

# United States Coast Guard Annual Performance Report

Fiscal Year 2018



# Letter from the Deputy Commandant for Operations

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**Vice Admiral Daniel B. Abel**

*United States Coast Guard*

**Deputy Commandant for Operations**

I am pleased to present the Coast Guard's Annual Performance Report for Fiscal Year 2018.

The Coast Guard is a small service with big missions that impact nearly all facets of American life. We ensure the continued maritime safety, security, environmental stewardship, and ultimately the prosperity of our nation. The clothes we wear, cars we drive, and so many other products we buy and sell are delivered via a Marine Transportation System that the Coast Guard is charged with supporting and protecting. We are the sole Federal agency postured and equipped with the broad legal authority to exert national sovereignty and enforce laws and treaties in our internal waters, littorals, and on the high seas. We protect our maritime borders from terrorist threats, illegal drugs, undocumented migrants, environmental threats, and contraband. Additionally, we have established a reputation as one of the world's premier lifesaving and crisis response organizations. Our service regularly rises to meet ever-changing man-made and natural disasters that threaten our people and our way of life. We are unparalleled as a humanitarian organization; more than one million people owe their lives to the Coast Guard.



Our success hinges on our people, who are our greatest strength and most important resource. The quality, dedication, and professionalism of Coast Guard men and women are tested daily. They are a unique and dedicated breed of service members, civilian employees, and volunteer Auxiliarists—quiet heroes who with little fanfare or attention, save lives, stop transnational criminals, protect the environment, safeguard the marine transportation system, and fight our nation's wars. They live the Coast Guard's core values and are committed to excellence in all they do. Their faithful service ensures a Coast Guard performance posture that remains **Ready...Relevant...Responsive**.

A handwritten signature in black ink that reads "Daniel B. Abel". The signature is stylized and cursive. Below the signature, the name "Daniel B. Abel" is printed in a smaller, sans-serif font.

Vice Admiral, U. S. Coast Guard

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## Coast Guard Missions and Mission Programs

The Coast Guard safeguards U.S. maritime interests; protecting those on the sea, protecting against threats delivered by sea, and protecting the sea itself. The Service ensures the integrity of America’s maritime domain, which is comprised of 95,000 miles of shoreline and a nearly 4.5 million square mile exclusive economic zone. In the ports and harbors, and across the vast expanse of the ocean, coastal and inland waterways, the Coast Guard ensures safety and security and the stewardship of natural and commercial resources, against internal and external threats, both natural and man-made.

The Homeland Security Act of 2002 transferred the Coast Guard to the newly created Department of Homeland Security. It delineated 11 missions to ensure that performance is reasonably tracked and non-homeland security results did not suffer because of the transfer. These are managed within the six mission programs that comprise the Coast Guard’s strategic mission management construct, which is based upon the prevention and response architecture. The six Coast Guard mission programs and their Homeland Security Act mission responsibilities are listed in the table below.

USCG MISSION PROGRAMS	HOMELAND SECURITY ACT MISSIONS
Maritime Prevention	Ports, Waterways & Coastal Security — <i>Prevention Activities</i> (PWCS-P) to include vessel and security plan oversight and physical security compliance inspections.
	Marine Safety (MS)
	Marine Environmental Protection — <i>Prevention Activities</i> (MEP) to include vessel and facility contingency plan oversight, physical compliance inspections to ensure compliance with international and domestic standards, and investigations of environmental incidents.
Marine Transportation System (MTS) Management	Aids to Navigation (ATON)
	Ice Operations (ICE)
Maritime Security Operations	Ports, Waterways & Coastal Security — <i>Response Activities</i> (PWCS-R) to include establishment and oversight of maritime security operations regimes and employment of maritime domain awareness capabilities; execution of antiterrorism, counterterrorism, response and recovery operations; and related preparedness activities.
Maritime Law Enforcement	Migrant Interdiction (MIGRANT)
	Drug Interdiction (DRUG)
	Living Marine Resources (LMR)
	Other Law Enforcement (OLE)
Maritime Response	Search and Rescue (SAR)
	Marine Environmental Protection — <i>Response Activities</i> (MER) to include contingency planning and response to environmental incidents.
Defense Operations	Defense Readiness (DR)

The Coast Guard has other mission responsibilities not explicitly listed in the Homeland Security Act, including products and services for the Intelligence Community; activities and efforts provided in support of U.S. diplomacy and international relations; Cyber Security; and Bridge Administration, Great Lakes Pilotage, and other Waterways Management functions supplementary to Aids to Navigation.

## Coast Guard Measures and Target Setting Process

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The Coast Guard has established a balanced set of indicators to be used in measuring and assessing progress toward attaining or maintaining its primary mission outcome goals. Actual results inform performance discussions, initiative development, strategic plans, operational direction, and budget priorities. The results also provide a means of communicating Coast Guard actual and expected performance to interested partners and stakeholders. Additionally, these measures fulfill the requirements set forth by the Government Performance and Results Modernization Act of 2010.

The Coast Guard Annual Performance Report includes measures not in the Department of Homeland Security Annual Performance Report, but not every metric available or used by the Service is presented. Developing meaningful measures, and ensuring data availability and validity, is challenging. The suite of reported measures evolves as new and improved measurement and reporting capabilities are developed and results reported throughout the year. Thus, there may be disparities from one year to the next for those numbers reported in the Annual Performance Report and other related documents, as compared to prior years.

Each March, the Service completes a year long process of performance assessment, improvement planning, and target setting to coincide with its annual budget submission. Targets are ambitious, yet realistic expectations of future results. They are realistically derived from reliable baselines and credible performance benefits anticipated from ambitious initiatives and improvement plans. In determining such expectations, the Coast Guard does not presume every target will be attained. Identifying and understanding target variance is a key function and benefit of performance analysis.

The baseline is the reference point from which expectations of change are determined. In a stable environment, where results are expected to deviate within normal limits of variation, the baseline is typically just a forward projection of the past several years' average. In a period of dynamic change, the baseline is more appropriately determined from some trend line with due care given to both the type of trend line and its expected duration.

Each target is set by the Coast Guard, but some are derived from external mandates. Except for targets that reflect performance standards established with specific stakeholders, we annually refine targets by:

- Determining the anticipated out-year benefits of Coast Guard performance initiatives (e.g., strategy modifications to incorporate new technology);
- Identifying the expected benefits of Coast Guard continuous improvement efforts (e.g., improved operational execution);
- Ascertaining the impact of any constraints on Coast Guard capabilities (such as budget or operational limits on staffing, training, equipment, infrastructure, information, or etc.); and,
- Assessing external driver impacts (such as an increase or decrease in economic activity).

# Summary of Coast Guard Mission Performance

MARITIME PREVENTION	SECURITY ACT MISSION	Prior Year	FY18 Actual*	FY18 Target	FY19 Target
M Annual MTSA facility compliance rate with transportation worker ID credential regulations	PWCS-P	99.0%	<b>99.0%</b>	≥ 99.0%	≥ 99.0%
S Annual Number of Breaches at High Risk Maritime Facilities	PWCS-P	260	<b>320</b>	≤ 235	≤ 307
S 3-yr average number of serious marine incidents	MS	714	<b>705</b>	≤ 698	≤ 689
Annual number of commercial mariner deaths and critical, serious & severe injuries	MS	114	<b>89</b>	≤ 148	≤ 128
M 3-yr average number of commercial mariner deaths and critical, serious & severe injuries	MS	142	<b>126</b>	≤ 133	≤ 132
Annual number of commercial passenger deaths and critical, serious & severe injuries	MS	87	<b>89</b>	≤ 104	≤ 101
M 3-yr average number of commercial passenger deaths and critical, serious & severe injuries	MS	105	<b>92</b>	≤ 134	≤ 132
Annual number of recreational boating deaths	MS	686	<b>582</b>	≤ 602	≤ 599
M 3-yr average number of recreational boating deaths	MS	667	<b>655</b>	≤ 605	≤ 602
Annual number of chemical discharge incidents	MEP	15	<b>15</b>	≤ 20	≤ 19
M 3-yr Average of Chemical Discharge Incidents per 100 million short tons shipped	MEP	7.9	<b>8.2</b>	≤ 14.6	≤ 14.5
Annual number of oil spills > 100 gallons	MEP	83	<b>80</b>	≤ 127	≤ 90
M 3-yr Average Number of Oil Spills in the Maritime Environment per 100 million short tons shipped	MEP	9.1	<b>8.8</b>	≤ 10.3	≤ 10.2

## MARINE TRANSPORTATION SYSTEM (MTS) MANAGEMENT

S Availability of maritime navigation aids	ATON	97.5%	<b>97.1%</b>	≥ 97.5%	≥ 97.5%
M Percent of time high-priority waterways in Great Lakes and Eastern Seaboard open during ice season	ICE	99.9%	<b>89.5%</b>	≥ 95.0%	≥ 95.0%
Annual number of navigational accidents	ATON	1,121	<b>975</b>	≤ 1,822	≤ 1,822
M 5-yr average number of navigational accidents	ATON	1,504	<b>1,344</b>	≤ 1,749	≤ 1,749

## MARITIME SECURITY OPERATIONS

M Percent reduction of all maritime security risk subject to USCG influence	PWCS-R	49.0%	<b>52.0%</b>	≥ 56.0%	≥ 49.0%
M Percent reduction of maritime security risk—USCG consequence management	PWCS-R	2.0%	<b>2.0%</b>	≥ 4.0%	≥ 2.0%
M Percent reduction of maritime security risk—USCG terrorist entry prevention	PWCS-R	59.0%	<b>60.0%</b>	≥ 58.0%	≥ 59.0%
M Percent reduction of maritime security risk—USCG WMD entry prevention	PWCS-R	44.0%	<b>46.0%</b>	≥ 39.0%	≥ 44.0%

## MARITIME LAW ENFORCEMENT

Number of undocumented migrants attempting to enter U.S. by maritime routes	MIGRANT	4,760	<b>5,007</b>	≤ 9,000	≤ 5,897
M Number of undocumented migrants attempting to enter U.S. by maritime routes interdicted	MIGRANT	3,952	<b>3,603</b>	≤ 6,750	≤ 4,718
S Migrant interdiction effectiveness in the maritime environment	MIGRANT	83.0%	<b>72.0%</b>	≥ 75.0%	≥ 75.0%
Percent undocumented migrants attempting to enter U.S. by maritime routes interdicted by USCG	MIGRANT	52.8%	<b>33.4%</b>	≥ 50.0%	≥ 50.0%
Metric tons of cocaine removed	DRUG	223.8	<b>209.6</b>	≥ 200.0	≥ 240.0
M Removal rate for cocaine from non-commercial vessels in maritime transit zone	DRUG	8.2%	<b>7.3%</b>	≥ 10.0%	≥ 10.0%
S Fishing regulation compliance rate	LMR	97.1%	<b>97.8%</b>	≥ 97.0%	≥ 97.0%
Percent of federal fisheries found in compliance with laws and regulations	LMR	23.0%	<b>23.0%</b>	≥ 28.0%	≥ 28.0%
Number of detected incursions of foreign fishing vessels violating U.S. waters	OLE	136	<b>201</b>	≤ 190	≤ 190
S Interdiction rate of foreign fishing vessels violating U.S. waters	OLE	22.8%	<b>31.3%</b>	≥ 18.0%	≥ 18.0%

## MARITIME RESPONSE

S Percent of people in imminent danger saved in the maritime environment	SAR	78.8%	<b>78.0%</b>	≥ 80.0%	≥ 80.0%
M Percent of time rescue assets are on-scene within 2 hours	SAR	91.0%	<b>93.0%</b>	100%	100%
Percentage of property "in danger of loss: saved	SAR	57.9%	<b>60.0%</b>	≥ 70.0%	≥ 70.0%

## DEFENSE OPERATIONS

Defense readiness of major cutters for DoD contingency planning	DR	97.0%	<b>100%</b>	100%	100%
Defense readiness of patrol boats for contingency planning	DR	100%	<b>100%</b>	100%	100%
Defense readiness of port security units (deployed)	DR	100%	<b>93.5%</b>	100%	100%
Defense readiness of port security units (ready to deploy)	DR	100%	<b>100%</b>	≥ 85.0%	≥ 85.0%

S — [STRATEGIC] MEASURE REPORTED PUBLICALLY BY DHS M — [MANAGEMENT] MEASURE NOT REPORTED PUBLICALLY BY DHS, BUT PROVIDED TO CONGRESS

## **Fiscal Year 2018 Selected Performance Highlights**

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- Completed 5,500+ Maritime Transportation Security Act facility exams; visited 150+ facilities in 50 countries; and did 9,400+ International Ship and Port Facility Security foreign vessel exams.
- Did 19,000+ inspections on U.S. flagged commercial vessels, resulting in 33 detentions; and completed 9,600+ Port State Control foreign vessel exams, resulting in 95 detentions.
- Conducted 16,000+ inspections at facilities handling regulated cargoes; and executed 23,000+ container inspections for structural and hazardous materials compliance.
- Provided 60,000+ hours of Coast Guard Auxiliary boating education for some 40,000 students and conducted nearly 115,000 recreational boating safety checks.
- Initiated 19,200+ preliminary investigations, including 6,300+ enforcement actions for marine safety violations; 2,500+ pollution incidents; 500+ credentialed mariner investigations; and 42 marine casualties in partnership with the National Transportation Safety Board.
- Issued 62,000+ Merchant Mariner Credentials/endorsements and 59,000+ medical certificates.
- Issued/renewed 238,000 Certificates of Documentation to commercial and recreational vessels.
- Reviewed 16,000+ commercial vessel plans for compliance with technical standards for design, construction, alteration, and repair with an average cycle time of 18 days.
- Performed maintenance on 13,336 buoys and beacons, and corrected 6,383 discrepancies.
- Conducted 6,757+ hours of icebreaking to support Great Lakes movement.
- Identified and tracked 208 icebergs in the North Atlantic shipping lanes.
- Established 1,164 waterways operational controls in support of Coast Guard Captains of the Port, of which 99 addressed safety concerns related to obstructions or hazards to navigation.
- Issued 37 bridge permits with a total project cost of \$1.84 billion.
- Conducted 30,383 waterborne patrols of maritime critical infrastructure and key resources.
- Provided support for 131 military out load security zones, and conducted 350 waterborne enforcement activities of fixed security zones.
- Conducted 4,441 Small Vessel Security Boardings, and 509 “high-interest” (vessels that might pose high relative security risks to U.S. ports or alternate destinations) boardings.
- Interdicted 3,603 undocumented migrants.
- Removed 209.6 metric tons of cocaine and 21,564 pounds of marijuana.
- Boarded 6,624 U.S. vessels and cited 144 significant fishery violations; responded to 51 reports or requests from partner agencies to assist with stranded, distressed or entangled mammals.
- Responded to 15,634 Search & Rescue cases; assisted 41,093 people, saved 3,965 lives, and protected approximately \$66 million in property from loss.
- Assisted and saved more than 992 lives and 337 pets in the response to Hurricane Florence.
- Responded to 11,894 pollution incident reports.
- Managed 296 federal cleanup projects, costing more than \$22.5 million.
- Responded to 120 air defense threats in Washington, DC area with 100% on-time rate.
- Rotary Wing Intercept assets deployed a record 21-times, spanning 165 days; responded to 122 alerts and were scrambled 64 times in response to DoD-identified tracks of interest.
- Tactical Cryptology Afloat personnel provided actionable intelligence that contributed to the removal of 27,073 kilos of cocaine valued at nearly \$900 million and the arrest or detention of 63 suspected traffickers.

# PREVENTION MISSION-PROGRAMS

The Assistant Commandant for Prevention Policy, through its *Maritime Prevention Program* and *Marine Transportation System Management Program*, develops and promulgates mission strategy, doctrine, and policy guidance to enable the safe and efficient flow of people and commerce on the Nation's waterways. The Assistant Commandant also provides strategic planning direction to ensure successful operational execution against programmatic standards; and maintains outreach to key stakeholders and federal, state, tribal, military, industry, and international partners.

## FY 2018 PERFORMANCE HIGHLIGHTS

- Completed 5,500+ security inspections at Maritime Transportation Security Act facilities; visited 150+ port facilities in 50 countries; and did 9,400+ International Ship and Port Facility Security foreign vessel exams.
- Did 19,000+ inspections on U.S. flagged commercial vessels, resulting in 33 detentions; and completed 9,600+ Port State Control foreign vessel exams, resulting in 95 detentions.
- Conducted 16,000+ inspections at facilities handling regulated cargoes; and executed 23,000+ container inspections for structural and hazardous materials compliance.
- Examined 2,000+ marine pollution waste reception facilities; and monitored 1,000+ transfers of oil, hazardous substances, or explosives.
- Provided 60,000+ hours of Coast Guard Auxiliary boating education for some 40,000 students; conducted nearly 115,000 recreational boating safety checks; and completed 92,000+ marine dealer and recreational boating safety partner visits.
- Did 6,600+ fishing vessel exams; and issued 3,400+ safety decals.
- Initiated 19,200+ preliminary investigations, including 6,300+ enforcement actions for marine safety violations; 2,500+ pollution incidents; 500+ credentialed mariner investigations for misconduct, illegal drug use, incompetence, negligence or violations; and 42 marine casualties where the Coast Guard partnered with the National Transportation Safety Board.
- Issued 62,000+ Merchant Mariner Credentials/endorsements, 59,000+ medical certificates; and approved 680+ courses for mariner training providers with 96.5% customer satisfaction.
- Issued/renewed 238,000 Certificates of Documentation to both commercial and recreational vessels.
- Reviewed 16,000+ commercial vessel plans for compliance with technical standards for design, construction, alteration, and repair with an average cycle time of 18 days.
- Performed maintenance on 13,336 buoys and beacons, and corrected 6,383 discrepancies.
- Conducted 6,757+ hours of icebreaking to support Great Lakes movement of 17.3 million tons of cargoes valued at \$623+ million.
- Identified and tracked 208 icebergs in the North Atlantic shipping lanes.
- Determined impacts of 459 dredging and port infrastructure projects while conducting 1,211 engagements with federal, state and local governments and public-private committees.
- Established 1,164 waterways operational controls in support of Coast Guard Captains of the Port, of which 99 addressed safety concerns related to obstructions or hazards to navigation, 58 related to commercial vessel movements, and 51 to dredging and infrastructure projects.
- Reviewed 3,133 applications and issued 831 marine event permits. 133 required safety zones.

- Addressed 268 disruptions to the MTS, of which 36 related to vessel breakaways, groundings, and other navigation hazards; 82 related to ice, extreme weather, low visibility, or river levels; and 38 related to bridge and lock malfunctions or operational deviations.
- Issued 37 bridge permits with a total project cost of \$1.84 billion.

## SUCCESS STORIES

**Facilitating LNG fueled shipping.** The availability of affordable Liquefied Natural Gas (LNG) in the United States, coupled with looming emissions requirements, has made LNG an attractive fuel choice for marine operators; but novel approaches and high-tech equipment are necessary to utilize this environmentally friendly fuel source.

The Coast Guard’s Prevention Program has been working diligently to ensure design, construction, and in-service use of LNG fuel systems are safe. The Coast Guard’s Liquefied Gas Carrier National Center of Expertise, Marine Safety Center, Headquarters Prevention offices, Coast Guard field units, and the marine industry collaborated extensively to establish an appropriate regulatory framework to facilitate construction and operation of LNG fueled ships. As a result of this cooperation, there were six LNG fueled vessels operating in the U.S., including two Tote containerships and four Harvey Gulf offshore supply vessels.



The *CLEAN JACKSONVILLE* LNG barge following successful Cold Trials in Orange, TX. (U. S. Coast Guard photo)

In 2018, several additional vessel projects were completed, and major milestones achieved. The *CLEAN JACKSONVILLE* was completed in August. It is the world’s first LNG bunker barge that utilizes a membrane tank technology to maximize cargo capacity. The barge received its initial Certificate of Inspection following six weeks of equipment validation and sea trials supported by Marine Safety Units Port Arthur and Houma, Sector Jacksonville, and the Liquefied Gas Carrier National Center of Expertise. In September, the barge was successfully loaded at the new JAX LNG waterfront facility and then made history by successfully completing the first U.S. ship-to-ship LNG bunkering operation of the Tote container ship *M/V PERLA DEL CARIBE*. A total of 1000 m<sup>3</sup> of LNG was transferred safely at a rate three times faster than what had been possible before using shore side trucks.

Also completed in 2018, was Crowley’s first LNG fueled ship, *M/V EL COQUI*, a combination Container and Roll-On/Roll-Off ship that will join Tote’s two LNG fueled ships in Jones Act trade between Jacksonville and Puerto Rico. Harvey Gulf completed their fifth LNG fueled Offshore Supply Vessel in February to support U.S. oil drilling and production on the Outer Continental

Shelf; and Tote completed phase one of an LNG fuel conversion project for the Roll-On/Roll-off ship, *NORTH STAR*, which operates between the U.S. west coast and Alaska.

There has also been a noticeable increase in the number of LNG-as-fuel related projects, with seven additional vessels being built or converted in the U.S. and many more in various stages of construction around the world. Currently there are 16 LNG-fueled cruise ships on order, several of which are scheduled to visit cities along the Florida coast. Later this year, the Liquefied Gas Carrier and Cruise Ship National Centers of Expertise, Activities Europe, and Marine Safety Center members will travel to the Netherlands for the Initial-Certificate of Compliance examination of the *AIDANOVA*, the first cruise ship completed utilizing LNG as fuel.

Growing interest in LNG-fueled vessels also translates into a need for LNG fuel infrastructure—and sufficient training for those involved. Recognizing this, the Liquefied Gas Carrier National Center of Expertise and Office of Port and Facility Compliance have been guiding major international oil and gas companies through the planning process of establishing LNG facilities along the inland rivers to accommodate towing vessel demand. The Center held the fourth annual LNG as Fuel Workshop in Jacksonville, FL. Coast Guard inspectors and industry representatives from around the world received four days of detailed classroom lectures and training—including witnessing a LNG bunkering operation.

**Subchapter “M” Implementation Begins.** Towing vessels are essential to America’s commerce,



The Commanding Officer of Marine Safety Unit Lake Charles issues the area’s first Certification of Inspection under the new Subchapter M towing vessel regulations to Devall Towing and Boat Services on August 15, 2018. (U.S. Coast Guard photo)

moving significant quantities of goods and providing essential services to U.S. ports and waterways. Beginning in 2009, the Coast Guard underwent a significant regulatory project to publish a new vessel inspection Subchapter M in Title 46 of the Code of Federal Regulations that established safety regulations governing inspection, standards, and optional safety management systems on towing vessels.

To ease the transition and ensure that both the Coast Guard and the towing vessel industry were kept informed and prepared to meet the new requirements, a Towing Vessel Bridging Program was established. The Coast Guard published vessel inspection requirements for a safety management system appropriate for the characteristics, methods of operation, and unique nature of towing vessels.

This rule, which became effective July 20, 2018, included provisions covering specific electrical and machinery requirements for new and existing towing vessels, the approval and use of third-party organizations, and procedures for obtaining a Certificate of Inspection (COI). At the end of

FY 2018, nine Third Party Organizations were approved by the Service's Towing Vessel National Center of Expertise, and nearly 150 companies have been issued a Towing Safety Management System Certificate or Document of Compliance—covering over 2,800 towing vessels. More than 100 towing vessels have received COIs under Subchapter M, with roughly two-thirds of them choosing to obtain their COI using the Towing Safety Management System option. The towing vessel fleet will be issued COIs over a period of four years, 25% per year with single vessel companies coming in compliance by the end of 2020.

The Coast Guard has provided various Subchapter M oversight training and familiarity opportunities. The Tank Vessel National Center of Expertise developed and presented three specific coursework sessions for apprentice marine inspectors at Coast Guard Training Center Yorktown; and working closely with the Office of Commercial Vessel Compliance, launched TugSafe and TugSafe Central. TugSafe Central is an online hub for Subchapter M compliance requirements and guidance; TugSafe is an application that dynamically generates inspection checklists specific to a given vessel, which greatly streamlines the inspection process by reducing inspection preparation time, and minimizes errors in the application of regulations.

**Recreational Boating Gains New Partnership.** In FY 2018, the Coast Guard significantly



Rear Admiral John Nadeau, Assistant Commandant for Prevention Policy, shakes hands with Vice Admiral Charles Wurster, USCG (ret), Sea Scout National Commodore, while Auxiliary National Commodore Richard Washburn signs the Auxiliary-Boy Scouts of America Memorandum of Agreement. (U.S. Coast Guard photo)

expanded the scope of its partnership with other boating safety organizations. In August, Commodore Richard Washburn, National Coast Guard Auxiliary Commodore, and Vice Admiral Charles Wurster, USCG (ret.), Sea Scout National Commodore, signed a Memorandum of Agreement between the Boy Scouts of America (BSA) and the Coast Guard Auxiliary that establishes BSA's Sea Scout program as the Auxiliary's first official youth program.

This collaboration will benefit both organizations, as well as America's more than 73 million recreational boaters. The expanded partnership enables the Coast Guard Auxiliary to now enroll Sea Scouts as young as 14 years of age from the Sea Scouts' 10,000-plus member roster. It also allows Auxiliary units to create much stronger organizational ties by chartering and sponsoring Sea Scout units. This will provide the Sea Scouts with a much broader pool of adult leaders with high quality seamanship skills, training, and access to vessels. Additionally, Auxiliary programs will facilitate advanced science, technology, engineering and mathematics oriented training with their Sea Scout partners.

For the Coast Guard, Sea Scout participation will promote a new pathway to Coast Guard service and Auxiliary membership. Sea Scouts will have unique and greatly expanded exposure to Coast U.S. Coast Guard Fiscal Year 2018 Performance Report

Guard and Auxiliary personnel and missions. This initiative will also foster an additional source of potential Coast Guard Academy candidates and enlistees who already possess prior training and an aptitude for Coast Guard service. Through such enhanced interaction between the Auxiliary and Sea Scouts, both organizations will have the ability to reach out to and recruit newer constituencies in the recreational boating community.

