hull fleet, combined with a comprehensive Federal regulatory regime for oil spill prevention, response and liability and the adoption by vessel owners of safety management systems, vendor vetting programs and other safety measures, has produced dramatic, positive results for the American public. Oil spills from tank barges have plummeted by 99.6 percent since enactment of OPA 90. This outstanding safety record is all the more relevant today given the Nation's energy renaissance and the vastly increased need for marine transportation of crude oil and petroleum products.

Second is the Vessel Incidental Discharge Act of 2018, or VIDA, passed last year by the 115th Congress with the leadership and support of this Committee. This law, included in the Frank A. LoBiondo Coast Guard Authorization Act, is distinctive for many reasons, not least the leadership of Chairman Wicker, Ranking Member Cantwell, and Senators Thune, Sullivan, Klobuchar, and Peters, that helped make it a reality. VIDA is a landmark bipartisan measure that will bring uniformity and certainty to the regulation of ballast water and other incidental discharges for vessels engaged in interstate commerce. While the agreement enacted into law is preemptive in nature, it is also notable for balancing the role of the states in the standard-setting and implementation process. VIDA represents both a win for the maritime industry, which needed the national uniformity that only Federal regulations can guarantee, and for the marine environment, which will benefit as the highest standards economically achievable are implemented nationwide.

OPA 90 and VIDA have and will promote safety, protect the environment, and preserve the efficiency of barges and towing vessels engaged in interstate commerce. This should be the goal of Federal preemption in the regulation of interstate commerce. As such, it is critical that Federal primacy be maintained. I urge the Committee to ensure the primacy of Federal laws governing the operation of towing vessels and hold Executive Branch agencies accountable for actively defending and preserving Federal authority over vessel operations.

III. Infrastructure

The third pillar, waterways infrastructure, is equally essential to the towing industry. It is a key component of the Nation's intermodal transportation network that helps to make America competitive in world markets. However, that infrastructure is in urgent need of modernization and repair. For example, more than half of the 238 locks on our inland waterways system are over fifty years old and have exceeded their design lifespan. Critical failures, and significant unscheduled temporary closures, have occurred at locks across the system. If left untended, these problems will compound, increasing the cost of marine transportation and calling its very reliability into question. That would be devastating not only to the tugboat, towboat and barge industry, but to the shippers who rely on it and for air quality and highway congestion as well. Each barge that is pulled off the waterways adds 16 bulk rail cars to our railways or 70 tractor-trailers to our highways, with a resulting increase of greenhouse gases of more than 20 percent and 150 percent, respectively.

Fortunately, the ongoing revitalization of waterways infrastructure has shown Congress at its bipartisan best. For the past six years, lawmakers have worked across the aisle to secure long-sought improvements for our Nation's coastal and inland waterways. The resulting authorization and appropriations bills have ensured that America's waterways will continue to remain vital to the safe, reliable and efficient movement of cargo.

Congress can continue to support the pillar of infrastructure by doing two things. First, we urge you to keep the Water Resources Development Act (WRDA) on a two-year reauthorization cycle. WRDA is a crucial part of a cooperative effort that involves the Inland Waterways Users Board, the U.S. Army Corps of Engineers, and the key committees of jurisdiction in Congress. As we have seen in the past, failure to enact WRDA bills on a regular basis causes backlogs in much-needed modernization and maintenance that result in costly navigation stoppages on the inland waterways system.

Second, we urge Congress to oppose any additional taxation, tolling, lockage fees, or other charges placed upon the users of the inland waterway system. Our industry has already stepped up to the plate there. In 2014, Congress, at the industry's request, enacted a 45 percent increase in the diesel fuel tax our member companies pay into the Inland Waterways Trust Fund (IWTF), a longstanding public-private partnership that yields positive results for our industry and the U.S. economy. We already pay our fair share.

IV. Marine Safety

The fourth pillar is marine safety, which is our industry's franchise to operate. Unlike the other pillars, this responsibility falls primarily on us, and we know and welcome that. Congress also has an important role to play. For more than 25 years, our members have demonstrated their commitment to safety leadership through industry-led initiatives and partnerships with government to safeguard human life and protect the marine environment. AWO's top priority is to lead and support members in continuously improving safety, security, and environmental protection.

A quarter century ago, AWO developed the Responsible Carrier Program (RCP) as a code of best practices for member companies. Companies use the program to develop safety management systems that meet or exceed applicable laws and regulations and are tailored to reflect their unique operational needs. We subsequently instituted a third-party external audit mechanism to enhance the integrity of our safety management system. Building on these industry-led initiatives, AWO worked closely with the Coast Guard for more than a decade to develop comprehensive towing vessel safety and inspection regulations, which went into full effect last July. These regulations will ensure that each of the 5,500 affected U.S.-flag towing vessels meet minimum standards of safety to protect lives, the environment and property, while recognizing and incentivizing operators who exceed minimum standards. The regulations, known as Subchapter M, also leverage safety management systems and third-party organizations to help the Coast Guard focus its limited resources where they're needed most.

It is important to emphasize that, even while Subchapter M is now in effect, AWO members remain committed to getting safer every day. Our goal is not simply to comply with the regulations, but to institute a genuine culture of safety industry-wide. Last October, AWO's Board of Directors unanimously approved Safety Leadership 3.0, a vision to guide how AWO will lead and support members in continuously improving safety, security and environmental stewardship in the post-Subchapter M landscape. As we move forward with this initiative, we look forward to working with Congress to build a safer marine transportation industry. Please hold us accountable for the commitments we make.

In addition, help the Coast Guard incentivize a culture of safety, and not simply a culture of compliance. This includes ensuring that the agency's regulations and policy don't disincentivize the use of safety management systems, which are the foundation of every effective safety culture. That is why it is so important to establish towing vessel inspection user fees that are lower for vessels that have implemented a safety management system—in recognition of their reduced demand on agency resources, because of the Coast Guard's ability to leverage approved third parties to supplement their oversight. We thank the Committee for directing the Coast Guard in last year's authorization bill to compare the costs to government of towing vessel inspections performed by the Coast Guard and those performed by a third party in order to more accurately assess inspection user fees.

There are also other ways that Congress can help the industry and the agency eliminate disincentives, including eliminating regulations that pose implementation challenges for towing vessel operators, but offer little positive impact on personnel or vessel safety or environmental protection. Congressional assistance to resolve these low-risk compliance challenges will enable the Coast Guard and the industry to focus our attention on the regulatory requirements that will make a real difference in protecting people, the environment and property.

V. Conclusion

AWO's member companies are committed to a culture of continuous improvement—to making our domestic maritime industry ever safer, more efficient, and more environmentally sustainable. The vibrancy of the towing industry is a direct result of the ingenuity, resourcefulness, and work ethic of the men and women who comprise it. The sound state of our industry is also a direct result of the bipartisan support that it enjoys in this Committee specifically and in the Congress generally. The statutory and regulatory certainty that you provide is foundational to our survival and success.

I would again like to thank the Committee for its demonstrated record of support for our industry, and ask for your continued support for the four pillars that undergird our industry and enable us to do what we do for the country. It is no exaggeration to say that this Committee is the guarantor of the certainty that will ensure the towing industry's continued success in the years ahead.

Thank you for this opportunity to testify, and I look forward to answering your questions.

The CHAIRMAN. Thank you, Mr. Allegretti.
And now for the Shipbuilders Council, Matthew Paxton.

STATEMENT OF MATTHEW PAXTON, PRESIDENT, SHIPBUILDERS COUNCIL OF AMERICA

Mr. PAXTON. On behalf of the Shipbuilders Council of America, I want to thank you, Mr. Chairman and Ranking Member Cantwell and Members of the Committee, for the opportunity to provide testimony on the state of the shipyard, on the state of the maritime industry, specifically on the critical importance of the U.S. shipyard industrial base.

The SCA represents shipyards and suppliers that build and maintain all vessels, from tug boats to aircraft carriers. The domestic shipbuilding industry is diverse and competes in both government and commercial markets.

From our industry's perspective, the Jones Act ensures that the U.S. maintains critical shipyard infrastructure and an associated skilled workforce that can build, repair, modernize, and maintain the more than 41,000 vessels of the domestic Jones Act fleet.

This industrial base also ensures there is a sufficient workforce and vital supply chain to support the construction and repair of our Navy, Coast Guard, and other government programs.

Simply put, the Jones Act sustains a domestic market for which carriers, operators, and shipyards vigorously compete.

When the Jones Act is not enforced or undermined by short-sighted policy, there can be dramatic influences on the market. Recently, our shipyards successfully completed the recapitalization of the tanker and domestic large ocean-going container ships and RO/ROs, and it is a testament to the Jones Act that the commercial shipbuilding sector was able to rapidly meet the market demand for these vessels and will complete construction for these trades in the coming years.

The fleet will include the world's first LNG-powered container ship. Again, it is a result of the Jones Act that we have such a capable and robust shipyard industry to build these markets.

In contrast, a 2017 decision by the Department of Homeland Security to not revoke a series of letter rulings that have allowed foreign vessels to operate in violation of the Jones Act has created uncertainty and resulted in the cancellation of numerous new U.S. vessel construction contracts.

The cancellation of contracts dampens our industry's ability to invest in a world-class workforce and modern and efficient facilities.

Instead of seeking to undermine the law, the United States should be promoting policies that actively support the expansion of a shipyard industrial base. As the United States has become the world's leader in energy production, so, too, should we encourage our domestically produced natural resources, including LNG, be transported on U.S. vessels, under such policies as proposed by Chairman Wicker's bill, Energizing American Shipbuilding Act.

Not only would that help us regain a foothold on the international shipping market where we've ceded ground to heavily subsidized and government-backed shipyards but there's a direct relationship from the construction of LNG tanker vessels to the recapitalization of our strategic sealift fleets because of the stabilization would bring to the shipyard supplier base and to shipyards generally.

The recapitalization of the Coast Guard fleet is also an excellent example of how the Jones Act benefits national security. Most shipyards engage in the construction of Coast Guard assets, are bidding to do so, have engaged in the construction of commercial Jones Act vessels. These yards have benefited from stable commercial shipbuilding markets to leverage materials and workforce to develop the capability and capacity to build sophisticated Coast Guard vessels.

The most constant argument I hear is that we should do away with the Jones Act and outsource the construction of some of our government assets, commercial vessels, to foreign shipbuilders just because of price.

Along with the significant national security implications of such sentiments, the argument ignores that the U.S. does not compete on a level international playing field in shipbuilding.

From 2015 to 2017, South Korea has bailed out one of its shipyards to the tune of \$12 billion over 2 years while the company sells ships at zero margin.

In addition, according to the Wall Street Journal, the Chinese Development Bank provided COSCO, the Chinese shipping com-

pany, \$26 billion in credit facilities to develop its shipping fleet in 2018.

Comparatively, the U.S. shipyard industry receives no subsidies and instead relies on the stability and certainty of the Jones Act.

We ask for continued congressional and administrative support and enforcement of the law because it is essential to maintaining the critical U.S. industrial base that supports our Navy and Coast Guard fleets.

Thank you again, Chairman Wicker and Ranking Member Cantwell, for allowing me to testify along such distinguished witnesses today. I look forward to your questions.

[The prepared statement of Mr. Paxton follows:]

PREPARED STATEMENT OF MATTHEW PAXTON, PRESIDENT,
SHIPBUILDERS COUNCIL OF AMERICA

On behalf of the Shipbuilders Council of America (SCA), I would like to thank Chairman Wicker, Ranking Member Cantwell, and members of the Committee for the opportunity to provide testimony on the state of the American maritime industry, specifically the economic opportunities in the U.S. and shipbuilding industries. I ask that my entire testimony be submitted for the record.

I am Matthew Paxton, President of the Shipbuilders Council of America (SCA), the national trade association of the U.S. shipyard industry. The SCA is comprised of 85 member shipyard facilities and 105 industry partner member companies that represent the vital supply chain that make up the U.S. shipyard industrial base.

From tug boats to aircraft carriers, and everything in between, the domestic shipbuilding industry is diverse and operates in several sectors including government new construction, government repair and modernization, commercial repair and modernization and commercial new construction. SCA Members and the U.S. shipyard industry build some of the most technologically advanced ships in the world for our government customers including the U.S. Navy and the U.S. Coast Guard as well as for a vibrant domestic commercial market.

The Jones Act

That commercial market is sustained by the Jones Act by providing certainty and stability. This law, which is provided at no cost to the U.S. government, helps to ensure the existence of a domestic shipbuilding and ship repair industrial base. The Jones Act also ensures the maintenance of a merchant marine that is sufficient to carry our domestic water-borne commerce and also ensures an adequate number of ships and mariners to meet national security requirements in times of war or national emergency.

From our industry's perspective, the Jones Act also ensures that the U.S. maintains critical shipyard infrastructure and an associated skilled workforce that can build, repair, modernize and maintain the more than 40,000 vessels of the domestic Jones Act fleet. This industrial base also ensures there is a sufficient workforce to support the construction and repair of our critical national security fleets.

Simply put, the Jones Act sustains a domestic market for which carriers, operators and shipyards vigorously compete. When the Jones Act is not enforced or undermined by shortsighted policy, there can be dramatic influences on that market.

Recently our shipyards completely recapitalized the tanker market due to the oil boom. It is a testament to the Jones Act that the commercial shipbuilding sector was able to rapidly meet the market demand for domestic tankers and deliver these state-of-the-art vessels for that transportation sector. It was a true success for our industry.

In addition, our shipyards recently delivered numerous large ocean going container ships and RO/ROs to recapitalize the noncontiguous fleets. Vessel construction for these important shipping routes is ongoing at several shipyards, but will be completed in the coming years. This fleet includes world's first LNG-powered container ship. Again, it is a result of the Jones Act that we have such a capable and robust shipyard industry to build for these markets.

In a contrasting example, a 2017 decision by the Department of Homeland Security to not revoke a series of letter rulings that have allowed foreign-built, foreign-crewed and foreign-owned offshore supply vessels to vessels to operate in violation of the Jones Act has created uncertainty and resulted in the cancellation of numerous new U.S. vessel construction contracts. The cancellation of contracts dampens

our industry's ability to invest in a world-class workforce and modern, efficient facilities. I raise this issue as an example of how a decision by an agency to not enforce the Jones Act can have an adverse impact on commercial shipbuilding that reverberates throughout the entire shipyard industrial base, further destabilizing its ability to support national defense requirements.

LNG Market Emergence

Most recently, the industry has been concerned regarding the Administration's potential consideration of a long-term waiver of the Jones Act for purposes of transporting domestic LNG. Not only would a long-term waiver be unprecedented, but it would have severe and immediate impacts to a nascent shipbuilding market.

Several U.S. LNG export facilities have begun operations in the last two years. These facilities are already fully subscribed to foreign customers. It is expected over the next 5 years that potentially 11 additional domestic LNG export facilities could come online. As they do, there may be sufficient capacity to be able to service a nascent domestic LNG market. As a result, there are presently several inquiries being made in U.S. shipyards regarding the construction of such vessels which can be constructed well ahead of time to meet that market demand.

A Jones Act waiver is not necessary for the domestic LNG trade. In fact, MARAD has reported that there are 52 LNG carriers in the world that would qualify under existing 1996 legislation to transport LNG from the contiguous United States to Puerto Rico. Opponents of the Jones Act have countered that this is a false because "the law still requires these vessels to be U.S.-registered and U.S.-crewed." One supposes from this that the Jones Act opposition wants to skirt all U.S. regulations and taxes.

The LNG market in Boston is a spot market (several cargos during the winter) and is likely to remain so. As such, regardless of where the LNG might get loaded in a ship, in Louisiana, Maryland or Qatar, it will be delivered at world price and at a price the market will bear. The best example of that case is happening right now as there has been an LNG carrier sitting off Boston harbor for over a month waiting for a cold snap to cause a regional natural gas price hike before the ship lands the gas.

Thus, unless it is the Congress's intent to suspend all U.S. regulations and taxes for vessels operating in coastwise trade, then there is no need to waive the Jones Act. Gas customers in the Northeast will not receive any advantage and there are ships in the world today that could serve a coastwise trade to Puerto Rico if there was a market to justify it.

Waiving the Jones Act to allow coastwise trade by foreign vessels will serve no purpose other than to destroy the Jones Act and the American maritime industries it supports and ultimately damaging national security.

Instead of seeking to undermine the Jones Act and undermine the critical shipbuilding manufacturing sector, the United States should be promoting policies that actively support the expansion of the shipyard industrial base. As the United States has become the world's leader in energy production, so to should we encourage that our domestically produced natural resources, including LNG, be transported on U.S. vessels under such policies as proposed by the Chairman's Energizing American Shipbuilding Act. Not only would that help us regain a foothold on the international shipping market where we've ceded ground to heavily subsidized and government-backed shipyards, but there is a direct relationship from the construction of LNG tanker vessels to the recapitalization of our strategic sealift fleets because of the stabilization it would bring to the shipyard supplier base and shipyards generally.

