

**Statement of Michael G. Roberts
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**Before the Committee on Commerce, Science and Transportation
Subcommittee on Surface Transportation and
Merchant Marine Infrastructure, Safety, and Security**

United States Senate

**The State of the U.S. Maritime Industry: Stakeholder Perspectives
April 20, 2016**

Chairwoman Fischer, Ranking Member Booker and Members of the Committee:

Thank you for the opportunity to appear today to offer the perspective of American shipping companies on the state of the U.S. maritime industry. Attached to this Statement is a summary of Crowley Maritime Corp. and its current operations, as well as a brief biography. Crowley is one of the leading American maritime companies, operating more than 300 vessels in diversified services. It has about 5,300 employees, including 2,100 U.S. merchant mariners. These mariners work on U.S. flag vessels domestically and around the world. They live in 46 of the 50 states (including one in Nebraska and 31 in New Jersey), Puerto Rico, Guam, and the U.S. Virgin Islands. These are the men and women America relies upon to operate the vessels that supply our military personnel overseas. Crowley also leads in deploying new American-made vessels, with about \$2 billion invested in recent years in modern tank vessels, container / ro-ro ships, high-powered tugs and heavy deck barges.

This Statement provides updates on selected issues involving the American domestic and international maritime industry, and a brief review of key policy issues. It focuses on segments of the industry in which Crowley is substantially involved, including domestic tanker and liner businesses (Crowley is a market leader), international container shipping (strong regional

carrier), and offshore development (substantial operations). It does not address other important segments in which we are not involved (e.g., passenger, dry bulk, international tanker, etc.).

A brief contextual note – domestic and international maritime markets are discussed separately because very different legal and regulatory systems govern domestic and international shipping. This is important in understanding why those markets may have different economic conditions, and in considering policy choices in this area. “Normal” regulatory principles apply to domestic shipping in the sense that those who operate in American domestic trades must obey American laws. Ships must be registered under the U.S. flag, which means that in a legal sense, the vessels are considered a part of American sovereign territory. The ship owner and all involved must comply not only with rules that apply particularly to the maritime industry, but also to rules applicable to American businesses generally. This includes immigration (officers and crew of a U.S. flag ship must be American citizens), employment, environmental, safety, tax, and other laws.

Because ships in international trade do not operate within any single national jurisdiction, ship owners can simply pick the jurisdictional home of every element of their business, including most importantly, where their ships are registered.¹ This is not permitted in any domestic service business. For example, a restaurant or factory owner cannot plant the flag of another country at his / her facility in Lincoln and declare it to be no longer part of America, so that they can reduce costs, replace American workers with foreign workers, eliminate U.S. tax liability, etc. Because of the Jones Act and other “cabotage” laws in the U. S. and other countries, domestic shipping,

¹ Ship owners usually choose jurisdictions that minimize tax and regulatory burdens. According to a 2010 UN report, the top five registries for international shipping are: Panama, Liberia, Marshall Islands, Hong Kong, and Greece. These jurisdictions, which account for .4% of world population, register more than 50% of the world’s tonnage. U.S. flag vessels (including domestic and international) accounted for 1% of world tonnage, while U.S. population accounts for about 4.5% of the world total.

aviation, and other service industries are governed by “normal” regulatory principles, *i.e.*, the laws of the country in which they operate.

Domestic Shipping Markets

America has a large and diverse fleet of vessels serving its domestic commerce – about 40,000 vessels, providing employment to nearly 500,000 Americans, and about \$100 billion in economic activity. This includes some 5,000 towing vessels, and 27,000 barges in river and coastal trades; thousands of vessels supporting offshore development; about one hundred ocean going self-propelled vessels, and dozens of large tug-barge units (ATBs); and other specialty vessels. The contribution of the domestic maritime industry to national and homeland security is well-recognized, and includes providing manpower to support sealift operations; helping to sustain America’s shipbuilding industrial base; and helping secure America’s river system and coastal waterways from possible terrorist attack.²

Domestic Tanker Market

The domestic tank vessel industry has changed dramatically over the past several years. It has historically been a relatively discrete market, consisting primarily of moving crude oil from Alaska to U.S. West Coast refineries, and moving gasoline, jet fuel, heating oil and other refined products from refineries to markets around the coast. Vessels in these trades have been replaced over time due to the requirements of the Oil Pollution Act of 1990, which phased out single-hull vessels on a schedule that ended in 2015. Vessel owners deploy a variety of vessel types in these trades, including small, medium and large ATBs and self-propelled tankers.

