

**STAYING AFLOAT: EXAMINING THE RESOURCES
AND PRIORITIES OF THE U.S. COAST GUARD**

HEARING

BEFORE THE

SUBCOMMITTEE ON OCEANS, ATMOSPHERE,
FISHERIES, AND COAST GUARD

OF THE

COMMITTEE ON COMMERCE,
SCIENCE, AND TRANSPORTATION

UNITED STATES SENATE

ONE HUNDRED FOURTEENTH CONGRESS

FIRST SESSION

APRIL 28, 2015

Printed for the use of the Committee on Commerce, Science, and Transportation



U.S. GOVERNMENT PUBLISHING OFFICE

97-250 PDF

WASHINGTON : 2015

For sale by the Superintendent of Documents, U.S. Government Publishing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512-1800; DC area (202) 512-1800
Fax: (202) 512-2104 Mail: Stop IDCC, Washington, DC 20402-0001

SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

ONE HUNDRED FOURTEENTH CONGRESS

FIRST SESSION

JOHN THUNE, South Dakota, *Chairman*

ROGER F. WICKER, Mississippi	BILL NELSON, Florida, <i>Ranking</i>
ROY BLUNT, Missouri	MARIA CANTWELL, Washington
MARCO RUBIO, Florida	CLAIRE McCASKILL, Missouri
KELLY AYOTTE, New Hampshire	AMY KLOBUCHAR, Minnesota
TED CRUZ, Texas	RICHARD BLUMENTHAL, Connecticut
DEB FISCHER, Nebraska	BRIAN SCHATZ, Hawaii
JERRY MORAN, Kansas	EDWARD MARKEY, Massachusetts
DAN SULLIVAN, Alaska	CORY BOOKER, New Jersey
RON JOHNSON, Wisconsin	TOM UDALL, New Mexico
DEAN HELLER, Nevada	JOE MANCHIN III, West Virginia
CORY GARDNER, Colorado	GARY PETERS, Michigan
STEVE DAINES, Montana	

DAVID SCHWIETERT, *Staff Director*

NICK ROSSI, *Deputy Staff Director*

REBECCA SEIDEL, *General Counsel*

JASON VAN BEEK, *Deputy General Counsel*

KIM LIPSKY, *Democratic Staff Director*

CHRIS DAY, *Democratic Deputy Staff Director*

CLINT ODOM, *Democratic General Counsel and Policy Director*

SUBCOMMITTEE ON OCEANS, ATMOSPHERE, FISHERIES,
AND COAST GUARD

MARCO RUBIO, Florida, <i>Chairman</i>	CORY BOOKER, New Jersey, <i>Ranking</i>
ROGER F. WICKER, Mississippi	MARIA CANTWELL, Washington
KELLY AYOTTE, New Hampshire	RICHARD BLUMENTHAL, Connecticut
TED CRUZ, Texas	EDWARD MARKEY, Massachusetts
DAN SULLIVAN, Alaska	BRIAN SCHATZ, Hawaii
RON JOHNSON, Wisconsin	GARY PETERS, Michigan

CONTENTS

	Page
Hearing held on April 28, 2015	1
Statement of Senator Sullivan	1
Prepared statement	13
Prepared statement of Senator Rubio	31
Statement of Senator Booker	3
Statement of Senator Nelson	4
Prepared statement	4
Statement of Senator Schatz	15
Statement of Senator Peters	17
Statement of Senator Cantwell	23
Statement of Senator Blumenthal	25
WITNESSES	
Admiral Paul F. Zukunft, Commandant, U.S. Coast Guard	4
Prepared statement	6
APPENDIX	
Response to written questions submitted to Admiral Paul F. Zukunft by:	
Hon. John Thune	33
Hon. Dan Sullivan	35
Hon. Bill Nelson	41
Hon. Cory Booker	43
Hon. Maria Cantwell	44
Hon. Richard Blumenthal	50
Hon. Brian Schatz	51

**STAYING AFLOAT: EXAMINING THE
RESOURCES AND PRIORITIES
OF THE U.S. COAST GUARD**

TUESDAY, APRIL 28, 2015

U.S. SENATE,
SUBCOMMITTEE ON OCEANS, ATMOSPHERE, FISHERIES,
AND COAST GUARD,
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,
Washington, DC.

The Subcommittee met, pursuant to notice, at 10:03 a.m. in room SR-253, Russell Senate Office Building, Hon. Dan Sullivan, Chairman of the Subcommittee, presiding.

Present: Senators Sullivan [presiding], Ayotte, Booker, Cantwell, Blumenthal, Schatz, Peters, and Nelson.

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

Senator SULLIVAN. The Subcommittee on Oceans, Atmosphere, Fisheries, and Coast Guard will now come to order.

Good morning, everybody.

I would like to start by thanking the Commandant of the United States Coast Guard, Admiral Paul Zukunft, for taking time out of his busy schedule to testify today.

The Coast Guard's mission is to ensure the safety, security, and stewardship of our Nation's waters, a daunting task that covers the largest system of ports, waterways, and coastal seas in the world. The Coast Guard more than admirably performs this mission on a daily basis with a team of less than 90,000 members, comprised of active duty, reserve, civilian, and volunteer forces, and an annual budget of less than \$10 billion and a fleet of aging vessels and aircraft.

Admiral, I think as you know, as I have said before, prior to 9/11, in my view, the Coast Guard was the only one of our military services whose members were risking their lives literally on a daily, if not hourly, basis. Your heroic efforts continue. Please, I think one thing we want to get out of this committee is to make sure you thank all your members for their fantastic service.

Let me provide me a few examples of that service.

Last year, the Coast Guard executed more than 17,500 search and rescue missions and saved over 3,400 lives. In addition, last year's Coast Guard law enforcement crews interdicted 140 metric tons of narcotics, detained over 300 smugglers, and interdicted more than 3,500 migrants.

Meanwhile, the Coast Guard's maritime prevention mission was responsible for the inspection of over 12,000 U.S. commercial vessels, 3,600 maritime facilities, and the screening of more than 25,000 cargo containers.

This crucial mission ensures compliance with safety and environmental protections.

As you are aware, I am a very big fan of the Coast Guard and your members. But as you recently stated, Admiral, the Coast Guard's mission demands are on the rise. Increasing human activity in the Arctic; violence, corruption, terrorism, and drug trafficking in the Caribbean Basin, Central America, and Mexico; and, many people don't recognize, overseas contingency operations demand an increased Coast Guard presence not only off the coast of the United States but around the globe.

Amazingly, the Coast Guard continues to respond to these demands with a fleet of cutters that are operating well beyond their planned service life. These vessels are expensive to maintain and, due to their increasing age, are not necessarily optimal for the performance of your evolving set of missions.

The average age of the service's medium-endurance cutters is almost 50 years old. The Coast Guard's high-endurance cutters have been in service since the 1960s. Mechanical malfunctions have forced four cutters headed to sea in support of counter-narcotic missions to return to port for emergency dry-docking.