**Bering Strait Routing Measures Approved.** In November 2017, the U.S. and Russia proposed to the International Maritime Organization (IMO) a system of two-way routes for vessels to follow in the Bering Strait and Bering Sea in response to increased shipping traffic. Located in U.S. and Russian territorial waters off the coasts of Alaska and the Chukotskiy Peninsula, the routes are designed to help mariners avoid shoals, reefs and islands, and reduce potential for marine casualties and environmental disasters. The IMO approved the proposal in May 2018.

Taking effect on December 1, 2018, the six two-way routes and six precautionary areas are the first internationally recognized ship routing measures the IMO has approved for polar waters. This joint effort represents a significant area of cooperation with Russia. It also reinforces the Coast Guard's role as the U.S. lead in the Arctic, and demonstrates the Service's ability to leverage its mission set to achieve multiple national objectives.

The routes are voluntary for all domestic and international ships and do not limit commercial fishing or subsistence activities. This joint proposal was developed from a Port Access Route Study of Bering Strait marine traffic, submitted by District 17 in 2017. This study reflects almost a decade of consultation with international, interagency, industry, and private stakeholders, and extensive coordination with community residents along the coasts of Alaska.

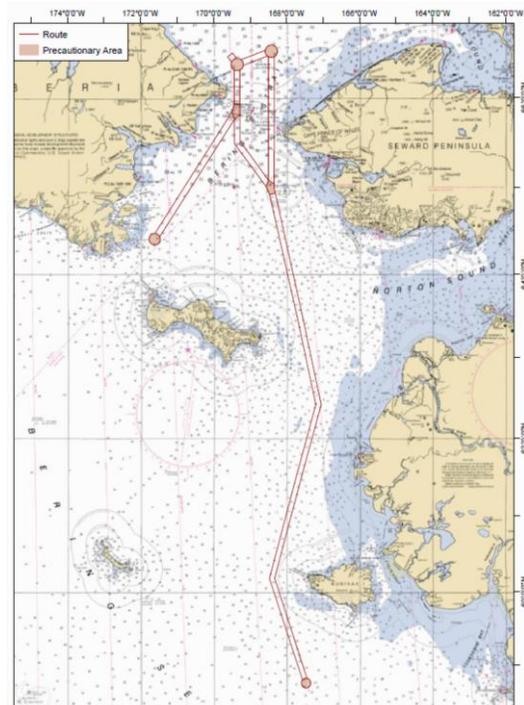


Chart of IMO- approved voluntary routing measures in the Bering Strait. Alaska is on the right side of the chart. (International Maritime Organization photo)

## MARITIME PREVENTION PROGRAM

The Maritime Prevention Program prevents personnel casualties and property losses, minimizes security risks, and protects the marine environment. The Coast Guard develops and enforces Federal marine safety, security, and environmental regulations. It reviews and approves vessel and maritime facility security plans, conducts security and safety inspections, and enforces Transportation Worker Identification Credential (TWIC) regulations. The program conducts domestic and international port security assessments, analyzes maritime security risk nationwide to identify high-risk targets and support risk reduction measures, and supports administration of port security grant funding. The program periodically reviews the effectiveness of anti-terrorism measures in foreign ports by assessing of those ports to determine compliance with the IMO International Ship and Port Facility Security (ISPS) Code, and requires vessels arriving in the U.S. from ports with inadequate anti-terrorism measures to take additional security precautions. The Coast Guard develops and applies design, construction and equipment standards for vessels; conducts compulsory, as well as voluntary vessel exams and inspections; certifies and licenses U.S. mariners; and promotes best practices by investigating marine casualties and sharing its findings. It provides grants to states to improve recreational boating safety and supports a variety of government and non-government boating safety efforts in partnership with other federal agencies, state and local governments, marine industries, and associations, including the Coast Guard's volunteer Coast Guard Auxiliary. The Coast Guard also maintains strong leadership roles in many international maritime organizations, contributing shared inspection techniques and best practices.



A Marine Science Technician at Marine Safety Unit Portland, observes the crew of a foreign vessel as they perform a fire-fighting drill during a Port State Control exam at Portland, OR. (U.S. Coast Guard photo)

## PORTS, WATERWAYS, AND COASTAL SECURITY—*PREVENTION ACTIVITIES*



An International Port Security Liaison Officer, discusses security procedures with Khor al-Amaya Oil Terminal security personnel in Iraq. (U.S. Coast Guard photo)

The focus of the Coast Guard's Ports, Waterways and Coastal Security—*Prevention Activities* is to prevent security incidents, including terrorist attacks, sabotage, espionage, or subversive acts in the maritime domain, upon the global supply chain, or to the U.S. MTS. It also seeks to improve security in the world's ports and thus reduce risk to the Nation. The Coast Guard strives to deny terrorists the ability to use or exploit the maritime domain or MTS as a means for attacks on U.S. territory, population centers, vessels, and maritime critical infrastructure and key resources. The mission requires intelligence support, establishment and oversight of maritime security regimes,

employment of maritime domain awareness activities, and initiatives that enhance the resilience of the MTS, maritime critical infrastructure, and key resources. To do so, the Coast Guard employs a layered and collaborative strategy that relies upon the cooperation of U.S. citizens and governmental, private sector, and international partners.

### ***FY 2018 Performance Results***

Annual MTSA Facility Compliance Rate with Transportation Worker Identification Credential (TWIC) Regulations

Year-to-Year Trend						2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2018 Target	2019 Target
2013	2014	2015	2016	2017	2018	99%	99.0%	99.0%	99.0%	99.0%	<b>99.0%</b>	≥ 99.0%	≥ 99.0%

Annual Number of Breaches at High Risk Maritime Facilities

Year-to-Year Trend						2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2018 Target	2019 Target
2013	2014	2015	2016	2017	2018	219	333	284	239	260	<b>320</b>	≤ 235	≤ 307

### ***Explanation of Results***

In FY 2018 the Coast Guard conducted over 5,500 Maritime Transportation Security Act-related inspections, finding only 35 instances of non-compliance with TWIC regulations that led to an enforcement action. This resulted in a 99.0% compliance rate, meeting the FY 2018 target and revised actual for FY 2017.

There were 320 breaches of security at MTSA regulated facilities in FY 2018, which exceeded the target expectation. The number for FY 2017 was also revised to 260 based on additional reporting. Only 6.7% of all MTSA regulated facilities experienced a breach of security, and none resulted in a Transportation Security Incident. Facilities handling LNG and liquefied hazardous gas as cargoes had the fewest security breaches per number of that facility type. A policy change implemented in December 2016, clarifying what should be classified as a breach and reported to the Coast Guard, necessitated a revision of previously recorded results. As the data normalizes targets will be adjusted to reflect a more accurate baseline.

## **MARINE SAFETY**

The Marine Safety mission focus is prevention of deaths, injuries, and property loss in the U.S. maritime domain. Marine Safety responsibilities include ensuring the safe and environmentally sound operation of millions of recreational vessels and thousands of U.S. flagged commercial vessels wherever they are in the world, as well as exercising Port State Control for foreign vessels operating in U.S. waters. The Coast Guard develops and enforces federal marine safety regulations, certifies and provides credentials to over 218,000 mariners, administers the approval program for marine safety equipment and materials, investigates commercial marine casualties and shares its

findings, conducts compulsory inspections, and utilizes the Coast Guard Auxiliary extensively to conduct voluntary safety exams.

### ***FY 2018 Performance Results***

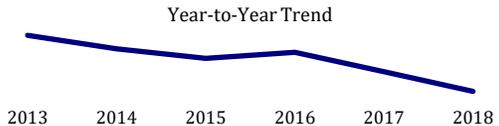
#### Three-year Average Number of Serious Marine Incidents

Year-to-Year Trend		2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2018 Target	2019 Target
		731	766	721	717	714	<b>705</b>	≤ 698	≤ 689

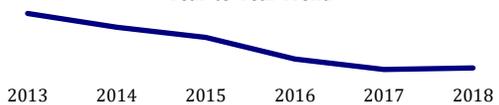
#### Annual Number of Commercial Mariner Deaths and Critical, Serious & Severe Injuries

Year-to-Year Trend		2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2018 Target	2019 Target
		161	161	138	175	114	<b>89</b>	≤ 148	≤ 128

#### Three-year Average Number of Commercial Mariner Deaths and Critical, Serious & Severe Injuries

Year-to-Year Trend		2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2018 Target	2019 Target
		172	161	153	158	142	<b>126</b>	≤ 133.0	≤ 132.0

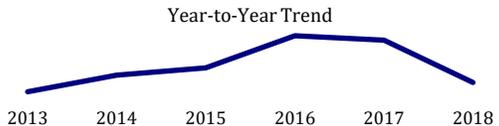
#### Annual Number of Commercial Passenger Deaths and Critical, Serious & Severe Injuries

Year-to-Year Trend		2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2018 Target*	2019 Target
		157	140	127	100	87	<b>89</b>	≤ 104	≤ 101

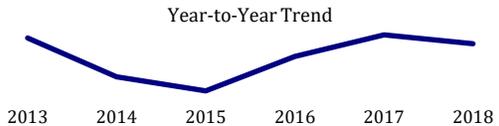
#### Three-year Average Number of Commercial Passenger Deaths and Critical, Serious & Severe Injuries

Year-to-Year Trend		2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2018 Target	2019 Target
		163	161	141	122	105	<b>92</b>	≤ 134.0	≤ 132.0

#### Annual Number of Recreational Boating Deaths

Year-to-Year Trend		2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2018 Target	2019 Target
		559	600	618	697	686	<b>582</b>	≤ 602	≤ 599

#### Three-year Average Number of Recreational Boating Deaths

Year-to-Year Trend		2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2018 Target	2019 Target
		663	611	592	638	667	<b>655</b>	≤ 605	≤ 602

\*FY18 target was changed from 178 to 104 to reflect current expectations derived from the FY12-FY17 baseline performance.

## *Explanation of Results*

Performance results are those reports of casualties recorded to date. Casualty reports are often delayed in reaching the Coast Guard; consequently, results are expected to rise as additional reports are received, and published data is subject to revision with the greatest impact affecting recent quarters. Thus, all numbers for prior fiscal years have been revised to reflect the most current data. For example, boating deaths are based on reports submitted by state reporting authorities, and recent experience suggests the number of FY 2018 deaths could increase roughly 11% as additional state reports are received, reviewed, and reconciled with news media accounts.

The annual number of Serious Marine Incidents decreased 3.9% from FY 2017 to FY 2018, and the three-year average showed a slight improvement over the revised prior year, but did not meet the 2018 target. Serious Marine Incidents comprise deaths or injuries requiring professional treatment beyond first aid, reportable property damage greater than \$100,000, actual or constructive loss of certain vessels, discharge of oil of 10,000 gallons or more, or a discharge of a reportable quantity of a hazardous substance. With the threshold for property damage increasing to \$200,000, reported numbers are expected to further decrease in the future, and out-year targets will be amended to reflect this change.

In FY 2018, there were 89 commercial marine deaths and critical, serious, and severe injuries (23 deaths, 66 injuries), contributing to a three-year average of 126, thus meeting the FY 2018 target. This also represents an 11.4% improvement compared to FY 2017. About one-third of these casualties occurred on towing vessels and barges, and this number is expected to decrease as more towing vessels are certificated for inspection.

In FY 2018, there were 89 commercial passenger deaths and critical, serious, and severe injuries (11 deaths, 78 injuries). This was the sixth year of consecutive improvement, contributing to a three-year average of 92, well below the established target expectation.

In FY 2018, there were 582 recreational boating deaths, contributing to a three-year average of 655. Though the target was not met, the average improved 1.8% from FY 2017 to FY 2018. With the rising popularity of boating, especially unregistered vessels such as paddleboards, the Coast Guard does not expect a significant decrease in recreational boating deaths unless States enact laws requiring mandatory wear of life jackets.

## **MARINE ENVIRONMENTAL PROTECTION—*PREVENTION ACTIVITIES***

The Marine Environmental Protection-*Prevention* mission preserves precious natural resources by regulating handling of oil, hazardous substances, and other shipboard wastes; preventing their discharge into U.S. and international waterways, reducing ship-based air emissions, stopping unauthorized ocean dumping, and averting the introduction of invasive species. The Coast Guard



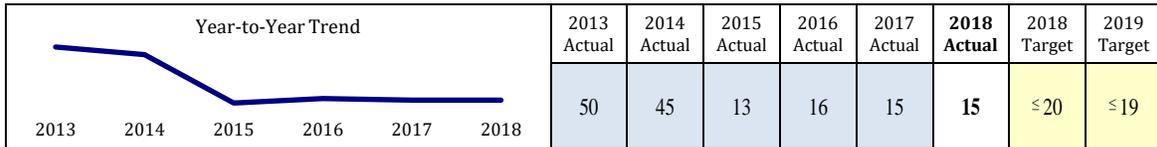
Container inspectors from Coast Guard Sector Maryland-National Capital Region perform inspections of hazardous shipments at Port of Baltimore, MD. (U.S. Coast Guard photo)

develops regulations and operating standards for domestic vessels and marine facilities and advocates for responsible environmental and operational standards at the IMO and the International Organization for Standardization. The Coast Guard enforces standards by conducting vessel examinations and inspections, performing inspections and spot-checks of waterfront facilities, and conducting criminal investigations into violations. The Coast Guard conducts transfer monitoring activities to ensure

vessels and facilities engaged in the movement of oil, hazardous materials, and explosives have implemented required safeguards. Containers used in the transport of hazardous materials are examined to ensure structural integrity is enough to withstand global transport and hazardous materials are packaged, labeled, and declared properly.

### ***FY 2018 Performance Results***

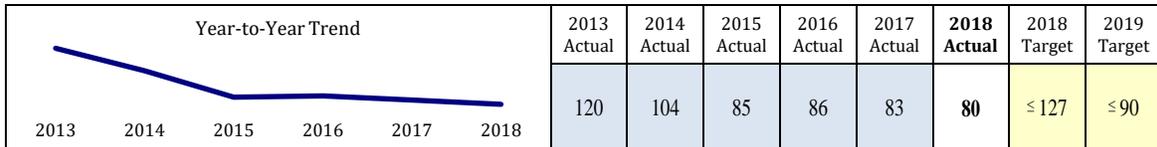
#### Annual Number of Chemical Discharge Incidents



#### Three-year Average Number of Chemical Discharge Incidents in the Maritime Environment per 100 million short tons shipped



#### Annual Number of Oil Spills >100 gallons



#### Three-year Average Number of Oil Spills in the Maritime Environment per 100 million short tons shipped



### *Explanation of Results*

In FY 2018 there were 15 hazardous chemical discharge incidents; the three-year average number of chemical discharge incidents in the maritime environment per 100 million short tons shipped was 8.2, a slight increase from FY 2017, but still meeting the FY 2018 target. Mobile offshore drilling units/offshore supply vessels and facilities accounted for 67% of the hazardous chemical discharges.

In FY 2018, there were 80 oil spills over 100 gallons, a 3.6% improvement over FY 2017. 40% of the oil spills over 100 gallons occurred at facilities. For the third consecutive year, the most frequent sources of spills over 100 gallons were commercial fishing vessels, representing 20% of the total. The three-year average number of oil spills over 100 gallons in the maritime environment per 100 million short tons shipped was 8.8, a 3.2% improvement over FY 2017, and met the FY 2018 target.

## **COMMERCIAL REGULATIONS AND STANDARDS**

The Regulatory Development Program develops Coast Guard enforceable policies and requirements applicable to maritime industry. Project management methodologies and ISO 9000 compliant best practices form the basis of the regulatory development process. The goal is timely and cost-effective regulations that balance government, industry, and public needs. By law, the Coast Guard must prove that the benefits of proposed actions exceed costs or costs are minimized for statutory mandates; impacts to small businesses or other entities mitigated; and environmental impacts characterized. All must be reviewed by the Administration and are subject to public comment before coming into effect. Statutes, international agreements, changes in technology, and lessons learned from marine accidents are driving forces. The Regulatory Development Program is also a key mechanism for outreach and engagement with the regulated public, industry and international partners.

### *Discussion of Results*

In FY 2018, the Coast Guard evaluated almost 1,700 de-regulation suggestions from the public, Federal Advisory Committee members, and Coast Guard Headquarters and field personnel. It included validating statutory flexibility, determining consistency with mission objectives, assessing resource effects, and conducting preliminary cost-benefit analyses. The evaluation led to revisions of numerous policies and regulations, with an estimated benefit of \$31 million per year.

The Consolidated Cruise Ship Security Regulations Final Rule was published on March 19, 2018, amending cruise ship terminal security requirements. Building upon existing facility security requirements, the changes simplified and removed outdated regulations. The primary purpose was to enhance security of cruise ship terminals while minimizing disruptions to business operations. It provides more efficient and clear requirements for the screening of all passengers, crew, and visitors, including their baggage and personal items. The change also implemented a Prohibited

Items List, based on similar items currently prohibited by the cruise ship industry. The Final Rule impacted 137 regulated facilities.

Amended regulations changed the property damage threshold requiring immediate notice and written report from \$25,000 to \$75,000; and from \$100,000 to \$200,000 to classify an incident as a Serious Marine Incident. This update aligns marine casualty reporting thresholds with inflation. It will reduce the investigative burden and is expected to save the maritime industry approximately \$600,000 per year.

The Coast Guard’s mariner credentialing provider—the National Maritime Center (NMC)—made significant strides in 2018 to improve service, maintaining an average customer satisfaction score of 96.5%. Mariners are now able to apply directly to the NMC to renew their medical certificates, avoiding up to seven days of processing for applications made at Regional Examination Centers. More than 13,000 mariners took advantage of this opportunity. Improved centralization also allows 99.5% electronic conversion and transfer of mariner credential applications, which further reduced processing and shipping time.



National Maritime Center, Martinsburg, WV. (U.S. Coast Guard photo)

# MARINE TRANSPORTATION SYSTEM MANAGEMENT PROGRAM

The MTS Management program ensures a safe, secure, efficient, and environmentally sound waterways system. The Coast Guard minimizes disruptions to maritime commerce by assessing and mitigating risks to safe navigation and by providing waterway restoration capabilities after extreme weather events, marine accidents, etc. The Coast Guard works in concert with other federal agencies, state and local governments, marine industries, maritime associations, and the international community to optimize balanced use and champion development of the Nation’s MTS.

## AIDS TO NAVIGATION

The Aids to Navigation (ATON) mission focus is to mitigate transit risks and promote the safe,



Members of Aids to Navigation Team Cape May re-establish navigational aids near Little Egg Inlet, NJ following dredging operations in May 2018.

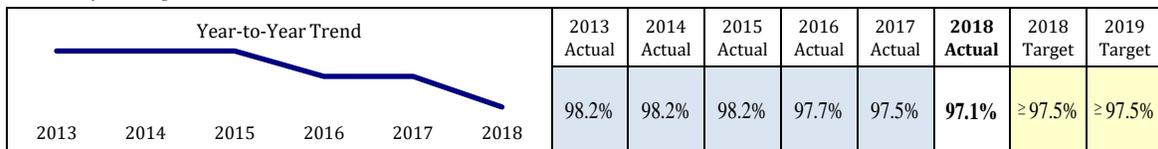
(U.S. Coast Guard photo by Petty Officer David Micallef)

economic and efficient movement of military, commercial, and other vessels. ATON assists navigators with determining their position, setting a safe course, and warning them of dangers and obstructions. The Coast Guard establishes, maintains, and operates more than 45,000 buoys and beacons, both lighted and unlighted, and ensures system compliance with international standards such as those promulgated by the International Association of Marine Aids to Navigation and Lighthouse Authorities. The Coast Guard is responsible for administration of a nearly

equivalent number of private ATON. The Service also provides electronic navigational aids, including Automatic Identification System (AIS) Aids to Navigation, to facilitate efficient and reliable transfer of Marine Safety Information between and among vessels and shore facilities. Marine Safety Information provided by the Coast Guard includes navigation rules; schemes and standards; support for mapping and charting; and tide, current, and pilotage information.

### *FY 2018 Performance Results*

Availability of Navigation Aids



***Explanation of Results***

Short-range federal Aids to Navigation were available 97.1% of the time in FY 2018. This performance fell below the target for the year, which is derived from standards established by the International Association of Marine Aids to Navigation and Lighthouse Authorities. Several factors contributed to the decline, including ongoing repairs to aids as a result of 2017 storm damage from Hurricanes Harvey, Irma, and Maria; coupled with late-2018 damage due to Hurricane Florence. This correlates with below target availabilities observed in District 5 (Mid Atlantic) at 96.9%, District 7 (Southeastern U.S. and Puerto Rico) at 96.2%, and District 8 (Gulf Coast) at 95.4%. Assuming a normal storm season in FY 2019, these shortages should be rectified.

**ICE OPERATIONS**

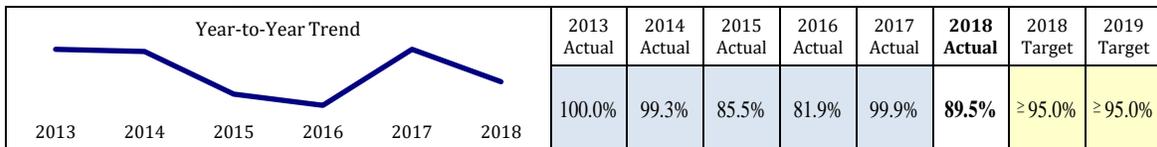
Coast Guard icebreakers, in cooperation with the Canadian Coast Guard, keep the Great Lakes and Northeastern U.S. connecting waterways open for commercial traffic, assist vessels transiting ice-filled waterways, and prevent ice-related flooding. The International Ice Patrol promotes safe navigation by monitoring icebergs and broadcasting the iceberg geographical limit to vessels transiting the North Atlantic between North America and Europe. Coast Guard Polar icebreakers uphold national security and sovereignty, and support National Science Foundation missions in the Polar Regions. They are used to determine and demonstrate the extent of U.S. Extended Continental Shelf claims, enforce U.S. laws and international treaty obligations in the Polar Regions, and provide a science platform in the Arctic for obtaining vital ecological and geographic data necessary to protect the U.S. Arctic marine environment and resources.



The Great Lakes Icebreaker U.S. Coast Guard Cutter (USCGC) MACKINAW breaks a shipping lane free of ice in support of Operation Taconite in Lake Superior. Operation Taconite is the largest domestic icebreaking operation in the United States, ensuring the primary means of transporting vast amounts of iron ore from mines bordering Lake Superior needed to meet the demands of steel mills in Lake Erie and Lake Michigan. (U.S. Coast Guard photo)

***FY 2018 Performance Results***

Percent of Time High Priority Waterways in the Great Lakes and along the Eastern Seaboard are Open during Ice Season



***Explanation of Results***

The availability of Tier One waterways is essential to public health and safety and the economies of the Great Lakes and Northeastern United States. Although the cumulative 2018 ice season was near average, unusually frigid weather along the East Coast of the United States in December and January resulted in rapid, significant ice formation that reduced the availability of Tier One waterways in District 5 (Mid-Atlantic) to 83.4% and District 9 (Great Lakes) to 84.9%. As a result, overall availability of Tier One waterways during FY 2018 fell below the established target of 95%.

Assuming a normal ice season in FY 2019, Coast Guard assets should be able to meet the established FY 2019 target.

**WATERWAYS MANAGEMENT**

The Waterways Management program leverages other federal agencies, harbor safety committees, pilots, port authorities, and other industry and waterway stakeholders to foster a safe, secure, resilient, and environmentally sound MTS. This includes cooperative work with the U.S. Army Corps of Engineers, National Oceanic and Atmospheric Administration, Marine Board of the Transportation Research Board, the Committee on the Marine Transportation System, and regional Federal Advisory Committee Act members.



A Coast Guard watch-stander directs marine traffic in the Houston Ship Channel at Sector Houston-Galveston. The Houston-Galveston Vessel Traffic Service was established in 1975 to improve maritime safety and efficiency in the largest petrochemical port in the United States. (U.S. Coast Guard photo)

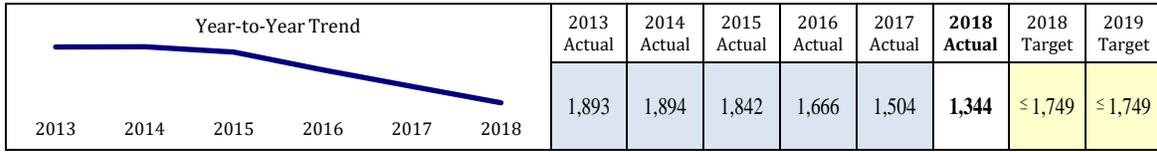
The Waterways Management Program encompasses Vessel Traffic Services, which minimize safety risks in the Nation’s most congested ports by monitoring and coordinating vessel traffic. Further, it oversees Great Lakes Pilotage, which ensures navigation safety on the Great Lakes by regulating pilotage for foreign trade vessels; and Coastal and Marine Spatial Planning, which collaborates with other federal agencies and stakeholders to support the balanced use of national waters in forums such as the regional planning.

***FY 2018 Performance Results***

Annual Number of Navigational Accidents



5-Year Average Number of Navigational Accidents



**Explanation of Results**

Navigational accidents, consisting of distinct collision, allision (vessel striking a fixed object), and grounding events, provide a proxy measure of Waterways Management effectiveness in preventing disruptions to commerce; they can and often do result in waterway closures.

There were 975 navigational accidents reported in FY 2018, 13% fewer than the updated and revised number of 1,121 recorded in FY 2017, and substantially fewer than the five-year average of 1,344 in FY 2018 and the revised FY 2017 average of 1,504. Groundings accounted for more than half (54%) of FY 2018 navigational accidents, allisions for 39%, and collisions only 7%.

**BRIDGE PROGRAM**

The Coast Guard collaborates with federal, state, local agencies, industry, and other stakeholders to ensure that over 20,000 bridges and causeways spanning the navigable waters of the United States do not unreasonably obstruct navigation. This includes issuing permits, establishing bridge lighting and marking requirements; approving drawbridge schedules; investigating bridges that may be unreasonably obstructive; monitoring rehabilitation, repair, maintenance and construction activities; and managing design construction and funding for Truman-Hobbs bridge projects.