² See, e.g., Dr. Daniel Goure, Lexington Institute, *Venerable Jones Act Provides an Important Barrier to Terrorist Infiltration of the Homeland*, March 24, 2016; Gen. Darren McDew, Commander, U.S. Transportation Command (2016); Gen. Paul Selva, current Vice Chairman of the Joint Chiefs of Staff (2015); Adm. Paul Zukunft, Commandant, U.S. Coast Guard (2014); and many others.

Dramatic growth in the domestic petroleum industry over the past few years has led to corresponding growth in the domestic petroleum shipping industry, with an incremental increase in the fleet of 20-25 vessels including those recently delivered and those on order. Five years ago, less than 10% of the fleet was dedicated to moving crude oil compared to about one-third of the fleet today. American shipbuilding order books are full well into 2018. One of the challenges in gearing up this fleet has been in finding highly qualified officers and crew, particularly engineers, to man the vessels. This may be ameliorated to some extent by the reduced offshore development activity, with corresponding lay-offs of hundreds of mariners. It is not clear, however, the extent to which these mariners have skills and certifications coming out of their work on tugs and supply vessels that will readily transfer to operating petroleum tankers.

The industry is also actively engaged in the “Military 2 Maritime” veteran recruiting effort. The basic concept is to find opportunities in the American commercial maritime industry for military service veterans who have maritime experience in their service background. Such veterans can be ideal candidates to fill open positions in that they not only have technical and licensing qualifications, but also are acclimated to the culture and environment of maritime operations. Many such veterans have found, however, that obtaining the necessary Coast Guard licensing has been more difficult than expected. This is not due to a lack of skills or practical training in many cases, but because credit for sea time experience and course work earned while in the military are not aligned with Coast Guard licensing requirements. As an example, more than thirty courses provided by the U.S. Army have been accredited by the Coast Guard, as compared to one course offered by the Navy. Several industry representatives are working with the Maritime Administration and military services to correct this situation.

A change in law included in the Omnibus Appropriations bill approved in December has created uncertainty in the domestic tanker industry. Under law dating to the 1970's, crude oil could not be exported from the United States, with limited exceptions. This limitation contributed significantly to basic expectations for the exploration, production and transportation of domestic crude oil. Contracts were signed and trading patterns developed accordingly. As noted, for example, crude oil's share of domestic tanker transportation volumes jumped from less than 10% five years ago to more than 30% today. Because of the change in law, crude oil exports are now permitted. An important question in the maritime industry is the extent to which this change will cause a reduction in domestic trading volumes, and thereby adversely impact the investments in new tonnage, some of which has yet to come on line.

Safety and environmental performance are the most important operational considerations for the American maritime industry. Lost-Time Incidents (LTIs) is a standard measure of worker safety performance used in the maritime industry and in other industrial activities. "Spills to water" is another key metric, for environmental performance. Management, mariners and our customers maintain a constantly renewed focus on safety and environmental performance. This has led to greater awareness, better measures, and more sophisticated training programs throughout the industry. Crowley's company-wide LTI rate, for example, has declined by more than 80% over the past four years. Another domestic maritime company, Alaska Tankers, has achieved a remarkable record of only one LTI (broken finger) since 2001.³ Crowley's tanker business recently passed the *one billion barrel* mark in petroleum transfers over a period of about ten years. During that time, accumulated spills to water totaled about *6.2 gallons*. This kind of performance puts the American maritime industry in the elite class of operators worldwide. It is,

³ See, Alaska Tanker Company presentation, "Mindfulness and Total Worker Health," Oregon Health and Science University, Fall 2015.

however, not the end game, as the ultimate goal for Crowley and other American maritime companies is zero – zero harm to persons, property and the environment.