In fact, a 2014 DHA inspector general report found that the declining readiness of the Coast Guard's high-endurance cutters continues to pose significant challenges to mission performance. This decline in fleet readiness certainly contributes to the service's ability to stop just 20 percent of the illegal drug shipments that it knows about.

So it is hard to believe that the Coast Guard's fiscal year 2016 budget request does not fully fund design activities related to the acquisition of the offshore patrol cutter. I look forward to hearing what impacts this will have on the acquisition of the offshore patrol cutter, a priority for the Coast Guard.

Another of the service's priorities should be a new polar icebreaker. The ongoing recession of the Arctic sea ice coverage and simultaneous opening of Arctic waters is driving dramatic increased activity in the regions of the Arctic, including off the coast of Alaska.

These developments have heightened interest and concerns about the region's future, with the consequences for increased demands for search and rescue, environmental response, vessel traffic safety and security, law enforcement, and, of course, fisheries resource management.

Coast Guard icebreakers are multi-mission platforms that are capable of supporting the national interest throughout the polar regions of our country. Its fleet of three, two of which are operational, pales in comparison to that of Russia's fleet of 40 icebreakers. The Coast Guard's fleet is actually one-third the size recommended by the High-Latitude Mission Analysis report published in 2010. And we would be very interested in your comments on the polar icebreaker needs.

This subcommittee has a great deal of work to do to ensure that the Coast Guard is properly resourced to fund its priorities, modernize its assets, and successfully execute its mission. I look forward to hearing from the Commandant and the Members of the Subcommittee on these and other important issues.

I would now like to turn the mike over to Ranking Member Booker for 5 minutes to deliver his opening statement.

**STATEMENT OF HON. CORY BOOKER,
U.S. SENATOR FROM NEW JERSEY**

Senator BOOKER. Thank you very much.

I just want to say this is my first opportunity to be a Ranking, with Senator Sullivan. It is an honor to have an opportunity to work with him. Honestly, his commitment in a very short time to the work of the Senate as well as the important work of this committee is admirable.

He said something to me the other day. He has served with me now for 4 months, and he said it feels like 10 years. I can only think that is because we feel like old friends.

Senator SULLIVAN. We will take that comment without objection. [Laughter.]

Senator BOOKER. I have already apologized, Admiral, that I have to leave to an important Committee markup. But I do want to say thank you so much for joining us here. As the Commandant of the Coast Guard, your service to our country is admirable and deeply appreciated by all here on the Committee.

I want to express my appreciation not only for your service but for all that the Coast Guard does. It has been 225 years that the Coast Guard has safeguarded our Nation's maritime interests here at home and around the world.

And what I have seen in my time as mayor of the state's largest city, of which I now serve as their Senator for the state, has been incredible continuous work by the Coast Guard in our state.

As recently as 2 weeks ago, the Coast Guard rescued four civilians from a capsized boat in central New Jersey. The operator of the 20-foot boat called the Coast Guard to say that it was taking on water near the entrance of the Shrewsbury River, just off of Sea Bright. A rescue crew from the Coast Guard Station Sandy Hook arrived on the scene as the boat capsized.

Rescue operations like these are, unfortunately, often for the Coast Guard, and they remind us of the importance of the work that you do in saving lives and serving this nation.

I am grateful to the men and women of the Coast Guard who continually put their lives on the line, day after day, for property at sea, who keep our ports safe and secure, and who protect our marine environment for this and future generations, both in New Jersey and around the country.

We have facilities in our state, from the United States Coast Guard Training Center in Cape May to the Atlantic City Station, that not only serve the purposes of which I have mentioned but are also important and integral parts of our state's economy, our state's community, and our state's overall well-being.

So I thank you for being here to represent the Coast Guard, and I look forward to hearing your testimony.

Senator NELSON. Mr. Chairman, may I say a word?
 Senator SULLIVAN. Yes, sir. Senator Nelson.

**STATEMENT OF HON. BILL NELSON,
 U.S. SENATOR FROM FLORIDA**

Senator NELSON. I will enter a statement in the record.

Just to say that I have spent quite a bit of time with the Admiral. We recently were together for a day, doing demonstrations of how they interdict a lot of the people that are coming as migrants and how they take care of them and all their health needs on those Coast Guard cutters. Some of those cutters are 50 years old. We have to replace them.

General Kelly, the Commander of SOUTHCOM, doesn't have enough Coast Guard out there to stop the drugs. They can only interdict 20 percent of the drugs that the intelligence apparatus knows is coming out of South America into Central America and now, increasingly, into the Dominican Republic and Puerto Rico.

While I was there with the Admiral, we went on a fast boat. And they showed me how one of their fast boats was the bad guy trying to get away from the Coast Guard fast boat. And, of course, if you like some g-forces, which I do, you can pull g-forces almost in those sharp turns on the fast boats. So they just do a wonderful job.

The final comment: They are part of our military effort on the other side of the globe because the Coast Guard is over there, along with the armed forces as well. So we owe a lot to this public service, and we need to modernize some of their equipment.

Thank you, Mr. Chairman.

[The prepared statement of Senator Nelson follows:]

PREPARED STATEMENT OF HON. BILL NELSON, U.S. SENATOR FROM FLORIDA

Thank you, Mr. Chairman.

I would also like to thank the Coast Guard's 25th Commandant, Admiral Paul Zukunft, for testifying today.

I had the opportunity to spend some time with Admiral Zukunft and some of the men and women that serve in the Coast Guard. I've experienced the professionalism of this sea-going service firsthand while flying interdiction drills with aircrews from Miami and also going to sea on multiple assets off the coast of Florida.

The Coast Guard, while small, is extraordinarily agile. With 11 statutory missions to perform, maintaining this level of agility is no small feat.

The Coast Guard has a vast amount of demands placed on it, and is forced to meet those demands with an aging fleet of cutters and aircraft.

The Coast Guard's 210-foot Medium Endurance Cutters are roughly 50 years old, and some of the Coast Guard's C-130 planes are almost as old.

Admiral, I know you face many challenges as the Commandant of the Coast Guard but I am confident in your ability to lead this Service. I am also confident in the men and women that serve under you, and in the Service's ability to do all that we ask of it.

Thank you for your continued service to our country and I look forward to your testimony.

Senator SULLIVAN. Admiral, the floor is yours for your opening statement.

**STATEMENT OF ADMIRAL PAUL F. ZUKUNFT, COMMANDANT,
 U.S. COAST GUARD**

Admiral ZUKUNFT. Good morning, Chairman Sullivan, Ranking Member Nelson, Ranking Member Booker, members of this com-

mittee. On behalf of the 88,000 men and women of the Coast Guard, thank you for the support that you provide to my Coast Guard.

I ask that my written statement be accepted as part of the official record.

Senator SULLIVAN. Without objection.

Admiral ZUKUNFT. I will first start in this, our hemisphere. We are witnessing extreme violence in Central America, stemming from insidious transnational organized criminal networks. We are seeing significant maritime commerce shifts, fueled by the American energy renaissance. We have rapidly increasing demands on both industry and government in the cyber domain. And the Arctic Ocean is open to more commerce and tourism every year.