If you do not think that our adversaries are not making investments maintaining their same industrial base, consider that last month, Russia adopted their own version of the Jones Act for purposes of international trade, which would limit the carriage of the country's national resources, including gas and petroleum to Russian-built, owned and flagged vessels.¹

The Commercial Shipyard Industrial Base & National Security

In a 2016 Force Structure Assessment (FSA) the Navy called for a fleet of 355-ships—substantially larger than the current fleet and also larger than the Navy's previously stated goal of 308 ships. The Congress, under the leadership of Chairman Wicker, made 355 ships the policy of the United States in the FY2017 National Defense Authorization Act.

Simultaneously, the United States Coast Guard is undertaking efforts to recapitalize essential assets such as the Polar Security Cutter (also known as the Polar

¹ <https://www.pacmar.com/story/2019/02/01/features/russias-arctic-more-than-promise/675.html>

Icebreaker), Offshore Patrol Cutters (OPC) s, and the waterways river tenders that ensure the safe navigation of inland marine transportation.

To note, the recapitalization of the Coast Guard's fleet is an excellent example of how the Jones Act supports our government fleets. Most shipyards engaged in the construction of Coast Guard assets or are bidding to do so, have engaged in the construction of commercial Jones Act vessels. These yards have benefitted from stable commercial shipbuilding markets to leverage materials and workforce skillsets to develop the capability and capacity to build the most sophisticated Coast Guard vessels in the world.

Additionally, the Maritime Administration is currently recapitalizing its school training ships that support our state Maritime Academies and train the American mariners of the future. In the criteria for awarding the shipbuilding contract for the procurement of those ships, the Maritime Administration specifically requested the shipyards bidding on the contract have commercial experience. The Administration, through this request, recognizes the value in commercial shipbuilding best practices to "leverage existing marketplace expertise targeting companies' experience in production of innovative U.S.-built ships."²

Another area of significant concern for government fleets is the recapitalization of the Nation's strategic sealift fleet, which ensures that unitized military cargo can be delivered to the war front. Currently the average age of the ships in this fleet is nearly 40 years³ old, and the number of ships that will reach the end of their programmed service lives over the next 10 years will reduce sealift capacity by over 25 percent. The Navy, in partnership with TRANSCOM and MARAD, is working through a plan to recapitalize that fleet through a combination of service life extensions, acquiring used commercial ships, and investing in new-build construction at U.S. shipyards.⁴ The U.S. shipyard industry is already vigorously competing to build and convert these ships.

In order to build and maintain these ships in as timely and affordable manner, stable and robust funding as well as stable construction rates and long-term procurement vehicles are necessary to sustain those industrial capabilities which support Navy, Coast Guard and other government shipbuilding and ship maintenance and modernization programs. These programmatic attributes provide the horizon and incentives required by industry to make risk-balanced investments in support of our national defense needs.

To meet the demand for increased vessel construction while maintaining the vessels we currently have will require U.S. shipyards to expand their workforces and invest in their physical infrastructure in varying degrees depending on ship type and ship mix. This is a requirement our Nation's shipyards are eager to meet however, meeting the national objectives is made more difficult by unstable procurement and sustainment appropriations and associated procurement strategies.

Unfortunately, any debate within the Administration or in the Congress of repealing or waiving the Jones Act adversely impacts financing for the industry undermining the commercial market substantially. This reverberates across the industry and financial markets, directly impacting our industrial base supply chain and that supply chain's ability to support the demands of our Navy and Coast Guard fleets and incrementally erodes the national defense intent of the Jones Act.

Many of our shipyards and suppliers that compete to build these national security assets are sustained by commercial shipbuilding and repair so they are viable when the time comes to build and repair the national security fleets. Companies that would be bidding on contracts for LNG carriers are the same shipyards and suppliers that the country will look to help recapitalize the Nation's strategic sealift fleets. Therefore, undermining the Jones Act through lack of proper enforcement or through broad, unnecessary waivers will directly impact the ability of the Nation to meet our own national security objectives.

International Competition in Shipbuilding

The most consistent argument I hear is that we should do away with the Jones Act and outsource the construction of some of our Coast Guard assets, such as the polar icebreaker, as well as commercial vessels, such as tankers and LNG carriers to foreign shipbuilders because of price. Along with the significant national security implications of such sentiments, that argument ignores that the U.S. does not compete on a level international playing field in shipbuilding.

² <https://www.maritime.dot.gov/newsroom/press-releases/maritime-administration-issues-request-proposal>

³ <https://www.gao.gov/assets/690/686733.pdf>

⁴ https://www.secnav.navy.mil/fmc/fmb/Documents/19pres/LONGRANGE_SHIP_PLAN.pdf

Over the last twenty plus years, with significant government policy and financial assistance, the world shipbuilding capacity grew dramatically, primarily in Asia. At its peak Asian shipbuilders had captured 92 percent of the world commercial shipbuilding market. In the recent severe and sustained downturn in the world commercial shipbuilding markets, Asian governments have doubled down on the support of their shipbuilding industries.

For example, in 2015 alone South Korea's Daewoo shipbuilding took on more than \$1.9 billion in government-financed debt, as it racked up cheap orders, likely at zero margin. Additionally, South Korea provided financial aid totaling just over \$10.7 billion, from 2015 to 2017 to keep the company afloat. Despite that enormous capital injection, Hyundai Heavy Industries, another Korean shipbuilder, agreed to acquire a 56 percent stake in Daewoo this year, with financing coming from the state-run Korean Development Bank,⁵ in order to prevent Daewoo from completely going under.

Comparatively, in the same period of 2015 to 2017, the U.S. Maritime Administration provided \$15 million in small shipyard assistance grants and \$49.7 million through the maritime guaranteed loan program, also known as Title XI.⁶

While China's government subsidies are extremely difficult to detect and measure partly because international trade agreements prohibit direct and indirect subsidies, we know that there is a certain amount of market manipulation based on international news reports and recent studies. A September 2017 report from the Center for Economic and Policy Research found evidence that shipyard costs in China decreased implying a subsidy of between 13 and 20 percent between 2006 and 2012, leading to "substantial misallocation of global production with no significant consumer [gains]."⁷

Additionally, between 2013 and 2017,⁸ China operated a "cash for clunkers" program that increased subsidies for scrapping obsolete ships by 50 percent to help cut overcapacity in the market. During this period, the Chinese government granted \$247 per gross ton for shipping companies to replace obsolete ships. Chinese shipyards further benefited from this initiative, because the grants were awarded to shipping companies only after replacement orders had been placed in Chinese shipyards.⁹

On top of the scrapping incentive, the Chinese government offers more overt support for its shipyard industry through cash infusions. One such shipyard, Rongsheng, received state subsidies of the equivalent of \$202 million, *per year* from 2010 to 2012. In that same time period, reports also noted that the shipyard had laid off 8,000 workers, and yet would still need to appeal for more government aid in 2013.¹⁰ Eventually, even state subsidies could not prop up the yard, which went bankrupt and the facility was removed from the government's white list in 2014.

These are examples of direct and indirect government support that distort the international shipbuilding market and render moot any discussion of U.S. shipyards competing internationally. Even with direct government support to shipyards in its various forms and huge government supported shipbuilding credit pools for ship owners, many Asian shipyards are taking contracts at zero-margin simply to keep the economic engine of the country going. It is therefore an extreme misrepresentation to compare the blatant manipulation of foreign shipyards to the market stability provided by the Jones Act.

These countries are investing and financing their shipyard industries because they consider it to be an issue of national sovereignty.

Future Investment in U.S. Shipbuilding

Looking towards the future, we expect there to be the continued investment by the U.S. Navy and U.S. Coast Guard in their recapitalization of critical shipbuilding programs for their fleets. Additionally, the Maritime Administration is in the process of recapitalizing school ships which will support our state maritime academies and we are seeing strong investment in marine transportation around the Nation

⁵ <https://asia.nikkei.com/Business/Business-deals/Hyundai-s-mega-shipbuilder-plan-puts-China-and-Japan-on-edge>

⁶ <https://www.transportation.gov/sites/dot.gov/files/docs/MARAD-FY-2017-CJ.pdf>
⁷ <https://www.transportation.gov/sites/dot.gov/files/docs/mission/budget/281151/marad-fy-018-cj-budget.pdf>

⁸ Kalouptsi, Myrto. Detection and impact of industrial subsidies: The case of Chinese shipbuilding. Washington, D.C.: Center for Economic and Policy Research, 2017.

⁹ <https://www.reuters.com/article/china-shipping/update-1-china-extends-ship-scrapping-subsidy-programme-to-end-2017-idUSL3N0Z91FB20150623>

¹⁰ <https://www.wsj.com/articles/china-ships-reforms-to-sea-1386684631>

¹¹ <https://www.reuters.com/article/us-china-shipping/china-to-aid-ailing-shipbuilders-with-more-subsidies-idUSBRE9B80Q320131209>

through expansion of ferry and passenger vessel service. Concurrently, the commercial market will continue to respond to industry demands for domestic shipbuilding.

We ask for continued Congressional and Administrative support and enforcement of the Jones Act because it is essential to maintaining the critical U.S. shipyard industrial base that supports our national security fleets.

Thank you again Chairman Wicker and Ranking Member Cantwell for allowing me to testify alongside such distinguished witnesses today. I look forward to your questions.

The CHAIRMAN. Thank you very much, Mr. Paxton.

We now turn to Mr. Austin Golding, President of Golding Barge Line.

Mr. Golding.

**STATEMENT OF AUSTIN GOLDING, PRESIDENT,
GOLDING BARGE LINE**

Mr. GOLDING. Good morning, Chairman Wicker, Ranking Member Cantwell, and members of the Committee. Thank you for the opportunity to come before you and discuss the state of the U.S. maritime industry.

My name's Austin Golding, and I'm President of Golding Barge Line of Vicksburg, Mississippi.

My family's been involved in the operation of towboats and barges for 54 years. Our family's current operation includes 24 towboats, 63 barges, and 225 employees.

I am honored to come before the Committee today to discuss the state of the industry that returns so much to our country. Our business, Golding Barge Line, moves refined petroleum and chemical products via tank barge.

Our voyages regularly consist of hundreds of miles and transits through multiple states. We rely on an aging system of infrastructure to accomplish these voyages that often link one part of the country with another and a volume of trade that is unmatched by another mode of transport.

The American mariner is at the heart of our story. At entry level, mariners start out as a deckhand earning \$30,000 a year salary. Within one to 2 years, they could be promoted to tanker man which comes with the responsibility of loading and unloading the barges. That position starts at \$70,000 a year. From there, they can be promoted to pilot within five to 8 years from hire date. That position starts out at a \$130,000 a year with an earning potential of over \$200,000 a year, all before the employee's 30 years old.

One way that we recruit and develop entry-level positions is a deckhand school that we have developed with our local community college, Hines Community College. This is a 1-week program that simulates life on the boat and what the job will call for.

Students are enrolled in the program by their employing company after they have passed all their pre-employment requirements. Passing this class is the final piece on their journey to becoming a real-deal deckhand.

Our company alone has hired 312 graduates of this program since its inception. We have seen improvements in our safety performance as well as improved entry-level retention.

Military veterans have found our industry is a great second career option. When veterans enter our ranks, they understand chain of command, being away from home, and working as a team to ac-

compish a task safely. Many of these veterans find our industry to be a perfect fit.

The Jones Act helps protect these maritime jobs. This critical Act ensures our country will not only have American citizens handling our precious cargo but also the equipment carrying that cargo will be built in our country by American citizens.

The Jones Act is a critical tool in protecting American jobs and national security. Without the Jones Act, I can say with confidence I would not be sitting before you today with a great story to tell.

Without the Jones Act, I can say our security as a nation wouldn't be as secure as it is today either. Our nation's security is too important to be outsourced around the world.

The Jones Act ensures that the United States of America has a robust maritime shipbuilding talent base. That is something worth conserving.

A point I touched on is the state of our inland waterway infrastructure. Many of the locks and dams we transit are well beyond their economic design life. Many of the products that move by barge travel through multiple locks before reaching their destination.

An investment in Kentucky may mean products in West Virginia can meet their end market in Texas, Louisiana, or abroad. As an operator, I can attest that many of these structures are in dire need of modernization or replacement. Investment in locks and dams may be the best investment in bulk commerce this country can make.

The cargo that passes through one lock may wind up on countless roads or rail lines before meeting its end consumer. As an industry, we want to pay our fair share to modernize our infrastructure. Right now, companies like ours pay 29 cents a gallon diesel fuel tax. At 29 cents per gallon, that is the highest gas tax per gallon of any commercial surface transportation mode.

The money we pay goes directly in the Inland Waterway Trust Fund. We voluntarily increased that tax by 45 percent in 2014, from 20 cents to 29 cents, because we want to see proper investment in the system.

We are in an active public/private partnership as we speak. Despite this increase, our industry still needs more Federal support to keep our waterways viable. The value that these locks and dams bring our country far exceeds their scale and size.

One of the lesser-known benefits of the inland maritime industry is how green we are. We are able to move cargo with the lowest carbon footprint among all transportation modes who move the same tonnage. We are stewards of the environment in which we operate as nature itself.

Investment in our inland waterway system not only benefits our economic interests. Flood control, municipal water supply, and recreation are all positively impacted by investment in our inland waterway system.

In closing, I must say it's an honor to come before the Committee to discuss these important issues. This industry is a critical thread in the fabric of America. It has been a key contributor to the success of the United States and an ever-present component of our country's prosperity.

Our operators quietly pass by harbors and city fronts, under bridges, and through locks and dams with our country's precious cargo in tow. The maritime industry keeps our country moving forward by providing many points of light in an endless enduring dream for American workers, farmers, manufacturers, energy producers, and consumers.

Thank you for holding this hearing and allowing our story and priorities to be discussed.

[The prepared statement of Mr. Golding follows:]

PREPARED STATEMENT OF AUSTIN GOLDING, PRESIDENT, GOLDING BARGE LINE

Good morning Chairman Wicker, Ranking Member Cantwell, and members of the Committee:

Thank you for the opportunity to come before you and discuss The State of the U.S. Maritime Industry. My name is Austin Golding and I am President of Golding Barge Line in Vicksburg, Mississippi. My family has been involved in the operation of towboats and barges for 54 years. My grandfather and a group of investors entered this industry by starting a shipyard with one boat in 1965. Our family's current operation includes 24 towboats, 63 barges and over 225 employees and is privately owned in its entirety by my family. We truly are a small family owned business. My family and our company have navigated the ups and downs of this space that has been at the center of the United State's ever-growing economy. I am honored to come before the Committee today to discuss the state of an industry that returns so much to our country.

Our business, Golding Barge Line, moves refined petroleum and chemical products via tank barge. Our barges serve as inland tank vessels as they move the material that fuels our country. Our voyages take us all along our gulf coast from Brownsville, Texas to Panama City, Florida. They also carry us the length of the Mississippi River as well as the entire Ohio Valley. Our voyages regularly consist of hundreds of miles and transit through multiple states. This is the case with most inland operators regardless of cargo. We rely on an aging system of infrastructure to accomplish these voyages that often link one part of the country with another in a volume of trade that would be impossible to move by another mode of transport. As far as our company specifically, we carry 50,000 to 100,000 barrels of cargo per voyage. That means we are responsible for delivering 2.1 to 4.2 million gallons of product per voyage to someone in a safe and timely manner. We accomplish this with reliable equipment, talented mariners and competent management who all rely on an aging infrastructure system and a regulatory environment that provides certainty.

The American mariner is at the heart of our story. Our business can take a young man or woman and start them as an entry level deckhand earning \$30,000 annual salary. Within one to two years they can be promoted to Tankerman, which yields a salary of \$70,000 a year. If a mariner is particularly talented and dedicated to their craft, they can train to be a Pilot and be credentialed as such within five to seven years, sometimes faster. A towboat pilot starts out making \$135,000 a year and can make over \$200,000 with tenure. Our industry routinely takes young men and women out of high school and develops them into someone earning well over \$100,000 a year before they are 30 years old. That is the American dream.

One way that we recruit and develop our entry level positions is a Deckhand School that we have developed with our local community college, Hinds Community College. This is a one week program that simulates life on the boat and what the job will call for. The class itself is held on the campus of Hinds Community College. The students leave their cars behind and are housed in a local hotel. They learn life skills such as cooking and cleaning to go along with basic towboating skills such as working lines and being aware of potential safety issues. Students are enrolled in this program by their employing company after they have passed all of their pre employment requirements. Passing this class is the final piece of their journey to becoming a real deal deckhand. This wonderful program was originally funded via a Trade Adjustment Assistance Community College and Career Training (TAACCT) Grant funded through the U.S. Department of Labor. That grant expired in the spring of 2017 and the companies involved, as well as Hinds Community College, kept it going out of their own pockets. Additional funding came through on July 1st 2018 via a Delta Regional Authority grant that originated in the Department of Agriculture. That funding piece expires later this year on June

30th 2019. Our company alone has hired 312 graduates of this program since its inception. We have seen improvements in our safety performance, as well as improved entry level retention. Programs like this could be duplicated across the country to introduce more people to this sometimes overlooked and undervalued occupation.