I will briefly mention the domestic maritime offshore development industry, which has been an important source of jobs and growth in recent years, but has seen radical changes in the direction of its markets. Based primarily in states around the Gulf of Mexico and Alaska, this industry is comprised of those who build, operate and crew the vessels needed to develop offshore energy installations. The industry boomed when oil prices were relatively high, with dozens of technically advanced vessels being built in U.S. shipyards to support exploration and development activities. This contributed to a boom in employment opportunities for mariners having the technical knowhow to operate these vessels. The tragic loss in 2010 of the Deepwater Horizon drill rig and the ensuing environmental disaster brought offshore development to a near standstill, which had a profound impact on maritime and other related industries. While the industry was able to begin recovering once development resumed, the radical drop in oil prices has once again brought offshore exploration and production to a crawl, with many major projects being canceled in the Gulf and in Alaska.⁴ Hundreds of vessels are laid up, and the number of active crew is down dramatically.

Domestic Liner Industry

The domestic liner industry refers to the container shipping business primarily in the non-contiguous domestic trades between the U.S. Mainland and Puerto Rico, Hawaii, Alaska and Guam. Carriers in these markets move most of the consumer products and other goods shipped from the Mainland to these locations, as well as moving goods produced in these locations back

⁴ See, e.g., Alixpartners, “Oil Price Drop Sinks Offshore Supply Vessel Market,” January 2016.

to the Mainland.⁵ These markets have been impacted by the exit of Horizon Lines last year. Horizon terminated service to Puerto Rico, and sold its business in the other trades to the Pasha Group (Hawaii) and Matson Navigation (Alaska).

Of critical importance is the ability of carriers in domestic liner markets to reinvest in their fleets. In the Puerto Rico trade, TOTE Maritime has now deployed two new ships that are the first LNG-powered containerships in the world. Crowley also is renewing its fleet with two LNG-powered container / RoRo ships, to be delivered in 2017-18. Both carriers are investing in terminal facilities in Puerto Rico, with Crowley's \$100 million investment one of the larger capital projects on the Island. Further, both fleets call in Jacksonville, Florida, which has triggered investment there in terminals, liquefaction plants, and other infrastructure needed to supply LNG fuel to these fleets. Major regulatory and public education efforts are underway in tandem with these investments.

The significance of this investment cannot be overstated. American carriers have triggered the construction in U.S. shipyards, and deployment in U.S. domestic service, of vessels that may prove to be prototypes of the world shipping fleet as it begins to transition to extremely low-emissions propulsion. These vessels bring significant environmental benefits to Puerto Rico, where air quality is a major concern. They also establish a substantial demand platform that enables the full development of American natural gas for use in transportation and other businesses in the Southeast and throughout the country. It is a game changer.

Before turning to the other trades, two additional points should be noted as to Puerto Rico. Carriers in the trade have supported efforts by political leaders on the Island and on

⁵ Note that U.S. flag vessels are not required for shipment of goods in non-domestic purchase / sale transactions, *i.e.*, from or to vendors / customers outside the United States. For example, about one-third of Puerto Rican consumer goods, and most of its energy resources, are sourced from foreign sellers and shipped into Puerto Rico directly on foreign flag vessels, which account for the majority of all ship calls in San Juan.

Capitol Hill to develop a legislative package that will help stabilize the economy. In general, the carriers and other Mainland businesses interested in Puerto Rico have supported a package that includes an appropriate mechanism to restructure bond debt, to create a control board with limited powers help the Puerto Rican government work through its financial challenges, and other measures. In Crowley's case, we took this unusual step based on our sixty years of commitment to the Island, recognition that the Puerto Rican economy is in rough shape, and our belief that Congress has a critical role to play in righting the ship.