Most importantly, all of these geostrategic trends have converged concurrently on our nation, dramatically increasing demands on Coast Guard operations and contingency preparedness. This comes at a time when much of the Coast Guard's infrastructure and many of our platforms are well beyond their service life. As you mentioned, last year, I sent four 50-year-old medium-endurance cutters to costly emergency dry-docks, losing 20 percent of my planned patrol days.

These pressures put the Coast Guard under tremendous strain. To help alleviate this strain, we have developed strategies to address these converging trends, and, moving forward, we will align our budget priorities to meet them. I will spend just a moment discussing these converging trends.

Illegal trade in drugs, people, and weapons is a \$750 billion global criminal enterprise, and, since 9/11, over 450,000 Americans have died in our homeland due to drug violence and drug overdose. And unaccompanied minors that are fleeing crime-ridden countries in Central America, they are fleeing because drug trafficking organizations reign supreme in those nations, and those children are coming to a safe refuge, the United States.

Now, combating these networks requires a forward-based presence that draws upon the Coast Guard's unique global authorities to attack illicit trafficking where it is most vulnerable, and that is at sea.

Two weeks ago, Cutter BOUTWELL returned home from a 79-day patrol on a flight deck with 29,000 pounds of pure cocaine that she had seized as a result of 40 interdictions made by U.S. forces and our international partners. Those interdictions also resulted in the apprehension of more than 100 traffickers.

Now, BOUTWELL is a 47-year-old Coast Guard cutter, and when she returned from the patrol before that, she came back with just slightly more cocaine than that.

And why is that? Because today we have visibility on approximately 90 percent of the known maritime drug movements in the Caribbean and the Pacific. And we are only able to target, as Senator Nelson mentioned, 20 percent of that 90 percent of those illegal shipments with our limited arsenal of ships and aircraft. This is truly an issue of capacity.

And this is why the offshore patrol cutter is my number one recapitalization priority. The offshore patrol cutter will provide af-

fordable and persistent offshore presence needed to meet maritime objectives well into the 21st century.

Now, shifting to the Arctic, our Nation's fleet of ocean-going icebreakers today is comprised of one heavy operational icebreaker, POLAR STAR, and one medium icebreaker, HEALY.

Today, human activity in the Arctic is on the rise, including trans-Arctic shipping, ecotourism, and resource exploitation, and the Coast Guard is actively planning for the potential of Arctic drilling this summer. And we will have a rotational presence of the Coast Guard Cutter HEALY, a national security cutter, and a shore-based aviation detachment based in the Arctic region this summer.

By reactivating POLAR STAR, we have purchased up to 10 years of decision space to recapitalize our icebreaking fleet. Two of those years have expired. And while I am exploring several options to reconstitute our Nation's fleet of icebreakers, I will need top-line relief in my acquisition budget to make this requirement a reality.

Finally, investing in 21st-century Coast Guard platforms and people is a smart choice. No one will return more operational value on every dollar than the men and women of the United States Coast Guard. Our acquisition force received 5 Federal acquisition awards in 2014, and we were the first military service to achieve a clean, unqualified financial audit, an accomplishment we have done for 2 consecutive years as we continue to strengthen our financial management processes. And we have proved to be responsible stewards of our financial resources and capital plan, operating and maintaining platforms, like BOUTWELL, well beyond their service life.

Going forward, the key to our future operational success is stable and predictable funding. I look forward to working with this committee as we make prudent investments in the 21st-century Coast Guard.

Thank you, and I look forward to your questions.

[The prepared statement of Admiral Zukunft follows:]

PREPARED STATEMENT OF ADMIRAL PAUL F. ZUKUNFT, COMMANDANT,
U.S. COAST GUARD

Introduction

Good morning Mr. Chairman and distinguished members of the Committee. Thank you for the continued support the Congress has shown to the 88,000 active duty, civilian, reservists, and auxiliary personnel of the United States Coast Guard, through funding investment in our people, the recapitalization of our aging fleet, and sustainment of our front-line operations.

At all times an Armed Force, a regulatory agency, a humanitarian service, a Federal law enforcement agency and a member of the intelligence community, the Coast Guard protects, defends, and promotes National interests on the high seas, in our Exclusive Economic Zone, near our coasts, and in our ports and inland waterways. The Service leverages more than 60 bilateral agreements and arrangements to address counter narcotics, illegal migration, fisheries enforcement and weapons proliferation—not only beyond our territorial sea, but in many cases, extending U.S. jurisdictional reach into [the territorial sea or other] waters under the jurisdiction of signatory nations.

We are a maritime law enforcement service without peer and a unique instrument of international diplomacy. Many nations model their maritime forces after the U.S. Coast Guard to address transnational crime, human smuggling and foreign incursions into their respective waters. The Coast Guard uses our broad authorities, capabilities, and expansive partnerships to sustain an effective and persistent pres-

ence to ensure the most vital National interests in the maritime operating environment are met.

The U.S. Coast Guard operates in a complex, diverse and rapidly changing world. To ensure we meet the demands of today while preparing for tomorrow, the Service aligns its actions and investments with other components of the Department of Homeland Security (DHS) and National strategies. The Fiscal Year 2016 Budget continues the sound stewardship of fiscal resources to invest in the 21st Century Coast Guard. Investments in the Offshore Patrol Cutter (OPC) acquisition, improved aviation capabilities, integrated command and control systems and a proficient workforce are all critical to our future success. We remain an adaptable force, firmly committed to prioritizing operations and resources to maximize service to the Nation.

Our extraordinary people deserve America's investment in a 21st century Coast Guard. In 2016, we will bring special focus to four maritime concerns that support the Nation's interests, security, and prosperity:

- (1) Combating Transnational Organized Crime networks and securing our borders;
- (2) Safeguarding commerce;
- (3) Enhancing our internal IT security and promoting cyber security within ports; and
- (4) Maintaining our presence in the Polar Regions.

As part of the President's strategy to enhance stability, prosperity, and governance in Central America, the Coast Guard is repositioning legacy forces and investing in the people and platforms necessary to carry out an offensive strategy that targets Transnational Organized Crime networks, operating with impunity throughout the Central American region, and disrupts these criminal network operations where they are most vulnerable—at sea. For example, Coast Guard Cutter BOUTWELL returned home with nearly 60,000 pounds of uncut, pure cocaine with a street value of more than one and a half billion dollars in two patrols over the last six months. It was the result of nearly 40 different interdictions by U.S. forces. Our Helicopter Interdiction Tactical Squadron (HITRON) set a record in 2014, with 46 at sea interdictions netting over 31 metric tons of cocaine and 27 tons of marijuana. The increase in illicit trafficking of humans, drugs, and weapons into our transit zones and southern approaches is the direct result of Transnational Organized Crime networks operating with impunity throughout the Central American region. These organizations are vying for power through drug-fueled violence, the effects of which are destabilizing governments, undermining the rule of law, terrorizing citizens, and driving illegal migration from Central America to the United States, including the inhumane and perilous migration of unaccompanied children.