Military veterans have found our industry as a great second career option. When veterans enter our ranks they understand chain of command, being away from home and working as a team to accomplish a task safely. We take great pride in employing our country's veterans and offering them a chance to capitalize the skills they developed in the military. Many of these veterans become great leaders on board and find our industry to be a perfect fit.

The Jones Act helps protect these maritime jobs. This critical Act ensures that our country will not only have American citizens handling our precious cargo but also that the equipment carrying that cargo will be built in our country by American citizens. The Jones Act is a critical tool in protecting American jobs and national security. Without the Jones Act I can say with confidence I would not be sitting before you with a great story to tell. Without the Jones Act this country will be looking for foreign shipyards to build the vessels that protect not only the goods we produce but also our citizen's themselves. Our security as a nation is too important to be outsourced around the world. The Jones Act ensures that the United States of America has a robust maritime and shipbuilding talent base. That is something worth protecting.

A point I have touched on is the state of our inland waterway infrastructure. Many of the locks and dams we transit are well beyond their economic design life. Many corners of this country are perilously close to losing their gateway to the world market. Many of the products that move by barge travel through multiple locks before reaching their destination. An investment in a lock in Kentucky may mean products from West Virginia can reach their end market in Texas, Louisiana or abroad. As a vessel operator I can attest that many of these structures are in dire need of modernization or replacement. Considering the amount of cargo that is carried along the inland waterways, investments in locks and dams may be the best investment in bulk commerce this country can make. The cargo that passes through one lock may wind up on countless roads or rail lines before meeting its end consumer. An investment in locks and dams needs to happen before this cargo is forced on to our already congested roads, rail and pipelines. As an industry we want to pay our fair share. Right now companies like ours pay \$.29-per-gallon diesel fuel tax. The money we pay goes directly to the Inland Waterways Trust Fund (IWTF). We voluntarily increased that by 45 percent in 2014 from \$.20 to \$.29 because we want to see proper investment in the system. That \$.29 cents per gallon is the highest gas tax per gallon of any commercial surface transportation mode. We are an active public private partnership as we speak. Despite this increase and emphasis our industry still needs more Federal support to keep our waterways viable. The incredible scale of the locks and dams, as well as size of the network of which they are a part, requires constant maintenance. The value that these locks and dams bring to our country far exceeds their scale and size.

One of the lesser known benefits of the inland maritime industry is how green we are. We are able to move cargo with the lowest carbon footprint among other transportation modes to move the same tonnage. We are stewards of the environment in which we operate as it is nature itself. Roads, rail and airports have not been here for thousands of years as the rivers of this country have. An investment in our inland waterways system not only benefits economic interests but also environmental interests as well. Flood control, municipal water supply and recreation are all positively impacted by investments in our inland waterway system. With bulk cargo volume expected to increase in the future it only makes sense to ensure the vitality of our maritime industry so it can be the first choice to answer this need.

In closing, I must say it is an honor to come before the Committee to discuss these important issues. This industry is a critical thread in the fabric of America. The maritime industry traces its roots back thousands of years due to its unmatched economics. It has been a critical part of the success of the United States and an ever-present component of our country's prosperity. The inland boat and barge industry has proven itself to be the most efficient, safe and tenured form of cargo transportation in our country but that does not ensure it's properly prioritized in Washington, D.C. Our industry quietly passes by harbors and city fronts, under bridges and through locks and dams with our country's precious cargo in tow. Our industry provides many points of light and an endless enduring dream for the American workers, farmers, manufacturers, energy producers and consumers. Thank you for holding this hearing and allowing our story and priorities to be discussed.

The CHAIRMAN. Thank you very much, Mr. Golding.

Ms. Eriksson, we're delighted to have you on behalf of the Sailors' Union of the Pacific.

**STATEMENT OF BERIT ERIKSSON, WORKFORCE
DEVELOPMENT DIRECTOR, SAILORS' UNION OF THE PACIFIC**

Ms. ERIKSSON. Good morning, Chairman Wicker and Ranking Member Cantwell and members of the Committee.

As a mariner and a maritime workforce development specialist, I would like to thank you for the opportunity to address the Committee on the education and workforce development successes and challenges facing the United States Jones Act impact as well as the domestic maritime industry's workforce.

Although I am now sailing a desk as a maritime training director, I sailed many years as an able seaman and as a bosun in Alaska. I serve on one Federal advisory committee representing unlicensed deck, which is the Merchant Marine Personnel Advisory Committee, also known as MERPAC, and I anticipate to soon serve as a labor seat on the Maritime Transportation Systems National Advisory, also known as MTSNAC.

Merchant marine and maritime industry workforce issues have been my focus for the last 20 years or so. When I caught my first ship in 1970 at the age of 18, getting my seaman's documents was a relatively simple process. There were many more unlicensed entry-level positions from which you could work your way up to able seaman or oiler.

The maritime academies have supplied entry-level officers and there were also many who hawsepiped from the unlicensed to officer through an on-the-job training and U.S. Coast Guard testing pathway.

As you may be aware, the International Treaty of 1978, known as the Standards of Training, Certification, and Watchkeeping, known as STCW, has created certain training and certification regulations which have impacted the ability of the industry to meet credentialing requirements.

Since the implementation in 2002, STCW has severely affected the ability of mariners to hawsepipe due to these requirements.

In the past, advancing from entry-level positions, such as ordinary seaman and wiper, was relatively simple by just accruing the appropriate sea time and taking a lifeboat and able seaman or oiler test. This has now become a complicated and expensive journey, even if you can find an entry-level job on an American deep sea vessel.

As the entry positions are not U.S. Coast Guard-required billets, these positions have been drastically reduced since I first went to sea. Credentialing has even become a complex process for the domestic maritime industry, such as towing and passenger vessels.

All of this is affecting our ability to support the U.S. Navy in its mission to protect our Nation. As Maritime Administrator Admiral Busby has said, a battle group cannot stay at sea longer than a week without replenishment from the support fleet. These military sealift command or government-contracted civilian support vessels are manned by U.S. merchant mariners, of which approximately 75 percent are unlicensed mariners.

To keep these vessels ready to serve, there needs to be enough billets to provide the training platforms for entry-level unlicensed mariners as well as maritime academy cadets. They are needed to replace an aging workforce which many came up in the Vietnam and Desert Storm eras when there were plenty of support vessels to learn your trade on.

To ensure that we have enough vessels to grow new mariners on, it is imperative that the Jones Act is protected, that the Maritime Security Program is fully funded, and that USAID, also known as Food for Peace, should come from U.S. farmers directly and carried on U.S. vessels.

Without these programs, our ability to make more U.S. mariners will be imperiled which will in turn impact our ability to support our military missions at sea.

One path to building our mariner pool is the Military-to-Mariner Project that has been developed over the last five or six years. This has been a collaborative process that mainly took place through MERPAC.

The parties involved were the U.S. Coast Guard, U.S. Navy, U.S. Army, National Maritime Center, private industry, and other subject matter experts. The issue that needed to be addressed was that military personnel qualifications were not accepted as equal to the U.S. Coast Guard qualifications, even though the experience and training were mainly equal.

Several sessions were held with military training personnel sat with National Maritime Center course approval personnel and cross-walked military PQSs with civilian competencies.

In the end, scores of military training programs for U.S. Coast Guard were approved as meeting civilian standards. This will enable a military member to acquire merchant marine credentials before separation, thereby saving them time and money if they wish to go to sea as a civilian mariner. This is still an ongoing process, but the most difficult parts have been completed.

Military-to-Mariner is still an open task at MERPAC and all parties are working to ensure progress continues.

Besides our excellent merchant marine academies, there's also some very good community colleges and private training providers that provide maritime training for both entry-level certifications and continuing professional developments.

In my home state of Washington, there has been developed a high school career and technical education curriculum for both merchant mariner and shipyard workers. These students can acquire the skills needed for entering family wage employment out of high school. This is supported by the State Superintendent of Public Instruction.

In conclusion, considering all the challenges faced by the industry workforce, in my opinion, the most urgent is the lack of enough training platforms on our U.S. merchant vessels. It is therefore vital that we maintain and grow our U.S. Jones Act fleet.

Thank you.

[The prepared statement of Ms. Eriksson follows:]

PREPARED STATEMENT OF BERIT ERIKSSON, WORKFORCE DEVELOPMENT DIRECTOR,
SAILOR'S UNION OF THE PACIFIC

Good Morning Chairman Wicker, Ranking Member Cantwell and members of the committee. As a mariner and maritime workforce development specialist I would like to thank you for the opportunity to address the Committee on the education and workforce development successes and challenges facing the United States Jones Act impacted as well as the domestic maritime industry's workforce.

Although I am now sailing a desk as a maritime training director, I sailed many years as an Able Seaman and as Bosun. Currently I serve on two Federal Advisory Committees, representing unlicensed deck on the Merchant Marine Personnel Advisory Committee (or MERPAC) and as a labor seat on the Marine Transportation Systems National Advisory Committee (MTSNAC). Merchant marine and maritime industry workforce issues have been my focus for the last 20 years or so.

When I caught my first ship in 1970 at the age of 18, getting my seaman's document was a relatively simple process. There were many more unlicensed entry-level positions from which to work your way up to Able Seaman or Oiler. The maritime academies supplied entry level officers and there were many who "Hawsepiped" from unlicensed mariner to officer through on the job training and U.S. Coast Guard testing.

As you may be aware, the international treaty of 1978 known as the Standards of Training, Certifications and Watchkeeping (known as STCW) has created certain training and certification regulations which have impacted the ability of the industry to meet credentialing requirements. Since implemented in 2002, STCW has severely affected the ability of mariners to "Hawsepiped" due to these requirements. In the past, advancing from entry level positions such as Ordinary Seaman and Wiper was relatively simple by just accruing the appropriate sea time and taking a lifeboat and Able Seaman or Oiler test. This has now become a complicated and expensive journey even if you can find an entry level job on an American deep-sea vessel. As the entry positions are not USCG required billets, these positions have been drastically reduced since I first went to sea. Credentialing has even become a complex process for the domestic maritime industry such as towing and passenger vessels.

All of this is affecting our ability to support the U.S. Navy in its mission to protect our Nation. As Maritime Administrator, Admiral Busby has said, a battle group cannot stay at sea longer than a week without replenishment from the support fleet. These Military Sealift Command or government contracted civilian support vessels are manned by U.S. Merchant Mariners of which approximately 75 percent are unlicensed mariners. To keep these vessels ready to serve there needs to be enough billets to provide the training platforms for entry level unlicensed mariners as well as maritime academy cadets.

They are needed to replace an aging maritime workforce of which many came up in the Viet Nam and Desert Storm eras when there were plenty of support vessels to learn your trade on.

To ensure that we have enough vessels to grow new mariners on, it is imperative that the Jones Act is protected, that the Maritime Security Program is fully funded and that USAID (also known as Food for Peace) should come from U.S. farmers directly and carried on U.S. vessels. Without these programs our ability to make more U.S. mariners will be imperiled which will in turn impact our ability to support our military missions at sea.

One path to building our mariner pool is the Military to Mariner project that has been developed over the last five or six years. This has been a collaborative process that mainly took place through MERPAC. The parties involved were the U.S. Coast Guard, U.S. Navy, U.S. Army, National Maritime Center, private industry and other subject matter experts. The issue that needed to be addressed was that military personnel qualifications were not accepted as equal to the civilian U.S. Coast guard qualifications even though the experience and training were mainly equal. Several sessions were held where military training personnel sat with National Maritime Center course approval personnel and cross-walked military PQS's with civilian competencies. In the end scores of military training programs were U.S. Coast Guard approved as meeting the civilian standard. This will enable a military member to acquire merchant mariner credentials before separation thereby saving them time and money if they wish to go to sea as a civilian mariner. This is still an ongoing process, but the most difficult parts have been completed. Military to Mariner is still an open task at MERPAC and all parties are working to insure progress continues.

Besides our excellent Merchant Marine Academies, there are also some very good community colleges and private training providers that provide maritime training for both entry level certifications and continuing professional development.

In my home State of Washington, there has just been developed a high school Career and Technical Education curriculum for both merchant mariners and shipyard workers. These students can acquire the skills needed for entering family wage employment out of high school. This is supported by the State Superintendent of Public Instruction.

In conclusion, considering the all challenges faced by the industry's workforce, in my opinion the most urgent is the lack of enough training platforms on our U.S. merchant vessels. Therefore it is vital that we maintain and grow our U.S. Jones Act fleet.

The CHAIRMAN. Thank you very, very much, and thank you all for some very excellent testimony.

Mr. Golding, can you elaborate on the infrastructure problem and how it affects you on a daily basis in your business?

Mr. GOLDING. Yes, sir, Mr. Chairman. Many of the locks and dams that we transit through are well beyond a useful life. We've maintained them. We've been able to operate within their scope, but as we testified here today, the infrastructure we have is outdated and in need of investment.

Some examples I can give you, recently Olmstead Lock and Dam was completed. I know that had been a long yoke around our industry's neck. We changed our cost-share program to more match the Inland Harbor Trust Fund. We added a more robust match to what our industry pays in to and as a result that project came together rather quickly and is now considered a success.

One project I could point to that is in dire need of update is the Industrial Lock and Canal in New Orleans, Louisiana. This lock is nearing a hundred years old and in 1956 was authorized for modernization. I don't think anything's been done since then.

There are oftentimes we can wait two to three days to transit that part of the country. It's a vital inland and outlet for the east side of the Lower Gulf states of the country, including the Port of Mobile, and entry to the Tenn Tom Waterway.

Many of these gateways have massive delays associated with them and as a result that cost gets passed on to the consumer. If we can find a way to invest in these locks and dams and create a system that's more efficient, I have no doubt that the maritime industry will rise to the occasion and be at a price point that will benefit and be looked back upon as a worthy investment.

The CHAIRMAN. Thank you. Mr. Golding, during your testimony, Senator Cantwell and I were just amazed at the staggering salaries that a young American can make after a year or so.

Were you giving the best case scenario or how accurate is that across the board? Is there a little hyperbole here or is \$70,000–100,000 actually something that the average trainee can aspire to after a year or two?

Mr. GOLDING. That is the salary that they begin that position. This cycle of work does come at a high compensation, but I have to stick up for our mariners and tell you they miss a lot, Chairman. They work really hard. They work in elements that are uncomfortable. They miss major life events and they do it in the name of putting food on the table and providing a wage and a living for their family. We're happy to pay these wages. These men are talented.

These men and women are credentialed. These men and women sacrifice a lot to do this work.

So as they go from \$30,000 to \$70,000, I can tell you that's my favorite part of the job, especially when they go from \$70,000 to \$150,000 or \$130,000 to start that position. As they become more proficient as a pilot, it doesn't stop there. They can go from a \$130,000 over \$200,000 a day. I've had pilots——

The CHAIRMAN. A year.

Mr. GOLDING. Oh, yes, a year. Where I was going with that is we've had to call some of these guys to try to get them to move our commerce and they'll tell you I'm not getting off the couch for less than a thousand dollars a day and so I'm proud to pay these wages.

We are as an industry proud to employ these mariners. I think that the sacrifice and effort and the talent that goes into these positions is well worth the money and I anticipate those salaries actually increasing in the future.

The CHAIRMAN. Thank you very much.

Mr. Paxton, it's frustrating to hear people suggest that we can't move our LNG and still operate under the Jones Act.

Help us confirm that the domestic shipbuilding industry is capable and prepared to give our United States economy what we need and also when we're talking transport to Europe, which we would love to supply with our abundant resources and get them out from under the thumb of a dominant Russia, those vessels are not required to be under the Jones Act. So help us out on that.

Mr. PAXTON. Yes, sir. First of all, right now we're building for the market for LNG transport. Two LNGs building ocean-going articulated tug barge LNG carriers and we're servicing the market that exists right now for LNG.

Now the question is could we build LNG carriers? Absolutely, 1,000 percent, we could build those if there is a market to move LNG domestically with an LNG carrier, we can build that.

Right now, sir, there's not. There just isn't for a domestic shipment of LNG in a carrier.

The CHAIRMAN. Well, let me sink this in. I want to get the needed LNG to our American citizens in Puerto Rico.

Mr. PAXTON. Yes, sir.

The CHAIRMAN. Do we have the capability to do that?

Mr. PAXTON. Absolutely, sir. For years, we had LNG carriers who were waiting to deliver LNG to Puerto Rico, three of them, U.S.-built, U.S. crude, way back in 2011, and those vessels were never used.

The reality is and the facts are, sir, in Puerto Rico to deliver large LNG delivery, they don't have the infrastructure to receive it. They don't. The fact is if they do develop that infrastructure to receive large LNG quantities, we can build those ships in time to do that, sir. Our shipyards are right now talking to operators to build LNG carriers and we have enough time width to build those carriers to deliver LNG to Puerto Rico when they have the infrastructure to receive it, sir.

The CHAIRMAN. So whether it's the Jones Act vehicle or non-Jones Act vehicle, you've got to have the facilities to receive the product?

Mr. PAXTON. To have the facilities. Yes, sir. One last thing on your question about delivering LNG internationally to Europe. You know, your legislation in the last Congress, the Energizing American Shipbuilding Act, is the way to do that. Take some percentages, we did the same thing with Prudhoe Bay with Alaska crude, and we put those on U.S. tankers and they sent that crude internationally. We could do the same thing with LNG.