A few have taken this legislative activity as an opportunity to urge that a Jones Act exemption for Puerto Rico be included in the package. They have offered no credible proof that such a change would help Puerto Rico, and we are confident it would do more harm than good both for Puerto Rico and for the country generally. Such a change would put at risk the reliable, efficient service the Island currently receives, as well as hundreds of private sector jobs on the island, with no offsetting gains. It would also send a chilling message that would bring further investment in vessels built in U.S. shipyards to a standstill.

A second and related point concerns the supply of LNG to the Island. One of the primary issues in Puerto Rico (as in other offshore locations) is the high cost of electricity. This results in part from its island location and limited market size, and also from concerns with the government-owned utility, PREPA. The high electricity cost not only hits consumers on the island, but also key employers on the Island – manufacturers and other industrial facilities that have high energy usage. To help such employers reduce the cost and improve the reliability of their electrical service, Crowley subsidiary Carib Energy began a small-scale LNG supply business to customers on the Island. Carib provides LNG using 40-ft. ISO tanks, which are filled up at a natural gas plant on the Mainland, and shipped to the customers' facility in Puerto Rico.

This is offered as an example of the private sector helping to find solutions to the Island's problems. It is not suggested to be a suitable method for supplying LNG to PREPA, which currently purchases bulk LNG primarily under contract with a supplier in nearby Trinidad. If and when PREPA seeks new bulk LNG supply contracts, it can ask for bids from U.S. suppliers knowing that American bulk LNG vessels will be available to provide an efficient and cost-effective service when needed. Allegations that shipping costs would materially increase the cost of U.S.-sourced LNG to the Island are unfounded.

As to the other non-contiguous trades, as noted, Horizon Lines sold its Hawaii business last year to the Pasha Group, and its Alaska business to Matson Navigation. Also last year, Pasha took delivery of its second new vessel in the Hawaii trade, and is continuing to deploy the existing ex-Horizon vessels to meet the needs of shippers in the trade. Similarly, Matson has orders pending for two new ships under construction at Philly Shipyard. Like Pasha, it will also continue to operate the vessels it acquired from Horizon Lines in the Alaska trade. While there are other carriers in all three noncontiguous trades, none has announced their fleet renewal plans.

Lastly, we are mindful of the tragic loss of the *El Faro* last October, which was sailing in the Puerto Rico trade. We have a duty as members of the maritime community to remember the officers and crew, and learn from this tragedy. Because the government's investigation of the root cause of the sinking remains active, however, it would not be appropriate to comment on any particular aspect of this matter.

International Shipping Markets – Foreign Flag

Crowley participates in the international shipping market in two ways. First, it provides a comprehensive suite of liner and logistics services to customers in the regional trades involving the Caribbean islands, Central America and parts of South America. The vessels used to serve

these markets are a mix of owned and chartered in tonnage. They are sized and specially configured for customers in these trades. Crowley has developed the expertise and deployed the full range of systems necessary to handle all aspects of the business – to book, track, document, and insure the cargo, coordinate trucking, manage marine terminals, stow vessels, arrange delivery at destination, manage invoicing, etc. Additional logistics services include Customs brokerage, warehousing and consolidation, among others.

The international liner business is generally subject to the strength or weakness of the overall economy. Strong global economic growth usually leads to more international trade and stronger liner shipping companies. Conversely, relatively flat economic performance such as we are currently seeing leads to poor financial performance, which can be magnified by the tendency of the industry to build more vessel capacity than the market can absorb. This is partly a result of carriers seeking lower unit costs by building and deploying larger ships.⁶ Excess capacity also results from shipyards building more vessels than the market requires based on the desire (frequently fed by government incentives) to continue employment of the shipyard, instead of any market need for the capacity.

Another factor currently impacting the international liner industry is the slowdown in the growth rate of global trade. For decades the average annual rate of growth in U.S. foreign trade was more than 10%. In more recent years it has been less than 5%. While still growing, the change in the rate of growth can have an unfavorable effect if planning and investment has assumed more substantial trade and economic activity.