Artist's rendering of the new Frederick Douglass Memorial Bridge. (Rendering courtesy of the District of Columbia Department of Transportation)

**Discussion of Results**

During FY 2018, the Coast Guard issued 37 Bridge Permits with an estimated construction cost of \$1.84 billion. These permits included the replacement of the Frederick Douglass Memorial Bridge in Washington DC, two new Totchaket Road bridges in Nenana, Alaska; and the modification of the Presidio-Ojinaga International Bridge, an international crossing from the U.S. to Mexico.

In February 2018, the Coast Guard, U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, National Oceanic and Atmospheric Administration, and Federal Highway Administration signed the Working Agreement to Coordinate and Improve

Planning, Project Development, and the National Environmental Policy Act Review and Permitting for Major Infrastructure Projects Requiring the Preparation of an Environmental Impact Statement.

## ARCTIC PROGRAM

The United States has been an Arctic Nation since 1867, when it purchased Alaska from Russia for \$7.2 million. The U.S. has significant equities in the region, and the Coast Guard is responsible for ensuring safe, secure, and environmentally responsible maritime activity throughout this domain. This includes exercising maritime sovereignty and maintaining persistent maritime domain awareness in the Arctic; providing effective maritime border control; overseeing and ensuring the safety of maritime activities; protecting natural resources; providing governance regimes; and supporting collaborative engagement that safeguards U.S. Arctic interests and promotes cooperative effort in forums such as the Arctic Council, the IMO, and Inuit Circumpolar Council.



U.S. Coast Guard Cutter (USCGC) Healy crewmember poses for a photograph during support for the Office of Naval Research north of Barrow, AK, in the Arctic. (U.S. Coast Guard photo by Petty Officer NyxoLyno Cangemi)

### *Discussion of Results*

During FY 2018, the Arctic Program worked collaboratively with Coast Guard commands and other partners to enhance Service readiness, relevance, and responsiveness in Arctic security. These efforts included Operation Arctic Shield 2018, continued leadership in Arctic scholarship at the Center for Arctic Study and Policy, and adoption of Vessel Routing Measures in the Bering Strait by the IMO.

In April 2018, the Center for Arctic Study and Policy at the Coast Guard Academy organized and led the inaugural joint exercise between the U.S. Coast Guard Academy and the Royal Norwegian Naval Academy in Bergen, Norway. After working through strategy and budget considerations during the spring semester, the team of 38 U.S. Coast Guard Academy cadets competed alongside Norwegian counterparts in a virtual exercise to stress-test their responses to a massive casualty in the Arctic. The teams collaborated in real time using custom-software to simulate a rescue of 1,600 cruise ship passengers, mitigate environmental pollution, and address public affairs and diplomatic issues.

# RESPONSE MISSION PROGRAMS

The Assistant Commandant for Response Policy through its four Coast Guard mission programs: *Maritime Security Operations*, *Maritime Law Enforcement*, *Maritime Response*, and *Defense Operations*, develops and promulgates doctrine and policy guidance to effectively and efficiently accomplish operational maritime missions in the areas of law enforcement, maritime security, counterterrorism and defense operations, incident management and preparedness, search and rescue, and contingency exercises. The Assistant Commandant also provides strategic planning direction to ensure successful operational execution against programmatic standards; and maintains outreach to key stakeholders and federal, state, tribal, military, industry, and international partners.

## FY 2018 PERFORMANCE HIGHLIGHTS

- Conducted 30,383 waterborne patrols of maritime critical infrastructure and key resources; 3,824 escorts of high-capacity passenger vessels; 476 escorts of vessels carrying certain dangerous cargos; and 284 escorts of high-value Naval vessels.
- Provided support for 131 military out load security zones, and conducted 350 waterborne enforcement activities of fixed security zones.
- Conducted 4,441 Small Vessel Security Boardings, and 509 “high-interest” (vessels that might pose high relative security risks to U.S. ports or alternate destinations) boardings.
- Interdicted 3,603 undocumented migrants; repatriated 2,534 Haitian, 724 Dominican, 551 Mexican, and 351 Cuban migrants.
- Removed 209.6 metric tons of cocaine and 21,564 pounds of marijuana worth about \$6.1 billion in wholesale value; and detained 602 suspected smugglers for prosecution.
- Boarded 6,624 U.S. vessels and cited 144 significant fishery violations; and responded to 51 reports or requests from partner agencies to assist with stranded, distressed or entangled animals protected by Endangered Species or Marine Mammal Protection Acts.
- Patrolled 3.4 million square nautical miles of the U.S. Exclusive Economic Zone (EEZ) to suppress illegal fishing by foreign vessels, detected 201 incursions, and interdicted 63 vessels; boarded 111 foreign vessels to suppress illegal, unreported and unregulated fishing on the high seas and in the EEZs of partner nations.
- Responded to 15,634 Search & Rescue cases; assisted 41,093 people, saved 3,965 lives, and protected approximately \$66 million in property from loss.
- Mobilized 8,650 active duty, reservists, and civilians for Hurricanes Florence, Lane, and Mangkut in South Carolina, North Carolina, Hawaii, and Guam.
- Assisted and saved more than 992 lives and 337 pets in the response to Hurricane Florence.
- Responded to 11,894 pollution incident reports; and deployed the National Strike Force to support Coast Guard and EPA On-Scene Coordinators in response to four natural disasters, four special events, and 14 oil and six hazardous substance incidents.
- Managed 296 federal cleanup projects, costing more than \$22.5 million; and had six National Response Framework Emergency Response Function-10 cases valued at \$58 million.
- Responded to 120 air defense threats in Washington, DC area with 100% on-time rate.
- Deployable Rotary Wing Intercept assets deployed a record 21-times, spanning 165 days; responded to 122 alerts and were scrambled 64 times in response to DoD-identified tracks of interest.

## SUCCESS STORIES

**Counter Unmanned Aircraft Systems.** The proliferation of Unmanned Aircraft Systems (UAS) technologies has increased dramatically in recent years, with applications ranging from recreational to military and commercial use. UAS have been flown over Coast Guard vessels and shore units and near ongoing law enforcement boardings, escorts, and airborne aircraft. This is prompting concern over whether the Coast Guard has the appropriate authority and capability to identify, engage, and neutralize a UAS threat.

The UAS threat is particularly concerning for the Coast Guard and other law enforcement assets conducting escorts of Navy ballistic missile submarine and other high value Navy units, cruise ships, ferries, and vessels carrying selected certain dangerous cargoes. Between 2017 and 2018 there were 17 UAS reports at the Coast Guard unit responsible for conducting ballistic missile submarine escorts in Bangor, WA alone, and 139 Field Intelligence Reports related to UAS activity Coast Guard-wide.

Since 2015, the Coast Guard has been working alongside the Department of Homeland Security and the Department of Defense to acquire the necessary legal authority to counter a UAS threat and to develop the graduated spectrum of capabilities necessary to neutralize or disrupt UAS interference with Coast Guard operations. Working closely with the Federal Aviation Administration, UAS operations were restricted at over 10 critical Coast Guard facilities. These restrictions took effect on June 20, 2018, under 14 Code of Federal Regulations (CFR) §99.7—“Special Security Instructions” to address concerns about UAS operations over national security sensitive facilities by establishing temporary UAS flight restrictions.

The Coast Guard continues to seek expansion of protections offered under 14 CFR §99.7 to other Coast Guard facilities. The Coast Guard supported DHS efforts that resulted in passage of the Preventing Emerging Threats Act of 2018 that the President signed on October 5, 2018. Under this Act, the Coast Guard and DHS Operational Components may take authorized actions against UAS that pose a credible threat to the safety or security of a covered facility or asset. The service is testing and evaluating several counter-UAS capability initiatives and participating in a DHS Joint Requirements Council Counter-UAS Working Group to develop common departmental capability requirements.

**Joint Agency Migrant Interdiction.** In 2018, the Sector Miami Command Center received notification of a target of interest from an Air Station Miami HC-144 mid-range patrol aircraft. The contact was located approximately 19 nautical miles east of Haulover Inlet and heading westbound at 18 knots. Continued surveillance was subsequently provided by a Customs and Border Protection aircraft, which monitored the vessel as it continued heading westbound. The target suddenly changed course after apparently becoming aware of law enforcement units, and proceeded on an easterly course toward international waters. A Station Miami law enforcement small boat SPC-LE

and three Customs and Border Protection Air and Marine Operations surface units engaged in pursuit of the target.

The 25-foot Hydrasport Cuddy Cabin was interdicted with 16 illegal migrants onboard. The identified human trafficker had been previously arrested. One of the migrants had a previous arrest by Immigration and Customs Enforcement for illegal drug charges, and another was apprehended for previous illegal weapons charges, possession of stolen property, and larceny. Approximately \$25,000 in U.S. currency and \$2,200 Bahamian currency were also seized from the vessel.



HC-144 Ocean Sentry Aircraft. (U.S. Coast Guard photo)

Successes such as these often are a result of joint maritime migrant interdiction operations and the strong partnerships the Coast Guard has established with fellow Department of Homeland Security components and international partners.

**Multilateral Drug Summits.** The Coast Guard plans and facilitates three Multilateral Summits each year—the semi-annual Multilateral Maritime Counter Drug Summit, which focuses on Central and South American regions and the annual Multilateral Maritime Interdiction and Prosecution Summit, which focuses on the Caribbean.

In 2018, the 22nd and 23rd iterations of the Counter Drug Summit and the sixth meeting of the Interdiction and Prosecution Summit were held in Brasilia, Brazil; Washington, DC; and Nassau, Bahamas. They were the largest to date, with nearly 400 attendees from 30 countries.

These summits are attended by professionals from the operational, policy, legal, and intelligence communities from nations across North, Central, and South America, and Europe. They foster continuing dialogue between maritime and justice sectors of both source zone and transit zone countries in the Western Hemisphere; enhance awareness of the air, surface, and semi-submersible/submersible threats; and strengthen multinational cooperation. They also support key elements of the February 9, 2017, Presidential Executive Order on Enforcing Federal Law with Respect to Transnational Criminal Organizations and Preventing International Trafficking; the State Department’s Central America Regional Security Initiative and Caribbean Basin Security Initiative; and the Coast Guard’s Western Hemisphere Strategy.

The Colombian and Mexican Delegations provided particularly insightful remarks at both Counter Drug Summits regarding Campaign Orion, specifically highlighting the value of the April 2018, U.S.-Mexico-Colombia Trilateral Operation, known as OP BETELGEUSE; and at the Counter

Drug Summit held in Washington, DC in May 2018, the Colombian Navy announced planning of Campaign Orion II, which will include Operation BETELGEUSE II taking place in October 2018.

**High Seas Illegal Fishing.** The Coast Guard conducts Operation NORTH PACIFIC GUARD patrols to detect and deter illegal High Seas Drift Net activity and combat Illegal, Unreported, and Unregulated fishing activity on the high seas. These are long-standing, annual, combined law enforcement operations between the U.S., Canada, China, Japan, Russia and South Korea. Typically, they include Chinese personnel operating from Coast Guard cutters pursuant to an inter-governmental MOU signed in 1993.

In June of 2018, while on routine patrol, a Coast Guard cutter with embarked Chinese law enforcement ship-riders interdicted and boarded a Chinese fishing vessel suspected of utilizing



Joint Chinese and U.S. Coast Guard inspection team boards the *Run Da*, June 16 2018. (U.S. Coast Guard photo)

large-scale high seas drift nets. Upon investigation, the joint boarding team discovered such nets, along with 80 tons of illegally caught salmon. The Chinese law enforcement personnel seized the vessel, crew of 23, and catch; and the Coast Guard cutter escorted the fishing vessel toward a Chinese Coast Guard enforcement vessel, which assumed custody to facilitate future prosecution.

The case highlighted the multi-national dimension of the fight against Illegal, Unreported, and Unregulated fishing and the value of increased communication and coordination between the U.S., China, and other partners.

**Air Force B-52 Responds to Coast Guard Rescue Call.** Coast Guard Rescue Coordination Center (RCC) Guam received an alert of an overdue outrigger canoe sailing from Pikelot Atoll to Puluwat Atoll within the Federated States of Micronesia with six adult males on board. The small vessel left Pikelot Atoll on June 18, 2018, but did not arrive in Puluwat Atoll or any other local islands within 24 hours as planned. The RCC contacted the U.S. Air Force's 36<sup>th</sup> Wing command post at Anderson Air Force Base for assistance; their B-52H Stratofortress' were within a one-hour flight time of the search area. By 11 a.m. the next day, a B-52 from Anderson AFB was airborne in search of the small Pacific Island style canoe.

The amount of time since the mariners left, weather conditions, and currents generated a large search area; and the mission was further complicated because the search object was unfamiliar to the B-52 crew. For more than three hours, the aircrew scoured the ocean for the wayward vessel. At about 2:45 p.m., from about 19,000 feet, the aircrew spotted a small wooden canoe with a white sail and six passengers on board—almost seven days after going missing. In that large swath of ocean, they had found the small wooden ship 30 nautical miles northeast of Puluwat Atoll.

Once the survivors were located, RCC Guam identified the closest Automated Mutual Assistance Vessel Rescue (AMVER) vessel, *M/V SUMAQ QUEEN*, and requested assistance, while the B-52 returned to Anderson Air Force base. The *M/V SUMAQ QUEEN* arrived on scene and rendered the necessary aid, which successfully concluded this intricate multi-agency response.

Global oceanographic and meteorological models run by the U.S. Navy and NOAA provided daily updated surface current and wind fields to the Coast Guard SAROPS program, which models and predicts ocean currents and winds to generate optimal search areas; and these models were updated after Coast Guard and Australian oceanographers traveled to Guam, Chuuk, and Puluwat Atolls in 2012 to determine the leeway drift of outrigger canoes. Considerable science, Coast Guard Search and Rescue expertise, and interagency collaboration contributed to this success.

**Coast Guard Supports International SAR Request.** On September 14, 2018, Coast Guard



Survivors of a stricken Fishing Vessel are located by a US Coast Guard HC-130 during a Search and Rescue Agency Assist mission. (U.S. Coast Guard photo)

Rescue Coordination Center Miami received a report from the Jamaican Defense Force that they were in communication with a 131-foot fishing vessel in the vicinity of Serranilla Bank, Colombia that was on fire with approximately 20 persons on board. The Rescue Center contacted the Colombian Navy, who dispatched several assets to the position; but were unable to locate any survivors after arriving at the stated distress position.

Rescue Coordination Center Miami dispatched an HC-130 from Air Station Clearwater and developed an updated distress position to pass to the aircraft. Once on scene, the HC-130 located approximately 15 people inside several life rafts and a small panga.

The Rescue Coordination Center located the closest vessel, *M/V CHALLENGE POLLUX*, whose crew rescued all 15 people in distress and remained on scene until further assistance was provided by the Colombian Navy. The case demonstrates the value of the Service's ongoing cooperation and coordination of Search and Rescue operations with international partners, and how critical commercial ships are to rendering assistance to persons in distress at sea.

**Operation Arctic Shield 2018.** This was the 151st year of Coast Guard operations in the American Arctic; a persistent presence that was extended by Operation Arctic Shield 2018, which concluded in October.

Operation Arctic Shield began as a mobile, seasonal operation for meeting the Coast Guard's Arctic statutory responsibilities. The operation has evolved and aligns with the Service's strategic objectives to improve awareness, modernize governance, and broaden partnerships. Arctic Shield builds upon the lessons learned from previous years including response and prevention activities, and engagement with local and Tribal communities.

Coast Guard air and surface assets participating in Operational Arctic Shield, including two MH-60 helicopters deployed to Forward Operating Location Kotzebue, led or took part in 15 Search and Rescue cases saving 13 lives and assisting 13 other persons in distress.



A MH-60 stationed at Forward Operating Location Kotzebue conducts confined space landing training as part of Arctic Shield 2018. (U.S. Coast Guard photo)

One notable case was a medical evacuation on August 3, 2018 of a passenger from the Bahamian-flagged cruise ship *SILVER EXPLORER*, carrying some 262 passengers and crew approximately 135 nautical miles northwest of Kotzebue. The vessel was near Wrangell Island in the Chukchi Sea, in the Russian Federation search and rescue zone, when a 35-year-old crewmember suffered a possible heart attack. Maritime Rescue Coordination Center Vladivostok indicated told there were no Russian assets in the area and the patient should be taken to Anadyr, a surface transit greater than 500 miles, or call another agency. The ship then contacted Coast Guard District 17, which was able to deploy the MH-60 helicopters at Kotzebue. The successful Coast Guard MEDEVAC hoist is considered the first practical exercise of the 2011 Agreement on Cooperation on Aeronautical and Maritime Search & Rescue in the Arctic.

Arctic Shield 2018 also focused on prevention activities. District 17 and Sector Anchorage staff conducted 35 bulk liquid facility inspections; completed 65 Commercial Fishing Vessel Exams and issued 35 decals, conducted 42 Nome gold dredge exams and issued 28 decals, and completed 41 commercial vessel inspections, 18 of which were Port State Control inspections of foreign flagged vessels. A historic milestone was reached when the first gold dredge Certificate of Inspection was issued to *M/V MYRTLE IRENE* by Sector Anchorage, facilitating compliance of the larger vessels in the gold dredge fleet.

Sector Anchorage also collaborated with District 17 staff, *USCGC STRATTON*, Alaska State Troopers, and state, local, and tribal representatives to enforce commercial fishing vessel regulations. The effort led to a 60% increase in Commercial Fishing Vessel Safety examinations and decals issued. Coast Guard Ice Rescue Team members worked with local authorities and first responders to conduct Ice Rescue Training in Kotzebue, Nome, Utqiagvik, and Wrainwright; and Coast Guard members and local partners engaged 3,800 students in 25 villages in support of the Kids Don't Float boating safety program. These cooperative efforts enhanced local Search and Rescue capability, improved community resiliency and security, and provided constructive relief to the growing need for Coast Guard response in this challenging maritime environment.

**Building Partnerships for Arctic Oil Spill Prevention, and Response.** As part of Operation Arctic Guardian, personnel from the Coast Guard, National Oceanic and Atmospheric



Pacific Strike Team and Sector Juneau crewmembers, work together to coil a hose after an oil spill response demonstration in Bethel, AK, July 25, 2018. (U.S. Coast Guard photo by Petty Officer Lauren Dean)

Administration (NOAA), Alaska Chadux Corporation, Alaska Department of Environmental Conservation (ADEC), Global Diving and Salvage, the Alaska Division of Homeland Security and Environmental Management, Association of Village Council Presidents, Orutsararmiut Traditional Native Council and various other state and federal entities, attended an annual seminar held at the Alaska Army National Guard Readiness Center in Bethel, AK, July 24-26, 2018.

Focused on the unique Alaskan issues in spill response, the seminar presented lectures on subjects such as oiled wildlife protection and rehabilitation; dispersant use plans; historic properties protection; alternative response technologies and booming tactics; the science of oil spills; and the incident command system structure. The seminar also doubled as a hands-on equipment deployment event to make local governments and industry, as well as interested citizens, aware of the federal and state governments' response to oil and chemical spills in the area.

# MARITIME SECURITY OPERATIONS PROGRAM

The Maritime Security Operations program encompasses activities required by executive and policy mandates to detect, deter, prevent, disrupt, and recover from terrorist attacks and other criminal acts in the maritime domain. It includes the execution of antiterrorism, counterterrorism, and security response operations. The program conducts and oversees the operational elements of the Coast Guard Ports, Waterways, and Coastal Security (PWCS) mission, which is complemented by the Service’s Maritime Domain Awareness and prevention activities.

## PORTS, WATERWAYS, AND COASTAL SECURITY—*RESPONSE ACTIVITIES*

The PWCS-*Response Activities* (PWCS-R) mission of the Maritime Security Operations Program is to prevent and disrupt terrorist attacks, sabotage, espionage, or subversive acts in the maritime domain and MTS. Coast Guard Maritime Security Operations deny the use and exploitation of the MTS by terrorists as a means for attacks on U.S. territory, population centers, vessels, and critical maritime infrastructure and key resources. Coast Guard PWCS-R efforts include establishment and oversight of maritime security operations regimes and employment of maritime domain awareness capabilities; execution of antiterrorism, counterterrorism, response and recovery operations; and related preparedness activities.



Coast Guard Response Boat-Small II.  
(U.S. Coast Guard Photo)

### *FY 2018 Performance Results*

Percent Reduction of all Maritime Security Risk Subject to U.S. Coast Guard Influence



Percent Reduction of Maritime Security Risk Resulting from U.S. Coast Guard Consequence Management



Percent Reduction of Maritime Security Risk Resulting from U.S. Coast Guard Efforts to Prevent a Terrorist Entering the U.S. via Maritime Means



Percent Reduction of Maritime Security Risk Resulting from USCG Efforts to Prevent a WMD from Entering the United States via Maritime Means



***Explanation of Results***

The above risk-based outcome measures begin with an assessment by maritime subject matter experts of 16 high-consequence maritime terrorist attack activity scenarios, and the Coast Guard’s ability to deter, detect, protect, disrupt, and defeat surveillance, target selection, attack planning/rehearsal, and attack execution. Each of these 16 scenarios is analyzed against the three PWCS pillars (Maritime Domain Awareness - MDA, Maritime Security Response Operations - MSRO, and Maritime Security Regime). The result of this analysis creates a threat, vulnerability, and consequence level for each scenario, known as the proxy (index) value, or ‘raw risk’ which exists in the maritime domain for each scenario. The outcome measures above demonstrate the degree to which PWCS response activities have the ability to reduce the determined total ‘raw risk.’

Note: The ‘raw risk’ is a fluid number which ebbs and flows with the current threat picture. As threats increase, so do the annual targets and vice versa. To appropriately respond to increased threat assessments, MSO has a proven track record to continually improve models to increase efficiencies in a system with a fixed response capability.

In FY 2018, the Coast Guard did not meet performance targets for two PWCS measures: Percent Reduction of all Maritime Security Risk Subject to U.S. Coast Guard Influence (ie. boardings, patrols, inspections etc.), and Percent Reduction of Maritime Security Risk Resulting from U.S. Coast Guard Consequence Management (ie. contingency exercise planning and training). Despite missing performance targets, maritime security performance continues the three-year trend of improvement. In particular, the Coast Guard increased the previous year’s percent reduction of all maritime security risk subject to Coast Guard influence from 49% to 52% and percent reduction of risk resulting from Coast Guard efforts to prevent a terrorist from entering the U.S. from 59% to 60%. Coast Guard maritime security employment hours continue to be within historical norms (ie. fixed response capability); however, maturation of the Coast Guard’s Risk Based Maritime Security Operations (RBMSRO) tool has allowed for the more effective use of operational assets as indicated over the past three years. Also notable, were increased changes to the threat level, as assessed by the Coast Guard’s Intelligence Coordination Center (ICC), which resulted in the Coast Guard actually reducing a greater share of overall risk subject to Coast Guard influence. Lastly, improved vessel tracking and surveillance capability also resulted in increased risk reduction.

As noted above, the threat picture continually changes. These shifts modify the paradigm from which out-year targets were originally set. Assuming no significant further changes to underlying assumptions or threat picture, the Coast Guard should meet FY 2019 targets.

## MARITIME LAW ENFORCEMENT PROGRAM

The Maritime Law Enforcement (MLE) program protects America's maritime borders from encroachment, defends U.S. maritime sovereignty from illicit activity, facilitates legitimate use of the waterways, and suppresses violations of federal law on, under, and over the high seas and waters subject to the jurisdiction of the United States. The Coast Guard is the lead federal maritime law enforcement agency and the only agency with both the authority and capability to enforce national and international law on the high seas, Outer Continental Shelf, and inland from the U.S. Exclusive Economic Zone (EEZ) to inland waters. Coast Guard responsibilities include detecting and interdicting contraband and illegal drug traffic; at sea enforcement of U.S. immigration laws and policies; enforcing U.S. fisheries and marine protected resource laws and regulations; ensuring the integrity of the EEZ; monitoring compliance with international living marine resource regimes and international agreements to which the U.S. is party; and through compliance with international agreements, combating illegal, unreported, and unregulated fishing that negatively impacts maritime and economic security in coastal and regional areas worldwide.

## UNDOCUMENTED MIGRANT INTERDICTION

Coast Guard interdiction of undocumented migrants provides effective law enforcement presence at sea and achieves the three main objectives of safe, legal, and orderly migration. Coast Guard migrant interdiction operations also stem the flow of human smuggling and trafficking through maritime routes and approaches to the United States. Leveraging statutory authority, bilateral agreements and policy, the Coast Guard conducts these interdictions as far from U.S.



At sea maritime interdiction. (U.S. Coast Guard photo)

borders as possible. Doing so facilitates the return of migrants to their home country while further protecting them from an often perilous sea voyage. Strong partnerships and information sharing with other agencies, such as Citizenship and Immigration Services, Immigration and Customs Enforcement, Customs and Border Protection, and Department of State, are critical. While the Coast Guard leads the high seas interdiction mission, partnerships with other agencies are essential for carrying out timely disposition of interdicted migrants via repatriation and removal operations and for conducting further investigation and prosecution in the case of human smugglers or traffickers.

## ***FY 2018 Performance Results***

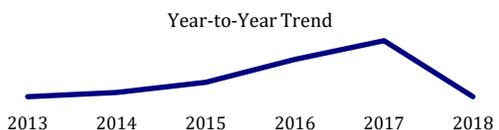
### Number of Undocumented Migrants Attempting to Enter U.S. via Maritime Routes

Year-to-Year Trend		2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2018 Target	2019 Target
		7,631	10,629	8,057	10,319	4,760	<b>5,007</b>	≤9,000	≤5,897

### Number of Undocumented Migrants Attempting to Enter U.S. via Maritime Routes Interdicted

Year-to-Year Trend		2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2018 Target	2019 Target
		5,262	7,747	6,028	8,165	3,952	<b>3,603</b>	≤6,750	≤4,718

### Migrant Interdiction Effectiveness in the Maritime Environment

Year-to-Year Trend		2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2018 Target	2019 Target
		68.9%	72.8%	74.8%	79.3%	83.0%	<b>72.0%</b>	≥75.0%	≥75.0%

### Percent of Undocumented Migrants who Attempt to Enter the United States via Maritime Routes Interdicted by the Coast Guard

Year-to-Year Trend		2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2018 Target	2019 Target
		27.6%	33.8%	47.5%	61.5%	52.8%	<b>33.4%</b>	≥50.0%	≥50.0%

## ***Explanation of Results***

Total known flow of undocumented migrants attempting to enter the U.S. by maritime routes increased slightly from 4,760 in FY 2017 to 5,007 in FY 2018. This is largely attributable to the 36% increase in Haitian and 67% increase in Mexican migrant flows over FY 2018. Cuban migrants accounted for over 56% of the total known flow in FY 2015, but have steadily fallen, making up only 8% in FY 2018, the lowest level recorded in 30 years.