In fact, Russia last year passed a law requiring all their LNG and crude to go on Russian-built LNG carriers under Russian control. They saw the wisdom of your legislation, sir, and they implemented it in Russia. So that's what we're up against and I think we should do the same thing here.

The CHAIRMAN. Thank you, sir.

Mr. PAXTON. Thank you.

Senator Cantwell.

Senator CANTWELL. Thank you.

Mr. Golding, Ms. Eriksson, you know, I think people hear some of the salary numbers and think that that's very well paid, but as you pointed out, Mr. Golding, when you are welding underwater, it's a very unique skill set, but as you mentioned, Ms. Eriksson, a lot of our young people can be very excited about these jobs if they know about them. So it's really about getting exposure at that high school and community college level.

What can we do on the Committee to help with that? I know I've been very involved with Department of Labor and Department of Energy grants as it relates to community college and curriculum development in aerospace and energy and various things. What do we need to do in the maritime space?

Ms. ERIKSSON. Well, in terms of the secondary level, at the high school level, the Perkins, the Current Technical Education Act, I think would be a place to maybe put some emphasis on meaningful secondary training.

You may be familiar with the Maritime Industrial Council, Dave Gearing, he created the Washington State Core Plus Curriculum for both mariners and shipyard workers, but the funding would be coming through a Department of Education program. So I think you would want to look at that for a secondary.

I think under the new Current Technical Education emphasis in education in general, now that's a good place and so the Perkins Act I would just recommend initially.

Senator CANTWELL. Mr. Golding.

Mr. GOLDING. Yes, thank you for the question. The specific funding around our program came through a TAAC Grant, which is a Trade Adjustment Assistance Community College Career Training Grant that was granted to the Mississippi River Transportation Distribution Logistics Consortium. That grant lasted from November 15 to March 31, 2017, and I have to tell you it was robust. It was close to \$24 million. That was placed in nine community colleges around the country.

2.1 million of it went to Hines Community College right there in Vicksburg, Mississippi. We split that 50/50 between trucking and maritime. That propped up our initial training program. That funding expired, and I'll tell you the program's so valuable to us that Hines Community College and the member companies that partici-

pate in this paid our way until new funding came. That funding came through the Department of Agriculture, through the Delta Regional Authority locally in Mississippi. The funding we got was \$80,000.

I can tell you that we're making the most of it, but I also know that from our standpoint, to train these young men and women, we have over \$2,000 in each participant in these classes, whether it be pre-employment or whether it be cost of the class.

Any funding that can go grant-wise in any direction, I can tell you that our industry will take it to help train these mariners. I hear it from our guys on board, whenever we have a lapse in funding for this training and we don't have the opportunity to send these young men and women through this program, my captain's calling me on the phone and saying where are you getting these folks? It really works. It really helps.

And to your point, it really helps advertise our industry. We are passively overlooked so many ways and I can tell you that as we've gone out and actively recruited in our communities and around the country, we've found great untapped talent out there that has also, I think, used our industry as untapped, as well.

Senator CANTWELL. Well, I look forward to working with you also on the infrastructure investment on the lock and dam side. I can't tell you, having done the Freight Act, how important that is.

If you lose capacity to move on a timely basis, you will lose. You know, your ports become less effective as movement of product and that is their destination. Somebody decides to just buy from somebody else and we just can't afford that.

Mr. GOLDING. No.

Senator CANTWELL. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you.

Senator Schatz and then Senator Fischer.

**STATEMENT OF HON. BRIAN SCHATZ,
U.S. SENATOR FROM HAWAII**

Senator SCHATZ. Thank you, Mr. Chairman. Thank you to all of the testifiers.

I want to—we've been talking a lot about the economic impact of the Jones Act. I want to talk about the national security piece and this is for the whole panel because I think it's important to back up a bit and recognize that every Secretary of Defense, every Secretary of the Navy, every President going back decades has been supportive of the Jones Act, and I want you to talk about the national security implications of the Jones Act not just in terms of the fleet but also having the merchant mariners ready in case they are needed, and I'll start with Mr. Woodruff.

Mr. WOODRUFF. Well, I think you hit probably the most critical element and that's the people element because as the Jones Act fleet becomes a predominant source of mariners in this nation, it becomes the predominant pool from which we can draw mariners to mobilize the gray ships that are tied up throughout harbors in America that are just lacking a crew.

So if we have to mobilize, we have to have people to do it. Without a domestic maritime industry, those people simply don't exist and we have no ability to project force.

I'm not discounting the importance of the shipyard industrial base because that's vital, as well, but to me I think it's increasingly becoming about the people and so when the vast majority of the American flag fleet is in the Jones Act trades and the Jones Act personnel, it just becomes all the more vital to maintain them.

Senator SCHATZ. Sir.

Mr. ALLEGRETTI. I think I would supplement that by saying that, you know, we are about to celebrate the 100th Anniversary of the Jones Act and anti-Jones Act forces are using that centennial as an opportunity to seek to reform it or repeal it and one of the taglines they use is that because it's a hundred years old, it must be a relic.

I would tell you that I think any analysis of the importance of the Jones Act to our country today tells you that it is more important today than when it was enacted.

Senator SCHATZ. Well, talk a little bit about what happened in the Gulf War and how the Jones Act plays into that.

Mr. ALLEGRETTI. Well, the Jones Act has repeatedly provided what Mr. Woodruff referred to, is the assets, physical assets and the mariners to move materiel into harm's way, and, you know, it's absolutely startling and that experience tells you that you need to have assets under American control and citizens with allegiance to America who can be relied on to move that cargo where it needs to go.

And so the idea that we would somehow transition from this system we have today, where the allegiances are clear, where the men and women who work on those vessels are the eyes and ears of security, homeland security on a daily basis, and somehow transfer that to foreign assets and foreign crews with no allegiance to our country is just startling to me.

I don't think that there is—and so then the question becomes why would we do that? Because we are seeking an ideological purity to do away with protectionist laws, because we're seeking to lower the cost of transportation incrementally? I would say that those don't stand up to scrutiny.

Senator SCHATZ. Does anybody else have anything to add on that?

Mr. PAXTON. I would just say as the panelist who represents the industrial base, I would say this. If you don't have the Jones Act and if you don't maintain the commercial shipbuilding industrial base, you'll have incredibly complex Navy and Coast Guard ships that will be hard to build because of the supply chain that will atrophy. You will not be able to do that.

At a time where the law of the land, thanks to Chairman Wicker, is a 355-ship Navy, we have to maintain an industrial base to build that Navy, to build that Coast Guard.

And the last thing I'd say, every one of the Coast Guard vessels, minus one, are being—the Coast Guard vessels are being built in commercial Jones Act yards, yards that'll cut their teeth on commercial work and have robust competition. The Polar Security Cutter has five shipyards still competing for that contract. It's because of the Jones Act. We cannot cede that territory or our industrial base will go away.

Senator SCHATZ. Mr. Golding.

Mr. GOLDING. I would just have two quick points to make.

It takes us five to 10 years to make a seasoned mariner that can actually operate one of our vessels. It is not something that happens overnight. At the same time, we use the same shipyards, the same Jones Act shipyards that would service our military vessels and our defense vessels. We're the ones that come in the in-between time. They're servicing our domestic privatized vessels before they have a call to come answer our national security needs.

So we help educate and develop mariners. We help develop and further our inland shipbuilding. They all contribute to national security and it does not happen overnight. It takes years to develop.

Senator SCHATZ. Ms. Eriksson, I'm out of time, but go ahead.

Ms. ERIKSSON. Just briefly, I'm a person who trains people to serve on the supply vessels or MSE-contracted support fleets, and for me to create a mariner from ordinary entry level to become an AB that can sail and be part of any of the support fleet and the mission, supporting the mission is that's a real difficult—it's become more and more difficult to get that person from entry level to above entry level.

The academies do a great job. They also have challenges, but I don't think enough attention has been paid to the unlicensed ranks.

Thank you.

Senator SCHATZ. Thank you.

The CHAIRMAN. Thank you.

Senator Fischer.

**STATEMENT OF HON. DEB FISCHER,
U.S. SENATOR FROM NEBRASKA**

Senator FISCHER. Thank you, Mr. Chairman.

Thank you, Senator Schatz, for that question. That is so important to hear the answers from this entire panel on how vital it is for the military readiness of this country, for the security of this country.

I thank all of you for your answers and helping to educate Members of Congress and to educate our citizens in this country on the importance of the Jones Act to the security and the safety of the United States. Thank you all for your answers.

Mr. Woodruff, as you know, the Jones Act is a cabotage law regulating coast-wise trade in the United States. Is the United States unique in that compared to other maritime countries?

Mr. WOODRUFF. No, ma'am. The reality is I think 80 percent of the coastlines of the world, those countries have cabotage laws. Virtually every country that has more than one port has some form of cabotage law to deal with the carriage of cargos between those ports and as was pointed out by Mr. Paxton, there are some countries, including now Russia, that go beyond that and even command the use of their own vessels in foreign trades originating in their ports.

Senator FISCHER. Some of you touched on this when you answered Senator Schatz's previous question, but I would ask Mr. Paxton. How would the repeal of the Jones Act affect our shipbuilding capabilities that we have in this country when we compare it to the laws of the other countries?

Mr. PAXTON. Thank you for the question. If we just repealed the Jones Act or just even the Build requirement of the Jones Act, it would have an immediate impact and why I say that is what we know now is through foreign industrial policy, Asian shipyards now control 90 percent of global tonnage annually.

And so as much as I am an adamant believer in our competition and our capability in our shipyards because it's unparalleled, built the most advanced and sophisticated Navy in the world, you can't compete against subsidies that we see taking place in foreign shipyards. It's just unbelievable.

As I mentioned in my testimony, one shipyard got 12 billion just to stay afloat and are now taking zero margin contracts. We cannot do that, you know, in the United States.

The last thing I'd say is China's doubled down on this—\$25 billion to create terminals and shipping lanes that are dominated by Chinese ships. This is their way to build their next generation Navy and it'll be on the backs of outsourcing commercial shipyards.

So it really is that dramatic and I would argue we should be forward-thinking in policies. Again, Chairman Wicker had a piece of legislation that looked at taking a small percentage of our energy commodities and moving those on U.S. ships under U.S. flag in the international market.

I think we're at that place. If we're going to recapitalize our auxiliary fleets to do sealift for the Navy, we're going to have to think about that. So thank you, Senator.

Senator FISCHER. Thank you. Mr. Allegretti, last year I was proud to work on the Federal Maritime Commission Reauthorization and that was included in the Coast Guard reauthorization.

A provision in it prohibited ocean carriers from negotiating contracts jointly with tug boat operators through alliances.

Can you speak broadly to what impact the ocean alliances have on your members and what would be the impact on the tug boat operators if the carriers could jointly negotiate those contracts?

Mr. ALLEGRETTI. Simply, it would be devastating. We would not be able to stand up to the collective rate-making power of those ocean alliances were they allowed to continue and the leadership of this Committee was instrumental in protecting us in that regard.

You know, this was really, without any exaggeration, a David and Goliath situation and if Congress had not stepped in to ensure that that kind of rate-making authority wasn't available, you would have seen devastating impacts. This was a significant, a grave threat without overstatement.

Senator FISCHER. Right.

Mr. ALLEGRETTI. Thank you very much for your help with that.

Senator FISCHER. Of course. Mr. Golding and Mr. Allegretti, how significant is intermodal transportation on the inland waterway that we are looking at that industry?

I had a subcommittee hearing on that last week, and does that network have a role in addressing the congestion that we see with our intermodal transportation system? Mr. Allegretti, would you like to go first?

Mr. ALLEGRETTI. Sure. The system is intermodal and the importance of the intermodality in the United States is that it's driven by the markets. People make decisions based on the efficiency of

the movement of that particular cargo over a particular route, and barge lines and railroads and trucking companies work together to service the needs of their collective customers, and make rational judgments about which cargo should move by which mode, and I think it works incredibly well.

Senator FISCHER. Thank you. Mr. Golding.

Mr. GOLDING. Many times our voyages are interconnected with rail, pipeline, highway, airport operation. Oftentimes, we're the bulk answer or the versatile answer to those moves.

With a pipeline or a rail or a highway, you're in a fixed area and a fixed process. With our operation, we offer versatility in size, cargo amount, and voyage distance and location we're able to reach.

So as we fit into the supply mode, not only do we offer mass bulk transportation at an ultra-efficient cost but our waterways are not mutually exclusive. We are inclusive in the national supply chain and many times the people that we negotiate for our services are also in control of those other modalities.

So they're doing the math on where we fit in, where we fit in best. So we play as a major part in these giant consumer supplier supply chains, usually at the source, usually at the beginning. It gets parceled out after we hold it. So as we take it and it gets parceled out, the consumer benefits from our efficiency down the line.

Senator FISCHER. OK. Thank you. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Fischer.

Senator Baldwin.

**STATEMENT OF HON. TAMMY BALDWIN,
U.S. SENATOR FROM WISCONSIN**

Senator BALDWIN. Thank you, Mr. Chairman.

As representatives of the U.S. maritime industry, you all represent a critical national security asset for the United States. Our laws are clear that ships for the Government and ships in the coast-wise trade must be manufactured in the United States and national security justification for doing so is absolutely compelling.

These laws are in place because foreign competitors often have an advantage over us due to direct government support or subsidy, less stringent regulatory requirements, and due to a robust commercial shipbuilding market.

Our laws protect shipyards from unfair competition but the same is not true for the shipbuilding supplier base since the domestic manufacture requirements can be met simply by constructing the hull with U.S.-made steel and other materials.

DoD recently published an industrial base report highlighting the critical state of many aspects of our supplier base. That is why last Congress, I introduced a bill called The Made in America Shipbuilding Act and I intend to reintroduce it very soon.

So, Mr. Paxton, do you believe that given the findings in this DoD report that a reliable, secure domestic supply base is essential to your members, and, if so, what can you do to support strengthening the U.S. shipbuilding supplier base?

Mr. PAXTON. Well, thank you, Senator, for the question, and, of course, we supported emphatically your legislation last Congress and will do so again.

We represent over a 110 supplier companies that are spread out across our entire nation. We touch all 50 states. Building big ships takes a lot of parts and pieces. So our supply chain is absolutely critical and we have to continue to monitor it.

The report you speak to showed that from 2000 we lost about 20,500 U.S.-based manufacturing firms, 20,500 have exited our industry, and we need to pull that back. So any policies that look to build more ships here and more pieces of those ships here, we support. So we're grateful for your leadership on that, Senator.

I would say there are pinch points that are rising. We have so many folks that can build chaps for submarines and so many folks that can do these things. We need to have a policy where we support these industries. We want to build the most advanced Navy in the world. It's going to take a very sophisticated supply chain and so we will work with you and, of course, the Congress to do whatever it takes to do that.

Senator BALDWIN. Thank you. Next, I wanted to highlight the Small Shipyard Grant Program.

There's strong support for small shipyards within this committee, which strengthened the grant program in the last maritime bill. We will soon get to work writing a bill for Fiscal Year 2020. The Small Shipyard Grant Program helps shipyards make needed upgrades and investments in workers. The program helps ensure that America's shipbuilding industry remains strong, all while supporting military shipbuilding.

For you again, Mr. Paxton, how have you seen the Small Shipyard Grants Program invest in facilities and workers, and could you describe how these grants support programs for the Navy and Coast Guard?

Mr. PAXTON. Again, thank you, Senator. It's a great question. I think the wisdom of the Small Shipyard Assistance Grant Program is the reality that smaller and mid-tier shipyards don't have the funds to do capital investments, to do some of the expenditures it takes to make shipyards more efficient, more competitive.

It's through the Small Shipyard Assistance Grant Program we've seen those smaller to mid-tier shipyards get more and more competitive and what happens is you have more competition because shipyards can all of a sudden bid on those government contracts they couldn't before because they learn how to build more and more complex commercial ships.

So as a direct result, there's a cost savings that comes back to the taxpayer because again you have more shipyards bidding on more contracts, be it NOAA ships, be it Coast Guard ships, be it Army ships. All those grants went into those shipyards to allow them to get welding machines and heavy lifts to allow them to be more competitive and it comes back in the competition amongst those shipyards to bid on those government projects that much more effectively.

So thank you for your support of that, Senator.

The CHAIRMAN. Thank you.
Senator Scott.

**STATEMENT OF HON. RICK SCOTT,
U.S. SENATOR FROM FLORIDA**

Senator SCOTT. Thank you to each of you for being here.

I just finished eight years as Governor of Florida. We have 15 seaports and I invested \$1.5 billion in our ports in those eight years and actually had to put up the Federal portion of quite a few projects because the Federal Government wouldn't be a good partner in that regard for whatever reason.

So I guess, Mr. Allegretti or anyone, what are the most important investments you think the Federal Government ought to do to continue to make American ports more competitive and our shippers more competitive to make sure we continue to get jobs?

Just in the 8 years I was there, we added about 300,000 trade jobs and we got a great return. So what do you all think we ought to be doing?