We continue to replace High Endurance Cutters, with the more capable National Security Cutters. In 2016, we will continue construction of the final three NSCs. In the future, acquisition of an affordable and capable offshore patrol cutter will also be a critical piece of the Coast Guard's Western Hemisphere Strategy to combat these networks. The OPC will be the backbone of Coast Guard offshore presence and the manifestation of Coast Guard authorities. It is essential to interdicting drug smugglers at sea, as well as for interdicting undocumented migrants, rescuing mariners, enforcing fisheries laws, responding to disasters, and protecting our ports. As the Coast Guard completes acquisition of the NSC, the OPC will become Coast Guard's number one acquisition priority.

In 2013, a new tank barge entered the stream of commerce every day in America, moving product on our maritime highways to fuel the United States economy. There has been a significant increase in barge transits carrying oil and natural gas on the Mississippi River in the last five years. The Coast Guard plays an important role in ensuring the safe and secure movement of commerce on the Nation's waterways to bolster economic security. Changes in U.S. energy production have increased the traffic levels at some of our ports. Larger tanker vessels, greater complexity of port operations and expanded movement of energy and hazardous materials increase the overall risk of an incident that could have severe environmental consequences. To keep pace with the maritime industry we regulate, the Coast Guard will continue ongoing initiatives to improve our marine safety workforce, and support innovative technologies to improve waterways management.

In 2016, we will remain in lockstep with other components of DHS and Department of Defense (DOD) efforts to enhance cyber security to defend our own network and work with port partners to protect maritime critical infrastructure and operators.

The Coast Guard cutter POLAR STAR recently completed Operation Deep Freeze in Antarctica. Her mission consisted of breaking out a channel, and escorting petroleum and break bulk carriers, to resupply the United States base of operations in McMurdo Sound. That vital mission has enabled the U.S. to conduct scientific research and to implement the Antarctic treaty—a strategic necessity for our Nation. POLAR STAR is the only heavy ice breaker in the United States fleet capable of conducting this mission and providing assured access. In 2016, we continue the pre-acquisition work for procurement of a new polar icebreaker including development of a request for proposal.

In 2016, the Coast Guard will continue mobile and seasonal operations and partner with the coast guards of all Arctic nations through the Arctic Coast Guard Forum. We will continue to cooperate with the Department of State and other Federal and international partners as the U.S. assumes the Chairmanship of the Arctic Council in 2015. Mobile and seasonal operations—the summer deployment of assets during Operation Arctic Shield—will continue to better understand the operational demands of the region and inform the timing and extent of any infrastructure needs based on human and economic activity in the region. Operation Arctic Shield is geared towards assessing the operational capabilities of cutters, boats, and aircraft in the Arctic while strengthening relationships with state, local, and tribal stakeholders. Research operations will continue on Coast Guard’s medium ice breaker, HEALY. In addition to providing a research platform for U.S. scientists, HEALY provides a vessel of opportunity to help manage increasing human and economic activity in the Arctic. For example, last summer Coast Guard Cutter HEALY was diverted to rescue a 36-foot sailing vessel trapped in ice forty miles north of Barrow, Alaska.

The Coast Guard’s daily activities support nearly every facet of the Nation’s maritime interests, protect our homeland and secure our economic prosperity. The past year of Coast Guard operations was no exception. The Coast Guard responded to over 17,500 search-and-rescue cases, saving more than 3,400 lives; seized over 91 metric tons of cocaine and 48.9 metric tons of marijuana destined for the United States, worth an estimated \$3 billion; detained over 340 suspected drug smugglers; interdicted more than 3,500 undocumented migrants; conducted over 25,000 container inspections; completed over 9,600 Safety of Life at Sea (SOLAS) safety exams on foreign vessels; and responded to approximately 8,000 reports of pollution incidents.

You will not find a better return on investment than the U.S. Coast Guard. Due to exceptional commitment and innovation, the Coast Guard has ships sailing today that are 60 years old—well beyond their service life. The Medium Endurance Cutters that make up the backbone of the offshore fleet are reaching 50 years of age. Over the last two years, four of these cutters have experienced emergency drydocks, losing nearly 20 percent of their planned patrol days. As careful stewards, the Service was the first military service to earn an unqualified audit opinion, and has done so two years running. As part of the Coast Guard’s plan to recapitalize for the next half century, the Service created an acquisition workforce that won five federal-level awards in 2014.

As the Service approaches 225 years of service, history has proven that a responsive, capable, and agile Coast Guard is an indispensable instrument of national security, and investing in 21st century Coast Guard platforms and people is a prudent choice despite the challenging fiscal environment.

No other investment will return more operational value on every dollar than the 88,000 extraordinary men and women of the U.S. Coast Guard. The Coast Guard will remain *Semper Paratus*—Always Ready.

FY 2016 Request

The Coast Guard’s FY 2016 budget preserves Coast Guard operations, invests in Coast Guard personnel and continues recapitalization efforts for our cutters, boats, aircraft, systems and infrastructure. The budget also efficiently allocates resources to optimize Coast Guard mission performance. The Coast Guard must continue meeting today’s operational requirements while investing in future capability to best serve the Nation.

The Coast Guard’s FY 2016 budget priorities are to:

1. Invest in the 21st Century Coast Guard;
2. Sustain mission excellence; and
3. Maximize service to nation.

Invest in the 21st Century Coast Guard

Coast Guard mission demands continue to grow and evolve. The complexities and challenges facing the Nation require well-trained Coast Guard men and women with capable platforms providing the persistent presence necessary to conduct operations. Given the age and condition of existing assets, future mission success relies on continued recapitalization of Coast Guard boats, cutters, aircraft, systems, and infrastructure. Similar to the Medium Endurance Cutter it replaces, the Offshore Patrol Cutter will provide the majority of the Coast Guard's offshore surface capacity essential to stopping drug smugglers at sea in addition to interdicting undocumented migrants, rescuing mariners in distress, deploying alongside the Navy, enforcing U.S. fisheries laws, responding to disasters, and protecting our ports. They are an important component of enhancing security as outlined in the U.S. Strategy for Engagement in Central America.

In support of the DHS's strategic objectives, the FY 2016 budget provides for the acquisition of six Fast Response Cutters, continues to invest in acquisition activities for an affordable Offshore Patrol Cutter and funds vessel sustainment projects for two 140-foot WTGB Ice-breaking Tugs and a 225-foot Seagoing Buoy Tender. The budget also continues sustainment and conversion work on legacy fixed and rotary wing aircraft, missionization of the C-27J aircraft received from the Air Force, and investment in Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) systems.

Sustain Mission Excellence

The FY 2016 budget ensures the Coast Guard can conduct today's highest priority operations in support of national objectives. Most importantly, it sustains the Coast Guard's workforce and supports proficiency, maximizing operational safety and effectiveness. In 2016, the Coast Guard will decommission two 110-foot Patrol Boats that are being replaced by more capable Fast Response Cutters. The Coast Guard will also decommission three HC-130 aircraft and corresponding support personnel while accepting the delivery of new C-130J aircraft and C-27J aircraft. The FY 2016 budget sustains the Coast Guard's highest priority operations with current operational assets and the necessary workforce.