The Coast Guard interdicted 1,671 undocumented migrants this year, with 3,603 interdicted in total by the Coast Guard and its partners. This equates to 72% of the total known flow, a decrease from 83% in FY 2017. Of the total interdictions, the Coast Guard interdicted 33.4% of undocumented maritime migrants, a decrease from FY 2017 and below the FY 2018 target of 50%. The decrease in total and in Coast Guard interdictions is in part due to shifting flows within the maritime domain and shifting resources due to more intensified drug trafficking flows in the Eastern Pacific. In FY 2018, known maritime migrant flows in Southern California increased by over 300%. Although maritime interdictions increased proportionately, so did successful landings of maritime migrants. Further, in FY 2018, foreign partners have increased interdictions in the maritime domain, thereby comprising a larger percentage of the total migrant interdictions. Out-year targets will be adjusted accordingly, once changes in migrant routes and agency participation is further quantified.

# ILLEGAL DRUG INTERDICTION

The Drug Interdiction mission supports national and international strategies to deter and disrupt the



Members of the U.S. Coast Guard Cutter (USCGC) ESCANABA crew stand next to approximately 12.4 tons of cocaine December 7, 2017. (U.S. Coast Guard photo)

market for illegal drugs, dismantle Transnational Organized Crime and Drug Trafficking Organizations, and prevent transnational threats from reaching the U.S. The Coast Guard is the lead federal agency for drug interdiction on the high seas. In the territorial seas of the U.S., it shares the lead with Customs and Border

Protection (CBP) and receives assistance from numerous other agencies. The Coast Guard strategy is to maintain a strong interdiction presence that denies smugglers access to maritime routes and deters trafficking activity; to strengthen ties with source and transit zone nations to increase their willingness and ability to reduce the production and trafficking of illicit drugs within their sovereign boundaries and territorial seas; and to support interagency and international efforts to combat drug smuggling through increased cooperation and coordination.

## *FY 2018 Performance Results*

Metric Tons of Cocaine Removed

Year-to-Year Trend		2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2018 Target	2019 Target
		88.4	90.0	144.8	201.3	223.8	209.6	≥200.0	≥240.0

Removal Rate for Cocaine from Non-Commercial Vessels in Maritime Transit Zone

Year-to-Year Trend		2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2018 Target	2019 Target
		15.3%	9.5%	11.5%	7.1%	8.2%	7.3%	≥10.0%	≥10.0%

## *Explanation of Results*

In FY 2018, the Coast Guard removed 209.6 metric tons of cocaine, a decrease of 6% from the prior year. The overall removal rate remained somewhat unchanged from FY 2017, falling slightly from 8.2% to 7.3%. Over the reporting period, known cocaine flow through the transit zone via non-commercial means increased by 6% to 2,892.4 metric tons in FY 2018 from 2,738 metric tons in FY 2017. The Coast Guard sets performance targets to be realistic yet ambitious. Each target considers maritime flow of cocaine in the Western Hemisphere Transit Zone against resource

availability to combat total known flow. While the Coast Guard did not meet its performance target of removing 10% of non-commercial maritime cocaine flow, the Coast Guard did meet its removal target of 200 metric tons. Further, the Coast Guard removed more tonnage of cocaine per interdiction in FY 2018 than anytime following FY 2008. The Coast Guard continues to prioritize preventing transnational threats from reaching U.S. borders, and remains optimistic about its performance toward reaching future interdiction targets.

Key factors to success in the transit zone include interdictions, detections, cuing, and adversary patterns. As noted above, tonnage removed per event has risen to a 10-year high. However, the increase in tonnage removed per event was not enough to overcome the overall decrease in the number of interdictions in FY 2018. One reason for this decrease is likely due to the increasing expanse of the trafficking area and the transnational criminal organization’s efforts to exploit that area. Thus, long-range air and cutter assets are key to successful surface interdiction operations. Thus, the Coast Guard continues to believe the future target is achievable assuming that sufficient interdiction assets remain available and current flow trends do not substantially change.

## LIVING MARINE RESOURCES LAW ENFORCEMENT

The Coast Guard conducts Living Marine Resources (LMR) Law Enforcement under the provisions of the Magnuson-Stevens Fishery Conservation and Management Act, the Endangered Species Act, and other federal laws focused on the protection of marine resources. The core objective of these efforts is to provide effective and professional enforcement to advance national goals for the conservation, management, and recovery of living marine resources, marine protected species, and national marine sanctuaries and monuments. This includes the enforcement of LMR regulations in addition to numerous other activities that strengthen both domestic and international fisheries management regimes.



A member of Coast Guard Station Barnegat Light inspects the catch aboard a commercial fishing boat off the coast of Barnegat Light, NJ. (U.S. Coast Guard photo)

### ***FY 2018 Performance Results***

#### Fishing Regulations Compliance Rate



#### Percent of Federal Fisheries Found in Compliance with Laws and Regulations



## *Explanation of Results*

The Coast Guard uses the percentage of fishing vessels observed at sea complying with domestic regulations as an indirect measure of the Coast Guard's impact on the health of U.S. fisheries and marine protected species. During FY 2018, the Coast Guard boarded more than 6,624 U.S. vessels, an increase of 20% from FY 2017, citing 144 significant fishery violations. In FY 2018, the observed at-sea regulation compliance rate was 97.8% for LMR, as compared to 97.1% in FY 2017.

The percent of federal fisheries found in compliance provides a measure of the Coast Guard's level of effective enforcement. It measures the percentage of fisheries in which the Coast Guard met its boarding standard and found an adequate level of compliance (the standard is to board 20% of vessels in high precedence fisheries and 10% in low precedence fisheries). The Coast Guard met its combined boarding and compliance standards in only 23% of the 202 fishery components for which we have an enforcement obligation. Although no change over last year, this is below the target rate of 28% due to constrained asset hours and ineffective targeting. The Coast Guard's Office of Maritime Law Enforcement is continuing to refine its data analytics methods to increase operational efficiency and improve resource management. Assuming assets are available, the FY 2019, and future targets should be attainable.

## **OTHER LAW ENFORCEMENT**

Other Law Enforcement (OLE) mission responsibilities include issues related to foreign fishing



Shark illegally poached by Mexican lancha fishermen in Southern Texas waters on April 11, 2018.  
(U.S. Coast Guard photo)

vessels. This takes two forms. The first is deterrence, detection, and interdiction of illegal foreign fishing vessel incursions into the U.S. EEZ, which represent a threat to U.S. renewable natural resources and a violation of United States sovereignty. Protecting the U.S. EEZ is a fundamental Coast Guard maritime security objective. The second is ensuring compliance with international agreements for the management of living marine resources. This is done through enforcement of conservation and management measures

created by Regional Fishery Management Organizations. The Coast Guard helps build organic enforcement capacity within partner nations for resource management and commercial fishery regulations. These partnerships serve as force multipliers, helping to monitor compliance with international agreements and deter illegal, unreported, and unregulated fishing activity worldwide.

## FY 2018 Performance Results

### Number of Detected Incursions of Foreign Fishing Vessels Violating U.S. Waters

Year-to-Year Trend						2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2018 Target	2019 Target
2013	2014	2015	2016	2017	2018	189	198	224	176	136	201	≤ 190	≤ 190

### Interdiction Rate of Foreign Fishing Vessels Violating U.S. Waters

Year-to-Year Trend						2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2018 Target	2019 Target
2013	2014	2015	2016	2017	2018	20.1%	16.8%	17.4%	25.5%	22.8%	31.3%	≥ 18.0%	≥ 18.0%

## Explanation of Results

In FY 2018, there were 201 detected incursions of foreign fishing vessels in U.S. waters, a 48% increase from the 136 detected incursions in FY 2017. Coast Guard units interdicted 63 incursions, resulting in an interdiction rate of 31.3%, an increase of 37% from FY 2017.



The USCGC Mellon and crew patrol along the Maritime Boundary Line between the U.S. and Russia in the Bering Sea, May 25, 2018. The crew kept a lookout for illegal encroachments of the U.S. Exclusive Economic Zone by foreign fishing vessels. (U.S. Coast Guard photo by Petty Officer Bill Colclough)

Over 89% of the documented incursions in FY 2018 were Mexican lanchas located in the Gulf of Mexico. Mexican lancha incursions increased by 36% within the Gulf of Mexico, though making up a smaller percentage of total incursions due to an increase in detected incursions in Oceania as well. Lanchas are active along the Mexico/U.S. EEZ boundary. The lancha will typically

deploy fishing gear in the U.S. EEZ, then return to Mexican waters until they are ready to retrieve their gear. Their small size, low profile, and homemade floats make these incursions difficult to detect.

Tuna fisheries are among the most valuable pelagic fisheries in the world. In FY 2018, there was one incursion detected along the U.S.-Russia Maritime Boundary Line; and 15 incursions detected in the Western and Central Pacific where tuna are prevalent, a region that is extremely remote, hard to effectively patrol, and where it is difficult to detect incursions and even more difficult to respond in a timely manner.

## MARITIME RESPONSE PROGRAM

The Coast Guard is the Nation's maritime first responder. It searches for and rescues persons in distress, alleviates human suffering, and mitigates marine casualties and other disastrous events. The Maritime Response program also mitigates pollution and damage to the marine environment through incident response operations. The Coast Guard's all-threats and all-hazards preparedness efforts ensure incident response and recovery resources are fully ready and capable of scalable mobilization in coordination with, and in support of, local, state, tribal, federal, and private sector partners. Additionally, the Coast Guard provides these same services in support of U.S. interests during international incidents.

## SEARCH AND RESCUE

The Coast Guard is the lead agency for maritime Search and Rescue (SAR) in U.S. waters. The Coast Guard also works with other nations through the International Maritime Organization, International Civil Aviation Organization, and other regional forums to save lives and advance the SAR system both nationally and globally. The Coast Guard strives to alleviate human suffering and minimize loss of life and property by rendering aid to those in distress in the maritime environment and elsewhere when Coast Guard intervention can influence the outcome of life-threatening incidents. The Coast Guard maintains a high state of readiness, continuously monitoring for vessels in distress, and employs sophisticated drift modeling and search optimization tools to improve SAR planning and execution. When someone is in peril, the Service coordinates search and rescue efforts utilizing afloat and airborne Coast Guard units, and those of other federal, state, and local responders. The Coast Guard manages the maritime mass rescue response preparedness program, and using its Captain of the Port authorities and responsibilities, coordinates response efforts on waterways after an incident or disaster.



The fishing vessel Master D on fire approximately 40 miles east of Port Isabel, TX, August 31, 2018. All three crewmembers from the fishing vessel were rescued by the crew of the Coast Guard Cutter Coho after activating the vessel's emergency position-indicating radio beacon. (U.S. Coast Guard photo)

In support of the global and U.S. SAR system, the Coast Guard is one of four federal partners in the Search and Rescue Satellite-Aided Tracking (SARSAT) program and participates in the governance and operation of the International Cospas-Sarsat Programme. The Coast Guard also partners with the world's merchant fleet to rescue mariners in distress around the globe through the Automated Mutual-assistance Vessel Rescue (AMVER) system, a computer based voluntary global

ship reporting system used worldwide by SAR authorities to arrange for assistance to persons in distress at sea.

### ***FY 2018 Performance Results***

Percent of People in Imminent Danger Saved in the Maritime Environment

Year-to-Year Trend 	2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2018 Target	2019 Target
		78.7%	79.4%	79.8%	79.3%	78.8%	<b>78.0%</b>	≥ 80.0%

Percent of Time Rescue Assets on Scene within Two Hours

Year-to-Year Trend 	2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2018 Target	2019 Target
		92.2%	95.4%	95.8%	90.3%	91.0%	<b>93.0%</b>	100%

Percentage of property "in danger of loss" saved

Year-to-Year Trend 	2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2018 Target	2019 Target
		63.1%	56.5%	59.7%	59.4%	57.9%	<b>60.0%</b>	≥ 70.0%

### ***Explanation of Results***

In FY 2018, the Coast Guard responded to 15,634 maritime search and rescue cases, assisted 41,093 people, and saved 3,965 lives in imminent danger. These statistics do not include people saved or assisted by Coast Guard disaster response efforts directly related to Hurricane Florence in order to keep the data normalized from year to year.

The percentage of people in imminent danger in the maritime environment saved by the Coast Guard was 78.0% in FY 2018, which is less than the 78.8% achieved last year, but consistent with the previous five years' average of 78.9%. The Office of Search and Rescue, through operational analysis, has determined that the number of cases the Coast Guard is called to respond to are becoming increasingly complex, requiring greater levels of SAR planning proficiency. Therefore, the Office of Search and Rescue is developing innovative Service-wide training solutions to improve SAR planning across the Service in effort to retain and sharpen the skills necessary to execute complex maritime SAR.

The time it takes to reach the scene of distress is a key performance factor that may influence the response outcome. The Coast Guard's performance benchmark is to arrive on scene within two hours of notification 100% of the time. In FY 2018, Coast Guard search and rescue assets met this standard 93.0% of the time. This year's results were slightly better than the updated 91.0% average achieved in FY 2017 and the 91.0% average over the past five years. Factors beyond the Coast Guard's control influence its ability to arrive within the benchmark timeframe, including adverse

weather conditions, unfavorable geographical proximity, and limited asset availability. The Coast Guard is continually looking at ways to improve this performance, with focus on where search and rescue assets are strategically located.

Saving lives is always the Coast Guard priority; recovery of property is a secondary consideration and undertaken only if it can be done with minimal risk and without degrading search and rescue effectiveness. Prospects for property recovery are always case dependent and vary widely. In many instances, such as when a vessel sinks before a Coast Guard asset arrives on scene, there is no opportunity for recovery. In FY 2018, the Coast Guard was able to save 60.0% of property in danger of loss. This is notably less than the 70.0% target, but is trending upward when compared with the 57.9% result in 2017, and 58.85% average over the previous five years. The Coast Guard continues to work closely with partners in the salvage industry to strengthen marine property recovery capabilities to improve these results.

## MARINE ENVIRONMENTAL PROTECTION—*RESPONSE ACTIVITIES*



National Strike Force members working with salvage contractors in Crown Bay on St. Thomas, U.S. Virgin Islands. (U.S. Coast Guard photo)

The Coast Guard is the lead federal agency for directing the removal and mitigation of oil and hazardous substances from spills and releases in the waters and shorelines of the coastal zone. The Coast Guard accomplishes this marine environmental response and preparedness mission with strategically distributed marine environmental response program elements at the national, regional, and local level. This includes strategic program management and policy support at Coast Guard Headquarters and National Contingency Plan Special

Teams, which include the Coast Guard National Strike Force and District Response Advisory Teams, Federal On-Scene Coordinators (FOSCs), FOOSC Representatives, and Pollution Responders at Sectors, Marine Safety Units, and Marine Safety Detachments.

## *Discussion of Results*

From August 2017 to April 2018, the Coast Guard led the National Response Framework Emergency Support Function-10 response to Hurricanes Harvey, Irma, and Maria. Managing the catastrophic impacts of several major hurricane landfalls was unprecedented and required a complex approach. The Coast Guard worked with other federal agencies, state officials, and thousands of salvage and environmental professionals to remove 4,215 vessels and significant pollutants from the environment over the course of a 10-month response.



Members of the National Strike Force assess vessels impacted by Hurricane Harvey at Port Aransas, TX. (U.S. Coast Guard photo)

The Coast Guard established an interagency coordination team, and using its Federal On-Scene Coordinator authority, ensured rapid assessments were conducted, hazards were mitigated, and endangered species and sensitive environmental, cultural, and historical sites protected. Direct federal assistance was provided to Texas, Florida, Puerto Rico, and the U.S. Virgin Islands, with over \$150 million managed under the Stafford Act.

## **CONTINGENCY PREPAREDNESS AND INCIDENT MANAGEMENT**

The Contingency Preparedness and Exercise Policy Program establishes processes and procedures



Coast Guard shallow water rescue team and National Guard members rescue residents near Old Dock, NC on September 18, 2018. (U.S. Coast Guard photo)

to ensure effective employment of all Coast Guard resources in coordination with partner responders during significant incidents. Through active outreach to Coast Guard mission program managers, the Incident Management and Preparedness Program assesses, maintains, and improves the knowledge, skills, and abilities necessary to ensure consistency within the Service, agency interoperability, and support to the National Preparedness and Planning Systems as established by Presidential Policy Directive-8. Program efforts ensure response readiness for all threats and all hazards, and include

exercises and real-world events that cut across all Coast Guard missions and support programs.

In FY 2018, the Coast Guard directed 139 Government Initiated Unannounced Exercises; reviewed 7,341 submissions for compliance with the Oil Pollution Act of 1990; and conducted 99 Oil Spill Removal Organization site inspections, during 19 Preparedness Assessment Visits to ensure port readiness.

# DEFENSE OPERATIONS PROGRAM

Coast Guard forces utilize provided authorities, capabilities, capacity and partnerships to carry out homeland security and homeland defense operations, either under Coast Guard control or under the control of a Department of Defense (DoD) Geographic Combatant Commander (GCC). As an armed service, the Coast Guard provides uniquely trained, equipped and mission-matched forces in support of GCC initiatives, as outlined in the 2008 DoD-DHS Memorandum of Agreement. Coast Guard Defense Operations missions include: Maritime Interception/Interdiction Operations; Military Environmental Response; Port Operations, Security and Defense (including maintaining a Title 10 Reserve force and providing Aids to Navigation support for battle-space preparation); Theater Security Cooperation; Coastal Sea Control (including providing DoD the only assured access in ice-covered and ice-diminished waters); Rotary Wing Air Intercept; Combating Terrorism; and Maritime Operational Threat Response support.



Members of MSRT-W perform a hook and climb training operation with Philippine Navy frigate *BRP ANDRÉS BONIFACIO* (Former *USCGC BOUTWELL*) as part of the 2018 RIMPAC exercise. (U.S. Coast Guard Photo by Petty Officer David Wydert)

## FY 2018 Performance Results

### Defense Readiness of Major Cutters for DoD Contingency Planning

Year-to-Year Trend						2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2018 Target	2019 Target
2013	2014	2015	2016	2017	2018	N/A	100%	100.0%	99.5%	97.0%	100%	100%	100%

### Defense Readiness of Patrol Boats for DoD Contingency Planning

Year-to-Year Trend						2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2018 Target	2019 Target
2013	2014	2015	2016	2017	2018	N/A	100%	100%	100%	100%	100%	100%	100%

### Defense Readiness of Port Security Units (Deployed)

Year-to-Year Trend						2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2018 Target	2019 Target
2013	2014	2015	2016	2017	2018	N/A	100	100%	100%	100%	93.5%	100%	100%

### Defense Readiness of Port Security Units (Ready to Deploy)

Year-to-Year Trend						2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2018 Target	2019 Target
2013	2014	2015	2016	2017	2018	N/A	61.0%	89.0%	57.8%	100%	100%	≥ 85.0%	≥ 85.0%

## *Explanation of Results*

The decline in Defense Readiness of Port Security Units (Ready to Deploy) was primarily due to depot maintenance of the Transportable Port Security Boat for warranty work and Coast Guard Reserve personnel recruiting and retention challenges. The boats will be available in FY 2019, and every effort is being made to enhance reserve recruitment.

Coast Guard cutters assigned to Patrol Forces Southwest Asia (PATFORSWA) provided short notice layered defense for *USS HIGGINS* (DDG 76) in the Northern Arabian Gulf during Tomahawk Land Air Missile strikes against suspected chemical weapons targets in Syria. The PATFORSWA Maritime Engagement Team (MET) also conducted visit, board, search, and seize training exchanges with coalition forces operating in support of Combined Task Force 150, whose mission includes disrupting terrorist organizations and related illegal activities within an area that includes the Red Sea, Gulf of Aden, Indian Ocean and Gulf of Oman. The Australian Navy frigate *HMAS WARRAMUNGA*, after completing pre-patrol workups with the MET, seized a record 31.8 tons of hashish and two tons of heroin, valued at approximately \$2 billion. The MET also participated in Cutlass Express 2018, a U.S. Africa Command sponsored exercise designed to assess and improve participating nations' abilities to respond to illicit maritime trafficking, piracy, illegal fishing, and search and rescue situations.



USCGC *ADAK* and *AQUIDNECK* provide layered defense for *USS HIGGINS* during strikes on suspected military targets in Syria. (U.S. Navy photo)

The Coast Guard participated in the 26th Rim of the Pacific Exercise, which included 26 nations, 47 surface ships, 18 national land forces, and more than 200 aircraft and 25,000 personnel. The



MSRT-W operators sweep for radioactive materials during Pacific Shield 2018. (U.S. Coast Guard photo)

Coast Guard's force package included the *USCGC BERTHOLF* and Coast Guard Maritime Security Response Team-West (MSRT-W). This effort marked the first extended deployment of a MSRT Advanced Interdiction capability on a National Security Cutter.

MSRT-W also participated in the Pacific Shield 2018 exercise held in Japan. Members of the team worked alongside elements from Japanese, Korean, and U.S. Department of Defense teams to practice boarding private cargo ships in search of weapons of mass destruction materials.

# COAST GUARD INTELLIGENCE



Coast Guard Intelligence produces and disseminates timely, actionable, and relevant intelligence that provides mission support to Coast Guard tactical and operational commanders, senior Coast Guard leaders in their strategic management and policy-making roles, the Department of Homeland Security for homeland security missions, and other national intelligence and federal law enforcement agencies in support of national security objectives. In these roles, Coast Guard Intelligence provides decision advantage, knowledge about adversaries, threats, and the surrounding environment. The Coast Guard is a member of the Intelligence Community (IC), a group of 17 Executive Branch departments and agencies that conduct intelligence activities necessary to protect National Security as laid out in Executive Order 12333. In addition, the Coast Guard collects and reports information of intelligence value for Coast Guard, DHS, and national objectives using its federal law enforcement and regulatory authorities.

## FY 2018 HIGHLIGHTS

- Tactical Cryptology Afloat personnel provided actionable intelligence that contributed to the removal of 27,073 kilos of cocaine valued at nearly \$900 million and the arrest or detention of 63 suspected traffickers.
- Atlantic Area intelligence support contributed to the removal of over 5,200 kilos of cocaine and Maritime Intelligence Fusion Center Pacific intelligence support contributed to the removal of 6,334 kilos of cocaine.
- Coast Guard Intelligence units screened 117,575 commercial vessels and over 11 million crew members and approximately 23.7 million passengers prior to arrival in U.S. ports, identifying over 1,400 vessels of interest with national security, law enforcement and/or regulatory concerns.
- Coast Guard Intelligence units assisted in 161 SAR events in the Pacific area and provided maritime domain awareness that assisted in the saving of 16 lives in 11 separate cases, and assisted in the resolution of non-alert SAR related situations resulting in deferred operational savings of \$1.2 million.
- Coast Guard Intelligence Counter Network Analysis provided information to the Australian Federal Police, resulting in seizure of 1.2 metric tons of finished methamphetamine worth almost \$1 billion—the largest seizure in the world at the time.
- Coast Guard Intelligence supported continued Transnational Criminal Organization targeting through Counter Network Analysis, enabling more effective enforcement.
- Illegal High Seas Drift Net (HSDN) fishing violations continued to be reduced as a result of a series of intelligence-driven HSDN vessel seizures. Successful intelligence-driven operations have directly led to a reduction in random patrol activity and associated operational cost in favor of more reliable intelligence-driven response.
- The Coast Guard developed a Supply Chain Risk Management process, acquiring that mission from the Defense Intelligence Agency and providing crucial counterintelligence support for the Polar Security Cutter acquisition effort.

# INTERNATIONAL ENGAGEMENT

The Coast Guard is a unique instrument of national power that promotes global maritime governance in support of U.S. national security, homeland security, and foreign policy objectives. Under the auspices of the U.S. Coast Guard Director of International Affairs and Foreign Policy (CG-DCO-I), the Coast Guard pursues meaningful international engagement activities that enhance its own operations and partner nations. This is accomplished through a robust foreign visits program, key leader engagements with senior maritime and government officials from around the world, and subject matter expert exchanges with partner nations. The Coast Guard conducts maritime assessments of partner nations and provides a diverse set of training and technical services and assists partner nations in strengthening their maritime service capacity and professionalism through resident training programs and exportable Mobile Training Teams. Through the Excess Defense Articles and Foreign Military Sales programs, the Coast Guard transfers assets, associated sustainment, and training to partner nations to support their maritime missions.

## SUCCESS STORIES

**Reaching New Heights: C-27J Working Group.** In September 2018, a memorandum of understanding to formalize the Joint Cargo Aircraft Team, completed internal USCG staffing



C-27 Spartan Aircraft. (U.S. Coast Guard photo)

processes. The working group comprised of stakeholders from the U.S. Coast Guard, the U.S. Special Operations Command (SOCOM), and the Royal Australian Air Force intends that further formalization will facilitate information sharing between their two countries and produce more cost solutions for the Alenia C-27J aircraft. Currently, the group holds semi-annual and ad-hoc meetings around the world to

share best practices between partners and other global operators. Successful implementation of this MOU will strengthen the close security relationship between Australia and the U.S. and the knowledge and best practices produced through close cooperation saving the U.S. Coast Guard valuable time and resources. The MOU is currently pending approval from SOCOM and the Department of Defense.

The U.S. Coast Guard acquired 14 Alenia C-27J Spartan aircraft from the U.S. Air Force in 2013. In April 2016, the Coast Guard's first operational C-27J arrived in Air Station Sacramento, painted in the traditional Coast Guard scheme. As they enter service, the Spartans are fitted with weather radar and upgraded communications capabilities. The aircraft will join the service's medium range surveillance fleet, playing an essential role in surveillance, disaster response, drug interdictions, and search and rescue missions.