Mr. ALLEGRETTI. I think what I would say with respect to the domestic fleet, Senator, is that the system that you have in place today and that you support today works really well.

I've heard AWO members describe our business as a pure capital market where contracts are won by efficiency, by customer service, and that companies that grow and improve are the ones that are rewarded, and costs are kept down and the incredible employment opportunities that you've heard this morning are maintained, and the basis of that is the Jones Act and the certainty of cargo that it provides to the folks who own those 40,000 vessels in the fleet.

The other piece is to ensure that we operate under a single national standard, enforced by Federal agencies, whether that's the EPA or the Coast Guard, and to ensure that as we're moving in interstate commerce, we're not subject to a patchwork of state regulations.

If you maintain that foundation of certainty, the industry will continue to flourish.

Senator SCOTT. Do you think the Federal Government's making the investments they need to make as far as dollar investments?

Mr. ALLEGRETTI. Well, —

Senator SCOTT. Are we behind other countries?

Mr. ALLEGRETTI.—we're certainly behind other countries in terms of the modernization and maintenance of our inland waterways infrastructure.

As has been said, most of the locks and dams on our inland system are well beyond their design life. Many of them are crumbling and we need to not only spend more but we need to spend more efficiently.

The example that Mr. Golding referenced of Olmstead is a great example. If you spend the money efficiently and you provide the funding to complete the project, there are enormous benefits that accrue from that. The fact that Olmstead was finished 3 years before it was concluded saved the Federal Government \$300 million in costs that it would have incurred had that project continued and the benefits of the project then accrue much earlier than they otherwise would.

So if we spend the money more efficiently, we'll make substantial gains.

Senator SCOTT. Anybody else?

Mr. GOLDING. I would like to add that in the case of our coastal ports, we have a trust fund, the Harbor Maintenance Trust Fund, that has some \$9 billion of excess in it. It's an ad valorem tax paid on cargo coming into our coastal ports that's supposed to be spent to maintain those ports and it's not being spent to maintain those ports. So that is a responsibility the Government has had since the founding days of our Nation.

Senator SCOTT. Did you say \$9 billion and they're not being a partner with what the states are doing?

Mr. GOLDING. Well, really the states shouldn't have to pay a dime for maintenance of Federal waterways. The tax is collected on the cargo coming in to pay all the costs. We're bringing in enough money every year in that tax to maintain all of our harbors and that money is being spent elsewhere in the Federal budget.

You know, people say, well, the Federal Harbor Maintenance Trust Fund is, you know, sitting somewhere, I guess in Ft. Knox, but I challenge anyone to find it.

Senator SCOTT. Being swept. Is that what's happening?

Mr. GOLDING. It's being swept. It's being used to offset other costs to the Federal Government. It's not being spent for its intended purpose.

Mr. PAXTON. Senator Scott, I would just add I echo all of those comments as well as if there is an infrastructure bill, we need to make sure that these projects are included in it.

These projects aren't transited by the general public a lot of times but the products that go through them end up in your house and we have to include these projects in a major infrastructure bill and not just the ones that are most visible in our communities.

A lot of these locks, dams, and river infrastructure projects are beyond the public sight. They don't need to be beyond the public mindset.

Senator SCOTT. Thank you.

The CHAIRMAN. Thank you very much.

Senator Sullivan.

STATEMENT OF HON. DAN SULLIVAN, U.S. SENATOR FROM ALASKA

Senator SULLIVAN. Thank you, Mr. Chairman, and I want to thank our witnesses today.

I'm going to focus on a theme of the new subcommittee you may have heard about on this committee under the Chairman's leadership on economic and security issues. I happen to chair that subcommittee and, of course, the maritime industry is kind of a key component of that. So I want to keep my questions kind of in that sphere.

Let me begin by—and I'll just again to all of you open up the opportunity to comment, if you'd like.

The President just a couple days ago issued this Executive Order to better enable veterans to move into domestic maritime jobs. I'm actually getting ready to go to a hearing we have on the Veterans Affairs Committee happening right now in a couple minutes.

But can you give me your sense of both the importance of that Executive Order and the challenges that the maritime industry has in attracting qualified workforce, particularly now when we have

such a strong economy and low unemployment? I'll just open that up to any and all.

Mr. Woodruff.

Mr. WOODRUFF. Well, we do have challenges. There are particular challenges to the lifestyle that you've heard some about from other testimony. People have to go away from home for periods of time. That's offset by very good wages, but what we find in particular is that veterans are great candidates for the type of work we have because they're accustomed to being away from home, having a chain of command, having an environment where—

Senator SULLIVAN. Work hard, discipline, know how to get up at 05 in the morning, that kind of thing?

Mr. WOODRUFF. Roger that, and the other part of it, I think, that's very essential to recognize is that while we focused in—the Executive Order this week focuses on people with seagoing experience in the military, we'll take a veteran from any service who has done anything because we can train them in our company, as Mr. Golding said about his company through their community college.

We have our own training facility where we train in-house, but those folks, we can give them the skills they need to be very successful and have a career in the industry, whether they were a rifleman, whether they worked on a tank, whether they did any other skill in the military. Those skills are absolutely transferrable to the maritime industry.

Senator SULLIVAN. Thank you. Thanks for all that you guys are doing with regard to veterans and also I appreciate what the President did with regard to—yes, Ms. Eriksson, would you like to comment on that?

Ms. ERIKSSON. Yes, I would. I actually chair the subcommittee at MERPAC that worked on this.

Senator SULLIVAN. Great. I really appreciate that.

Ms. ERIKSSON. So in terms of the Executive Order, I was very pleased to see it in terms of it outlines pretty much what we're working on and reinforces what we're working on, in terms of enabling not just veterans but also in-service military members to acquire the credentialing they need prior to separation.

Senator SULLIVAN. Good.

Ms. ERIKSSON. And that's work that's been done with the Navy Cool Group and that actually is a little further along than the EO indicates.

Senator SULLIVAN. Great. Thank you for that work. Again, working with this committee and the Veterans Affairs Committee, we want to continue to take advantage of benefits to the industry, your industry, but it really helps our veterans and it's a totally win-win and we want to keep working on that.

Let me turn to another economic and national security topic. I know it was in a number of your testimonies. It's an issue that a number of us care about. The Chairman and I certainly do.

That's the importance of the Jones Act with regard to not just shipyard industrial base but our broader national security issues.

One of the things, you know, we're hearing these rumors. A number of us signed on to a letter under the Chairman's leadership to

the White House saying, hey, you know, the Jones Act is very important.

I know there's already a lot of discussion on it, but if you were going to send a message to the Administration on some of the things you're thinking about, I want to just offer the opportunity and also this is a really important point.

I'm not sure many other countries would go without a Jones Act. Last time I checked, Korea, China, Japan, they certainly have like Jones Act on steroids and I think it's important to recognize not just the importance to our domestic economy, jobs, and national security, but the rest of the world certainly has similar policies that benefit their shipbuilding and maritime industry.

Any additional comments that haven't already been mentioned with regard to the importance of the Jones Act in terms of what this committee or the White House needs to hear?

Mr. GOLDING. I'd like to just sum it up in the best way possible. The Jones Act is about being built in America, crewed by Americans, and owned by Americans.

The second part of that, the eco effect that we're really proud of, is the revenue that we generate to move American products from American port to American port stays in America. This revenue is passed back out not only through payroll but also all our vendor services and all of our investment. That is an American investment that gets to stay in America, that gets to be invested in American security.

I don't know how much more it has to have America in it for anybody to support this, but I can tell you that we benefit from it and we're proud to be a beneficiary of that patriotic Act.

Senator SULLIVAN. Any other comments on the Jones Act?

Mr. PAXTON. Yes, Senator Sullivan. The one thing I would point out is your Subcommittee on Security, it really has an intersection with you both serve on the Armed Services Committee and any talk of waivers, any talk of eroding the Jones Act just impedes our goal of a 355-ship Navy because that industrial base is building commercial ships. It's supply chain dynamics. If that were to go anywhere, we can't build that Navy. We can't build that Coast Guard or if we do, it's going to be just that much harder.

We have great competition on our Navy and our Coast Guard and in commercial yards, but, sir, this subcommittee and your work on readiness and sea power and all those really intersect with this committee quite nicely and I would just say we should be doing more, not less, when it comes to this industrial base and maintaining it to build that Navy we're going to need for our next generation.

Senator SULLIVAN. And I'm sure you know the author of the 355-ship Navy is the Chairman of this committee.

Mr. PAXTON. Yes, sir, yes, sir.

Mr. ALLEGRETTI. Can I supplement,—

Senator SULLIVAN. Yes.

Mr. ALLEGRETTI.—Senator, just to say that with respect to the situation in Puerto Rico and the request for a 10-year waiver of the Jones Act, you know, my recommendation to those folks would be they seek to comply with the law before they seek to waive it and, you know, our business is all about meeting customer demands.

So if there is a long-term need to move LNG into Puerto Rico to help them transition their energy grid over to a better fuel source, we should be part of that solution. We will be happy to move that under long-term contract for them and that's the proper way to come at it, not to seek to waive the law to use foreign assets.

Senator SULLIVAN. Ms. Eriksson, did you have a comment?

Ms. ERIKSSON. Yes, speaking of the mariners needed to keep the Jones Act fleet and the national security support fleet going, I used to sail on the Alaska Marine Highway. I've lived in Seward and one of the things the Alaska Marine Highway has is entry-level billets and without the Jones Act, will there be an Alaska Marine Highway where very vital positions for creating mariners to serve this country are created. It's a big carry system.

Senator SULLIVAN. Great. Thank you. Thank you, Mr. Chairman. Oh, Mr. Woodruff.

Mr. WOODRUFF. Well, I'd just like to add to what the others have said and be perfectly blunt that the long-term waiver of the Jones Act would be a gut punch to the American maritime worker. It would make Buy America/Hire America ring hollow.

Thank you.

Senator SULLIVAN. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Sullivan, and all the Senators on both sides of the dais who have very strongly spoken today in favor of the Jones Act.

I would simply say I hope the Administration is listening. I hope our letter, Senator Sullivan, from you and me and others has been given some attention and this is a fight that the Administration doesn't need to have with folks that are creating American jobs and standing by to protect the security needs of our Nation in case something happens.

We're going to close the hearing now but the record will remain open for two weeks. During this time, Senators are asked to submit any questions for the record. Upon receipt, witnesses are requested to submit their written answers to the Committee as soon as possible but no later than Wednesday, March 20.

And again I want to thank the witnesses for great testimony and a wonderful exchange during the question and answer period.

This hearing is now adjourned.

[Whereupon, at 11:24 am, the hearing was adjourned.]

A P P E N D I X

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. JOHN THUNE TO MATTHEW WOODRUFF

Question. Mr. Woodruff, your testimony highlighted the importance of legal certainty in your industry, especially when making considerations for capital investments. Thanks to bipartisan efforts to establish a uniform Federal framework for ballast water discharge rules, the Vessel Incidental Discharge Act was signed into law last year as part of the Coast Guard reauthorization. Could you elaborate on how the establishment of uniform vessel discharge rules will affect your industry when it comes to capital planning and investment?

Answer. It gives us confidence to invest, either in upgrades to existing vessels or new vessels. Before the law was passed, we could not be sure whether an investment in a ballast water system meeting the Federal standard would meet potentially evolving state requirements. When you are not sure, you hold back on making investments. Now that we have statutory certainty, we can evaluate which vessels should get a ballast water system and which are candidates for retirement/replacement and proceed with system installation on vessels that need them.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MARSHA BLACKBURN TO MATTHEW WOODRUFF

Question 1. There was much discussion during the hearing regarding the economic and national security benefits provided by the domestic maritime industry. Barge companies in my home state of Tennessee make long-term business decisions based on the current legal regime, such as purchasing large amounts of steel to replace and refit barges for the next thirty years. These decisions require certainty in U.S. maritime law, and Section 27 of the Merchant Marine Act—the Jones Act—is the foundational statute underpinning U.S. maritime law. What are some potential market disruptions that would occur in the maritime industry if Congress or the Administration were to make changes to the Jones Act?

Answer. The domestic maritime industry is fundamentally premised on the legal certainty that the Jones Act provides. Every investment that the industry makes is made in reliance on existing U.S. law. The maritime industry is particularly dependent on legal certainty because our business is highly capital-intensive and the assets we invest in (such as newly constructed vessels) are long-life assets. An administrative waiver of the length and type proposed by Puerto Rico would undercut efforts to build a domestic LNG fleet and, in fact, the novel use of the § 501 authority for an extended LNG administrative waiver could destabilize the entire American domestic shipping industry by introducing extreme uncertainty and volatility into the market.

Question 2. What are the national security implications of changing this statute, or allowing waivers to the Jones Act?

Answer. The Jones Act has important national and homeland security benefits. That is why waivers of the Jones Act under 46 U.S.C. § 501 are limited to waivers of the navigation or vessel-inspection laws that are “necessary in the interest of national defense.”

First, the Jones Act supports national security by providing the Department of Defense with access to commercial sealift and intermodal capacity to support force deployment abroad and by ensuring that the country maintains a strong defense industrial base by supporting shipyards that make or repair vessels for both the domestic market and the military. Perhaps most importantly, mariners on Jones Act ships form a substantial portion of the pool of mariners that are required to crew government-owned vessels in the case of emergencies. It is perhaps best said by General Paul Selva, the Vice Chairman of the Joint Chiefs of Staff, who stated: “I am an ardent supporter of the Jones Act. It supports a viable ship building indus-

try, cuts costs and produces 2,500 qualified mariners. Why would I tamper with that?"

Second, the Jones Act supports homeland security by ensuring that the vessels that travel between domestic points every day are American-owned and American-crewed. These Americans are additional eyes and ears for the agencies charged with homeland security. Our economy relies on just-in-time delivery of domestic cargoes. The Jones Act ensures that the movement of this domestic waterborne traffic (including vital products such as agriculture, chemicals, and energy sector cargoes) is not dependent on foreign companies, crews or governments, who could use their control of supply chains to delay or prevent delivery and thus wreak havoc on our economy. Our non-contiguous territories would be especially vulnerable if the vessels they depend on for fresh groceries and other necessities suddenly did not arrive in port due to a trade dispute or similar situation.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. RON JOHNSON TO
MATTHEW WOODRUFF

Question 1. As you testified, the Jones Act serves a critical role in maintaining the ready workforce of mariners that can be used to mobilize the fleet of grey hulled American ships that only lack a crew. Can you please provide annual data on the number of U.S. mariners over the past 30 years?

Answer. I do not have access to annual data on the number of U.S. mariners. The Maritime Workforce Working Group, a subset of the U.S. Maritime Transportation System National Advisory Committee, reported to Congress in 2017 that there are about 11,768 qualified mariners with unlimited credentials available to crew the Ready Reserve Force and that 3,380 of those come from the Jones Act fleet. Admiral Buzby, Administrator for the U.S. Maritime Administration, recently testified that the United States is short about 1,800 mariners that would be needed in case of a full, prolonged mobilization. To help address that need, President Trump recently signed an executive order entitled "Supporting the Transition of Active Duty Service Members and Military Veterans into the Merchant Marine" which is designed to ease the transition from military service to working in the industry.

Question 2. As you noted in the hearing, some 80 percent of coastline nations have some form of cabotage laws. Can you provide a complete list of nations that have cabotage laws? Can you provide a complete list of nations with laws that include domestic build requirements?

Answer. A full list of nations that have cabotage laws, including nations that have domestic build requirements, can be found in the report Cabotage Laws of the World, released in September 2018 by Seafarers' Rights International (SRI), a leading international research center on maritime and seafarers' law. See this link for the full report: <http://ftp.elabor8.co.uk/sri/cabotage/flipbook/mobile/index.html>. A map from that report that identifies the countries with cabotage laws is below.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MARIA CANTWELL TO
MATTHEW WOODRUFF

Question 1. Federal Freight Funding. Ports, waterways and other freight infrastructure are a critical part of our transportation network, but frequently get overlooked when it comes to Federal funding. With more than 40 percent of jobs in Washington state connected to international trade, we know the importance of being able to get product to the market.

The FAST Act included new freight programs to help move freight more efficiently. However, during the first year of the INFRA grants program I authored, the Department of Transportation received applications requesting \$9.8 billion, more than 12 times the amount of funding provided. This shows that we need to do more to improve our freight infrastructure.

Why is it important that Federal funding is provided for freight infrastructure investments?

Answer. Infrastructure is the foundation of America and facilitates economic generation for our country. When freight shipping costs are low, the Nation's GDP goes up. If our country wants to continue to be a leader in world, I believe that significant Federal investment needs to be made in all modes of transportation in order to gain efficiency and stay at the top of the global leader board.

Question 2. How is the supply chain affected when portions of our freight network don't work?

Answer. The supply chain is connected by all modes of freight transportation. Shippers choose the most efficient mode or combination of modes for their particular cargo. If one piece of the network goes down it affects all shippers by increasing rates due to limited and less efficient options to get commodities to market. If you look at export grain along the Mississippi River, grain is transported from the family farmer's field to a river terminal by truck, from the river terminal to the American seaport by barge, and then from the seaport to the export market by ocean vessel. If one of these links in the supply chain were to break then that grain would have to look at an alternative, less efficient and more expensive way to ship. This is just one example of how the freight transportation is interconnected.