The result is an international liner industry today that is under serious economic pressure. Like most businesses in these circumstances, the liner carriers are looking for ways to survive

⁶ For example, the *MSC Zoe* was delivered last year and has a reported capacity of more than 19,000 twenty foot equivalent units. The units carried on this single vessel, placed end-to-end, would stretch more than seventy miles.

primarily by cutting costs. This includes not only reductions in personnel and other traditional measures, but also actions more unique to the transportation industry. For example, like airlines, liner shipping companies may skip port calls or entire voyages for economic reasons, *i.e.*, where there is not enough cargo to cover the costs. Carriers may also seek ways to save cost by rationalizing capacity in a given market. Rather than two carriers sailing two vessels half full between the same two ports, the market may be better off if the carriers sail one vessel in that trade, and continue to compete with each other to sell space on that vessel. That is the basic logic behind vessel sharing agreements (VSAs), which are widely adopted today throughout the industry. Customers benefit from such arrangements because they take cost out of the system, yet retain the same number of competitors seeking to provide the service.

The regulatory system that facilitates the formation of VSAs and similar cooperative working arrangements is the Shipping Act of 1984 as administered by the Federal Maritime Commission. VSAs are filed with the FMC and become automatically effective – are presumptively lawful – unless the agency raises concerns within 45 days. The parties to the agreement can then implement it with regulatory confidence once the waiting period expires. The alternatives to this system are either to go ahead with the agreement and risk antitrust prosecution, or to submit the agreements for antitrust review by the Justice Department, with no specific procedures or deadline for action. The Shipping Act / FMC process is clearly preferred by most in the industry.

As may be expected in times of financial stress, the industry is also seeing more merger and acquisition activity by carriers. The FMC does not have jurisdiction over these types of transactions. They must be reviewed under normal antitrust guidelines. It should be noted that for both cooperative working agreements and M&A transactions, regulatory approval from

multiple jurisdictions may be required. Indeed, competition authorities in the EU and China have rejected or placed conditions on carrier agreements that did not appear to trigger comparable concerns from U.S. authorities.⁷

International Shipping Markets – U.S. Flag

As noted, Crowley participates in two ways in the international shipping market. In addition to owning and operating its own liner and logistics service in the Central America and Caribbean trades, Crowley also provides technical ship management for other vessel owners operating ships worldwide. Crowley does not market or sell the transportation services provided by these vessels. It instead provides the officers and crew needed to sail them, as well as a range of other services (vessel maintenance, insurance, port services, etc.) as agreed by the parties. Most of the vessels operated by Crowley on behalf of third parties fly the U.S. flag.

It is widely known that the U.S. flag fleet operating in international trade has been in decline. The reasons behind this are noted at the beginning of this statement. It is not enough that the tax and regulatory burdens of ships operated under the U.S flag have been reduced from time to time, and American carriers have been among the most innovative in the industry. Even so, U.S. flag costs are among the highest in the world, reflecting the fact that, compared to most other shipping registries, U.S. flag ships are a part of the first-world economy, and operate under a relatively mature tax and regulatory system. Those who would simply say, “Let the market decide” should understand that there will be no U.S. flag ships operated in international commerce if that sentiment prevails entirely.

⁷ See, e.g., “Maersk, Partners Surprised by Chinese Regulator,” Wall Street Journal, updated June 17, 2014; “CMA CGM Compromising to Get EU’s Nod on NOL Takeover,” World Maritime News, April 2016.

Virtually no one involved in the industry desires that outcome, and more importantly, U.S. military leaders have very clearly stated that it would not be an acceptable one.⁸ American national security and readiness require an ability to station and resupply our armed forces anywhere in the world. This means not only having access to modern vessels and equipment, but also to American seafarers who know how to operate these vessels and systems because they do so on a regular basis to ports all over the world. Sealift remains a core function of our national security infrastructure, even in times of air, space and cyber warfare. Overseas deployment of U.S. military forces is a continuing fact of life, and it would not be possible to transport and sustain a large force and accompanying equipment from the U.S. via any other mode of transportation. Similarly, it would be exponentially more expensive to American taxpayers for the U.S. military itself to replicate the vessels, equipment, logistics networks, and manpower needed to provide a credible and comparable sealift capability.