Maximize Service to Nation

The Coast Guard's authorities extend well beyond our territorial sea, requiring us to meet evolving mission requirements stemming from national priorities, while remaining a trusted steward of public resources.

The FY 2016 budget sustains critical frontline operations by efficiently allocating resources across all mission programs. Coast Guard operational commanders will continue maintaining search and rescue coverage, protecting critical infrastructure, countering illicit threats from entering the United States, facilitating the proper function of the MTS to minimize disruptions to the transit of maritime commerce, safeguarding the maritime environment, and supporting foreign policy objectives and defense operations.

FY 2016 Highlights

Invest in the 21st Century Coast Guard

- *Surface Assets* \$533.9M (0 FTE)

The budget provides \$533.9 million for the following surface asset recapitalization and sustainment initiatives:

- *National Security Cutter (NSC)*—Provides funding for the Structural Enhancement Drydock Availability (SEDA) for the NSC and post delivery activities for the fifth through eighth NSCs, completing the recapitalization of the Coast Guard's High Endurance Cutter fleet. The acquisition of the NSC is vital to performing DHS missions in the far off-shore regions, including the harsh operating environment of the Pacific Ocean, Bering Sea, and Arctic;
- *Fast Response Cutter (FRC)*—Provides funding to procure six FRCs. These assets replace the aging fleet of 110-foot patrol boats that provide the coastal capability to conduct Search and Rescue operations, enforce border security, interdict drugs, uphold immigration laws, prevent terrorism, and enhance resiliency to disasters;
- *Offshore Patrol Cutter (OPC)*—Supports technical review and analysis of preliminary and contract design phase deliverables for the OPC project. The Administration's request includes a general provision permitting a transfer to the OPC project if the program is ready to award the next phase of vessel acquisition in FY 2016. The OPC will replace the Medium Endurance Cutter classes that conduct missions on the high seas and coastal approaches;

- *Polar Ice Breaker (WAGB)*—Continues pre-acquisition activities for a new polar icebreaker;
- *Cutter Boats*—Continues funding for production of multi-mission cutter small boats that will be fielded on the Coast Guard’s major cutter fleet beginning with the NSC;
- *In-Service Vessel Sustainment*—Continues funding for sustainment projects on 140-foot ice breaking tugs (WTGB), 225-foot seagoing buoy tenders, the training Barque EAGLE (WIX), and initial sustainment activities for the 47-foot motor lifeboats (MLB);
- *Survey and Design*—Continues funding for multi-year engineering and design work for multiple cutter classes in support of future sustainment and acquisition projects.
- *Air Assets* \$200.0M (0 FTE)
The budget provides \$200.0 million for the following air asset recapitalization or enhancement initiatives:
 - *HC-144A*—Funds spare parts required to maintain the operational availability of the HC-144A Ocean Sentry aircraft;
 - *HC-27J*—Funds continued activities of the C-27J Asset Project Office (APO). The APO organizes logistics, training, maintenance support and ensures these newly acquired aircraft are ready for induction into the operational fleet. Funds aircraft regeneration, spares, initial training, mission system development, ground support equipment to stand up first operational unit;
 - *HH-65*—Continues modernization and sustainment of the Coast Guard’s fleet of HH-65 helicopters, converting them to MH-65 Short Range Recovery (SRR) helicopters. The modernization effort includes reliability and sustainability improvements, where obsolete components are replaced with modernized sub-systems, including an integrated cockpit and sensor suite;
 - *C-130J*—Funds initial spare parts required for stand up of the second operational HC-130J unit.
- *Other Acquisition, Construction, and Improvements Initiatives* \$65.1M (0 FTE)
The budget provides \$65.1 million for other initiatives funded under the Acquisition, Construction and Improvements account, including the following equipment and services:
 - *Program Oversight and Management*—Funds activities associated with the transition of the Coast Guard’s assets from acquisition to operations, including delivery, provision of logistics, training, and other services necessary to ensure seamless integration into the operational fleet;
 - *Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR)*—Provides design, development, upgrades, and assistance on C4ISR hardware and software, creating a common operational picture and ensuring interoperability of all new and in-service assets;
 - *CG-Logistics Information Management System*—Continues development and deployment of a unified logistics system for Coast Guard operational assets.
- *Shore Units and Aids to Navigation (ATON)* \$101.4M (0 FTE)
The budget provides \$101.4 million to recapitalize shore infrastructure for safe, functional, and modern facilities that support Coast Guard assets and personnel:
 - *Specific Projects*—Pier improvements in Little Creek, VA, to facilitate a 210’ WMEC homeport shift; renovation and restoration of electrical system at Air Station Barbers Point, HI; the first phase of the replacement of aging dry-dock facilities at the Coast Guard Yard; erosion control work at Station Siuslaw River, OR; and construction of permanent facilities at Station Vallejo, CA;
 - *ATON Infrastructure*—Construction and improvements to short-range aids and infrastructure to improve the safety of maritime transportation.
 - *Major Acquisition System Infrastructure*—Modification and construction of facilities to support newly delivered acquisitions. Includes upgrades and construction for NSC homeports, Medium Range Surveillance aircraft operational and maintenance facilities, and engineering, feasibility, and environmental studies for future projects.

- *Personnel and Management* \$116.9M (881 FTE)
The budget provides \$116.9 million for pay and benefits of the Coast Guard's acquisition workforce.

Sustain Mission Excellence

- *Operational Adjustments*
 - *Cyber Security Remediation* +\$5.2M (0 FTE)
This increase reflects a portion of a DHS-wide plan to address identified vulnerabilities related to a component controlled system, and the Department will track remediation of these vulnerabilities commencing in FY 2015.
 - *Support Structure Review and Rebalancing* -\$2.5M (-18 FTE)
A thorough review of the Coast Guard's support delivery structure identified personnel reductions at various locations that can be taken with no direct operational impacts and a minimal loss of current service delivery;
 - *National Capital Region Footprint Consolidation* -\$3.0M (0 FTE)
Reduces the Coast Guard's physical footprint in the National Capital Region through consolidation of personnel and offices into the Douglas A. Munro Coast Guard Headquarters building at St. Elizabeths;
 - *Professional Services Contract Reduction* -\$44.9M (0 FTE)
Reduces or scales professional services contracts and redirects savings to higher priorities;
 - *Manual Continuous Monitoring Reduction* -\$1.2M (0 FTE)
Due to increased capabilities of the Continuous Diagnostics and Mitigation (CDM) program, the need for manual cyber security monitoring is reduced and the Coast Guard is able to achieve savings with no loss of IT system security;
 - *Headquarters Directorate Reduction* -\$5.0M (0 FTE)
Reduces funding for the overhead costs of Coast Guard headquarters directorates through a focused effort to minimize duplicative spending on consumable supplies and materials.
- *Asset Decommissioning and Retirement*
As the Coast Guard recapitalizes its cutter and aircraft fleets and brings new assets into service, the older assets that are being replaced will be decommissioned or retired.
 - *Patrol Boat (WPB)* -\$1.1 M (-14 FTE)
Decommissions two 110-ft WPB patrol boats. These assets will be replaced with Fast Response Cutters (FRCs) in the Seventh Coast Guard District.
 - *HC-130 Aircraft Retirement* -\$11.7M (-53 FTE)
Eliminates funding and personnel associated with the retirement of three HC-130H to the Air Force for transfer to the U.S. Forest Service as outlined in the FY 2014 National Defense Authorization Act. Newly acquired HC-130J and C-27J aircraft will provide increased operational reliability.