Question 3. What else should the Committee consider to improve freight infrastructure?

Answer. The Committee should look at a plus-up of the INFRA grants program that was provided in the FAST Act. As you mentioned in your first question, DOT received \$9.8 billion in requests, which is 12 times the amount of funding provided. This shows that there are communities out there that have antiquated infrastructure that needs modernization and recapitalization. The Committee should also enact an infrastructure bill in the 116th Congress that has meaningful Federal dollars for all modes of transportation.

Question 4. National Maritime Strategy. The maritime industry is critically important to our economy, but it also plays a vital role during times of national crisis, including military conflicts and national emergencies.

However, the industry faces challenges with fewer ships, mariners and cargoes that impact its ability to support our defense needs.

Congress has called on the Department of Transportation to complete a national maritime strategy to address these challenges, and last year the Government Accountability Office report found that the strategy needs to be completed expeditiously.

Can you speak to the importance of a national maritime strategy and why these challenges must be addressed in the near-term?

Answer. Development of a national maritime strategy is important and has been a priority for many years. For example, the Jones Act is crucial to supporting a strong domestic maritime industry. It also provides important national, homeland, and economic benefits to our nation, including military sealift and 650,000 American jobs. Military leaders, key Members of Congress, and senior government officials have consistently endorsed the Jones Act but it would be helpful to have that support memorialized in a national maritime strategy document.

Question 5. Domestic Maritime Industry. The Jones Act is crucial to supporting a strong domestic maritime industry. How would a long-term waiver of the Jones Act for the shipment of liquefied natural gas (LNG) to Puerto Rico affect the domestic maritime industry? Do you believe U.S. carriers have the capacity to meet this need?

Answer. A long-term waiver of the Jones Act to ship LNG to Puerto Rico would have a devastating impact on the domestic maritime industry. As mentioned in my testimony, the industry is dependent on legal certainty. The Jones Act is the foundational law of the domestic maritime industry and every investment that the industry makes is made in reliance on existing U.S. law. The maritime industry is particularly dependent on legal certainty because our business is highly capital-intensive and the assets we invest in (such as newly constructed vessels) are long-life assets. Long-term waivers of existing law make it less likely that companies will invest in these long-term assets, which impacts the ability of the industry to grow and thrive.

I do believe that U.S. carriers have the capacity to meet Puerto Rico's LNG needs. Given the growth in the U.S. supply of natural gas, the industry is already investing in the LNG market and is looking to continue that investment in the future. At the moment, domestic shipyards are already building or have delivered assets capable of moving LNG, and Puerto Rico is currently receiving LNG through ISO containers. Representatives of these shipyards tell me they are ready, willing and eager to build more and have the capacity to meet any domestic needs. The domestic maritime industry has always responded to new market demands (including building new tankers for the shale oil boom), and this would be an opportunity to invest in a new market.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. RICHARD BLUMENTHAL TO
MATTHEW WOODRUFF

Question 1. Multimodal investment to benefit ports. Freight—with an emphasis on goods that move through our ports—took a big step forward after passage of the FAST Act. Specifically, the bill provided a total of \$11 billion in dedicated freight funding over five years. However, of that, only \$1.13 billion is multimodal eligible. In 2018, the American Association of Port Authorities identified more than \$20 billion in multimodal funding needs for public port authorities alone over the next decade. Do you consider ports to be a critical part of our multimodal freight network?

Answer. Absolutely. They are the connecting link that allows cargo to shift between modes. Without ports and terminals, you cannot have a multimodal network.

Question 2. Could investing in multimodal facilities at our ports reduce highway congestion, increase supply chain efficiency, and save money through reduced delays?

Answer. Again, absolutely. The right investments at the right places can do these things and more, including reducing pollution. They should be considered as a part of an overall national strategy to ensure that our transportation system is sound and efficient.

Question 3. Do you support increasing the amount of multimodal eligible funding in a reauthorization of the FAST Act?

Answer. I am not familiar with the details of this program. For the programs I do follow, I know that they suffer from chronic underfunding and that in general, underfunding of all forms of infrastructure is a major concern for the Nation.

Question 4. The Coast Guard's polar icebreaker fleet. The Coast Guard has stated that it needs at least three heavy icebreakers and three medium icebreakers to ensure continued access to the polar regions. Updating our fleet is essential to maintaining a national presence, the safety and security of the maritime transportation system, as well as coordinating national search and rescue efforts in colder regions.

Congress recently passed the Consolidated Appropriations Act of 2019, which provided \$655 million for construction of the first Coast Guard Polar Security Cutter. In addition, the bill provided \$20 million for some long lead-time materials toward a second ship. However, this falls well short of the funding needed to satisfy the Coast Guard's commitment to acquiring six polar icebreakers and more funding is undoubtedly needed to accomplish this goal.

I imagine you recognize the importance of the Coast Guard's ability to provide this vital icebreaking services to protect our Nation's security and economic prosperity. Would you agree that it is critical to continue this vital acquisition?

Answer. As a maritime nation, it is critical that we have the ability to operate anywhere, anytime, on the navigable waters of the world. We cannot cede our ability to access any international waters to other nations. We must have appropriate access to U.S. territorial waters to protect national security and facilitate American coastwise and other maritime commerce. It seems to me that replacing our aging and less than reliable polar icebreakers is a vital national interest. In fact, Admiral Schultz, Commandant of the Coast Guard, recently testified to the importance of a revitalized icebreaking fleet. I rely on the expertise of our Coast Guard leaders to define the needs and priorities in this area.

Question 5. What are the potential consequences of failing to fully fund the Coast Guard's icebreaker acquisition?

Answer. Initially, it will be delays in the program, but more importantly, it will delay our ability as a nation to enjoy the benefits of these assets or abate the risks these assets are intended to abate. I defer to the leaders of the Coast Guard with respect to the particulars.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. JOHN THUNE TO
THOMAS ALLEGRETTI

Question 1. Mr. Allegretti, you mentioned in your testimony the urgent need for modernization and repair of inland waterways infrastructure. In addition to locks and dams, inland ports play a vital role in the maritime supply chain, serving as critical intermodal connections for agricultural commodities bound for markets across the country and the world. Could you speak to the importance of inland port facilities to the supply chain, especially as it relates to the movement of agricultural commodities?

Answer. 592 million tons of cargo is transported by barge on U.S. inland waterways each year, including nearly 90 million tons of food and farm products. The 25,000 miles of navigable waterways serve 38 states and act as a key gateway in

efficiently moving American agricultural products from the heartland to export markets around the world.

Inland ports are an important part of that transportation supply chain. Waterways Council, Inc., estimates that there is a \$20.37/ton cost savings to transport goods by waterway. For farmers buying bulk fertilizer or selling commodities moved by barge, inland port facilities provide the opportunity to take advantage of that reduced transportation cost closer to home. In addition to the economic savings for producers and consumers, shifting more cargo to waterways served by inland ports reduces highway congestion and roadway infrastructure requirements while also reducing emissions, since a single dry cargo barge can hold the equivalent cargo of 70 tractor trailers.

Question 2. As a follow-up, when it comes to Federal freight policy, do you see any gaps in the promotion of intermodal infrastructure development at inland ports?

Answer. Federal freight policy should be responsive to the individualized needs and conditions of localities. As highways become more congested, states, counties, and cities have begun looking to intermodal transportation and opportunities to utilize waterways for alternative transportation options. This diversification shows the greatest promise when a locality identifies a congested highway or a new transportation need in tandem with identifying a waterway that can be utilized to relieve that congestion or provide a needed new service to consumers. I encourage Congress to use the authorizations and appropriations process to be responsive to this type of ground-up approach to support localities in building and expanding intermodal links.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MARSHA BLACKBURN TO
THOMAS ALLEGRETTI

Question 1. There was much discussion during the hearing regarding the economic and national security benefits provided by the domestic maritime industry. Barge companies in my home state of Tennessee make long-term business decisions based on the current legal regime, such as purchasing large amounts of steel to replace and refit barges for the next thirty years. These decisions require certainty in U.S. maritime law, and Section 27 of the Merchant Marine Act—the Jones Act—is the foundational statute underpinning U.S. maritime law. What are some potential market disruptions that would occur in the maritime industry if Congress or the Administration were to make changes to the Jones Act?

Answer. The requirements of the Jones Act all work in tandem to support America's domestic maritime industry. Weakening any one of those elements would seriously undermine the national, homeland, and economic security that the maritime industry provides for the country.

As you correctly note in your question, maritime businesses make long-term decisions based on the stability and certainty of the Jones Act. Without this foundational law, the maritime industry would become a race-to-the-bottom as foreign competitors that are supported by state-owned enterprises, subsidies, and lax regulations enter the domestic market. When lawmakers or members of the Administration waiver in their support of the Jones Act, vessel operators hesitate to make long-term business decisions to hire more American workers or make investments that support shipbuilding, manufacturing, and an efficient transportation system for producers and consumers throughout the country.

Question 2. What are the national security implications of changing this statute, or allowing waivers to the Jones Act?

Answer. America's ability to project and deploy forces globally depends on having the civilian sealift capacity to transport military and humanitarian cargos. Military leaders consistently express strong support for the Jones Act because it ensures a domestic maritime industrial base of vessels and mariners to reliably transport equipment and supplies from U.S. ports to distant parts of the world. Domestically, the Jones Act fleet of tugboats, towboats and barges also provides vital services that support the day-to-day operation and readiness of the U.S. military, including waterborne transportation of military goods and cargos throughout the U.S., harbor assist services to safely escort military vessels in and out of port, and transporting coal and petroleum products to maintain the operation and resiliency of electrical generation on which military bases and installations rely. Without strong support for the Jones Act, those tasks would be outsourced to foreign companies.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. RON JOHNSON TO
THOMAS ALLEGRETTI

Question. As you noted in discussions with Senator Schatz regarding the Gulf War, it is critical that our Nation maintains a reliable fleet of vessels and mariners with an unquestionable allegiance in order to move our military assets in times of war. Could you please provide the breakdown of which Jones Act assets were used to provide that critical transport support, and what percentage of transport was made via Jones Act vs non-Jones Act vessels?

Answer. A wide array of American civilian and military vessels supported what the Department of Defense called the largest rapid deployment of U.S. forces and supplies in history. According to Military Sealift Command, more than 95 percent of all the equipment, supplies, and fuel needed to support the Gulf War was transported by sea, with U.S.-flagged military and civilian vessels carrying nearly 80 percent of that seaborne cargo. Those U.S.-flagged civilian vessels included both cargo vessels and tankers. Additionally, several U.S.-flagged containerships delivered cargoes as part of their regularly-scheduled liner service.

The remaining 20 percent of seaborne cargo was carried by foreign-flagged vessels chartered by the military. To show the vulnerability we face as a nation in relying on foreign vessels to transport wartime materiel, alarmingly, crews on 13 of those foreign-flagged vessels mutinied and forced the ships away from the warzone. Our nation cannot afford this kind of uncertainty when our armed forces rely on the timely delivery of these critical cargoes.

Again, thank you again for the opportunity to provide testimony and for your interest in the American maritime industry. If you have any further questions or need additional information, please do not hesitate to contact me.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MARIA CANTWELL TO
THOMAS ALLEGRETTI

Question 1. Federal Freight Funding. Ports, waterways and other freight infrastructure are a critical part of our transportation network, but frequently get overlooked when it comes to Federal funding. With more than 40 percent of jobs in Washington state connected to international trade, we know the importance of being able to get product to the market.

The FAST Act included new freight programs to help move freight more efficiently. However, during the first year of the INFRA grants program I authored, the Department of Transportation received applications requesting \$9.8 billion, more than 12 times the amount of funding provided. This shows that we need to do more to improve our freight infrastructure.

Why is Federal funding for freight infrastructure investment important to growing the United States maritime economy?

Answer. Properly funding maritime infrastructure is important because it is an investment in jobs and economic opportunity for the broader economy. The U.S. Coast Guard's Maritime Commerce Strategic Outlook notes that the U.S. marine transportation system supports \$4.6 trillion of economic activity each year and accounts for the employment of 23 million Americans. Because such a high percentage of goods move through ports and via waterways, the growth outlook of the maritime economy and the full U.S. economy are inextricably linked; to grow one, you must grow the other.

Question 2. How is the supply chain affected when portions of our freight network don't work?

Answer. Inefficiencies in the freight transportation network result in increased costs and delays to shippers and consumers. When inadequate waterways infrastructure causes delays or closures at locks, customers will look to other modes of transit to move their goods. Waterways Council, Inc., estimates that our waterways network produces a savings of more than \$20.00 a ton for domestic cargoes transported by waterway. That cost savings translates to over \$12 billion in annual transportation cost savings that would instead be borne by American businesses and consumers if their goods had to instead move by road or rail.

One increasing problem affecting the freight network is development pressure from states, localities and citizens that oppose ports and working waterfronts. In Seattle, the Northwest Seaport Alliance is undertaking a \$300 million modernization of Terminal 5. This project has taken several years, and numerous regulatory and permitting steps, to reach its current stage of soliciting construction bids. Fortunately, local government is supportive of this project and its economic and environmental benefits to the entire region.

But, that kind of support for ports and industrial waterfronts is not universal. The nation's ports are the critical gateway for interstate and foreign commerce, either as the final step in the process of exporting goods from as far away as the interior heartland of landlocked states or the first step in importing products from abroad.

Despite that pivotal role in interstate and international commerce, waterfront development decisions are controlled by local governments. A single vote to deny a permit for port infrastructure development by a city council can impact transportation chains that span the country and the globe. Moreover, if that decision is challenged, courts are hesitant to consider the far-reaching effects on interstate and international commerce and the cumulative effects of these decisions on the country's entire transportation network. To systemically support the development of port infrastructure and maintain supply chain effectiveness, the Federal Government must consider how to more equitably balance local opinions on waterfront development against the transportation needs of the entire country.

Question 3. What else should the Committee consider to improve freight infrastructure?

Answer. Beyond the Committee's consideration of the important matter of the level of Federal funding, consideration should also be given to consistency in the authorizations and appropriations processes. That consistency is critical to improving freight infrastructure. Several waterways maintenance and modernization projects have lagged for years because of inconsistent Congressional action. When those projects lag, vessel operators are forced to delay or alter their long-term business investment plans, which can negatively impact their ability to provide efficient and reliable transportation to their customers.

Question 4. National Maritime Strategy. The maritime industry is critically important to our economy, but it also plays a vital role during times of national crisis, including military conflicts and national emergencies.

However, the industry faces challenges with fewer ships, mariners and cargoes that impact its ability to support our defense needs.

Congress has called on the Department of Transportation to complete a national maritime strategy to address these challenges, and last year the Government Accountability Office report found that the strategy needs to be completed expeditiously.

Can you speak to the importance of a national maritime strategy and why these challenges must be addressed in the near-term?

Answer. America is a maritime nation and therefore needs a national maritime strategy to assure sufficient vessels and mariners to project and deploy military force and diplomatic assistance globally. The absence of a viable U.S.-flag fleet to move critical military and humanitarian cargos would leave America vulnerable and reliant on foreign vessels and crews to conduct military strategy and foreign policy around the globe.

Question 5. Domestic Maritime Industry. The Jones Act is crucial to supporting a strong domestic maritime industry. How would a long-term waiver of the Jones Act for the shipment of liquefied natural gas (LNG) to Puerto Rico affect the domestic maritime industry?

Answer. Puerto Rico is just beginning to invest in transitioning to a natural gas-powered economy. Granting a waiver now, in addition to not meeting the statutory requirements for issuing a waiver, would not be justified and would stifle any complementary investments the domestic maritime industry will make as a market for LNG shipping develops.

Like pipelines, liquefaction facilities and other components of the natural gas transportation network, LNG vessels are built to serve the contractual needs of a customer. Those contractual agreements provide stability for financing and determining the size and capacity requirements for the construction of the vessels. If a market for LNG develops in Puerto Rico and developers on the island commit to long-term supply contracts for domestically-produced LNG, then a market will likewise develop for the domestic transportation of LNG to the island, and Jones Act carriers will vigorously compete to provide that service via Jones Act-compliant LNG vessels.

LNG vessels are some of the most sophisticated and expensive vessels in the world. Discussions of granting a waiver of the Jones Act to transport domestic LNG have already chilled the certainty needed to make a capital-intensive investment in vessel assets that can operate safely for over 30 years. Moreover, granting that waiver would ensure that LNG vessels are never built in American shipyards, never operated by American companies and never crewed by American mariners.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. RICHARD BLUMENTHAL TO
THOMAS ALLEGRETTI

Question 1. The impact an oil spill could have on America's maritime industry. Last year, former Interior Secretary Zinke announced that the Trump Administration would open up 90 percent of outer continental shelf waters to oil and natural gas drilling and extraction.