**Supporting Costa Rica.** In April 2018, then Vice Commandant Admiral Charles Michel joined Costa Rican President Luis Guillermo Solis, U.S. Ambassador Sharon Day, and other U.S. and Costa Rican principals at the commissioning ceremony for three Island Class patrol boats transferred to the Latin American nation. For the 32 Costa Rican Coast Guard members in attendance, the April 2018 event capped four months of training at the Coast Guard Yard in Baltimore, Maryland.



Luis Gustavo Mata Vega, Costa Rican minister of public security cuts a cake shaped like a 110-foot patrol boat October 13, 2017, to celebrate the transfer of two of the ships to Costa Rica. The four officials surrounding him are, from left: Coronel Martin Arias Araya, director of the Costa Rican Coast Guard; Vice Admiral. Sandra L. Stosz, U.S. Coast Guard Deputy Commandant for Mission Support; Ambassador Sharon Day, chief of mission for the U.S. embassy in Costa Rica; and Commander Brent Bergan, U.S. senior defense official and defense attaché to Costa Rica. (U.S. Coast Guard photo)

Coast Guard members from the International Affairs and Foreign Policy Directorate, Office of International Acquisition Programs, and the Coast Guard Yard worked tirelessly to execute the entire transfer process, facilitated under the Excess Defense Articles program, in thirteen months.

The transfer marked a new milestone in the U.S.-Costa Rican maritime security partnership. As a Security Sector Assistance Partner Nation, Costa Rica was the recipient of a comprehensive, multi-year maritime development effort from the U.S. Coast Guard to combat drug trafficking, illegal fishing, and other illicit activities in the region. Working closely with the Bureau of International Narcotics and Law Enforcement (INL), and other U.S. government stakeholders, the Coast Guard supported additional capacity-building initiatives including the deployment of mobile training teams, the exchange of subject matter experts, officer-to-officer mentoring, and continued technical assistance.

Two months after the transfer, in June 2018 the *CRCG LIBERADORES* conducted their own drug interdiction operations. A Coast Guard Maritime Advisor will arrive at the Costa Rican Coast Guard's Training Academy in FY 2019, serving under INL's auspices, exemplifying the Coast Guard ongoing commitment to our Latin American partner.

# COAST GUARD CYBER COMMAND



The Coast Guard Cyber Command identifies, protects against, and counters electromagnetic threats to the maritime interests of the United States; provides cyber capabilities that foster excellence in the execution of Coast Guard operations; supports Department of Homeland Security cyber missions, defends Coast Guard systems, and serves as the Service Component Command to the U.S. Cyber Command.

## FY 2018 HIGHLIGHTS

Based on the “U.S. Coast Guard Cyber Strategy,” in FY 2018 the Service continued to make significant strides towards building cyberspace as an operational domain. To date these include:

- Standing up the Coast Guard Cyber Command,
- Establishing the Network Operations and Security Center,
- Achieving initial operating capability for a deployable Cyber Protection Team built to Department of Defense, and
- Establishing the Office of Cyberspace Forces (CG-791).

## SUCCESS STORIES

**CGCYBER Network Operations and Security Center Standup.** CGCYBER’s Network Operations and Security Center (NOSC) attained initial operating capability in 2018, combining legacy Command, Control, Communications, Computers and Information Technology (C4IT) elements and strengthening cyberspace defense and operations. It is the command center for the operation and defense of Coast Guard networks, which will assure punctual, secure net-centric capabilities across strategic, operational, and tactical boundaries supporting all of the Service’s operational missions.

The NOSC combines organizational elements that conduct network operations and defense functions, specifically the Coast Guard Cyber Security Operations Center, Telecommunication and Information Systems Command (TISCOM) Enterprise Services Operations Division, and C4IT Service Center Centralized Service Desk. Network operations, treated as mission support over the past 25 years, are now understood across the joint force as operational functions.



(U.S. Coast Guard photo)

The -NOSC's 24/7 watch co-located with the DHS Enterprise Security Operations Center (ESOC), is located on the DHS campus at St. Elizabeths. The NOSC exercises command and control (C2) of Coast Guard cyberspace defensive and network operations, including coordination with DoD and DHS. CGCYBER's status as a service component of DoD's US Cyber Command, colocation with the ESOC, and CGCYBER's growing relationship with the DHS National Cybersecurity and Communications Integration Center positions the service as a unique bridge between DHS and DoD cyber operations. NOSC will be the center for C2 which includes directing operations of the new Coast Guard Cyber Protection Team, a deployable specialized force that will maneuver inside cyberspace to defeat adversaries.

**Establishment of the Cyber Marine Transportation System Integrated Product Team.** Cyber-related vulnerabilities create significant risk to the MTS, which encompasses over 25,000 miles of navigable waters and 3,700 marine terminals. Vessel and facility operators increasingly depend on cyber for navigation, communications, engineering, safety, cargo handling, and many other operational applications. Collectively, these technologies enable the MTS to operate with impressive reliability at a capacity that drives the U.S. economy and supports national defense and homeland security. Exploitation, misuse, or failure of cyber systems can disrupt vital trade activities and harm the environment and personnel.

As lead Sector Specific Agency responsible for the MTS, the Coast Guard provides oversight and governance of commercial industry identifying the procedures necessary for cyber incident response. This resulted in the Coast Guard chartering the Cyber Marine Transportation System Integrated Product Team (IPT) in June, 2018.

The IPT seeks to address MTS cyber-related infrastructure protection debilities with as little interference as possible. Alongside industry, the Coast Guard will develop and adopt appropriate corporate governance regimes to proactively manage cyber risks. This includes the development of third party consensus standards for Cyber Risk Management (CRM) as well as training for particular roles and responsibilities for industry personnel. Governance regimes should evaluate the use of regulation, policy and third party oversight. Specific internal Coast Guard objectives will be to create an MTS-centric cyber response policy, improve field-level personnel training and to develop a baseline set of cyber skill requirements, and reduce vulnerabilities inherent.



(U.S. Coast Guard photo)



# Appendix—PERFORMANCE MEASURE DEFINITIONS

## MARITIME PREVENTION

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## DEFENSE OPERATIONS

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Defense readiness of port security units (ready to deploy)	A-39

# Annual MTSA Facility Compliance Rate with Transportation Worker ID Credential Regulations

<b>MEASURE DESCRIPTION</b>	The percentage of the more than 3,400 maritime facilities subject to Maritime Transportation Security Act regulation, which are determined to be in compliance with Transportation Worker Identification Card regulations.
<b>USCG PROGRAM</b>	Maritime Prevention
<b>USCG MISSION</b>	Ports, Waterways and Coastal Security—Prevention Activities
<b>DHS ALIGNMENT</b>	Mission Area 2 - Secure and Manage Our Borders Goal 2.2 – Safeguard and Expedite Lawful Trade and Travel Sub-Goal 2.2.1 - Safeguard Key Nodes, Conveyances and Pathways
<b>SCOPE</b>	This measure reports results of Coast Guard inspections of maritime facilities subject to the Maritime Transportation Security Act (MTSA), where a notice of violation or civil penalty is recorded for Transportation Worker Identification Card (TWIC) infractions—workers subject to the regulation who do not have and display a valid TWIC card. More than 3,400 MTSA regulated facilities constitute a subset of all waterfront facilities. They are facilities that handle certain dangerous cargoes, liquid natural gas or transfer oil or hazardous materials in bulk; or receive foreign cargo vessels greater than 100 gross tons, U.S. cargo vessels greater than 100 gross tons carrying certain dangerous cargoes, or vessels carrying more than 150 passengers.
<b>DATA SOURCE</b>	The Security and Accountability for Every (SAFE) Port Act requires the Coast Guard to conduct at least two security inspections each year of maritime facilities subject to the Maritime Transportation Security Act (MTSA); one announced and one unannounced. Inspections include random sampling of workers subject to the TWIC regulation. These inspections, and any notices of violation or civil penalties issued, are documented in the Coast Guard Marine Information for Safety and Law Enforcement (MISLE) database.
<b>METHODOLOGY</b>	Results for a given year are the number of MTSA facilities that have not received notices of violation or civil penalties for Transportation Worker Identification Card (TWIC) infractions in the reporting period, expressed as a percentage of the total number of MTSA regulated facilities.
<b>VERIFICATION &amp; VALIDATION</b>	To ensure consistency and integrity, MISLE data entry is controlled through program logic and pull-down menus that require key elements, prohibit the inappropriate, and limit choices to pre-determined options. Comprehensive training and user guides help ensure reliability and the MISLE application itself contains embedded Help screens. Data verification and validation is also affected through regular records review by the Office of Investigations and Casualty Analysis (CG-INV) and Coast Guard Program managers. To ensure random sampling of workers subject to the TWIC regulation, statistical guidelines based on the size of the facility have been developed to aid inspectors.
<b>LIMITATIONS</b>	The measure is a proxy indicator of maritime security risk; it provides insight into the level of adherence to the TWIC requirement. It does not encompass facilities that have a waiver or exemption, including shipyards, public access facilities, military facilities and facilities that do not store minimum established amounts of dangerous cargoes. It is based on random sampling and the observed TWIC compliance or non-compliance at that point in time; some non-compliance may be unobserved or may emerge and be resolved in between scheduled inspections or unscheduled spot checks. Some infractions can be corrected on the spot, and issuance of a notice of violation or civil penalty will depend on inspector or Captain of the Port judgment of violation severity.

# Annual Number of Breaches at High Risk Maritime Facilities

<b>MEASURE DESCRIPTION</b>	The annual number of breaches of security at any of the more than 3,400 maritime facilities subject to Maritime Transportation Security Act regulation, which are investigated and confirmed incidents where no Transportation Security Incident has occurred, but established security measures have been circumvented, eluded or violated.
<b>USCG PROGRAM</b>	Maritime Prevention
<b>USCG MISSION</b>	Ports, Waterways and Coastal Security—Prevention Activities
<b>DHS ALIGNMENT</b>	Mission Area 1 - Prevent Terrorism and Enhance Security Goal 1.3 - Reduce Risk to Critical Infrastructure, Key Leadership and Events Sub-Goal 1.3.1 - Enhance Security for Critical Infrastructure from Terrorism & Criminal Activity
<b>SCOPE</b>	This measure reports breach of security incidents at facilities subject to the Maritime Transportation Security Act (MTSA) where no Transportation Security Incident has occurred, but established security measures have been circumvented, eluded or violated. MTSA facilities that discover such security incidents must report them to the National Response Center. More than 3,400 MTSA regulated facilities constitute subset of all waterfront facilities. They are facilities that handle certain dangerous cargoes, liquid natural gas or transfer oil or hazardous materials in bulk; or receive foreign cargo vessels greater than 100 gross tons, U.S. cargo vessels greater than 100 gross tons carrying certain dangerous cargoes, or vessels carrying more than 150 passengers.
<b>DATA SOURCE</b>	Qualified Coast Guard Inspectors investigate incidents reported to the National Response Center by MTSA regulated facilities where security measures have been circumvented, eluded or violated. Verified incidents are documented in the Coast Guard Marine Information for Safety and Law Enforcement (MISLE) database as a Breach of Security Investigation.
<b>METHODOLOGY</b>	Results for a given year are the total number of confirmed breaches of security that occurred over the past 12-months at any of the more than 3,400 MTSA regulated facilities.
<b>VERIFICATION &amp; VALIDATION</b>	To ensure consistency and integrity, MISLE data entry is controlled through program logic and pull-down menus that require key elements, prohibit the inappropriate, and limit choices to pre-determined options. Comprehensive training and user guides help ensure reliability and the MISLE application itself contains embedded Help screens. Data verification and validation is also affected through regular records review by the Office of Investigations and Casualty Analysis (CG-INV) and Coast Guard Program managers.
<b>LIMITATIONS</b>	The measure is a proxy indicator of maritime security risk, which Coast Guard inspectors and facility owners use to collaboratively assess and strengthen security regimes. Reporting requirements are not applicable to facilities that have a waiver or exemption, including shipyards, public access facilities, military facilities and facilities that do not store minimum established amounts of dangerous cargoes. Some reportable incidents may not be reported and some reports are delayed in reaching the Coast Guard; current results are therefore likely to be understated and revised upwards in the future, with the greatest impact affecting recent quarters.

## 3-yr Average Number of Serious Marine Incidents

<b>MEASURE DESCRIPTION</b>	The 3-year average number of Serious Marine Incidents, which are defined by 46 CFR 4.03-2 as any marine casualties or accidents that include death, injury requiring professional treatment beyond first aid, reportable property damage greater than \$100,000, actual or constructive loss of certain vessels, discharge of oil of 10,000 gallons or more, or a discharge of a reportable quantity of a hazardous substance.
<b>USCG PROGRAM</b>	Maritime Prevention
<b>USCG MISSION</b>	Marine Safety
<b>DHS ALIGNMENT</b>	Mission Area 5 - Strengthen National Preparedness and Resilience Goal 5.2 - Mitigate Hazards and Vulnerabilities Sub-Goal 5.2.3 - Prevent Maritime Incidents by Establishing and Ensuring Compliance
<b>SCOPE</b>	The measure reports the 3-year average number of serious marine incidents. Owners, agents, masters, operators or persons in charge are required by Federal regulation to notify the nearest Coast Guard office of any serious marine incidents. These are defined in 46 CFR 4.03-2 as any marine casualty or accident that includes death, injury requiring professional treatment beyond first aid, reportable property damage greater than \$100,000, actual or constructive loss of certain vessels, discharge of oil of 10,000 gallons or more, or a discharge of a reportable quantity of a hazardous substance.
<b>DATA SOURCE</b>	Reports of Serious Marine Incidents received by Coast Guard offices are investigated and recorded in the Coast Guard's Marine Information for Safety and Law Enforcement (MISLE) database.
<b>METHODOLOGY</b>	Results for a given year are the annualized average of total serious marine incidents for the most recent three years.
<b>VERIFICATION &amp; VALIDATION</b>	To ensure consistency and integrity, MISLE data entry is controlled through program logic and pull-down menus that require key elements, prohibit the inappropriate, and limit choices to pre-determined options. Comprehensive training and user guides help ensure reliability and the application itself contains embedded Help screens. MISLE system quality control, and data verification and validation, is affected through regular review of records by the Coast Guard Office of Investigations and Analysis.
<b>LIMITATIONS</b>	Some incidents are never reported and some delayed in reaching the Coast Guard; previously published data is therefore subject to revision—with the greatest impact affecting recent quarters. Deaths and injuries include crewmembers or employees aboard U.S. commercial vessels, but not those aboard foreign flag vessels; and commercial passengers on U.S. vessels operating in any waters and foreign vessels in U.S. waters. Deaths, disappearances or injuries determined to be the result of natural causes or intentional acts—such as heart attack, altercation, or the like—are excluded. Passenger casualties associated with diving are excluded as well. Serious marine incidents arising from recreational craft, government vessels, fixed platforms, pipelines or other non-Coast Guard regulated facilities are also excluded. A 3-year average is used to mitigate year-to-year variation and ensure any near-term trend is more apparent.

# Annual Number of Commercial Mariner Deaths and Critical, Serious & Severe Injuries

<b>MEASURE DESCRIPTION</b>	The annual number of commercial mariner fatalities and critical, serious or severe injuries.
<b>USCG PROGRAM</b>	Maritime Prevention
<b>USCG MISSION</b>	Marine Safety
<b>DHS ALIGNMENT</b>	Mission Area 5 - Strengthen National Preparedness and Resilience Goal 5.2 - Mitigate Hazards and Vulnerabilities Sub-Goal 5.2.3 - Prevent Maritime Incidents by Establishing and Ensuring Compliance
<b>SCOPE</b>	The measure reports the annual number of commercial mariner fatalities and critical, serious or severe injuries. Owners, agents, masters, operators or persons in charge are required by Federal regulation to notify the nearest Coast Guard office of any loss of life or injury that requires professional medical treatment beyond first aid. Included are casualties of crewmembers or employees aboard U.S. commercial vessels. Casualties of commercial passengers, crewmembers or employees aboard foreign vessels, and those from recreational craft, government vessels, fixed platforms and facilities are excluded. Minor and moderate injuries, and deaths, disappearances or injuries determined to be a result of natural causes or intentional acts—such as heart attack, altercation, or the like—are also excluded.
<b>DATA SOURCE</b>	Notices of mariner casualties received by Coast Guard offices are investigated and recorded in the Coast Guard's Marine Information for Safety and Law Enforcement (MISLE) database.
<b>METHODOLOGY</b>	Results for a given year are the sum total of all applicable commercial mariner deaths, disappearances and critical, serious and severe injuries for the previous four quarters.
<b>VERIFICATION &amp; VALIDATION</b>	To ensure consistency and integrity, MISLE data entry is controlled through program logic and pull-down menus that require key elements, prohibit the inappropriate, and limit choices to pre-determined options. Comprehensive training and user guides help ensure reliability the application itself contains embedded Help screens. MISLE system quality control, and data verification and validation, is effected through regular review of records by the Coast Guard Office of Investigations and Analysis.
<b>LIMITATIONS</b>	Some incidents are never reported and some delayed in reaching the Coast Guard; previously published data is therefore subject to revision—with the greatest impact affecting recent quarters.

## 3-yr Average Number of Commercial Mariner Deaths and Critical, Serious & Severe Injuries

**MEASURE DESCRIPTION** The 3-year average annual number of commercial mariner fatalities and critical, serious or severe injuries.

**USCG PROGRAM** Maritime Prevention

**USCG MISSION** Marine Safety

**DHS ALIGNMENT** Mission Area 5 - Strengthen National Preparedness and Resilience  
Goal 5.2 - Mitigate Hazards and Vulnerabilities  
Sub-Goal 5.2.3 - Prevent Maritime Incidents by Establishing and Ensuring Compliance

**SCOPE** The measure reports the 3-year average annual number of commercial mariner fatalities and critical, serious or severe injuries. Owners, agents, masters, operators or persons in charge are required by Federal regulation to notify the nearest Coast Guard office of any loss of life or injury that requires professional medical treatment beyond first aid. Included are casualties of crewmembers or employees aboard U.S. commercial vessels. Casualties of commercial passengers, crewmembers or employees aboard foreign vessels, and those from recreational craft, government vessels, fixed platforms and facilities are excluded. Minor and moderate injuries, and deaths, disappearances or injuries determined to be a result of natural causes or intentional acts—such as heart attack, altercation, or the like—are also excluded.

**DATA SOURCE** Notices of mariner casualties received by Coast Guard offices are investigated and recorded in the Coast Guard's Marine Information for Safety and Law Enforcement (MISLE) database.

**METHODOLOGY** Results for a given year are the annualized average number of applicable commercial mariner deaths, disappearances and critical, serious and severe injuries for the most recent three years.

**VERIFICATION & VALIDATION** To ensure consistency and integrity, MISLE data entry is controlled through program logic and pull-down menus that require key elements, prohibit the inappropriate, and limit choices to pre-determined options. Comprehensive training and user guides help ensure reliability the application itself contains embedded Help screens. MISLE system quality control, and data verification and validation, is effected through regular review of records by the Coast Guard Office of Investigations and Analysis.

**LIMITATIONS** Some incidents are never reported and some delayed in reaching the Coast Guard; previously published data is therefore subject to revision—with the greatest impact affecting recent quarters. A 3-year average is used to mitigate year-to-year variation and ensure any near-term trend is more apparent.

# Annual Number of Commercial Passenger Deaths and Critical, Serious & Severe Injuries

<b>MEASURE DESCRIPTION</b>	The annual number of commercial passenger fatalities and critical, serious or severe injuries.
<b>USCG PROGRAM</b>	Maritime Prevention
<b>USCG MISSION</b>	Marine Safety
<b>DHS ALIGNMENT</b>	Mission Area 5 - Strengthen National Preparedness and Resilience Goal 5.2 - Mitigate Hazards and Vulnerabilities Sub-Goal 5.2.3 - Prevent Maritime Incidents by Establishing and Ensuring Compliance
<b>SCOPE</b>	The measure reports the annual number of commercial passenger fatalities and critical, serious or severe injuries. Owners, agents, masters, operators or persons in charge are required by Federal regulation to notify the nearest Coast Guard office of any loss of life or injury that requires professional medical treatment beyond first aid. Included are commercial passengers on U.S. vessels operating in any waters and foreign vessels in U.S. waters. Casualties of crewmembers or employees, and those from recreational craft, government vessels, fixed platforms and facilities are excluded. Minor and moderate injuries, and deaths, disappearances or injuries determined to be a result of natural causes or intentional acts—such as heart attack, altercation, or the like—are also excluded. Passenger casualties associated with diving are excluded as well.
<b>DATA SOURCE</b>	Notices of passenger casualties received by Coast Guard offices are investigated and recorded in the Coast Guard's Marine Information for Safety and Law Enforcement (MISLE) database.
<b>METHODOLOGY</b>	Results for a given year are the sum total of all applicable commercial passenger deaths, disappearances and critical, serious and severe injuries for the previous four quarters.
<b>VERIFICATION &amp; VALIDATION</b>	To ensure consistency and integrity, MISLE data entry is controlled through program logic and pull-down menus that require key elements, prohibit the inappropriate, and limit choices to pre-determined options. Comprehensive training and user guides help ensure reliability the application itself contains embedded Help screens. MISLE system quality control, and data verification and validation, is effected through regular review of records by the Coast Guard Office of Investigations and Analysis.
<b>LIMITATIONS</b>	Some incidents are never reported and some delayed in reaching the Coast Guard; previously published data is therefore subject to revision—with the greatest impact affecting recent quarters.

## 3-yr Average Number of Commercial Passenger Deaths and Critical, Serious & Severe Injuries

**MEASURE DESCRIPTION** The 3-year average annual number of commercial passenger fatalities and critical, serious or severe injuries.

**USCG PROGRAM** Maritime Prevention

**USCG MISSION** Marine Safety

**DHS ALIGNMENT** Mission Area 5 - Strengthen National Preparedness and Resilience  
Goal 5.2 - Mitigate Hazards and Vulnerabilities  
Sub-Goal 5.2.3 - Prevent Maritime Incidents by Establishing and Ensuring Compliance

**SCOPE** The measure reports the 3-year average annual number of commercial passenger fatalities and critical, serious or severe injuries. Owners, agents, masters, operators or persons in charge are required by Federal regulation to notify the nearest Coast Guard office of any loss of life or injury that requires professional medical treatment beyond first aid. Included are commercial passengers on U.S. vessels operating in any waters and foreign vessels in U.S. waters. Casualties of crewmembers or employees, and those from recreational craft, government vessels, fixed platforms and facilities are excluded. Minor and moderate injuries, and deaths, disappearances or injuries determined to be a result of natural causes or intentional acts—such as heart attack, altercation, or the like—are also excluded. Passenger casualties associated with diving are excluded as well.

**DATA SOURCE** Notices of passenger casualties received by Coast Guard offices are investigated and recorded in the Coast Guard's Marine Information for Safety and Law Enforcement (MISLE) database.

**METHODOLOGY** Results for a given year are the annualized average number of applicable commercial passenger deaths, disappearances and critical, serious and severe injuries for the most recent three years.

**VERIFICATION & VALIDATION** To ensure consistency and integrity, MISLE data entry is controlled through program logic and pull-down menus that require key elements, prohibit the inappropriate, and limit choices to pre-determined options. Comprehensive training and user guides help ensure reliability the application itself contains embedded Help screens. MISLE system quality control, and data verification and validation, is effected through regular review of records by the Coast Guard Office of Investigations and Analysis.

**LIMITATIONS** Some incidents are never reported and some delayed in reaching the Coast Guard; previously published data is therefore subject to revision—with the greatest impact affecting recent quarters. A 3-year average is used to mitigate year-to-year variation and ensure any near-term trend is more apparent.

# Annual Number of Recreational Boating Deaths

<b>MEASURE DESCRIPTION</b>	The annual number of recreational boating fatalities.
<b>USCG PROGRAM</b>	Maritime Prevention
<b>USCG MISSION</b>	Marine Safety
<b>DHS ALIGNMENT</b>	Mission Area 5 - Strengthen National Preparedness and Resilience Goal 5.2 - Mitigate Hazards and Vulnerabilities Sub-Goal 5.2.3 - Prevent Maritime Incidents by Establishing and Ensuring Compliance
<b>SCOPE</b>	The measure reports the annual number of recreational boating deaths. 33 CFR 173.55 requires operators of vessels used for recreational purposes to file a Boating Accident Report when a person dies, is injured and requires medical treatment beyond first aid or disappears under circumstances that indicate death or injury. Included are deaths caused by or attributed to a vessel, its equipment or appendages. Also included are swimming deaths due to carbon monoxide exposure; electrocution due to improper connection to shore power; a swimmer unable to get back to a drifting vessel not properly anchored, moored or docked; and persons struck by a vessel or associated equipment. Deaths or disappearances determined to be the result of natural causes or intentional acts are excluded as well.
<b>DATA SOURCE</b>	Boating Accident Reports are recorded in the Coast Guard's Boating Accident Report Database (BARD) System.
<b>METHODOLOGY</b>	Results for a given fiscal year are the sum total of all applicable recreational boating deaths for the previous four quarters. Only deaths recorded in the BARD database are counted. A one percent correction is added to compensate for under-reporting.
<b>VERIFICATION &amp; VALIDATION</b>	To ensure boating casualties are accurately captured, the Coast Guard Office of Auxiliary and Boating Safety (CG-BSX) crosschecks BARD data with incidents reported in the Coast Guard Marine Information for Safety and Law Enforcement (MISLE) database and recreational boating casualties reported in media announcements and articles provided by a news clipping service.
<b>LIMITATIONS</b>	Some incidents are never reported and some delayed in reaching the Coast Guard; previously published data is therefore subject to revision—with the greatest impact affecting recent quarters.