Accordingly, two long-standing government programs have enabled a number of U.S. flag vessels to continue operating commercially in international trades. The Maritime Security Program provides a flat-rate stipend to the owners of contracted U.S. flag vessels to offset the extra cost of operating under the U.S. flag. The contracts also require the owners to participate in the Voluntary Intermodal Sealift Agreement, a readiness program covering the use and potential requisition of U.S. flag vessels entered into MSP. The second program, Cargo Preference, generally requires that government shipments move on U.S. flag vessels. It was intended that the combination of the two programs would provide enough of an incentive for carriers to participate. MSP by itself would not be enough.

⁸ See, e.g., “Statement of Lieutenant General Stephen R. Lyons, United States Army Deputy Commander, United States Transportation Command,” before the Subcommittee on Seapower and Projection Forces, House Armed Services Committee, March 22, 2016.

The drawdown of military activity in the Middle East, coupled with the loss of EXIM Bank and other civilian cargoes, has led to the withdrawal of several vessels from the U.S. flag, with the risk that more will follow. According to the Maritime Administration, less than 80 U.S. flag commercial vessels now operate in international trade, vs. some 9,000 foreign flag vessels that call at U.S. ports. To stem the tide, Congress agreed to increase the stipend payable to MSP carriers, so that there would remain a modest financial incentive to remain under the U.S. flag built directly into the MSP. It is essential that this increase be fully funded in FY 2017.

Thank you for your attention and I look forward to your questions.

ATTACHMENTS

Summary of Crowley Maritime Corp. Businesses – April 2016

Crowley Maritime Corporation is a U.S.-owned and operated marine solutions, energy and logistics services company organized into six business units: Domestic liner services in the Puerto Rico trade; International liner services in Caribbean and Central America markets; Logistics; Marine contract solutions; Petroleum transportation; and Petroleum distribution and marine services in Alaska.

The primary services offered by these six business lines include:

- [Shipping and Logistics](#)
- [Freight Forwarding and Global Project Logistics](#)
- [Alaska Fuel Sales and Distribution](#)
- [Petroleum and Chemical Transportation](#)
- [Harbor Ship Assist and Tanker Escort](#)
- [Global Ship Management](#)
- [Marine Salvage, Wreck Removal and Emergency Response](#) (through a 50% ownership position in Ardent Global)
- [Marine Solutions](#) (including [Naval Architecture, Engineering](#) and [Project Management](#))
- [Offshore Services](#) (including [Heavy Lift Barge Transportation](#) and [Ocean Towing](#))
- [Liquefied Natural Gas](#) (specialized services include transportation, sales and logistics; vessel design; engineering; storage supply and management)

The company was founded in 1892, when founder Thomas Crowley — the grandfather of current chairman and CEO Thomas B. Crowley Jr. — purchased an 18-foot Whitehall boat to provide transportation of personnel and supplies to ships anchored on San Francisco Bay. The present structure, in which Crowley Maritime Corporation serves as a holding company for business lines and all subsidiaries, was put in place in 1992. The company is wholly and privately owned by the Crowley family and Crowley employees. Crowley-owned subsidiaries include: [Jensen Maritime Consultants](#) and [Customized Brokers](#)

Today, Tom Crowley Jr. and his leadership team direct a company with approximately \$2.2 billion in annual revenues and approximately 5,300 employees. Crowley maintains a fleet of more than 200 vessels, consisting of RO/RO (roll-on-roll-off) vessels, LO/LO (lift-on-lift-off) vessels, [articulated tug-barges \(ATBs\)](#), tugs and barges. Land-based facilities and equipment include terminals, [warehouses](#), [tank farms](#), office buildings, trucks, trailers, containers, chassis, cranes and other specialized vehicles.