In 2010, our Nation witnessed Deepwater Horizon, the greatest oil spill disaster in U.S. history, in horror as it ravaged the Gulf coast. To this day, even with restoration efforts, the Gulf is struggling to heal from the damage and we continue to see the long-term consequences ranging from effects on human health, the environment, and the economy.

The Trump administration's decision to open up offshore drilling leases, including in the North Atlantic region, raises serious environmental disaster and economic concerns for coastal states. We are currently awaiting the release of the administration's updated five-year plan, but we expect the proposal to massively expand offshore oil and gas drilling. How would an oil spill off the coast of New England affect our local maritime economy?

Answer. Serious oil spills damage the marine environment. The maritime industry knows this and constantly works to lower and mitigate the risks posed in the transportation of petroleum products, so that an oil spill off the coast of New England, or anywhere else for that matter, is prevented.

Congressional enactment of the Oil Pollution Act of 1990 (OPA 90) brought about many changes that spurred both more environmentally protective vessels and improved pollution prevention vessel operations. For example, OPA 90 compelled a phase-out of single-hull tankers and tank barges in favor of double-hull vessels. Importantly, Congress understood that retiring single-hulled vessels and replacing them with new double-hulled vessels was a multi-billion-dollar undertaking that needed to be carried out in a phased process over time. Instead of requiring that all single-hull vessels be immediately retired, and therefore causing a major economic disruption to shipping, OPA 90 required that new tankers and tank barges be double-hulled and provided for the orderly phaseout of existing single-hulled vessels over a 25-year period based on vessel age and size.

In addition to complying with the requirements of OPA 90, the maritime industry has actively worked to implement additional measures to prevent oil spills. AWO's Responsible Carrier Program (RCP) requires vessel operators to implement a safety management system that seeks to achieve zero harm to human life, property and the environment. In a 2012 report to Congress, the Coast Guard noted that "[a]nother downward shift in spill volume occurred about 1997, which corresponds to the implementation of voluntary industry standards, known as the 'Responsible Carrier Program'. . . ." Further, since "most of the U.S. tank barge population belongs to member companies of AWO" that must comply with the RCP, "spill volumes reach new record low values" that represent "approximately one gallon spilled for every 71.4 million gallons transported . . . a remarkable improvement given that the amount of oil transported by barge has been relatively constant, at approximately 69 billion gallons per year."

Question 2. Multimodal investment to benefit ports. Freight—with an emphasis on goods that move through our ports—took a big step forward after passage of the FAST Act. Specifically, the bill provided a total of \$11 billion in dedicated freight funding over five years. However, of that, only \$1.13 billion is multimodal eligible. In 2018, the American Association of Port Authorities identified more than \$20 billion in multimodal funding needs for public port authorities alone over the next decade. Do you consider ports to be a critical part of our multimodal freight network?

Answer. Yes. All ports, whether inland or coastal, are gateways for transporting the domestic commerce of the United States, for bringing imports into the country and moving exports out of the country. A strong and successful multimodal system relies on developing the most efficient means of getting goods to and from those gateways.

Question 3. Could investing in multimodal facilities at our ports reduce highway congestion, increase supply chain efficiency, and save money through reduced delays?

Answer. Yes. As highways become more congested, states, counties, and cities have begun looking to intermodal transportation and opportunities to utilize waterways for alternative transportation options. This diversification shows the greatest promise when a locality identifies a congested highway, or a new transportation need, in tandem with identifying a maritime waterway that can be utilized to relieve that congestion or provide a needed new service to consumers. Federal freight policy should be responsive to the individualized needs and conditions of localities,

and we encourage Congress to use the authorizations and appropriations process to be responsive to this type of ground-up approach to support localities in building and expanding intermodal links.

Question 4. Do you support increasing the amount of multimodal eligible funding in a reauthorization of the FAST Act?

Answer. Yes. A single dry cargo barge can hold the equivalent cargo of 70 tractor trailers. Increased funding for multimodal projects that shift cargo and freight from the congested roadways to marine highways can reduce congestion and the cost of roadways construction and maintenance, all while also reducing emissions and increasing environmental sustainability.

Question 5. The Coast Guard's polar icebreaker fleet. The Coast Guard has stated that it needs at least three heavy icebreakers and three medium icebreakers to ensure continued access to the polar regions. Updating our fleet is essential to maintaining a national presence, the safety and security of the maritime transportation system, as well as coordinating national search and rescue efforts in colder regions.

Congress recently passed the Consolidated Appropriations Act of 2019, which provided \$655 million for construction of the first Coast Guard Polar Security Cutter. In addition, the bill provided \$20 million for some long lead-time materials toward a second ship. However, this falls well short of the funding needed to satisfy the Coast Guard's commitment to acquiring six polar icebreakers and more funding is undoubtedly needed to accomplish this goal.

I imagine you recognize the importance of the Coast Guard's ability to provide this vital icebreaking services to protect our Nation's security and economic prosperity. Would you agree that it is critical to continue this vital acquisition?

Answer. Yes.

Question 6. What are the potential consequences of failing to fully fund the Coast Guard's icebreaker acquisition?

Answer. America is a maritime nation, with an extensive coastline, much of which needs an icebreaking capability to assure navigation and commerce. Moreover, without this icebreaking capability, the U.S. cannot secure its territorial integrity and control over its resources in the Arctic. If the U.S. Congress chooses not to invest in building an adequate icebreaker fleet, it is essentially choosing to outsource icebreaking responsibilities to other countries, countries whose interests may not align with ours.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. JOHN THUNE TO
MATTHEW PAXTON

Question. Mr. Paxton, in 2018, more than 90 percent of U.S. grain destined for international markets moved via the Nation's inland waterways. In your testimony, you highlighted the importance of a robust shipyard industrial base to sustaining a diverse fleet capable of responding to growth in various sectors. Do you believe the current vessel fleet operating on our Nation's waterways will be able to adequately respond to future growth in agricultural exports?

Answer. The benefit of the Jones Act is that it enables the U.S. shipyard industry to rapidly respond to market demands. As you can see from the chart attached, the industry has engaged in continued investment in dry cargo barges that would provide the necessary tonnage to transport agricultural exports. Over the last five years, the industry has built more than 3,600 of these vessels to service that trade.

However, any waiver of the Jones Act could threaten the dry cargo barge market as financing available to recapitalize the inland fleet would freeze. Any waiver would also stifle investment in the industry and prevent U.S. shipyards from competing in emerging domestic markets, and also erodes the shipyard industrial base.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MARSHA BLACKBURN TO
MATTHEW PAXTON

Question 1. There was much discussion during the hearing regarding the economic and national security benefits provided by the domestic maritime industry. Barge companies in my home state of Tennessee make long-term business decisions based on the current legal regime, such as purchasing large amounts of steel to replace and refit barges for the next thirty years. These decisions require certainty in U.S. maritime law, and Section 27 of the Merchant Marine Act—the Jones Act—is the foundational statute underpinning U.S. maritime law. What are some potential market disruptions that would occur in the maritime industry if Congress or the Administration were to make changes to the Jones Act?

Answer. If the Congress or the Administration were to undermine the Jones Act, there would be a severe disruption to the U.S. shipyard industrial base. As your question states, the industry makes long-term business decisions on the stability of current law. Any change to the Jones Act would signal uncertainty in those long-term business decisions. This signal would reverberate across the industry and financial markets, directly impacting the industrial base supply chain and that supply chain's ability to support the demands of our Navy and Coast Guard fleets and incrementally erodes the national defense implications of the Jones Act. Any waiver will stifle investment in the industry and prevent U.S. shipyards from competing in emerging domestic markets, therefore further eroding the shipyard defense industrial base.

Question 2. What are the national security implications of changing this statute, or allowing waivers to the Jones Act?

Answer. Any change to the statute or the allowance of waivers to the Jones Act will have disproportionate impacts to the U.S. shipyard industrial base. In a September 2018 report, *Assessing and Strengthening the Manufacturing and Defense Industrial Base and Supply Chain Resiliency in the United States*, the White House and the Office of the Secretary of Defense outlined their concerns to the overall defense industrial base and specifically cited their concern for the decline of the U.S. manufacturing and its impact to defense shipbuilding.

The report states:

Industries involved in the manufacturing of shipbuilding components were among the hardest hit by the global shift in the industrial base over the last 20 years. Of the top ten highest grossing industries in Navy shipbuilding, six are in the manufacturing sector. Since 2000, these industries experienced a combined decline of over 20,500 establishments in the U.S.

Contraction of the shipbuilding sector limits competition among U.S. suppliers of Navy components. In many cases, competition has altogether vanished, forcing the Navy to rely on single and sole source suppliers for critical components. These companies struggle to survive and lack the resources needed to invest in innovative technology. Expanding the number of companies involved in Navy shipbuilding is important to maintaining a healthy industrial base that can fulfill the 355 ship fleet and support the Navy's long range shipbuilding plan.

Furthermore, in the FY202 Long Range Shipbuilding Plan, the Navy echoed those concerns stating

"... the commercial industry supporting our auxiliaries and sealift has atrophied due to increased foreign competition through modernized facilities and inexpensive labor. A contributing factor was policy legislation that ended U.S. Government shipyard subsidies, putting U.S. industry at a considerable disadvantage compared to subsidized overseas competitors."

In summation, the U.S. shipyard industry has already weathered the negative impacts of the decline in overall manufacturing coupled with the rise in heavily-subsidized foreign competition. The way to ensure there is a stable industrial base going forward is to ensure the consistent enforcement and application of the Jones Act. Any waiver will stifle investment in the industry and prevent U.S. shipyards from competing in emerging domestic markets, therefore further eroding the shipyard defense industrial base.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. RON JOHNSON TO
MATTHEW PAXTON

Question 1. Mr. Paxton, in your testimony you stated that there is currently no demand for a domestic shipment of LNG by a carrier. A number of states have signaled a need for U.S. natural gas and acknowledged that current imports of natural gas come from places like Nigeria. Could you please explain what these states would need to further signal to demonstrate that there is domestic demand for shipment of LNG by a U.S. carrier?

Answer. Several U.S. LNG export facilities have begun operations in the last two years including in Cheniere, LA and Cove Point, MD. These facilities are already fully subscribed to foreign customers meaning there is no domestic supply of LNG from these facilities. A foreign carrier entering the domestic trade would therefore have no product to move.

However, it is expected over the next 5 years that potentially 11 additional domestic LNG export facilities could come online. As they do, there may be sufficient LNG capacity to be able to service a nascent domestic LNG market. As a result, there

are presently several inquiries being made in U.S. shipyards regarding the construction of such vessels which can be constructed well ahead of time to meet that market demand.

A Jones Act waiver is not necessary for the domestic LNG trade. In fact, MARAD has reported that there are 52 LNG carriers in the world that would qualify under existing 1996 legislation to transport LNG from the contiguous United States to Puerto Rico. Opponents of the Jones Act have countered that this is a false because “the law still requires these vessels to be U.S.-registered and U.S.-crewed.” One supposes from this that the Jones Act opposition wants to skirt all U.S. regulations and taxes.

The LNG market in Boston is a spot market (several cargos during the winter) and is likely to remain so. As such, regardless of where the LNG might get loaded in a ship, in Louisiana, Maryland or Qatar, it will be delivered at world price and at a price the market will bear. The best example of that case is happening right now as there has been an LNG carrier sitting off Boston harbor for over a month waiting for a cold snap to cause a regional natural gas price hike before the ship lands the gas.

Thus, unless it is the Congress’s intent to suspend all U.S. regulations and taxes for vessels operating in coastwise trade, then there is no need to waive the Jones Act. Gas customers in the Northeast will not receive any advantage and there are ships in the world today that could serve a coastwise trade to Puerto Rico if there was a market to justify it.

U.S. shipyards have already built bunkering barges to serve the needs of new LNG-powered ships coming to market. Those barges could easily respond to spot markets, such as Boston, during the winter months if the demand signal was given.

Question 2. As you testified, it is critical that the United States maintain an industrial base to construct its Navy and Coast Guard vessels. Can you please provide annual data on the number of domestically-owned shipyards and the number of commercial and non-commercial vessels built?

Answer. According to a 2016 U.S. Maritime Administration study, there are more than 125 private shipyards currently operating in the United States. As you can see from the chart below of ships delivered by type, there is a certain amount of cyclical nature to the U.S. shipyard business. The chart also shows commercial vs. non-commercial ships built in the U.S. from 2013 to 2018, and the number of vessels delivered each year.

The number of commercial ships delivered far outweighs the number of Navy and Coast Guard ships delivered. However, it should be noted that in terms of spending, the Maritime Administration has estimated that 70 percent of dollars spent on shipbuilding in the U.S. is from government contracts while 30 percent is spent on commercial projects. The difference in spending is derived from many factors including the complexity of the vessel.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MARIA CANTWELL TO
MATTHEW PAXTON

Question 1. Foster Growth in Number of U.S. Mariners, Apprentice Programs and Training. I have been working on a bill with Senator Collins that would allow retiring workforce to continue to work and mentor our next generation. This is particularly important in the trades, where skills and knowledge that workers have learned over a lifetime could be passed to the next generation. Is this program something that your shipyards could put to good use?

Answer. The SCA is continuously evaluating policies that will help train the next generation of shipyard workers. To that end, a stable and predictable order book is the best way to ensure that our shipyard can invest in the next generation of their workforce. As we stated in our written testimony, any undermining of the Jones Act contributes to the instability and unpredictability of potential future work, therefore hurting the ability of our shipyards to invest in their workforce and facilities.

Question 2. Small Shipyard Grants. Our maritime economy also supports a robust shipbuilding and ship repair industry in Washington. Nearly 20 percent of shipyards in the U.S. are in the state of Washington.

The Federal Small Shipyard Grant Program provides funds for the construction and repair of vessels at small U.S. shipyards.

Since 2010, Washington state shipyards have received eight grants, valued at over \$4.8 million dollars in investments into our shipbuilding industry.

How important is Federal support for small shipyards?

Answer. Federal support for small shipyards is invaluable. When funded, the Small Shipyard Assistance Grant Program has helped many small shipyards make

critical capital investments in their facilities. These investments help improve the competitiveness of the shipyards and supports continued workforce training and development programs. Funding for this program is intended to help small shipyards improve the efficiency of their operations by providing funding for equipment and other facility upgrades, including dredging of waters located within the shipyard's geographical location for the purpose of improving the shipyard facility operations.

According to MARAD: "Small shipyard facilities vary in size, from family-owned businesses employing a few dozen workers, to multifaceted establishments with hundreds of employees. The grants, which were primarily available to U.S. shipyards with less than 600 production employees, are generally less than \$1 million each, but can make a huge difference in a shipyard's bottom line."

The administration of this program should also be lauded as the efficiency created by MARAD in awarding these grants has allowed more money to be awarded through this grant program.

Small shipyard grants allow smaller shipyards to make capital investments to increase their facility's competitiveness. That competition allows them to better compete for open commercial projects and help streamline workloads in shipyards by making their workforce more efficient.

There have been several cases where small shipyards were awarded grants that in turn allowed them to bid on more complex commercial projects. The complexity in those projects then allowed those shipyards to become competitive for larger and more dynamic vessel contracts ultimately resulting in their ability to compete for government contracts

Question 3. What changes to the program should we consider as we develop the next maritime reauthorization legislation?

Answer. SCA would request that lawmakers increase the amount available for the Small Shipyard Assistance program. The Maritime Administration should be lauded as the efficiency created by the staff at MARAD has allowed more money to be awarded through this grant program. Additionally, the SCA supports the reauthorization and funding of the Maritime Administration's Title XI loan guarantee program, also known as "Title XI." Funding and implementation of the Title XI program creates loans for privately financed commercial ship construction and shipyard modernization—all in the United States. The amount appropriated funds the credit guarantee—essentially insuring the payment the government makes to itself.

Question 4. Jones Act. The Government Accountability Office has said that a loss of the Jones Act could result in significant effects on U.S. shipyards and the shipyard industry base. What are your views on the importance of the Jones Act to the U.S. shipbuilding industry. What more could be done to enforce the act's provisions?

Answer. If the Congress or the Administration were to undermine the Jones Act, there would be a severe disruption to the U.S. shipyard industrial base. As your question states, the industry makes long-term business decisions on the stability of current law. Any change to the Jones Act would signal uncertainty in those long-term business decisions. This signal would reverberate across the industry and financial markets, directly impacting the industrial base supply chain and that supply chain's ability to support the demands of our Navy and Coast Guard fleets and incrementally erodes the national defense implications of the Jones Act. Any waiver will stifle investment in the industry and prevent U.S. shipyards from competing in emerging domestic markets, therefore further eroding the shipyard defense industrial base.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. RICHARD BLUMENTHAL TO
MATTHEW PAXTON

Question 1. Multimodal investment to benefit ports. Freight—with an emphasis on goods that move through our ports—took a big step forward after passage of the FAST Act. Specifically, the bill provided a total of \$11 billion in dedicated freight funding over five years. However, of that, only \$1.13 billion is multimodal eligible. In 2018, the American Association of Port Authorities identified more than \$20 billion in multimodal funding needs for public port authorities alone over the next decade. Do you consider ports to be a critical part of our multimodal freight network?