# 3-yr Average Number of Recreational Boating Deaths

<b>MEASURE DESCRIPTION</b>	The 3-year average annual number of recreational boating fatalities.
<b>USCG PROGRAM</b>	Maritime Prevention
<b>USCG MISSION</b>	Marine Safety
<b>DHS ALIGNMENT</b>	Mission Area 5 - Strengthen National Preparedness and Resilience Goal 5.2 - Mitigate Hazards and Vulnerabilities Sub-Goal 5.2.3 - Prevent Maritime Incidents by Establishing and Ensuring Compliance
<b>SCOPE</b>	The measure reports the 3-year average annual number of recreational boating deaths. 33 CFR 173.55 requires operators of vessels used for recreational purposes to file a Boating Accident Report when a person dies, is injured and requires medical treatment beyond first aid or disappears under circumstances that indicate death or injury. Included are deaths caused by or attributed to a vessel, its equipment or appendages. Also included are swimming deaths due to carbon monoxide exposure; electrocution due to improper connection to shore power; a swimmer unable to get back to a drifting vessel not properly anchored, moored or docked; and persons struck by a vessel or associated equipment. Deaths or disappearances determined to be the result of natural causes or intentional acts are excluded as well.
<b>DATA SOURCE</b>	Boating Accident Reports are recorded in the Coast Guard's Boating Accident Report Database (BARD) System.
<b>METHODOLOGY</b>	Results for a given fiscal year are the average number of all applicable recreational boating deaths and injuries for the most recent three years. Only casualties recorded in the BARD database are counted. A one percent correction is added to compensate for under-reporting.
<b>VERIFICATION &amp; VALIDATION</b>	To ensure boating casualties are accurately captured, the Coast Guard Office of Auxiliary and Boating Safety (CG-BSX) crosschecks BARD data with incidents reported in the Coast Guard Marine Information for Safety and Law Enforcement (MISLE) database and recreational boating casualties reported in media announcements and articles provided by a news clipping service.
<b>LIMITATIONS</b>	Some incidents are never reported and some delayed in reaching the Coast Guard; previously published data is therefore subject to revision—with the greatest impact affecting recent quarters. A 3-year average is used to mitigate year-to-year variation and ensure any near-term trend is more apparent.

# Annual Number of Chemical Discharge Incidents

<b>MEASURE DESCRIPTION</b>	The annual number of chemical discharge incidents where a reportable quantity of a hazardous substance is discharged into navigable waters of the United States.
<b>USCG PROGRAM</b>	Maritime Prevention
<b>USCG MISSION</b>	Marine Environmental Protection—Prevention Activities
<b>DHS ALIGNMENT</b>	Mission Area 5 - Strengthen National Preparedness and Resilience Goal 5.2 - Mitigate Hazards and Vulnerabilities Sub-Goal 5.2.3 - Prevent Maritime Incidents by Establishing and Ensuring Compliance
<b>SCOPE</b>	The measure reports the annual number of chemical discharge incidents where a reportable quantity of a hazardous substance is discharged into U.S. navigable waters. 40 CFR 300 requires vessel or facility operators to report discharges of any hazardous substance that equals or exceeds reportable quantities listed in 40 CFR 302. Discharges onto land, into the air, or into enclosed spaces are excluded. Discharges from non-maritime sources such as aircraft, trucks and other vehicles, rail cars and rail equipment, U.S. Navy and other public vessels, fixed platforms and pipelines are also excluded. Discharges from unspecified, unclassified and unknown sources are excluded as well.
<b>DATA SOURCE</b>	Notices of chemical discharge incidents received by Coast Guard offices are investigated and recorded in the Coast Guard’s Marine Information for Safety and Law Enforcement (MISLE) database.
<b>METHODOLOGY</b>	Results for a given fiscal year are the sum total of all applicable chemical discharge incidents for the previous four quarters where a reportable quantity of a hazardous substance is discharged into navigable waters of the United States.
<b>VERIFICATION &amp; VALIDATION</b>	To ensure consistency and integrity, MISLE data entry is controlled through program logic and pull-down menus that require key elements, prohibit the inappropriate, and limit choices to pre-determined options. Comprehensive training and user guides help ensure reliability the application itself contains embedded Help screens. MISLE system quality control, and data verification and validation, is effected through regular review of records by the Coast Guard Office of Investigations and Analysis.
<b>LIMITATIONS</b>	Some incidents are never reported and some delayed in reaching the Coast Guard; previously published data is therefore subject to revision—with the greatest impact affecting recent quarters.

## 3-yr Average Number of Chemical Discharge Incidents per 100 Million Tons Shipped

<b>MEASURE DESCRIPTION</b>	The 3-year average annual number of chemical discharge incidents where a reportable quantity of a hazardous substance is discharged into navigable waters of the United States per 100 million short tons of Chemical and Chemical Products shipped in U.S. waters.
<b>USCG PROGRAM</b>	Maritime Prevention
<b>USCG MISSION</b>	Marine Environmental Protection—Prevention Activities
<b>DHS ALIGNMENT</b>	Mission Area 5 - Strengthen National Preparedness and Resilience Goal 5.2 - Mitigate Hazards and Vulnerabilities Sub-Goal 5.2.3 - Prevent Maritime Incidents by Establishing and Ensuring Compliance
<b>SCOPE</b>	The measure reports the 3-year average annual number of chemical discharge incidents, where a reportable quantity of a hazardous substance is discharged into U.S. navigable waters, per 100 million short tons of Chemical and Chemical Products shipped. 40 CFR 300 requires vessel or facility operators to report discharges of any hazardous substance that equals or exceeds reportable quantities listed in 40 CFR 302. Discharges onto land, into the air, or into enclosed spaces are excluded. Discharges from non-maritime sources such as aircraft, trucks and other vehicles, rail cars and rail equipment, U.S. Navy and other public vessels, fixed platforms and pipelines are also excluded. Discharges from unspecified, unclassified and unknown sources are excluded as well.
<b>DATA SOURCE</b>	Notices of chemical discharge incidents received by Coast Guard offices are investigated and recorded in the Coast Guard's Marine Information for Safety and Law Enforcement (MISLE) database. Data on chemical and chemical products shipped in U.S. waters is obtained from the Army Corps of Engineers, Waterborne Commerce of the United States. Shipping statistics for a given year are not generally available until December of the following year; the measure uses a simple least-squares projection of the most recent three years of data.
<b>METHODOLOGY</b>	Results for a given fiscal year are the average over the most recent three years of the number of chemical discharge incidents per 100 million short tons of Chemical and Chemical Products shipped.
<b>VERIFICATION &amp; VALIDATION</b>	To ensure consistency and integrity, MISLE data entry is controlled through program logic and pull-down menus that require key elements, prohibit the inappropriate, and limit choices to pre-determined options. Comprehensive training and user guides help ensure reliability the application itself contains embedded Help screens. MISLE system quality control, and data verification and validation, is effected through regular review of records by the Coast Guard's Office of Investigations and Analysis.
<b>LIMITATIONS</b>	Some incidents are never reported and some delayed in reaching the Coast Guard; previously published data is therefore subject to revision—with the greatest impact affecting recent quarters. A 3-year average is used to mitigate year-to-year variation and ensure any near-term trend is more apparent. Current year shipping statistics are derived from a simple least-squares projection of recent past data and likely differs from actual levels. The number of chemical discharge incidents is reported as proportionate to chemical and chemical product shipping, but not all chemical discharges are transit related.

# Annual Number of Oil Spills >100 Gallons

**MEASURE DESCRIPTION** The annual number of oil spills greater than 100 gallons discharged into navigable waters of the United States.

**USCG PROGRAM** Maritime Prevention

**USCG MISSION** Marine Environmental Protection—Prevention Activities

**DHS ALIGNMENT** Mission Area 5 - Strengthen National Preparedness and Resilience  
Goal 5.2 - Mitigate Hazards and Vulnerabilities  
Sub-Goal 5.2.3 - Prevent Maritime Incidents by Establishing and Ensuring Compliance

**SCOPE** The measure reports the annual number of oil spills greater than 100 gallons discharged into U.S. navigable waters. 40 CFR 300 requires vessel or facility operators to report any discharge of oil or oil products that cause a sheen, discoloration, sludge, or emulsion. Discharges onto land, into the air, or into enclosed spaces are excluded. Discharges from non-maritime sources such as aircraft, trucks and other vehicles, rail cars and rail equipment, U.S. Navy and other public vessels, fixed platforms and pipelines are also excluded. Discharges from unspecified, unclassified and unknown sources are excluded as well.

**DATA SOURCE** Notices of reportable oil discharge incidents received by Coast Guard offices are investigated and recorded in the Coast Guard's Marine Information for Safety and Law Enforcement (MISLE) database.

**METHODOLOGY** Results for a given fiscal year are the sum total of all applicable oil spills for the previous four quarters where more than 100 gallons is discharged into navigable waters of the United States.

**VERIFICATION & VALIDATION** To ensure consistency and integrity, MISLE data entry is controlled through program logic and pull-down menus that require key elements, prohibit the inappropriate, and limit choices to pre-determined options. Comprehensive training and user guides help ensure reliability the application itself contains embedded Help screens. MISLE system quality control, and data verification and validation, is effected through regular review of records by the U.S. Coast Guard Office of Investigations and Analysis.

**LIMITATIONS** Some incidents are never reported and some delayed in reaching the Coast Guard; previously published data is therefore subject to revision—with the greatest impact affecting recent quarters.

## 3-yr Average Number of Oil Spills per 100 Million Short

<b>MEASURE DESCRIPTION</b>	The 3-year average annual number of oil spills greater than 100 gallons discharged into navigable waters of the United States per 100 million short tons of Oil and Oil Products shipped in U.S. waters.
<b>USCG PROGRAM</b>	Maritime Prevention
<b>USCG MISSION</b>	Marine Environmental Protection—Prevention Activities
<b>DHS ALIGNMENT</b>	Mission Area 5 - Strengthen National Preparedness and Resilience Goal 5.2 - Mitigate Hazards and Vulnerabilities Sub-Goal 5.2.3 - Prevent Maritime Incidents by Establishing and Ensuring Compliance
<b>SCOPE</b>	The measure reports the 3-year average annual number of oil spills greater than 100 gallons discharged into navigable waters of the United States per 100 million short tons of Oil and Oil Products shipped in U.S. waters. 40 CFR 300 requires vessel or facility operators to report any discharge of oil or oil products that cause a sheen, discoloration, sludge, or emulsion. Discharges onto land, into the air, or into enclosed spaces are excluded. Discharges from non-maritime sources such as aircraft, trucks and other vehicles, rail cars and rail equipment, U.S. Navy and other public vessels, fixed platforms and pipelines are also excluded. Discharges from unspecified, unclassified and unknown sources are excluded as well.
<b>DATA SOURCE</b>	Notices of reportable oil spills received by Coast Guard offices are investigated and recorded in the Coast Guard's Marine Information for Safety and Law Enforcement (MISLE) database. Data on oil and oil products shipped in U.S. waters is obtained from the Army Corps of Engineers, Waterborne Commerce of the United States. Shipping statistics for a given year are not generally available until December of the following year; the measure uses a simple least-squares projection of the most recent three years of data.
<b>METHODOLOGY</b>	Results for a given fiscal year are the average over the most recent three years of the number of oil spills greater than 100 gallons per 100 million short tons of Oil and Oil Products shipped.
<b>VERIFICATION &amp; VALIDATION</b>	To ensure consistency and integrity, MISLE data entry is controlled through program logic and pull-down menus that require key elements, prohibit the inappropriate, and limit choices to pre-determined options. Comprehensive training and user guides help ensure reliability the application itself contains embedded Help screens. MISLE system quality control, and data verification and validation, is effected through regular review of records by the Coast Guard Office of Investigations and Analysis.
<b>LIMITATIONS</b>	Some incidents are never reported and some delayed in reaching the Coast Guard; previously published data is therefore subject to revision—with the greatest impact affecting recent quarters. A 3-year average is used to mitigate year-to-year variation and ensure any near-term trend is more apparent. Current year shipping statistics are derived from a simple least-squares projection of recent past data and likely differs from actual levels. The number of oil spills greater than 100 gallons is reported as proportionate to oil and oil product shipping, but not all oil spills are transit related.

# Availability of Maritime Navigation Aids

<b>MEASURE DESCRIPTION</b>	The percentage of time Federal Short-Range Aids to Navigation were available and performing their specified functions, where an aid to navigation is counted as not being available from the initial time a discrepancy is reported until the time the discrepancy is corrected.
<b>USCG PROGRAM</b>	Marine Transportation System Management
<b>USCG MISSION</b>	Aids to Navigation
<b>DHS ALIGNMENT</b>	Mission Area 2 - Secure and Manage Our Borders Goal 2.2 – Safeguard and Expedite Lawful Trade and Travel Sub-Goal 2.2.2 – Manage the Risk of People and Goods in Transit
<b>SCOPE</b>	The measure reports the hours Federal Short Range Aids to Navigation were available as a percent of total hours they were expected to be available. Short-range aids to navigation are those intended for use within the visual, audible or radar range of the mariner; which term encompasses lighted and unlighted beacons, ranges, leading lights, buoys, and their associated sound signals. The measure includes all short-range aids to navigation in the Coast Guard inventory on the day a report is run.
<b>DATA SOURCE</b>	The Integrated Aids to Navigation Information System (I-ATONIS) is the official system used by the Coast Guard for information relating to short-range aids to navigation.
<b>METHODOLOGY</b>	Results for a given year are the total hours that all Federal Short Range Aids to Navigation were available, expressed as a percentage of total hours they were expected to be available. Expected availability is the total number of federal aids deployed on the day a report is run times the number of days in the reporting period, multiplied by 24 hours. Availability is determined by subtracting from expected hours, the total time any of these Aids were recorded as not available, which is the time between the initial reporting of a discrepancy until the time the discrepancy is corrected.
<b>VERIFICATION &amp; VALIDATION</b>	To ensure consistency and integrity, data entry in the I-ATONIS system is limited to specially trained personnel in each District. I-ATONIS data is also subject to review by Unit and District personnel, and by Coast Guard and National Ocean Service managers in the process of generating local Notices to Mariners.
<b>LIMITATIONS</b>	This measure provides an overall assessment of availability across the entire system of Federal Short-Range Aids to Navigation; it does not distinguish any lack of availability by significance. An individual Aid to Navigation can be distinguished by its navigational significance, which is influenced by factors such as its position and function in a waterway, the waterway importance, traffic density, climate and the mix and coverage of other aids in the system. A temporary change to a short-range aid to navigation is not considered a discrepancy.

# Percent of Time High-Priority Waterways in Great Lakes and Eastern Seaboard Open During Ice Season

<b>MEASURE DESCRIPTION</b>	The percent of time Tier One Waterways, in the Great Lakes and along the eastern seaboard, are open to vessel transits during the icebreaking season. Tier One waterways are those connecting waterways of the Marine Transportation System determined to be the highest-priority due to their geographical location or importance of cargo to public health and safety.
<b>USCG PROGRAM</b>	Marine Transportation System Management
<b>USCG MISSION</b>	Ice Operations
<b>DHS ALIGNMENT</b>	Mission Area 2 - Secure and Manage Our Borders Goal 2.2 – Safeguard and Expedite Lawful Trade and Travel Sub-Goal 2.2.2 – Manage the Risk of People and Goods in Transit
<b>SCOPE</b>	The measure reports the percentage of time Tier One waterways in the Great Lakes and along the eastern seaboard are not closed to vessel transits due to ice-related conditions during the icebreaking season. Icebreaking operations in the Great Lakes and waterways along the eastern seaboard are generally conducted during a January to April season. Tier One waterways are those identified and categorized as such due to their geographical location or importance of cargo to public health and safety. A closure is defined as an event or condition preventing vessels from transiting a waterway, including ice-related waterway restrictions or Captain of the Port limitations.
<b>DATA SOURCE</b>	Data is obtained from end-of-season reports submitted to Coast Guard Headquarters by 01 July each year.
<b>METHODOLOGY</b>	Results for a given year are total hours Tier One Waterways are not closed due to ice-related conditions during the icebreaking season, expressed as a percentage of total waterway hours. Total waterway hours are determined by multiplying the number of Tier One Waterways by ice season days times 24 hours. Total hours Tier One Waterways were closed is ice-related closures reported in days times 24, plus ice-related waterway closures reported in hours, plus ice-related waterway restrictions or Captain of the Port limitations in hours.
<b>VERIFICATION &amp; VALIDATION</b>	Icebreaking and waterway closure data provided in end-of-season reports are reviewed for accuracy and consistency by Unit and District staff and by the Office of Waterways and Ocean Policy (CG-WWM) at Coast Guard Headquarters.
<b>LIMITATIONS</b>	The measure is a proxy gauge of navigational mobility on the Great Lakes and along the eastern seaboard during the winter icebreaking season; it records closures due to ice only for Tier One Waterways. Results are sensitive to the severity of winter weather, and do not necessarily reflect Coast Guard performance; an exceptionally severe winter may produce more closures despite impressive Coast Guard icebreaking performance.

# Annual Number of Navigational Accidents

<b>MEASURE DESCRIPTION</b>	The annual number of distinct collision, allision and grounding events involving a commercial vessel, which includes marine casualties where two or more vessels collide, a vessel strikes a stationary vessel or object, or a vessel runs onto a shore, reef or bottom of a body of water.
<b>USCG PROGRAM</b>	Marine Transportation System Management
<b>USCG MISSION</b>	Aids to Navigation
<b>DHS ALIGNMENT</b>	Mission Area 2 - Secure and Manage Our Borders Goal 2.2 – Safeguard and Expedite Lawful Trade and Travel Sub-Goal 2.2.2 – Manage the Risk of People and Goods in Transit
<b>SCOPE</b>	46 CFR 4.05-10 requires the owner, agent, master, operator, or person in charge to notify the Coast Guard of any occurrence involving a vessel that results in a Collision, Allision or Grounding. Only distinct incidents involving a commercial vessel are counted; incidents that involve only non-commercial or recreational vessels are excluded. A vessel striking one or more other vessels, at least one of which is a commercial vessel, is counted as a distinct Collision event. A commercial vessel striking one or more stationary vessels or a stationary object is counted as a distinct Allision event. A distinct Grounding event might include a tug and a perhaps several barges in tow running onto a shore, reef or bottom of a body of water.
<b>DATA SOURCE</b>	Marine casualties are recorded in the Coast Guard’s Marine Information for Safety and Law Enforcement (MISLE) database.
<b>METHODOLOGY</b>	Results for a given year are the annualized total number of distinct Collision, Allision and Grounding events.
<b>VERIFICATION &amp; VALIDATION</b>	To ensure consistency and integrity, MISLE data entry is controlled through program logic and pull-down menus that require key elements, prohibit the inappropriate, and limit choices to pre-determined options. Comprehensive training and user guides help ensure reliability the application itself contains embedded Help screens. MISLE system quality control, and data verification and validation, is effected through regular review of records by the Coast Guard’s Office of Investigations and Analysis.
<b>LIMITATIONS</b>	Some incidents are never reported and some delayed in reaching the Coast Guard; previously published data is therefore subject to revision—with the greatest impact affecting recent quarters. The number of collisions, allisions and groundings is a proxy indicator of adverse impacts to maritime mobility; they can result in waterway closures and disruptions to maritime commerce. They may also result in personnel casualties, pollution incidents and property losses. Minimizing their occurrence is an objective of the Coast Guard Marine Transportation System Management Program, though their cause is often not related to a navigation or waterways management concern.

## 5-yr Average Number of Navigational Accidents

<b>MEASURE DESCRIPTION</b>	The 5-year average annual number of distinct collision, allision and grounding events involving a commercial vessel, which includes marine casualties where two or more vessels collide, a vessel strikes a stationary vessel or object, or a vessel runs onto a shore, reef or bottom of a body of water.
<b>USCG PROGRAM</b>	Marine Transportation System Management
<b>USCG MISSION</b>	Aids to Navigation
<b>DHS ALIGNMENT</b>	Mission Area 2 - Secure and Manage Our Borders Goal 2.2 – Safeguard and Expedite Lawful Trade and Travel Sub-Goal 2.2.2 – Manage the Risk of People and Goods in Transit
<b>SCOPE</b>	46 CFR 4.05-10 requires the owner, agent, master, operator, or person in charge to notify the Coast Guard of any occurrence involving a vessel that results in a Collision, Allision or Grounding. Only distinct incidents involving a commercial vessel are counted; incidents that involve only non-commercial or recreational vessels are excluded. A vessel striking one or more other vessels, at least one of which is a commercial vessel, is counted as a distinct Collision event. A commercial vessel striking one or more stationary vessels or a stationary object is counted as a distinct Allision event. A distinct Grounding event might include a tug and a perhaps several barges in tow running onto a shore, reef or bottom of a body of water.
<b>DATA SOURCE</b>	Marine casualties are recorded in the Coast Guard’s Marine Information for Safety and Law Enforcement (MISLE) database.
<b>METHODOLOGY</b>	Results for a given year are the annualized average number of distinct Collision, Allision and Grounding events for the most recent five years.
<b>VERIFICATION &amp; VALIDATION</b>	To ensure consistency and integrity, MISLE data entry is controlled through program logic and pull-down menus that require key elements, prohibit the inappropriate, and limit choices to pre-determined options. Comprehensive training and user guides help ensure reliability the application itself contains embedded Help screens. MISLE system quality control, and data verification and validation, is effected through regular review of records by the Coast Guard Office of Investigations and Analysis.
<b>LIMITATIONS</b>	Some incidents are never reported and some delayed in reaching the Coast Guard; previously published data is therefore subject to revision—with the greatest impact affecting recent quarters. The number of collisions, allisions and groundings is a proxy indicator of adverse impacts to maritime mobility; they can result in waterway closures and disruptions to maritime commerce. They may also result in personnel casualties, pollution incidents and property losses. Minimizing their occurrence is an objective of the Coast Guard Marine Transportation System Management Program, though their cause is often not related to a navigation or waterways management concern. A 5-year average is used to mitigate year-to-year variation and ensure any near-term trend is more apparent.

# Percent Reduction of All Maritime Security Risk Subject to USCG Influence

<b>MEASURE DESCRIPTION</b>	A proxy measure of Coast Guard effectiveness in reducing maritime security risk, where residual risk after Coast Guard intervention is reported as a percent reduction of what otherwise would be the raw risk. It is based on an assessment of threat, vulnerability and potential consequences for sixteen of the most significant maritime attack scenarios, and the expected impact of all relevant Coast Guard maritime security efforts.
<b>USCG PROGRAM</b>	Maritime Security Operations
<b>USCG MISSION</b>	Ports, Waterways and Coastal Security—Response Activities
<b>DHS ALIGNMENT</b>	Mission Area 1 - Prevent Terrorism and Enhance Security Goal 1.1 - Prevent Terrorist Attacks Sub-Goal 1.1.2 – Deter and Disrupt Operations
<b>SCOPE</b>	Annually, experienced facilitators guide Subject Matter Experts from representative Coast Guard Commands and ports in using the Maritime Security Risk Analysis Model (MSRAM) to assess raw threat, vulnerability and potential consequences for sixteen of the most-significant terrorist attack scenarios and the residual risk remaining after all relevant Coast Guard maritime security efforts.
<b>DATA SOURCE</b>	The Maritime Security Risk Analysis Model (MSRAM) tool is used to score threat, vulnerability and consequences associated with the defined target and attack scenarios. Coast Guard resource employment and capacity information is taken from the Service's AOPS, ALMIS and MISLE data systems.
<b>METHODOLOGY</b>	Workshops comprised of Subject Matter Experts are convened to assess raw threat, vulnerability and potential consequences for particular terrorist attack scenarios and to determine residual risk remaining after all relevant Coast Guard maritime security efforts. Round-table discussions are guided by experienced facilitators and informed by operational and regulatory activity data, which is extracted from AOPS, ALMIS and other authoritative information systems. Consensus determinations of raw risk and likely risk reduction resulting from Coast Guard maritime security efforts are compiled within the Maritime Security Risk Analysis Model (MSRAM), and validated by Coast Guard leadership.
<b>VERIFICATION &amp; VALIDATION</b>	To ensure consistency in the calculation of risk, an explicit and conceptually appropriate methodology is designed into the Maritime Security Risk Assessment Model (MSRAM). To ensure consistency in the assessment of risk factors, uniform definitions and concepts are established and structured training is provided to subject matter experts participating in elicitation workshops. Fidelity is assured for data entered in the AOPS, ALMIS and Marine Information for Safety and Law Enforcement (MISLE) database information systems through program logic and pull-down menus that require key elements, prohibit inappropriate entries, and limit choices to pre-determined options. Results are also checked for reliability by comparing them to prior assessments and comparable benchmarks; any inconsistencies are identified and resolved or documented.
<b>LIMITATIONS</b>	This measure is a proxy indicator; it is an assessment of sixteen of the most significant maritime attack scenarios and not a compilation of total risk for all conceivable attack scenarios. The assessment is an estimate of potential consequences extrapolated from known data; it is an approximation determined in the absence of actual security attacks. The measure encompasses performance of multiple Coast Guard programs; it reflects the risk reduction impacts of Maritime Security Operations Program activities as well as the contributions of Maritime Prevention Program efforts.