Crowley's Support to the U.S. Government

From raising the coal barge *City of Panama* during World War I, to providing emergency logistics support to the Defense Department for rapid deployment of Ebola treatment units in West Africa in 2014, Crowley has consistently been a responsive partner of the United States government.

Selected Past Performance Highlights

- Over 60 years ago, Crowley helped the U.S. government secure the **DEW Line radar installations (Distant Early Warning)** on the perimeter of Alaska.
- Vessel management for **United States Maritime Administration, Military Sealift Command**, and other agencies including ROCON ships, BOBO class ships, T-AGOS/T-AGM ships and others.
- **Navy Superintendent of Salvage (SUPSALV)** contract holder since 1976 to supplement the Navy's salvage, diving, and search and recovery capabilities. Projects have included: Air Alaska wreck recovery; *Ehime Maru* recovery and relocation; ship salvage engineering; wreck removal; oil spill contingency plans and development and modification of salvage firefighting equipment
- First responder and the largest marine contractor during the **M/T Exxon Valdez** oil spill response.
- Logistics, warehousing and transportation support for various **military relief cargoes (USAID)** at the request of the US government to Haiti, Dominican Republic, Cuba and Central America.
- Helped clear **Johnston Island** of human habitation for its return to a bird sanctuary as it was originally deemed by President Coolidge.
- Involvement in various **military tows/assists** including the: *USS Missouri, USS Oriskany, Everett, Lincoln, USS Iowa, Oklahoma, USS New Jersey, USS Belleau Wood*.
- Crowley carries the **US Postal service** deliveries between the US and the Virgin Islands.
- Assistance with clean up following the first **Desert Storm**.
- Delivery of 12,000 tons of aggregate and sand to **Kwajalein Atoll** from Masan, South Korea for the U.S. Army Corp of Engineers to construct a motor pool facility on the military installation at Kwajalein.
- Participation in various hurricane disaster relief responses providing vessel support and relief aid most notably during - **Hurricanes Katrina and Sandy**.
- Emergency humanitarian aid shipping and logistics, marine salvage and temporary port infrastructure solutions following the **Haiti Earthquake**.
- Completed the largest, most technically challenging marine salvage job in history, **Costa Concordia**.
- Ship management and logistics support for the **Syrian chemical weapons** destruction project.
- Logistics, personnel and transportation support for medicine and other emergency supplies in Liberia during the 2014 **Ebola outbreak**.

BIOGRAPHY - Michael G. Roberts – Sr. VP and General Counsel, Crowley Maritime Corp.

Legal and executive responsibilities with Crowley since 1991. Was based in Washington, DC prior to relocating to Jacksonville in 2008 to become a member of the company's senior leadership team. Overall responsibility for strategic government business, government relations, regulatory, legal, risk management and insurance functions of the company.

Actively involved since 1994 in the development of the Maritime Security Program and VISA, Jones Act matters, Ocean Shipping Reform Act, and various maritime initiatives. Member / coordinate company participation in industry trade groups, including NDTA, Navy League, American Maritime Partnership, American Waterways Operators, Chamber of Shipping of America, and others.

Earned Bachelor of Arts degree with high honors from Michigan State University; JD degree *cum laude* from American University, Washington College of Law.

Crowley is a leading American maritime company. Founded in 1892 in San Francisco Bay, the company today has more than 5,000 employees and \$2B in annual revenue. It is one of the top private sector employers of the US Merchant Marine. Over the past few years, it has invested or committed about \$2B in new US-built vessels. Lines of business include domestic and international liner shipping (primarily in Caribbean / Central America markets); logistics (including trucking, warehousing, customs brokerage, insurance and other services); domestic petroleum transportation (owned fleet of 17 to 21 vessels); technical services (including third party ship management, naval architecture & engineering, project management, marine salvage and wreck removal); and petroleum distribution (tank farms and road terminals in Alaska), ship assist / escort, and oil spill prevention and response in Valdez, AK. Crowley is a privately-held company.