Maximize Service to the Nation

- *Operating and Maintenance Funds for New Assets* +\$89.9M (222 FTE)
Provides funding for operations and maintenance of shore facilities, as well as cutters, boats, aircraft, and associated C4ISR subsystems delivered through acquisition efforts.
 - *Shore Facilities*—Funds operation and maintenance of shore facility projects scheduled for completion by FY 2016;
 - *Response Boat-Medium*—Funds operation, maintenance and support of 4 RBMs;
 - *FRC*—Funds operation and maintenance of FRCs #18–21 and provides funding for personnel to operate and maintain hulls #19–22, including the shore-side support personnel;
 - *NSC*—Funds personnel for NSC #6, and costs for shore side support personnel for NSCs #4–5 (to be homeported in Charleston, SC);
 - *C-27JA Aircraft*—Funds operations, maintenance, and personnel funding for the first four C-27J aircraft that will be assigned to Air Station Sacramento, CA.

- *Pay & Allowances* +\$80.8 (0 FTE)
Maintains parity with DOD for military pay, allowances, and health care, and for civilian pay raise and retirement contributions. As a branch of the Armed Forces of the United States, the Coast Guard is subject to the provisions of the National Defense Authorization Act, which include pay and personnel benefits for the military workforce.

Conclusion

In closing, I will stress that you will not find a better return on investment than the United States Coast Guard. As the service approaches its 225th year, history has proven us responsive, capable, and agile. The Service provides tremendous operational results for every dollar provided to the extraordinary men and women of the United States Coast Guard. We have been and will remain *Semper Paratus*—Always Ready.

Senator SULLIVAN. Thank you, Admiral. And, again, I would, please, from this committee, pass on our compliments to all the members of the Coast Guard, who are doing such great work for our country.

I wanted to start by drilling down into an issue that is very Alaska-specific, but I think it is a broader issue with regard to how individual agency decisions in one part of the Federal Government can dramatically impact another agency's resources.

So, over a year ago, the people of King Cove were denied a reliable lifesaving road that would provide medical emergency access because of the decision by Secretary Jewell at the Department of Interior not to allow for that road.

During that time, the Secretary, in her decision, stated she understood the need for reliable methods of medical transport for lives and safety for the residents of King Cove, Alaska, but have concluded that other methods of transport remain and could be improved to meet the community's needs.

She never identified any other methods and alternatives, and so what has happened is that the brave men and women of the Coast Guard have been asked and have admirably functioned their mission, to fly dangerous evacuation missions in very poor weather conditions.

Since Secretary Jewell denied the road in King Cove, there have been seven Coast Guard medevacs, most recently on February 22, 2015. How much do each of these evacuations from King Cove to Cold Bay cost the Coast Guard? Do you know?

Admiral ZUKUNFT. Mr. Chairman, those cost approximately \$42,000 per medevac. That is the financial cost, but there is also a cost of risk. As you know, this is not a benign operating environment.

Senator SULLIVAN. No.

So there is also the real risk that comes with the expenditure of those flights.

Senator SULLIVAN. A real risk to the brave men and women flying those flights.

Yes, sir.

Senator SULLIVAN. So, as you probably know and we certainly believe in Alaska, the Secretary of the Interior could fix this issue with the stroke of a pen. Have there been any discussions at all for the Department of the Interior reimbursing the Coast Guard for these expenses, which, again, in a year and a half, have grown quite significantly?

Admiral ZUKUNFT. There have been no such discussions.

Senator SULLIVAN. OK.

I would like to next turn to an issue that I think is on everybody's list here. You talked about it. I would like you to drill down a little bit more in your testimony with regard to the need for an offshore patrol cutter and the new icebreaker, with regard to the priorities at the top of your list.

How will you manage the acquisition, construction, improvement funding needed for these priorities as the funding for these types of requirements continues to decline?

I am going to submit for my written testimony how much the decline in your budget has been over the last few years.

[The prepared statement of Senator Sullivan follows:]

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

Good morning, everyone. I'd like to start by thanking the Commandant of the United States Coast Guard, Admiral Paul Zukunft, for taking time out of his busy schedule to testify before this Subcommittee today.

As we all know, the Coast Guard's mission is to ensure the safety, security, and stewardship of our Nation's waters—a daunting task that covers the largest system of ports, waterways, and coastal seas in the world.

The Coast Guard admirably performs this mission on a daily basis with a team of less than 90,000 members comprised of active duty, reserve, civilian, and volunteer forces, an annual budget of less than \$10 billion, and a fleet of aging vessels and aircraft.

I have often said, prior to the events of September 11, 2001, the Coast Guard was the only uniformed service whose members risked their lives for this Nation on a daily basis.

Last year, the Coast Guard executed more than 17,500 search and rescue missions and saved over 3,400 lives. And let me add a local item of interest: According to the *Alaska Dispatch News*, six of those rescues were conducted out of King Cove, in Alaska's Aleutian Chain, because the Department of Interior has blocked a potentially life-saving road that would allow residents to drive to an all-weather airport.

More about the heroic Coast Guard efforts in my home state: Just last week, an MH-60 Jayhawk helicopter crew out of Kodiak, Alaska rescued three mariners after a fire started on board their fishing vessel. The three men couldn't put out the fire, and were forced to don survival suits and abandon their vessel, floating in the choppy Gulf of Alaska in a small lifeboat. The MH-60 crew responded within a half hour and saved their lives.

In addition, last year Coast Guard law enforcement crews interdicted 140 metric tons of narcotics, detained over 300 smugglers, and interdicted more than 3,500 migrants.

Those successes have continued this year. The crew of the Cutter BOUTWELL seized over 14 tons of cocaine during its recent patrol. So far this year the Coast Guard has seized nearly 30 tons of cocaine and apprehended over 100 smugglers.

Meanwhile, the Coast Guard's maritime prevention mission was responsible for the inspection of over 12,000 U.S. commercial vessels and 3,600 marine facilities, and the screening of more than 25,000 cargo containers. This crucial mission ensures compliance with safety and environmental protection regulations.

Admiral Zukunft recently stated that the Coast Guard's mission demands were on the rise.

Increasing human activity in the Arctic; violence, corruption, terrorism, and drug trafficking in the Caribbean Basin, Central America, and Mexico; and overseas contingency operations demand an increased Coast Guard presence around the globe.