# Percent Reduction of Maritime Security Risk—USCG Consequence Management

<b>MEASURE DESCRIPTION</b>	A proxy measure of Coast Guard effectiveness in reducing maritime security risk through consequence mitigation, where residual risk after Coast Guard mitigation efforts is reported as a percent reduction of what otherwise would be the raw risk. It is based on an assessment of threat, vulnerability and potential consequences for sixteen of the most significant maritime attack scenarios, and the expected impact of all relevant Coast Guard consequence mitigation efforts.
<b>USCG PROGRAM</b>	Maritime Security Operations
<b>USCG MISSION</b>	Ports, Waterways and Coastal Security—Response Activities
<b>DHS ALIGNMENT</b>	Mission Area 1 - Prevent Terrorism and Enhance Security Goal 1.1 - Prevent Terrorist Attacks Sub-Goal 1.1.2 – Deter and Disrupt Operations
<b>SCOPE</b>	Annually, experienced facilitators guide Subject Matter Experts from representative Coast Guard Commands and ports in using the Maritime Security Risk Analysis Model (MSRAM) to assess raw threat, vulnerability and potential consequences for sixteen of the most-significant terrorist attack scenarios and the residual risk remaining after all relevant Coast Guard maritime security consequence mitigation.
<b>DATA SOURCE</b>	The Maritime Security Risk Analysis Model (MSRAM) tool is used to score threat, vulnerability and consequences associated with the defined target and attach scenarios. Coast Guard resource employment and capacity information is taken from the Service's AOPS, ALMIS and MISLE data systems.
<b>METHODOLOGY</b>	Workshops comprised of Subject Matter Experts are convened to assess raw threat, vulnerability and potential consequences for particular terrorist attack scenarios and to determine residual risk remaining after all relevant Coast Guard maritime security consequence mitigation. Round-table discussions are guided by experienced facilitators and informed by operational and regulatory activity data, which is extracted from AOPS, ALMIS and other authoritative information systems. Consensus determinations of raw risk and likely risk reduction resulting from Coast Guard maritime security consequence mitigation are compiled within the Maritime Security Risk Analysis Model (MSRAM), and validated by Coast Guard leadership.
<b>VERIFICATION &amp; VALIDATION</b>	To ensure consistency in the calculation of risk, an explicit and conceptually appropriate methodology is designed into the Maritime Security Risk Assessment Model (MSRAM). To ensure consistency in the assessment of risk factors, uniform definitions and concepts are established and structured training is provided to subject matter experts participating in elicitation workshops. Fidelity is assured for data entered in the AOPS, ALMIS and Marine Information for Safety and Law Enforcement (MISLE) information systems through program logic and pull-down menus that require key elements, prohibit inappropriate entries, and limit choices to pre-determined options. Results are also checked for reliability by comparing them to prior assessments and comparable benchmarks; any inconsistencies are identified and resolved or documented.
<b>LIMITATIONS</b>	This measure is a proxy indicator; it is an assessment of sixteen of the most significant maritime attack scenarios and not a compilation of total risk for all conceivable attack scenarios. The assessment is an estimate of potential consequences extrapolated from known data; it is an approximation determined in the absence of actual security attacks. The measure encompasses consequence mitigation performance of multiple Coast Guard programs; it reflects the consequence mitigation impacts of Maritime Security Operations Program activities as well as the contributions of Maritime Prevention Program efforts.

# Percent Reduction of Maritime Security Risk—USCG Terrorist Entry Prevention

<b>MEASURE DESCRIPTION</b>	A proxy measure of Coast Guard effectiveness in reducing maritime security risk by stopping terrorist entry into the U.S. by maritime means, where residual risk after considering Coast Guard entry prevention efforts is reported as a percent reduction of what otherwise would be the raw risk. It is based on an assessment of threat, vulnerability and potential consequences for sixteen of the most significant maritime attack scenarios and expected risk reduction impact of all relevant Coast Guard entry prevention efforts.
<b>USCG PROGRAM</b>	Maritime Security Operations
<b>USCG MISSION</b>	Ports, Waterways and Coastal Security—Response Activities
<b>DHS ALIGNMENT</b>	Mission Area 1 - Prevent Terrorism and Enhance Security Goal 1.1 - Prevent Terrorist Attacks Sub-Goal 1.1.2 – Deter and Disrupt Operations
<b>SCOPE</b>	Annually, experienced facilitators guide Subject Matter Experts from representative Coast Guard Commands and ports in using the Maritime Security Risk Analysis Model (MSRAM) to assess raw threat, vulnerability and potential consequences for sixteen of the most-significant terrorist attack scenarios and the residual risk remaining after all relevant Coast Guard efforts to prevent terrorist entry into the U.S. by maritime means.
<b>DATA SOURCE</b>	The Maritime Security Risk Analysis Model (MSRAM) tool is used to score threat, vulnerability and consequences associated with the defined target and attach scenarios. Coast Guard resource employment and capacity information is taken from the Service's AOPS, ALMIS and MISLE data systems.
<b>METHODOLOGY</b>	Workshops comprised of Subject Matter Experts are convened to assess raw threat, vulnerability and potential consequences for particular terrorist attack scenarios and to determine residual risk remaining after all relevant Coast Guard maritime security efforts to prevent terrorist entry into the U.S. by maritime means. Round-table discussions are guided by experienced facilitators and informed by operational and regulatory activity data, which is extracted from AOPS, ALMIS and other authoritative information systems. Consensus determinations of raw risk and likely risk reduction resulting from Coast Guard entry prevention efforts are compiled within the Maritime Security Risk Analysis Model (MSRAM), and validated by Coast Guard leadership.
<b>VERIFICATION &amp; VALIDATION</b>	To ensure consistency in the calculation of risk, an explicit and conceptually appropriate methodology is designed into the Maritime Security Risk Assessment Model (MSRAM). To ensure consistency in the assessment of risk factors, uniform definitions and concepts are established and structured training is provided to subject matter experts participating in elicitation workshops. Fidelity is assured for data entered in the AOPS, ALMIS and Marine Information for Safety and Law Enforcement (MISLE) information systems through program logic and pull-down menus that require key elements, prohibit inappropriate entries, and limit choices to pre-determined options. Results are also checked for reliability by comparing them to prior assessments and comparable benchmarks; any inconsistencies are identified and resolved or documented.
<b>LIMITATIONS</b>	This measure is a proxy indicator; it is an assessment of sixteen of the most significant maritime attack scenarios and not a compilation of total risk for all conceivable attack scenarios. The assessment is an estimate of potential consequences extrapolated from known data; it is an approximation determined in the absence of actual security attacks. The measure encompasses terrorist entry prevention performance of multiple Coast Guard programs; it reflects the entry prevention impact of Maritime Security Operations Program activities as well as the contributions of Maritime Prevention Program efforts.

# Percent Reduction of Maritime Security Risk—USCG WMD Entry Prevention

<b>MEASURE DESCRIPTION</b>	A proxy measure of Coast Guard effectiveness in reducing maritime security risk by stopping entry of a Weapon of Mass Destruction (WMD) into the U.S. by maritime means, where residual risk after Coast Guard WMD entry prevention efforts is reported as a percent reduction of what otherwise would be the raw risk. It is based on an assessment of threat, vulnerability and potential consequences for sixteen of the most significant maritime attack scenarios and expected risk reduction impact of all relevant Coast Guard WMD entry prevention efforts.
<b>USCG PROGRAM</b>	Maritime Security Operations
<b>USCG MISSION</b>	Ports, Waterways and Coastal Security—Response Activities
<b>DHS ALIGNMENT</b>	Mission Area 1 - Prevent Terrorism and Enhance Security Goal 1.2 – Prevent/Protect Against Unauthorized Acquisition or Use of CBRN Materials & Capabilities Sub-Goal 1.2.2 – Identify/Interdict Unlawful Acquisition & Movement of CBRN Precursors & Materials
<b>SCOPE</b>	Annually, experienced facilitators guide Subject Matter Experts from representative Coast Guard Commands and ports in using the Maritime Security Risk Analysis Model (MSRAM) to assess raw threat, vulnerability and potential consequences for sixteen of the most-significant terrorist attack scenarios and the residual risk remaining after all relevant Coast Guard efforts to prevent entry of a WMD into the U.S. by maritime means.
<b>DATA SOURCE</b>	The Maritime Security Risk Analysis Model (MSRAM) tool is used to score threat, vulnerability and consequences associated with the defined target and attach scenarios. Coast Guard resource employment and capacity information is taken from the Service's AOPS, ALMIS and Marine Information for Safety and Law Enforcement (MISLE) data systems.
<b>METHODOLOGY</b>	Workshops comprised of Subject Matter Experts are convened to assess raw threat, vulnerability and potential consequences for particular terrorist attack scenarios and to determine residual risk remaining after all relevant Coast Guard maritime security efforts to prevent WMD entry into the U.S. by maritime means. Round-table discussions are guided by experienced facilitators and informed by operational and regulatory activity data, which is extracted from AOPS, ALMIS and other authoritative information systems. Consensus determinations of raw risk and likely risk reduction resulting from Coast Guard WMD entry prevention efforts are compiled within the Maritime Security Risk Analysis Model (MSRAM), and validated by Coast Guard leadership.
<b>VERIFICATION &amp; VALIDATION</b>	To ensure consistency in the calculation of risk, an explicit and conceptually appropriate methodology is designed into the Maritime Security Risk Assessment Model (MSRAM). To ensure consistency in the assessment of risk factors, uniform definitions and concepts are established and structured training is provided to subject matter experts participating in elicitation workshops. Fidelity is assured for data entered in the AOPS, ALMIS and MISLE information systems through program logic and pull-down menus that require key elements, prohibit inappropriate entries, and limit choices to pre-determined options. Results are also checked for reliability by comparing them to prior assessments and comparable benchmarks; any inconsistencies are identified and resolved or documented.
<b>LIMITATIONS</b>	This measure is a proxy indicator; it is an assessment of sixteen of the most significant maritime attack scenarios and not a compilation of total risk for all conceivable attack scenarios. The assessment is an estimate of potential consequences extrapolated from known data; it is an approximation determined in the absence of actual security attacks. The measure encompasses WMD entry prevention performance of multiple Coast Guard programs; it reflects the WMD entry prevention impact of Maritime Security Operations Program activities as well as the contributions of Maritime Prevention Program efforts.

# Number of Undocumented Migrants Attempting To Enter U.S. By Maritime Routes

<b>MEASURE DESCRIPTION</b>	The number of known undocumented migrants attempting to enter the U.S. by maritime means, which is comprised of those interdicted by the Coast Guard, plus those interdicted by other agencies or foreign entities in partnership with the Coast Guard, plus those who self-report their entry by maritime means or are apprehended by CBP after so entering.
<b>USCG PROGRAM</b>	Maritime Law Enforcement
<b>USCG MISSION</b>	Migrant Interdiction
<b>DHS ALIGNMENT</b>	Mission Area 2 - Secure and Manage Our Borders Goal 2.1 - Secure U.S. Air, Land and Sea Borders and Approaches Sub-Goal 2.1.1 - Prevent Illegal Import and Entry
<b>SCOPE</b>	The measure includes all undocumented migrants of all nationalities who attempt direct entry by maritime means into the United States, its territories and possessions, who are interdicted by the Coast Guard or by other agencies or foreign entities in partnership with the Coast Guard. The measure also includes those undocumented migrants who self-report entry by maritime means or are apprehended by CBP after so entering the United States, its territories and possessions.
<b>DATA SOURCE</b>	Coast Guard Migrant interdiction data is extracted from Daily Operational Summaries compiled by the Coast Guard National Command Center from operational reports received from Coast Guard units. Additional interdiction data is compiled from notifications received from other agencies or foreign entities acting in partnership with the Coast Guard.
<b>METHODOLOGY</b>	Results for a given year are a compilation of all undocumented migrants of all nationalities who attempt direct entry by maritime means into the United States, its territories and possessions. It is the sum of interdictions during that period by the Coast Guard, plus any notifications of interdictions provided by other law enforcement agencies or foreign entities, plus self-reported entries or apprehensions reported by CBP of undocumented migrants entering by maritime means.
<b>VERIFICATION &amp; VALIDATION</b>	Coast Guard data are subject to review at multiple levels; discrepancies are reviewed and corrected as necessary. Data provided by other foreign entities acting in partnership with the Coast Guard are also reviewed and corrected as needed.
<b>LIMITATIONS</b>	Notifications received from other entities may be delayed in reaching the Coast Guard or not provided at all. The number of known undocumented migrants attempting to enter the U.S. by maritime means is not likely all who attempt entry—the total flow of undocumented migrants is difficult to determine, as the number not interdicted (who succeed, turn back or are lost in transit) is not directly measured.

# Number of Undocumented Migrants Attempting To Enter U.S. By Maritime Routes Interdicted

<b>MEASURE DESCRIPTION</b>	The number of undocumented migrants attempting to enter the U.S. by maritime means interdicted by the Coast Guard and other partners before reaching the U.S. land border—including maritime interdictions by Customs and Border Protection and other agencies or foreign entities in partnership with the Coast Guard for migrant interdiction operations.
<b>USCG PROGRAM</b>	Maritime Law Enforcement
<b>USCG MISSION</b>	Migrant Interdiction
<b>DHS ALIGNMENT</b>	Mission Area 2 - Secure and Manage Our Borders Goal 2.1 - Secure U.S. Air, Land and Sea Borders and Approaches Sub-Goal 2.1.1 - Prevent Illegal Import and Entry
<b>SCOPE</b>	The measure includes all undocumented migrants of all nationalities who attempt direct entry by maritime means into the United States, its territories and possessions who are interdicted by the Coast Guard or by other agencies or foreign entities in partnership with the Coast Guard.
<b>DATA SOURCE</b>	Coast Guard Migrant interdiction data is extracted from Daily Operational Summaries compiled by the Coast Guard National Command Center from operational reports received from Coast Guard units. Additional interdiction data is compiled from notifications received from other agencies or foreign entities acting in partnership with the Coast Guard.
<b>METHODOLOGY</b>	Results for a given year are a compilation of all undocumented migrants of all nationalities who attempt direct entry by maritime means into the United States, its territories and possessions who are interdicted. It is the sum of interdictions during that period by the Coast Guard, plus apprehensions reported by CBP, plus any notifications of interdictions received from other law enforcement agencies or foreign entities.
<b>VERIFICATION &amp; VALIDATION</b>	Coast Guard data are subject to review at multiple levels; discrepancies are reviewed and corrected as necessary. Data provided by other foreign entities acting in partnership with the Coast Guard are also reviewed and corrected as needed.
<b>LIMITATIONS</b>	Notifications received from other entities may be delayed in reaching the Coast Guard or not provided at all. The number of undocumented migrants interdicted is best understood in the context of the flow of such migrants who are attempting to enter the U.S. by maritime means.

# Migrant Interdiction Effectiveness in the Maritime Environment

<b>MEASURE DESCRIPTION</b>	The percentage of known undocumented migrants attempting to enter the U.S. by maritime means who are interdicted by the Coast Guard and other partners before reaching the land border, where the number of known migrants attempting entry is comprised of those interdicted by the Coast Guard and its partners plus undocumented migrants who self-report their entry by maritime means or are apprehended by CBP after so entering.
<b>USCG PROGRAM</b>	Maritime Law Enforcement
<b>USCG MISSION</b>	Migrant Interdiction
<b>DHS ALIGNMENT</b>	Mission Area 2 - Secure and Manage Our Borders Goal 2.1 - Secure U.S. Air, Land and Sea Borders and Approaches Sub-Goal 2.1.1 - Prevent Illegal Import and Entry
<b>SCOPE</b>	The measure includes all undocumented migrants of all nationalities who attempt direct entry by maritime means into the United States, its territories and possessions, who are interdicted by the Coast Guard or by other agencies or foreign entities in partnership with the Coast Guard. The determination of known flow includes undocumented migrants interdicted by the Coast Guard or by other agencies or foreign entities in partnership with the Coast Guard plus those undocumented migrants who self-report entry by maritime means or are apprehended by CBP after so entering the United States, its territories and possessions.
<b>DATA SOURCE</b>	Coast Guard Migrant interdiction data is extracted from Daily Operational Summaries compiled by the Coast Guard National Command Center from operational reports received from Coast Guard units. Additional interdiction data is compiled from notifications received from other agencies or foreign entities acting in partnership with the Coast Guard.
<b>METHODOLOGY</b>	Results for a given year are the sum of Coast Guard and partner interdictions divided by the known flow of undocumented migrants attempting to enter the U.S. by maritime means, expressed as a percentage. It is Coast Guard interdictions plus maritime apprehensions by CBP plus notifications of interdictions by other agencies or foreign entities, divided by and expressed as a percentage of these interdictions plus any entries by maritime means that are self-reported or afterwards apprehended and reported by CBP.
<b>VERIFICATION &amp; VALIDATION</b>	Coast Guard data are subject to review at multiple levels; discrepancies are reviewed and corrected as necessary. Data provided by other foreign entities acting in partnership with the Coast Guard are also reviewed and corrected as needed.
<b>LIMITATIONS</b>	Notifications received from other entities may be delayed in reaching the Coast Guard or not provided at all. The number of undocumented migrants interdicted is best understood in the context of migrant flow; but the number of known undocumented migrants is not likely all who make the attempt—the total flow is difficult to determine, as the number not interdicted (who succeed, turn back or are lost in transit) is not directly measured.

# Percent Undocumented Migrants Attempting To Enter U.S. By Maritime Routes Interdicted by USCG

<b>MEASURE DESCRIPTION</b>	The percentage of known undocumented migrants attempting to enter the U.S. by maritime means who are interdicted by the Coast Guard, where the number of known migrants attempting entry is comprised of those interdicted by the Coast Guard and its partners plus undocumented migrants who self-report their entry by maritime means or are apprehended by CBP after so entering.
<b>USCG PROGRAM</b>	Maritime Law Enforcement
<b>USCG MISSION</b>	Migrant Interdiction
<b>DHS ALIGNMENT</b>	Mission Area 2 - Secure and Manage Our Borders Goal 2.1 - Secure U.S. Air, Land and Sea Borders and Approaches Sub-Goal 2.1.1 - Prevent Illegal Import and Entry
<b>SCOPE</b>	The measure includes all undocumented migrants of all nationalities who attempt direct entry by maritime means into the United States, its territories and possessions, who are interdicted by the Coast Guard. The determination of known flow includes undocumented migrants interdicted by the Coast Guard or by other agencies or foreign entities in partnership with the Coast Guard plus those undocumented migrants who self-report entry by maritime means or are apprehended by CBP after so entering the United States, its territories and possessions.
<b>DATA SOURCE</b>	Coast Guard Migrant interdiction data is extracted from Daily Operational Summaries compiled by the Coast Guard National Command Center from operational reports received from Coast Guard units. Additional interdiction data is compiled from notifications received from other agencies or foreign entities acting in partnership with the Coast Guard.
<b>METHODOLOGY</b>	Results for a given year are Coast Guard interdictions divided by the known flow of undocumented migrants attempting to enter the U.S. by maritime means, expressed as a percentage. It is Coast Guard interdictions for the period, divided by and expressed as a percentage of the sum of these interdictions plus maritime apprehensions by CBP plus notifications of interdictions by other agencies or foreign entities plus any entries by maritime means that are self-reported or afterwards apprehended and reported by CBP.
<b>VERIFICATION &amp; VALIDATION</b>	Coast Guard data are subject to review at multiple levels; discrepancies are reviewed and corrected as necessary. Data provided by other foreign entities acting in partnership with the Coast Guard are also reviewed and corrected as needed.
<b>LIMITATIONS</b>	Notifications provided by other entities may be delayed in reaching the Coast Guard or not provided at all. The number of undocumented migrants interdicted is best understood in the context of migrant flow; but the number of known undocumented migrants is not likely all who make the attempt—the total flow is difficult to determine, as the number not interdicted (who succeed, turn back or are lost in transit) is not directly measured.

# Metric Tons of Cocaine Removed

<b>MEASURE DESCRIPTION</b>	Metric tons of cocaine removed by the Coast Guard from non-commercial vessels in the maritime domain, which includes cocaine seized by the Service plus the estimated amount of unrecovered cocaine jettisoned or destroyed as a result of Coast Guard law enforcement efforts.
<b>USCG PROGRAM</b>	Maritime Law Enforcement
<b>USCG MISSION</b>	Drug Interdiction
<b>DHS ALIGNMENT</b>	Mission Area 2 - Secure and Manage Our Borders Goal 2.1 - Secure U.S. Air, Land and Sea Borders and Approaches Sub-Goal 2.1.1 - Prevent Illegal Import and Entry
<b>SCOPE</b>	The measure includes the amount of cocaine physically seized by the Coast Guard from non-commercial vessels in the maritime domain, which is weighed and assigned a Federal Drug Identification Number. Also included is cocaine not physically recovered by the Service that is jettisoned or destroyed during interdiction operations, which is typically determined from pursuit video or other intelligence-analysis.
<b>DATA SOURCE</b>	Cocaine removal data is from the consolidated counter-drug database (CCDB) maintained by the United States Interdiction Coordinator, Office of National Drug Control Policy. CCDB source data includes interdiction reports of Coast Guard and other Joint Interagency Task Force South (JIATF-S) members, intelligence reports from Coast Guard LANT and PAC Maritime Intelligence Fusion Centers, and other authoritative sources for cocaine production, trafficking and consumption information.
<b>METHODOLOGY</b>	Results for a given year are the sum total metric tons of cocaine seized by the Service plus the amount of cocaine observed, reported or determined as having been jettisoned or destroyed by smugglers to avoid seizure by the Coast Guard.
<b>VERIFICATION &amp; VALIDATION</b>	Both the physically seized and jettisoned or destroyed components of this measure are tracked, collected, and analyzed by the Coast Guard Office of Law Enforcement (CG-MLE). Consolidated Counter-drug Database (CCDB) source data is verified and validated quarterly by representatives from the agencies involved in transit zone interdiction, who meet and review the data for each source event and resolve any discrepancies. Coast Guard seizure data is also tracked and verified by Federal Drug Identification Numbers.
<b>LIMITATIONS</b>	This measure reflects Coast Guard efforts, and is focused on cocaine removed from non-commercial vessels in the maritime domain. The amount of cocaine jettisoned or destroyed is a good estimate based on empirical evidence; it is not an absolutely certain quantity. The amount of cocaine removed is best understood in the context of total flow; but even the most authoritative transit information available from the CCDB remains an estimate.

# Removal Rate for Cocaine from Non-Commercial Vessels in Maritime Transit Zone

<b>MEASURE DESCRIPTION</b>	Percentage of cocaine removed by the Coast Guard and its partners, where the amount removed includes cocaine seized plus the estimated amount jettisoned or destroyed in the course of interdiction efforts, expressed as a percentage of total maritime flow of cocaine on non-commercial vessels.
<b>USCG PROGRAM</b>	Maritime Law Enforcement
<b>USCG MISSION</b>	Drug Interdiction
<b>DHS ALIGNMENT</b>	Mission Area 2 - Secure and Manage Our Borders Goal 2.1 - Secure U.S. Air, Land and Sea Borders and Approaches Sub-Goal 2.1.1 - Prevent Illegal Import and Entry
<b>SCOPE</b>	The measure includes the amount of cocaine physically seized by the Coast Guard and other Joint Interagency Task Force South (JIATF-S) members and partners from non-commercial vessels in the maritime domain, which is weighed and assigned a Federal Drug Identification Number. Also included is cocaine not physically recovered that is jettisoned or destroyed during interdiction operations, which is typically determined from pursuit video or other intelligence-analysis.
<b>DATA SOURCE</b>	Cocaine flow and removal data is from the consolidated counter-drug database (CCDB) maintained by the United States Interdiction Coordinator, Office of National Drug Control Policy. CCDB source data includes interdiction reports of Coast Guard and other Joint Interagency Task Force South (JIATF-S) members, intelligence reports from Coast Guard LANT and PAC Maritime Intelligence Fusion Centers, and other authoritative sources for cocaine production, trafficking and consumption information.
<b>METHODOLOGY</b>	Results for a given year are the sum total metric tons of cocaine seized by the Service and other partners plus the amount of cocaine observed, reported, or determined as having been jettisoned or destroyed by smugglers to avoid seizure, which is expressed as a percentage of the total maritime flow of cocaine on non-commercial vessels.
<b>VERIFICATION &amp; VALIDATION</b>	Both the physically seized and jettisoned or destroyed components of this measure are tracked, collected, and analyzed by the Coast Guard Office of Maritime Law Enforcement (CG-MLE). Consolidated Counter-drug Database (CCDB) source data is verified and validated quarterly by representatives from the agencies involved in transit zone interdiction, who meet and review the data for each source event and resolve any discrepancies. Seizure data is also tracked and verified by Federal Drug Identification Numbers.
<b>LIMITATIONS</b>	This measure is focused on cocaine removed from non-commercial vessels in the maritime domain. The amount of cocaine jettisoned or destroyed is a good estimate based on empirical evidence; it is not an absolutely certain quantity. The amount of cocaine removed is best understood in the context of total flow; but even the most authoritative transit information available from the CCDB remains an estimate.

# Fishing Regulation Compliance Rate

<b>MEASURE DESCRIPTION</b>	Percent of all fishing vessels boarded and inspected at sea by the Coast Guard found to have no significant violations of domestic fisheries regulations.
<b>USCG PROGRAM</b>	Maritime Law Enforcement
<b>USCG MISSION</b>	Living Marine Resources Law Enforcement
<b>DHS ALIGNMENT</b>	Mission Area 2 - Secure and Manage Our Borders Goal 2.2 – Safeguard and Expedite Lawful Trade and Travel Sub-Goal 2.2.3 - Maximize Compliance with U.S. Trade Laws
<b>SCOPE</b>	The measure includes boardings and inspections of U.S. commercial and recreational fishing vessels inside the portion of state waters that extend from three to nine nautical miles seaward of the state boundary line; U.S. commercial and recreational fishing vessels in the U.S. Exclusive Economic Zone (EEZ); foreign fishing vessels permitted inside the U.S. EEZ; and U.S. commercial and recreational fishing vessels outside the U.S. EEZ. Significant violations are those that result in significant damage or impact to a resource or fishery management plan, result in significant monetary advantage over competitors, and/or have high regional or national interest.
<b>DATA SOURCE</b>	Boardings and violations are documented by Coast Guard Boarding Forms and entered into the Coast Guard's Marine Information for Safety and Law Enforcement (MISLE) database.
<b>METHODOLOGY</b>	Results for a given year are the number of fishing vessels found to have no significant violations of domestic fisheries regulations divided by and expressed as a percentage of all fishing vessels boarded and inspected at sea by the Coast Guard.
<b>VERIFICATION &amp; VALIDATION</b>	MISLE data consistency and integrity is controlled through program logic and pull-down menus that require key elements, prohibit the inappropriate, and limit choices to pre-determined options. Reliability is further ensured by comprehensive training and user guides, and the application itself has embedded Help screens. District, Area and Headquarters staffs review, validate and assess the data on a quarterly basis as part of the Coast Guard's Standard Operational Planning Process; and Program managers review and compare MISLE data to after-action reports, message traffic and other sources of information.
<b>LIMITATIONS</b>	Fishing regulation compliance is relevant in terms of Coast Guard enforcement of other-agency established regulations; it is an intermediate outcome and not the ultimate fishery health outcome these regulations are intended to influence. Observed compliance rates are determined from that portion of fishing vessels boarded and inspected; these may not be representative of the total population of fishers. It is also an average across all fisheries that is not indicative of compliance within a specific fishery. It is also important to note that ' <i>significant violations</i> ' is a qualitative standard that requires uniform application to ensure consistent results.