Answer. Ports are an essential part of America's transportation system and the maintenance of our ports is critical. The SCA would support the use of the Harbor Maintenance Trust Fund to be used to invest and modernize domestic port facilities, including dredging ports with U.S.-dredgers.

Question 2. Could investing in multimodal facilities at our ports reduce highway congestion, increase supply chain efficiency, and save money through reduced delays?

Answer. Multimodal facilities, including short sea shipping and the development of the maritime highway would relieve some highway congestion and provide a more environmentally friendly option for transporting large amounts of domestic goods.

Question 3. Do you support increasing the amount of multimodal eligible funding in a reauthorization of the FAST Act?

Answer. The SCA supports multi-modal funding so long as there are guarantees that all investments and upgrades to maritime systems are compliant with the Jones Act. This includes dredging and ensuring that ships used in the multi-modal operations are not only built in the United States but also required to be repaired in U.S. shipyard facilities as well.

Question 4. The Coast Guard has stated that it needs at least three heavy icebreakers and three medium icebreakers to ensure continued access to the polar regions. Updating our fleet is essential to maintaining a national presence, the safety and security of the maritime transportation system, as well as coordinating national search and rescue efforts in colder regions.

Congress recently passed the Consolidated Appropriations Act of 2019, which provided \$655 million for construction of the first Coast Guard Polar Security Cutter. In addition, the bill provided \$20 million for some long lead-time materials toward a second ship. However, this falls well short of the funding needed to satisfy the Coast Guard's commitment to acquiring six polar icebreakers and more funding is undoubtedly needed to accomplish this goal.

I imagine you recognize the importance of the Coast Guard's ability to provide this vital icebreaking services to protect our Nation's security and economic prosperity. Would you agree that it is critical to continue this vital acquisition?

Answer. Yes—the Shipbuilders Council of America absolutely supports the full recapitalization of Coast Guard Polar assets. The U.S. shipyard industry is certainly up to the task of building polar icebreakers and has the expertise, the capability, the critical capacity and the unmatched skilled workforce to build these national assets. In fact, in a letter sent to the House Coast Guard & Maritime Transportation in 2011, SCA member companies urged the Congress, the Coast Guard and the Administration to work together to quickly authorize and fund such a project to deliver these critical vessels to meet the Nation's future strategic icebreaking needs. The U.S. shipbuilding industry is excited and eager for the opportunity to compete to build the Coast Guard's next icebreakers.

Question 5. What are the potential consequences of failing to fully fund the Coast Guard's icebreaker acquisition?

Answer. According to the Congressional Research Service:¹

The operational U.S. polar icebreaking fleet currently consists of one heavy polar icebreaker, Polar Star, and one medium polar icebreaker, Healy. In addition to Polar Star, the Coast Guard has a second heavy polar icebreaker, Polar Sea. Polar Sea, however, suffered an engine casualty in June 2010 and has been nonoperational since then. Polar Star and Polar Sea entered service in 1976 and 1978, respectively, and are now well beyond their originally intended 30-year service lives. The Coast Guard has used Polar Sea as a source of spare parts for keeping Polar Star operational.

A Department of Homeland Security (DHS) Mission Need Statement (MNS) approved in June 2013 states that "current requirements and future projections . . . indicate the Coast Guard will need to expand its icebreaking capacity, potentially requiring a fleet of up to six icebreakers (3 heavy and 3 medium) to adequately meet mission demands in the high latitudes. . . ."

While we do not know the details of the Coast Guard operations, we know from the shipyard industry perspective that further delay in the full funding and awarding of these programs will only put more pressure on the existing Coast Guard assets to cover an ever expanding Arctic presence.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED HON. MARSHA BLACKBURN TO
AUSTIN GOLDING

Question 1. Question. There was much discussion during the hearing regarding the economic and national security benefits provided by the domestic maritime industry. Barge companies in my home state of Tennessee make long-term business

¹<https://fas.org/sgp/crs/weapons/RL34391.pdf>

decisions based on the current legal regime, such as purchasing large amounts of steel to replace and refit barges for the next thirty years. These decisions require certainty in U.S. maritime law, and Section 27 of the Merchant Marine Act—the Jones Act—is the foundational statute underpinning U.S. maritime law. What are some potential market disruptions that would occur in the maritime industry if Congress or the Administration were to make changes to the Jones Act?

Answer. The initial impact would be massive collapse of our countries shipbuilding sector. All contracts to move products would be subject to the bids of foreign operators with lower operating costs. With those lower operating costs come more risk and less oversight. The price differential would take all the cargo out of U.S. operator's hands and put them into foreign operator's possession. Companies like ours would be forced to sell into a brand new market of foreign owned domestic operation that would be a shadow of the safe and environmentally aware industry we have built up to this point. Any military support the maritime sector could be counted on would be in foreign hands.

Question 2. What are the national security implications of changing this statute, or allowing waivers to the Jones Act?

Answer. Changing the statute or making a consistent habit of writing waivers chips away at the investment in our shipbuilding capability as a nation. It de-incentivizes investment in new operation and emerging markets. All of this means that our country has fewer options to build our Navy up and maintain it. It also erodes the support in the Jones Act fleet would provide in war time. This industry and the knowledge associated with it cannot be jump started over night. If we outsource our maritime industry our military is less supported, our cargo is now in foreign hands in our own backyards and if a conflict were to arise we would be dependent on non-US options to answer the call of that conflict. The Jones Act is a national security measure first and an economic measure second.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. MARIA CANTWELL TO
AUSTIN GOLDING

Question. National Maritime Strategy. The maritime industry is critically important to our economy, but it also plays a vital role during times of national crisis, including military conflicts and national emergencies.

However, the industry faces challenges with fewer ships, mariners and cargoes that impact its ability to support our defense needs.

Congress has called on the Department of Transportation to complete a national maritime strategy to address these challenges, and last year the Government Accountability Office report found that the strategy needs to be completed expeditiously.

Can you speak to the importance of a national maritime strategy and why these challenges must be addressed in the near-term?

Answer. Having a deep understanding of this countries marine assets and capabilities is very hard to do. We are not in communities the same way other modes of transport are. A national maritime strategy is an essential step in understanding this industry that is so distant to most citizens. While most Americans never step foot on a vessel, everyone's lives are impacted by them. A national understand and strategy would surely help optimize our industry.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. AMY KLOBUCHAR TO
AUSTIN GOLDING

Question 1. The Port of Duluth is the largest and busiest port on the Great Lakes and is a national leader for shipping. In 2017, a new intermodal terminal opened for Canadian National Railway and Duluth Cargo Connect to improve the flow of freight in and out of the Midwest. How can investments in multi-modal port infrastructure help reduce delays and congestion?

Answer. Multi-modal ports are the gateway for products to be traded in this country. Connecting supply chains at the point of origination is a key in any distribution system. Why not take that to the largest scale possible, multi-modal port facilities. These are great investments that have an echo impact.

Question 2. The Soo Locks Complex provides safe passage and a critical shipping connection within the Great Lakes. In November, the U.S. Army Corps of Engineers announced that the Soo Locks will receive more than \$32 million as part of its 2019 work plan. How do improvements to inland waterway infrastructure benefit domestic commerce in the United States?

Answer. Improvements equate to a more efficient supply chain and thus a benefit to the consumer and trader. You are talking about the largest volume possible being impacted. With one lock or dam project you get the same return as hundreds of road, bridge, rail projects all in one spot and project. It is the most impactful investment in infrastructure this country can make in my opinion. The investment will last decades, not just years. The products can change but the pathway and economic advantage remain.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. RICHARD BLUMENTHAL TO
AUSTIN GOLDING

Question 1. Multimodal investment to benefit ports. Freight—with an emphasis on goods that move through our ports—took a big step forward after passage of the FAST Act. Specifically, the bill provided a total of \$11 billion in dedicated freight funding over five years. However, of that, only \$1.13 billion is multimodal eligible. In 2018, the American Association of Port Authorities identified more than \$20 billion in multimodal funding needs for public port authorities alone over the next decade. Do you consider ports to be a critical part of our multimodal freight network?

Answer. No doubt about it they are a critical part. The volume ports can process far exceeds what normal highway, rail or airport volume can support. Once you incorporate maritime port elements in with multimodal options you unlock a universe of efficiency and options.

Question 2. Could investing in multimodal facilities at our ports reduce highway congestion, increase supply chain efficiency, and save money through reduced delays?

Answer. The volume handled through barges and ships equals thousands of trucks and rail cars. Many times the products are a beneficiary of a streamlined supply chain. The decision to trade the product can come down to the logistics. If the analysis includes a crowded highway or a delayed point of passage the product may not be traded at all or for a price that isn't as competitive. A multi-modal port saves money and makes money.

Question 3. Do you support increasing the amount of multimodal eligible funding in a reauthorization of the FAST Act?

Answer. I do. With proper oversight this could be a bountiful investment.

Question 4. *The Coast Guard's polar icebreaker fleet.* The Coast Guard has stated that it needs at least three heavy icebreakers and three medium icebreakers to ensure continued access to the polar regions. Updating our fleet is essential to maintaining a national presence, the safety and security of the maritime transportation system, as well as coordinating national search and rescue efforts in colder regions.

Congress recently passed the Consolidated Appropriations Act of 2019, which provided \$655 million for construction of the first Coast Guard Polar Security Cutter. In addition, the bill provided \$20 million for some long lead-time materials toward a second ship. However, this falls well short of the funding needed to satisfy the Coast Guard's commitment to acquiring six polar icebreakers and more funding is undoubtedly needed to accomplish this goal.

I imagine you recognize the importance of the Coast Guard's ability to provide this vital icebreaking services to protect our Nation's security and economic prosperity. Would you agree that it is critical to continue this vital acquisition?

Answer. Operating exclusively in the inland space of the lower 48 states I have to admit this is not my area of expertise. My opinion is that this is a needed tool for our countries security and I support the coast guards efforts in this space.

Question 5. What are the potential consequences of failing to fully fund the Coast Guard's icebreaker acquisition?

Answer. I would assume advanced threats from other nations. The Coast Guard does a great job of policing our waters and defending the USA's security interests.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MARIA CANTWELL TO
BERIT ERIKSSON

Question 1. Fostering Growth in Number of U.S. Mariners, Workforce Training. The maritime industry contributes \$21 billion to Washington state's economy and supports nearly 70,000 jobs. Yet, the maritime sector is facing a serious workforce shortage.

According to a 2013 report, the average age of the maritime workforce in Washington was over 54 years old.

Maritime academies and schools, such as at Seattle Central College, provide important vocational education and training to help develop future mariners.

In your view, what can be done to increase the number of mariners and why is it important that we focus on this issue now?

Answer. In my view, to increase the number of U.S. mariners would be a greater availability of entry level unlicensed positions available on Jones Act impacted ships. Currently the U.S. Merchant Marine Academy as well as the State Maritime Academies do a very good job in producing entry level officers. Unfortunately, the unlicensed deck and engine entry level needs are largely overlooked and poorly understood. This is probably due to when panels are asked about training issues the panelists are often from both civilian and military officer ranks. It is mainly their perspective that is being presented.

Today's unlicensed mariners are greatly impacted by STCW regulatory training requirements and without entry level positions there are VERY few opportunities to accrue the sea time needed to advance to Able Seaman or QMED. Without entry level training positions, we cannot create enough unlicensed U.S. mariners to replace a rapidly ageing workforce to sail in commercial trades or serve in support of our military at sea. The unlicensed mariner is just as vital to the mission as the licensed officer.

There are two possible solutions that I would suggest. One, on a vessel's Certificate of Inspection, the Coast Guard would require the manning level to include one Ordinary Seaman and one Wiper. This is currently not the case and may need a legislative solution. Two, revisit HR 2651 "The Maritime Workforce Development Act" that passed the House in the 1st session of the 111th congress. This legislation would provide much needed loans and grants for developing and funding unlicensed mariners as they move from entry level to licensed on an "on-the-job" pathway. The bill would need to be reviewed and updated for today's maritime education environment.

All maritime education programs, community colleges, private or union schools are constrained by the lack of at sea entry level positions.

Question 2. Fostering Growth in Number of U.S. Mariners, Apprentice Programs and Training. I have been working on a bill with Senator Collins that would allow retiring workforce to continue to work and mentor our next generation. This is particularly important in the trades, where skills and knowledge that workers have learned over a lifetime could be passed to the next generation.

How would this type of program benefit the maritime workforce?

Answer. This is a great idea. Both Secondary and Post-Secondary maritime programs can benefit from having instructors with maritime experience. The now closed (due to lack of funding) Mar Vista High School maritime program in Southern California had retired U.S. Coast Guard and Navy Bosun Mates as instructors. The kids respected them, were eager to learn and graduated with Merchant Marine Credentials. The instructors will probably need to acquire some sort of instructor certification from the State Dept of Education or whoever does that.

Question 3. How can the Federal Government better support training, recruitment and job growth in this critical sector?

Answer. Besides restating my answer to Question 1, I find merit in USDOT's exploration of decreasing the cost of bringing a ship under U.S. flag and requiring that certain energy export commodities such as oil or LNG be carried on U.S. flag vessels.

Also, the Carl Perkins Act (Career and Technical Education) is requiring a sector strategy approach to CTE and having Maritime (at sea and in ship building) CTE education as one of the sector priorities. The State level Perkins Plans (under U.S. Dept of ED) must now coordinate with the State level Workforce Plans (under USDOL's WIOA) in developing sector strategies. Perhaps some language in both of those program future reauthorizations may help.

Question 4. National Maritime Strategy. The maritime industry is critically important to our economy, but it also plays a vital role during times of national crisis, including military conflicts and national emergencies. However, the industry faces challenges with fewer ships, mariners and cargoes that impact its ability to support our defense needs. Congress has called on the Department of Transportation to complete a national maritime strategy to address these challenges, and last year the Government Accountability Office report found that the strategy needs to be completed expeditiously. Can you speak to the importance of a national maritime strategy and why these challenges must be addressed in the near-term?

Answer. The National Maritime Strategy needs to be completed so there is a clear plan on maintaining and growing a merchant mariner workforce to man the support fleet for our military force projection. This must be addressed in the near term as

the current workforce is aging out quite rapidly and it takes several years to bring up an entry level mariner to full competency. I anticipate that I will soon be serving on the Marine Transportation Systems National Advisory Committee (MTSNAC) where I may have an opportunity to provide input on this project.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. RICHARD BLUMENTHAL TO
BERIT ERIKSSON

Question 1. Multimodal investment to benefit ports. Freight—with an emphasis on goods that move through our ports—took a big step forward after passage of the FAST Act. Specifically, the bill provided a total of \$11 billion in dedicated freight funding over five years. However, of that, only \$1.13 billion is multimodal eligible. In 2018, the American Association of Port Authorities identified more than \$20 billion in multimodal funding needs for public port authorities alone over the next decade. Do you consider ports to be a critical part of our multimodal freight network?

Answer. Yes. Ports are an integral link for international trade. Millions of tons of import/export cargo are moved efficiently across the docks of U.S. ports daily creating thousands of jobs throughout the multimodal system. Ports are a critical link for our manufacturing and agricultural exporters to reach international markets with their products. This does come with challenges for instance the much needed Harbor Maintenance Tax creates crucial funding needed to keep our ports efficient but also has the unintended consequence of diverting import cargo from ports located near international borders to ports of other countries limiting much needed capacity and equipment for U.S. exporters in affected regions and “shipping” U.S. jobs to foreign countries.

Question 2. Could investing in multimodal facilities at our ports reduce highway congestion, increase supply chain efficiency, and save money through reduced delays?

Answer. Yes. Getting cargo to and to and from ports in the “last mile” efficiently is key to importers and exporters success. Highway projects that improve the “last mile” pay huge dividends in the multimodal system. In addition, funding rail projects such as grade separations throughout the rail system not only reduces highway congestion at ports but improves the impacts that freight have on communities throughout the system.

Question 3. Do you support increasing the amount of multimodal eligible funding in a reauthorization of the FAST Act?

Answer. Yes

Question 4. The Coast Guard’s polar icebreaker fleet. The Coast Guard has stated that it needs at least three heavy icebreakers and three medium icebreakers to ensure continued access to the polar regions. Updating our fleet is essential to maintaining a national presence, the safety and security of the maritime transportation system, as well as coordinating national search and rescue efforts in colder regions.

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I imagine you recognize the importance of the Coast Guard’s ability to provide this vital icebreaking services to protect our Nation’s security and economic prosperity. Would you agree that it is critical to continue this vital acquisition?

Answer. Yes. Having lived and sailed in Alaska for 21 years prior to moving to Washington, I am very much in agreement on the need for more icebreakers. I am very opposed to the idea of leasing or chartering foreign owned icebreakers. We might as well lease our navy warships from a foreign power in that case.

Question 5. What are the potential consequences of failing to fully fund the Coast Guard’s icebreaker acquisition?

Answer. The U.S. ability to keep a position of superiority in the opening of Arctic sea lanes is of great concern. Even Finland has greater capacity/modernity then we do. The worst case consequences would be the control of arctic shipping by Russia and China which would further maritime tensions between the U.S. and these countries.