Amazingly, the Coast Guard continues to respond to these demands with a fleet of cutters that are operating beyond their planned service life. These vessels are expensive to maintain, and due to their increasing age, are not necessarily optimal for the performance of their evolving set of missions.

The average age of the service's medium endurance cutters is almost 50 years.

The Coast Guard's high endurance cutters have been in service since the 1960s. Mechanical malfunctions have forced four cutters headed to sea in support of counter-narcotics missions to return to port for emergency dry-docking.

In fact, a 2014 DHS Inspector General report found that the declining readiness of the Coast Guard's high endurance cutters continues to pose significant challenges to mission performance. This decline in fleet readiness certainly contributes to the service's ability to stop just 20 percent of the illegal drug shipments that it knows about.

So it's hard to believe that the Coast Guard's Fiscal Year 2016 budget request does not fully fund design activities related to the acquisition of the offshore patrol cutter. I look forward to hearing what impact this will have on the acquisition of the offshore patrol cutter—a priority for the Coast Guard.

Another of the service's priorities should be a new polar icebreaker. The ongoing recession of the Arctic sea ice coverage and simultaneous opening of Arctic waters is driving increased human activity in the region. These developments have heightened interest in, and concerns about, the region's future, with consequences for increased demands for search and rescue, environmental response, vessel traffic safety and security, law enforcement, and fisheries resource management.

For example, the Bureau of Ocean Energy Management is currently reviewing one company's plan to drill exploratory wells off the coast of Alaska. This alone highlights the need for greater Coast Guard presence in the Arctic in support of the agency's response and prevention missions.

Coast Guard icebreakers are multi-mission platforms that are capable of supporting national interests in the Polar Regions. Its fleet of three, of which two are operational, pales in comparison to that of Russia's fleet of 40.

The Coast Guard's fleet is actually one third the size recommended by a High Latitude Mission Analysis Report published in 2010.

That report indicated a service need of at least three heavy icebreakers and three medium icebreakers.

Currently, the Coast Guard operates just one heavy icebreaker that was brought into service in 1976, exceeding its 30-year service life. An overhaul of the vessel completed in 2012 may continue her service to between 2019 and 2022.

A new heavy icebreaker could cost more than \$1 billion, and would have a tremendous impact on the Coast Guard's budget. For perspective, the President's Fiscal Year 2016 budget request includes approximately \$1 billion to support all of the service's acquisition, construction, and improvement projects.

This is almost 17 percent below what was enacted last year, but more importantly, provides the service with 35 percent less funding for vessel acquisitions and highlights a continuing trend of decreased funding for Coast Guard acquisitions.

This Subcommittee has a great deal of work to do to ensure that the Coast Guard is properly resourced to fund its priorities, modernize its assets, and successfully execute its missions. I look forward to hearing from the Commandant and this Subcommittee's members on these important issues.

Senator SULLIVAN. But how are you trying to manage that as the decline is occurring?

Admiral ZUKUNFT. Yes. Several key elements of our acquisition portfolio, right now the largest being our national security cutter. And we just awarded the final contract for the eighth national security cutter, which is the program of record for that platform.

And I cannot say enough great things about what this platform is doing not just for our Coast Guard but for our nation overall on a global scale. So the national security cutter, I am quite pleased with its performance.

We have used a commercial-off-the-shelf design to recapitalize our patrol boat fleet with our fast-response cutters using fixed-price contracts. And we will recompetete those. The first phase of that will build 32, after that the next 26, with emphasis on affordability through open and fair competition, as we look at building that out.

And, similarly, we have done a lot of homework on the offshore patrol craft, with an emphasis on meeting our mission demands. One is operating globally, which means in a sea state 5, which is really 8- to 13-foot seas, where it can still launch boats, helicopters, perform missions, but do so in an affordable way and, again, using fixed-price contracting. We have solicited out to three bids.

We have had great support from this committee in bringing on 14 C-27J aircraft at no cost to the Coast Guard, which avoided a \$500 million expenditure, which I would be woeful to find those funds to recapitalize my fixed-wing squadron within the Coast Guard, as well.

And so, at the same time, we are extending the service life of the 140-foot icebreakers, our 225-foot buoy tenders, to extend their service life out as we get at these most critical priorities within the budget constraints that we have right now.

Senator SULLIVAN. Great. Thank you.

We might have a second round of questions here, but my time is up, so, Senator Nelson.

Senator NELSON. I am going to defer so our other members can go.

Senator SULLIVAN. OK.

Senator Schatz.

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

Senator SCHATZ. Thank you, Chair Sullivan; thank you, Ranking Member Nelson.

Thank you, Admiral.

I want to just start by complimenting the leadership that you have had in the Pacific. I have gotten to know many of your leaders. They live in a very nice house on Diamond Head, and they deserve it. They have been doing great work for many, many years.

I want to start with this offshore patrol cutter question. You are planning for 25 at \$421 million apiece. Am I getting those numbers correct?

Admiral ZUKUNFT. That would be the lead ship design, and then, as you go into full-rate production, with economies of scale, that price would come down considerably.

Senator SCHATZ. OK. And, of the 25, how do they get deployed across the globe? And what percentage of those, if you can give me rough estimates, are going to be assigned to the drug interdiction priority?

Admiral ZUKUNFT. Yes. These will be ships, Senator, that will be around for 50-plus years. And so, as I look into my crystal ball, what are the threats going to be? We see continuing competition for fisheries, especially out in the Asia-Pacific region, where our remote economic exclusive zones are. Our nation seems to have an insatiable appetite for contraband, and so that will be with us.

Illegal migration, when I look at the push-pull factors of illegal migration, the disparity of economies between third-world nations and ours, that is going to be with us for some time, as well.

Senator SCHATZ. So, excuse me, but your recapitalization plan does not—this is not to get at this 20-percent-of-90-percent problem. I guess that is what I am worried about, is that if we are able to interdict 20 percent of the 90 percent that we can see, that is troubling. I am not sure that we can throw a sufficient number of vessels at this problem to actually significantly make an impact. And, therefore, we would be doubling down on a plan that, in the end, cannot work.

And so I guess my question is, what do we get for our 10 billion odd dollars spent in this recapitalization program in terms of drug interdiction? Does that number creep up from 20 percent to double that? Or is it a marginal increase? Are we just treading water? What do we get for that?

Because I think, if we don't get much of an increase in the percentage of penetration, then we have to reconsider our strategy, which I understand is sort of a national policy question.

Admiral ZUKUNFT. Yes. So I look at, near term, certainly, the off-shore patrol cutter would be applied to that 90 percent intel.

The other part of it is, no matter how we are resourced, the United States can't do this alone. I use a term, "it takes a network to defeat a network." We get great support from the Royal Navy from Canada, from the Dutch, and the French. We are working very closely right now with Colombia to put Coast Guard and law enforcement teams on those platforms to leverage some of that 90-percent information.

But it is not just about removing the drugs; it is what is happening in Central America. Eight out of 10 of the most violent nations right now are in this hemisphere, and they have gotten that way because drug trafficking organizations have found a safe haven. And they will continue to persist.