# Percent of Federal Fisheries Found in Compliance with Laws and Regulations

<b>MEASURE DESCRIPTION</b>	The percentage of federal fisheries where an acceptable Level of Effective Enforcement was attained, where individual fishery components are considered acceptable if their observed compliance rates—discounted by their ratio of actual versus targeted enforcement effort—is 97% or better.
<b>USCG PROGRAM</b>	Maritime Law Enforcement
<b>USCG MISSION</b>	Other Law Enforcement
<b>DHS ALIGNMENT</b>	Mission Area 2 - Secure and Manage Our Borders Goal 2.2 – Safeguard and Expedite Lawful Trade and Travel Sub-Goal 2.2.3 - Maximize Compliance with U.S. Trade Laws
<b>SCOPE</b>	A List of Fisheries is compiled annually, designating each as high or low precedence based upon relevant economic, biological, environmental or other factors. The number of active fishing vessels is determined for each fishery component and targets established for boarding 20% of these in high-precedence fisheries and 10% in low-precedence fisheries. Actual boardings are determined and enforcement effort expressed as the ratio of actual to target boardings. Associated compliance rates are determined, which are the percentage of boardings where no significant violations were found. Significant violations are those that result in significant damage or impact to a resource or fishery management plan, result in significant monetary advantage over competitors, and/or have high regional or national interest.
<b>DATA SOURCE</b>	A List of Fisheries and associated tally of Active Fishing Vessels is compiled by the Coast Guard Office of Law Enforcement (CG-MLE), based on annual Coast Guard District submissions. Boardings and violations are documented by Coast Guard Report of Boarding Forms and entered into the Coast Guard’s Marine Information for Safety and Law Enforcement (MISLE) database.
<b>METHODOLOGY</b>	Results for a given year are the number of fisheries that attain an acceptable level of enforcement, expressed as a percentage of the total List of Fisheries. Individual fisheries are considered acceptable if they attain a Level of Effective Enforcement that is 97% or better. The Level of Effective Enforcement is the Observed Compliance Rate discounted by the ratio of actual versus targeted enforcement effort. It is the number of boardings where no significant violations were found expressed as a percentage of the total conducted, multiplied by the ratio of actual versus targeted boardings for that fishery.
<b>VERIFICATION &amp; VALIDATION</b>	MISLE data consistency and integrity is controlled through program logic and pull-down menus that require key elements, prohibit the inappropriate, and limit choices to pre-determined options. Reliability is further ensured by comprehensive training and user guides, and the application itself has embedded Help screens. District, Area and Headquarters staffs review, validate and assess the data on a quarterly basis as part of the Coast Guard’s Standard Operational Planning Process; and Program managers review and compare MISLE data to after-action reports, message traffic and other sources of information.
<b>LIMITATIONS</b>	Fishing regulation compliance is relevant in terms of Coast Guard enforcement of other-agency established regulations; it is an intermediate outcome and not the ultimate fishery health outcome these regulations are intended to influence. Observed compliance rates are determined from that portion of fishing vessels boarded and inspected; these may not be representative of the total population of fishers. The percent of fisheries found in compliance is an assessment across all fisheries, which is not indicative of compliance within a specific fishery. It is also important to note that ‘ <i>significant violations</i> ’ is a qualitative standard that requires uniform application to ensure consistent results.

# Number of Detected Incursions of Foreign Fishing Vessels Violating U.S. Waters

<b>MEASURE DESCRIPTION</b>	The number of incursions into the U.S. Exclusive Economic Zone (EEZ) by foreign fishing vessels detected by the Coast Guard, or reported by other sources and judged by operational commanders as valid enough to order a response.
<b>USCG PROGRAM</b>	Maritime Law Enforcement
<b>USCG MISSION</b>	Other Law Enforcement
<b>DHS ALIGNMENT</b>	Mission Area 2 - Secure and Manage Our Borders Goal 2.2 – Safeguard and Expedite Lawful Trade and Travel Sub-Goal 2.2.3 - Maximize Compliance with U.S. Trade Laws
<b>SCOPE</b>	The measure includes foreign vessels illegally fishing inside the U.S. Exclusive economic Zone (EEZ) detected by the Coast Guard and incursions by foreign fishing vessels reported by other sources, which reports or intelligence are judged by Coast Guard operational commanders as valid enough to order a response. The Magnuson-Stevens Act, Title 16 of the U.S. Code defines terms necessary for identifying an incursion—such as fishing, fishing vessel, foreign fishing, etc.—and establishes an exemption for recreational fishing.
<b>DATA SOURCE</b>	Source data is collected from Living Marine Resource Enforcement Summary Reports and recorded in the Coast Guard’s Marine Information for Safety and Law Enforcement (MISLE) database.
<b>METHODOLOGY</b>	Results for a given year are the total number of incursions into the U.S. Exclusive Economic Zone (EEZ) by foreign fishing vessels detected by the Coast Guard, or reported by other sources and judged by operational commanders as valid enough to order a response.
<b>VERIFICATION &amp; VALIDATION</b>	To ensure consistency and integrity, MISLE data entry is controlled through program logic and pull-down menus that require key elements, prohibit the inappropriate, and limit choices to pre-determined options. The LMR Enforcement Summary Report purpose, format and submission requirements, and guidance on the use of MISLE, are provided in the Maritime Law Enforcement Manual. Comprehensive training and these user guides help ensure reliability, and the application itself contains embedded Help screens. Additionally, District summaries of EEZ cases are reviewed monthly by Areas and submitted to the Coast Guard Office of Maritime Law Enforcement (CG-MLE), and these and other sources of information are used to assess the reliability of the MISLE database.
<b>LIMITATIONS</b>	The number of vessels detected is dependent on actual sightings by Coast Guard assets and other reports of incursions or intelligence judged by operational commanders as being of sufficient validity to order available resources to respond. Standard rules of evidence do not apply; an incursion is counted if it is reasonably believed to have occurred. The result is a generally consistent sub-sample of EEZ foreign fishing violations, which is not presumed to be the total number that actually occurred. The measure is useful in assessing if such incursions are increasing or remain sufficiently deterred. Different types of incursions are not distinguished by this measure—whether large fishing factory ship or small lancha, one-time incursion or repeat offender.

# Interdiction Rate of Foreign Fishing Vessels Violating U.S. Waters

<b>MEASURE DESCRIPTION</b>	The percentage of detected incursions into the U.S. Exclusive Economic Zone (EEZ) by foreign fishing vessels that are interdicted by the Coast Guard.
<b>USCG PROGRAM</b>	Maritime Law Enforcement
<b>USCG MISSION</b>	Other Law Enforcement
<b>DHS ALIGNMENT</b>	Mission Area 2 - Secure and Manage Our Borders Goal 2.2 – Safeguard and Expedite Lawful Trade and Travel Sub-Goal 2.2.3 - Maximize Compliance with U.S. Trade Laws
<b>SCOPE</b>	The measure includes foreign vessels illegally fishing inside the U.S. Exclusive economic Zone (EEZ) detected by the Coast Guard and incursions by foreign fishing vessels reported by other sources, which reports or intelligence are judged by Coast Guard operational commanders as valid enough to order a response. The Magnuson-Stevens Act, Title 16 of the U.S. Code defines terms necessary for identifying an incursion—such as fishing, fishing vessel, foreign fishing, etc.—and establishes an exemption for recreational fishing.
<b>DATA SOURCE</b>	Source data is collected from Living Marine Resource Enforcement Summary Reports and recorded in the Coast Guard’s Marine Information for Safety and Law Enforcement (MISLE) database.
<b>METHODOLOGY</b>	Results for a given year are the number of Coast Guard interdictions of foreign fishing vessels expressed as a percentage of the total number of incursions into the U.S. Exclusive Economic Zone (EEZ) by foreign fishing vessels detected by the Coast Guard, or reported by other sources and judged by operational commanders as valid enough to order a response.
<b>VERIFICATION &amp; VALIDATION</b>	To ensure consistency and integrity, MISLE data entry is controlled through program logic and pull-down menus that require key elements, prohibit the inappropriate, and limit choices to pre-determined options. The LMR Enforcement Summary Report purpose, format and submission requirements, and guidance on the use of MISLE, are provided in the Maritime Law Enforcement Manual. Comprehensive training and these user guides help ensure reliability, and the application itself contains embedded Help screens. Additionally, District summaries of EEZ cases are reviewed monthly by Areas and submitted to the Coast Guard Office of Maritime Law Enforcement (CG-MLE), and these and other sources of information are used to assess the reliability of the MISLE database.
<b>LIMITATIONS</b>	The number of vessels detected is dependent on actual sightings by Coast Guard assets and other reports of incursions or intelligence judged by operational commanders as being of sufficient validity to order available resources to respond. Standard rules of evidence do not apply; an incursion is counted if it is reasonably believed to have occurred. The measure is useful in assessing relative level of effort devoted to EEZ enforcement, as the number of interdictions is dependent on Coast Guard asset availability and employment. Different types of incursions and subsequent interdictions are not distinguished by this measure—whether large fishing factory ship or small lancha, one-time incursion or repeat offender.

# Percent of People in Imminent Danger Saved in the Maritime Environment

<b>MEASURE DESCRIPTION</b>	Lives saved by the Coast Guard expressed as a percentage of all notifications the Service receives of people in imminent danger on the oceans and other waterways. The measure excludes single incidents with eleven or more people whose lives were saved or lost, which if included might skew results and impede trend analysis.
<b>USCG PROGRAM</b>	Maritime Response
<b>USCG MISSION</b>	Search and Rescue
<b>DHS ALIGNMENT</b>	Mission Area 5 - Strengthen National Preparedness and Resilience Goal 5.3 - Ensure Effective Emergency Response Sub-Goal 5.3.3 - Provide Timely and Appropriate Disaster Assistance
<b>SCOPE</b>	The measure encompasses all maritime distress incidents reported to the Coast Guard, which are judged by Coast Guard operational commanders as valid enough to order a response. The measure includes lives recorded as saved, lost before notification, lost after notification or unaccounted. Single incidents with eleven or more people saved, lost or unaccounted are excluded, so as not to skew results or impede trend analysis.
<b>DATA SOURCE</b>	All maritime distress incidents reported to the Coast Guard, which are judged by Coast Guard operational commanders as valid enough to order a response—and associated response data—are recorded in the Coast Guard's Marine Information for Safety and Law Enforcement (MISLE) database.
<b>METHODOLOGY</b>	Results for a given fiscal year are the total number of lives recorded as saved in the period expressed as a percentage of the total number of lives recorded as saved, lost before notification, lost after notification or unaccounted. Single incidents with eleven or more people saved, lost or unaccounted are excluded from the calculation.
<b>VERIFICATION &amp; VALIDATION</b>	To ensure consistency and integrity, MISLE data entry is controlled through program logic and pull-down menus that require key elements, prohibit the inappropriate, limit choices to pre-determined options, and flag data not conforming to expectations. Comprehensive training and user guides help ensure reliability and the application itself contains embedded Help screens. Search and rescue data are also reviewed at multiple levels, and discrepancies reviewed and corrected as necessary.
<b>LIMITATIONS</b>	Some distress incidents may not be reported to the Coast Guard, and some reported incidents might not be judged by Coast Guard operational commanders as valid enough to order a response. Imminent danger is not always obvious; the determination that a life was saved and not merely assisted can be subjective. Factors beyond Coast Guard control can lead to tragic outcomes regardless of life saving efforts; some victims are lost or succumb to injuries before first responders are notified or before they can conceivably reach the scene. Single incidents with eleven or more people saved, lost or unaccounted are excluded so as not to skew measure results or impede trend analysis.

# Percent of Time Rescue Assets are On-Scene within 2 Hours

<b>MEASURE DESCRIPTION</b>	The percent of all maritime distress incidents reported to the Coast Guard where a Search and Rescue Unit arrives on scene within two hours.
<b>USCG PROGRAM</b>	Maritime Response
<b>USCG MISSION</b>	Search and Rescue
<b>DHS ALIGNMENT</b>	Mission Area 5 - Strengthen National Preparedness and Resilience Goal 5.3 - Ensure Effective Emergency Response Sub-Goal 5.3.3 - Provide Timely and Appropriate Disaster Assistance
<b>SCOPE</b>	The measure encompasses all maritime distress incidents reported to the Coast Guard, which are judged by operational commanders as valid enough to order a response. Time on scene is the earliest time a Search and Rescue Unit is requested to proceed until the earliest time of an arrival on scene. It includes preparation time required for engine warm-up, underway checklist, risk management evaluation, mission planning, etc.; and transit time from underway to on-scene.
<b>DATA SOURCE</b>	All maritime distress incidents reported to the Coast Guard, which are judged by Coast Guard operational commanders as valid enough to order a response—and associated response data—are recorded in the Coast Guard’s Marine Information for Safety and Law Enforcement (MISLE) database.
<b>METHODOLOGY</b>	Results for a given fiscal year are the number of distress incidents where the First Sortie On-Scene Time minus the First Resource Requested Time is less than or equal to two hours, expressed as a percentage all maritime distress incidents reported to the Coast Guard, which are judged by operational commanders as valid enough to order a response.
<b>VERIFICATION &amp; VALIDATION</b>	To ensure consistency and integrity, MISLE data entry is controlled through program logic and pull-down menus that require key elements, prohibit the inappropriate, limit choices to pre-determined options, and flag data not conforming to expectations. Comprehensive training and user guides help ensure reliability and the application itself contains embedded Help screens. Search and rescue data are also reviewed at multiple levels, and discrepancies reviewed and corrected as necessary.
<b>LIMITATIONS</b>	The time it takes to reach the scene of a distress call is a key performance factor. The 2-hour standard was established in the 1970’s and revalidated in 1992 based on survival expectations in weighted-average water temperatures, which consider the varying number of incidents occurring regionally. The standard may not be a realistic benchmark for every circumstance. Adverse weather conditions, geographical proximity and asset availability may preclude arrival within the standard timeframe.

# Percent of Property “in Danger of Loss” Saved

<b>MEASURE DESCRIPTION</b>	Property saved by the Coast Guard expressed as a percentage of all property in danger of loss, which consists of saved, lost or unaccounted property associated with notifications the Service receives of people in imminent danger on the oceans and other waterways. The measure excludes single incidents with property valuations in excess of \$2 million, which if included might skew results and impede trend analysis.
<b>USCG PROGRAM</b>	Maritime Response
<b>USCG MISSION</b>	Search and Rescue
<b>DHS ALIGNMENT</b>	Mission Area 5 - Strengthen National Preparedness and Resilience Goal 5.3 - Ensure Effective Emergency Response Sub-Goal 5.3.2 – Conduct Effective and Unified Incident Response Operations
<b>SCOPE</b>	The measure encompasses all maritime distress incidents reported to the Coast Guard, which are judged by Coast Guard operational commanders as valid enough to order a response. The measure includes property recorded as saved, lost and unaccounted for. Single incidents with property valuations in excess of \$2 million are excluded, so as not to skew results or impede trend analysis.
<b>DATA SOURCE</b>	All maritime distress incidents reported to the Coast Guard, which are judged by Coast Guard operational commanders as valid enough to order a response—and associated response data—are recorded in the Coast Guard’s Marine Information for Safety and Law Enforcement (MISLE) database.
<b>METHODOLOGY</b>	Results for a given fiscal year are the total value of property recorded as saved in the period expressed as a percentage of the total value of property recorded as saved, lost and unaccounted. Single incidents with property valuations in excess of \$2 million are excluded from the calculation.
<b>VERIFICATION &amp; VALIDATION</b>	To ensure consistency and integrity, MISLE data entry is controlled through program logic and pull-down menus that require key elements, prohibit the inappropriate, limit choices to pre-determined options, and flag data not conforming to expectations. Comprehensive training and user guides help ensure reliability and the application itself contains embedded Help screens. Search and rescue data are also reviewed at multiple levels, and discrepancies reviewed and corrected as necessary.
<b>LIMITATIONS</b>	Some distress incidents may not be reported to the Coast Guard, and some reported incidents might not be judged by Coast Guard operational commanders as valid enough to order a response. Imminent danger is not always obvious; the determination that property was saved and not merely rendered assistance can be subjective. Factors beyond Coast Guard control such as weather, capabilities of responding units, and the priority necessarily given to saving lives can significantly impact the Service’s ability to save property. Single incidents with property valuations in excess of \$2 million are excluded so as not to skew measure results or impede trend analysis.

# Defense Readiness of Major Cutters for DoD Contingency Planning

<b>MEASURE DESCRIPTION</b>	The percentage of reporting period days designated Coast Guard Cutters are fully mission capable to meet Service commitments established in Department of Defense Global Force Management Implementation Guidance to conduct military activities necessary to reduce risk of terrorism, facilitate interoperability and jointly support national defense and homeland security.
<b>USCG PROGRAM</b>	Defense Operations
<b>USCG MISSION</b>	Defense Readiness
<b>DHS ALIGNMENT</b>	Mission Area 2 - Secure and Manage Our Borders Goal 2.1 - Secure U.S. Air, Land and Sea Borders and Approaches
<b>SCOPE</b>	The measure encompasses all Major Coast Guard Cutters capable of meeting commitments established in Department of Defense Global Force Management Implementation Guidance. The war fighting readiness of associated personnel, equipment, supplies and logistics are reported daily and compared to minimum standards. The measure reports the percentage of period days the Coast Guard is deemed capable of fully meeting established joint military contingency planning commitments for Major Cutters.
<b>DATA SOURCE</b>	All Coast Guard unit types designated in Department of Defense contingency plans use the Coast Guard Readiness and Assessment Evaluation (CG-RACE) system to report war-fighting readiness of unit personnel, equipment, supplies and logistics. CG-RACE information is reported to DoD via the Defense Readiness Reporting System (DRRS).
<b>METHODOLOGY</b>	Results for a given fiscal year are the number of days designated Coast Guard Cutters are fully mission-capable to meet Service commitments established in Department of Defense Global Force Management Implementation Guidance, expressed as a percentage of total period days.
<b>VERIFICATION &amp; VALIDATION</b>	CG-RACE data entry is controlled through program logic and structured menus to ensure consistency and integrity. Credibility and consistency criteria are promulgated as enclosure 9 to COMDTINST 3501.2H, and comprehensive training and user guides help ensure reliability. Readiness reports must be approved by unit commanding officers, and any discrepancies are identified and corrected as necessary. CG-RACE information is transferred to the Defense Readiness Reporting System (DRRS), where the data is further reviewed by Department of Defense managers.
<b>LIMITATIONS</b>	The measure reports Coast Guard Major Cutter readiness to meet specific Service commitments to support established Department of Defense Global Force Management Implementation Guidance. It is not an indicator of Coast Guard capability to meet any greater level of military support, nor a measure of the Service's overall operational readiness or capability to perform any specific Coast Guard mission.

# Defense Readiness of Patrol Boats for DoD Contingency Planning

<b>MEASURE DESCRIPTION</b>	The percentage of reporting period days Coast Guard Patrol Boats are fully mission capable to meet Service commitments established in Department of Defense Global Force Management Implementation Guidance to conduct military activities necessary to reduce risk of terrorism, facilitate interoperability and jointly support national defense and homeland security.
<b>USCG PROGRAM</b>	Defense Operations
<b>USCG MISSION</b>	Defense Readiness
<b>DHS ALIGNMENT</b>	Mission Area 2 - Secure and Manage Our Borders Goal 2.1 - Secure U.S. Air, Land and Sea Borders and Approaches
<b>SCOPE</b>	The measure encompasses all Coast Guard Patrol Boats capable of meeting commitments established in Department of Defense Global Force Management Implementation Guidance. The war fighting readiness of associated personnel, equipment, supplies and logistics are reported daily and compared to minimum standards. The measure reports the percentage of period days the Coast Guard is deemed capable of fully meeting established joint military contingency planning commitments for patrol boats.
<b>DATA SOURCE</b>	All Coast Guard unit types designated in Department of Defense contingency plans use the Coast Guard Readiness and Assessment Evaluation (CG-RACE) system to report war-fighting readiness of unit personnel, equipment, supplies and logistics. CG-RACE information is reported to DoD via the Defense Readiness Reporting System (DRRS).
<b>METHODOLOGY</b>	Results for a given fiscal year are the number of days designated Coast Guard Patrol Boats are fully mission capable to meet Service commitments established in Department of Defense Global Force Management Implementation Guidance, expressed as a percentage of total period days.
<b>VERIFICATION &amp; VALIDATION</b>	CG-RACE data entry is controlled through program logic and structured menus to ensure consistency and integrity. Credibility and consistency criteria are promulgated as enclosure 9 to COMDTINST 3501.2H, and comprehensive training and user guides help ensure reliability. Readiness reports must be approved by unit commanding officers, and any discrepancies are identified and corrected as necessary. CG-RACE information is transferred to the Defense Readiness Reporting System (DRRS), where the data is further reviewed by Department of Defense managers.
<b>LIMITATIONS</b>	The measure reports Coast Guard Patrol Boat readiness to meet specific Service commitments to support established Department of Defense Global Force Management Implementation Guidance. It is not an indicator of Coast Guard capability to meet any greater level of military support, nor a measure of the Service's overall operational readiness or capability to perform any specific Coast Guard mission.

# Defense Readiness of Port Security Units (deployed)

<b>MEASURE DESCRIPTION</b>	The percentage of reporting period days currently deployed Coast Guard Port Security Units are fully mission capable to meet Service commitments to conduct military activities necessary to reduce risk of terrorism, facilitate interoperability and jointly support national defense and homeland security in support of the current DoD Global Force Management Allocation Plan (GFMAP).
<b>USCG PROGRAM</b>	Defense Operations
<b>USCG MISSION</b>	Defense Readiness
<b>DHS ALIGNMENT</b>	Mission Area 1 – Prevent Terrorism and Enhance Security Goal 1.3 - Reduce Risk to the Nation’s Critical Infrastructure, Key Leadership and Events
<b>SCOPE</b>	The measure encompasses Coast Guard port security units currently deployed in support of the DoD Global Force Management Allocation Plan (GFMAP). War fighting readiness of associated personnel, equipment, supplies and logistics are reported daily and compared to minimum standards. The measure reports the percentage of period days the Coast Guard is deemed capable of fully meeting established joint military commitments for Deployed Port Security Units.
<b>DATA SOURCE</b>	All Coast Guard unit types designated in Department of Defense contingency plans use the Coast Guard Readiness and Assessment Evaluation (CG-RACE) system to report war-fighting readiness of unit personnel, equipment, supplies and logistics. CG-RACE information is reported to DoD via the Defense Readiness Reporting System (DRRS).
<b>METHODOLOGY</b>	Results for a given fiscal year are the number of days Deployed Coast Guard Port Security Units are fully mission-capable of meeting Service commitments established in the current Department of Defense Global Force Management Allocation Plan (GFMAP), expressed as a percentage of total period days.
<b>VERIFICATION &amp; VALIDATION</b>	CG-RACE data entry is controlled through program logic and structured menus to ensure consistency and integrity. Credibility and consistency criteria are promulgated as enclosure 9 to COMDTINST 3501.2H, and comprehensive training and user guides help ensure reliability. Readiness reports must be approved by unit commanding officers, and any discrepancies are identified and corrected as necessary. CG-RACE information is transferred to the Defense Readiness Reporting System (DRRS), where the data is further reviewed by Department of Defense managers.
<b>LIMITATIONS</b>	The measure reports the readiness of deployed Coast Guard Port Security Units to meet specific Service commitments in support of the current DoD Global Force Management Allocation Plan (GFMAP). It is not an indicator of Coast Guard capability to meet any greater level of military support, nor a measure of the Service’s overall operational readiness or capability to perform any specific Coast Guard mission.

# Defense Readiness of Port Security Units (Ready to Deploy)

<b>MEASURE DESCRIPTION</b>	The percentage of reporting period days designated Coast Guard Port Security Units are fully mission capable of deploying and meeting Service commitments to conduct military activities necessary to reduce risk of terrorism, facilitate interoperability and jointly support national defense and homeland security in support of the current DoD Global Force Management Allocation Plan (GFMAP).
<b>USCG PROGRAM</b>	Defense Operations
<b>USCG MISSION</b>	Defense Readiness
<b>DHS ALIGNMENT</b>	Mission Area 1 – Prevent Terrorism and Enhance Security Goal 1.3 - Reduce Risk to the Nation’s Critical Infrastructure, Key Leadership and Events
<b>SCOPE</b>	The measure encompasses all Coast Guard Port Security Units capable of deploying in support of the DoD Global Force Management Allocation Plan (GFMAP). War fighting readiness of associated personnel, equipment, supplies and logistics are reported daily and compared to minimum standards. The measure reports the percentage of period days the Coast Guard is deemed capable of fully meeting established joint military contingency planning commitments for deploying Port Security Units.
<b>DATA SOURCE</b>	All Coast Guard unit types designated in Department of Defense contingency plans use the Coast Guard Readiness and Assessment Evaluation (CG-RACE) system to report war-fighting readiness of unit personnel, equipment, supplies and logistics. CG-RACE information is reported to DoD via the Defense Readiness Reporting System (DRRS).
<b>METHODOLOGY</b>	Results for a given fiscal year are the number of days designated Coast Guard Port Security Units are fully mission-capable of deploying to meet Service commitments established in the current Department of Defense Global Force Management Allocation Plan (GFMAP), expressed as a percentage of total period days.
<b>VERIFICATION &amp; VALIDATION</b>	CG-RACE data entry is controlled through program logic and structured menus to ensure consistency and integrity. Credibility and consistency criteria are promulgated as enclosure 9 to COMDTINST 3501.2H, and comprehensive training and user guides help ensure reliability. Readiness reports must be approved by unit commanding officers, and any discrepancies are identified and corrected as necessary. CG-RACE information is transferred to the Defense Readiness Reporting System (DRRS), where the data is further reviewed by Department of Defense managers.
<b>LIMITATIONS</b>	The measure reports Coast Guard Port Security Unit readiness to meet specific Service commitments in support of the current DoD Global Force Management Allocation Plan (GFMAP). It is not an indicator of Coast Guard capability to meet any greater level of military support, nor a measure of the Service’s overall operational readiness or capability to perform any specific Coast Guard mission.