And I feel it is incumbent upon the Coast Guard to demonstrate its authorities—we have 41 counter-drug bilateral agreements with many of these nations—a leadership role in this Nation that we are not going to allow this to proliferate into the 21st century.

Senator SCHATZ. Right. I am in absolute agreement about not allowing these organizations to operate with impunity. My question, though, is efficacy. And I am trying to figure out, what do we get for taxpayers dollars in that region and how much of an increase in the Coast Guard's presence? So why don't we continue that conversation.

I have one other question I wanted to raise for you, and it has to do with unmanned systems, both in the maritime space and the aerial space. I am wondering what the Coast Guard is doing in this area, especially when it comes to disaster response, and whether there are technical challenges that are in the process of being overcome.

But it seems to me that both in the intel gathering, in the environmental monitoring space, and then in the actual delivery of supplies in the case that they are needed that there is great potential, and I am wondering what the Coast Guard is doing in that space.

Admiral ZUKUNFT. Yes, sir, Senator. Let me just talk efficacy first.

And so, in our sequestration year of 2013, we cut our counter-drug activity by over 30 percent, and we saw a commensurate drop in our interdictions. I have nearly increased by 50 percent our presence this last year alone. In the first 2 months of this Fiscal Year, we removed more drugs in the Pacific than we did in all of 2013. And, in fact, we have already exceeded what we have done in 2014.

So numbers do matter. And so it shifts the threat of where it goes from there.

When it comes to unmanned aerial systems, what we need is a sea-based system which is fairly light which allows us to have a

manned system and an unmanned system. And we have worked with some of those prototypes.

The Coast Guard also has 10 pilots that work with our Customs and Border Protection, operating their Predator drones, which could also be used during a disaster response to provide some degree of surveillance and domain awareness using that.

So we are invested. Going forward, we are looking at light but sea-based platforms that we could use into the future.

Senator SCHATZ. And you have the authorities you need to continue to pursue this technology?

Admiral ZUKUNFT. We have a set-aside to begin that, and so we are in the scoping phase right now. And then we are moving ahead, though, with unmanned aerial systems.

Senator SCHATZ. Thank you.

Senator SULLIVAN. Senator Peters.

**STATEMENT OF HON. GARY PETERS,
U.S. SENATOR FROM MICHIGAN**

Senator PETERS. Thank you, Mr. Chairman and Ranking Member Nelson, for being here.

And, Admiral, it is a pleasure, too, to have you here before our Subcommittee here.

I am particularly pleased to have you here because the Coast Guard plays a very critical mission in the Great Lakes. And, representing the state of Michigan, being surrounded by the Great Lakes is a big deal for us, and I can say firsthand that we are very proud of all the work the Coast Guard has done over the years along those shores.

In fact, I had the opportunity to go aboard your Coast Guard icebreaking tug, the Bristol Bay, which is a 140-foot vessel, recently. Got to see firsthand some of the operations along the St. Clair River and was impressed by the professionalism and the seamanship of your crew there.

And we talked a great deal about how their icebreaking operations in the Great Lakes have expanded considerably, especially the last couple years, with the significant ice cover that we had—in fact, near total both years, which, as you know, is an unusual event, but with the melting of the polar ice cap, some of our folks—in fact, I met with folks from NOAA who thought that might be more of the norm in the Great Lakes than the aberration. So we are going to continue to see the need for those operations.

But that vessel, of course, as you know, also does search and rescue, marine environmental protection, law enforcement, port security, safety duties—a long list of operations.

So, again, thank you for allowing me that opportunity. I also wanted to thank Admiral Midgette and District Nine for arranging that. And I look forward to seeing other operations around the Lakes that you are engaged in.

But I wanted to switch gears a little bit here and talk about another one of the very critical missions that you have, which is to protect the marine environment from oil and chemical spills.

According to a 2013 report by the Coast Guard, by your organization, the service and other responders—in that report, it was stated

that the service and other responders are not adequately equipped or prepared to deal for a heavy oil spill in the Great Lakes.

And it goes without saying a major spill in the Great Lakes would be a disaster of epic proportions, given the fact that we are one of the largest bodies of freshwater in the world and millions of people drink the water and the fishing/recreational assets there.

And I think we are particularly vulnerable—the one that I am focused on is an oil pipeline that we have across the Straits of Mackinac that is over 60 years old. And, as we know, with pipelines, usually it is just a matter of time before they leak. And a 60-year-old pipe going across 5 miles of Great Lakes is a frightening prospect for me, particularly coming from Michigan, where we had the largest oil spill, pipeline spill, in history just a few years ago in the Kalamazoo River that—I think the price tag now is over a billion dollars, and still working on the cleanup there, that we have to be concerned about these pipelines that are going across the Great Lakes.

So the question to you, Admiral, is, given the warnings that you had a couple years ago of the disastrous implications of a spill in the Great Lakes, what do you think is needed to build a better spill response plan for the Great Lakes region? What can we do to assist you in working with other stakeholders that are also involved in this?

Admiral ZUKUNFT. Yes, the real work began, Senator, with the regional response team. As we look at, you know, the whole of science, but what are the response protocols that we would use in a major oil spill? Probably one of the more controversial ones are the use of either dispersants or burning the oil off, or what we call an “in situ burn.”

We learned a lot of valuable lessons from the Deepwater Horizon oil spill. One, it is imperative that you have a responsible party and that we fully leverage the full extent of the authorities of the Clean Water Act to bring every national asset to bear when it comes to oil spill response. And if that is not adequate, then you reach out globally.

So when you look at a pipeline, obviously the first thing you want to do is be able to secure the source so you don't have a continuous flow like we did with *Deepwater Horizon*. But that is a very pristine environment, and so you don't have some of the microbes that you do in the Gulf of Mexico that will normally decay, you know, what oil remains. And so a lot of work needs to be done on that, because the tolerance for any oil spill, quite honestly, is going to be very low, which means the removal threshold needs to be set very high.

So we worked through that with the regional response team, and then how do you mitigate a major oil spill. So those are some of the challenges that I see going forward.

Senator PETERS. And, from the report, it seems as if you are concerned about some of those plans in the Great Lakes. And I know there have been some issues related to the Pipeline and Hazardous Materials Safety Administration, PHMSA, and we are going to have their reauthorization coming up in this committee, as well. And there have been some significant gaps that have been identified in their ability to respond or to put the plans forward.

How comfortable are you with the plans in the Great Lakes, particularly—not just with the Straits of Mackinac pipeline, but we have others. So I guess a couple questions: Do you have enough information regarding those pipelines that cross this pristine environment? And do you feel comfortable that the partners that you work with are in a position to respond as quickly as necessary?

Admiral ZUKUNFT. And until I have actually seen the plans, Senator, I would have to say, no, I am not comfortable.

And the reason I say that is that information is then factored into what we call an area contingency plan, when you look at what a worst-case discharge might be and then what equipment do you have to have pre-staged to enable a response to a spill of that magnitude. And we found out, again, during *Deepwater Horizon*, that those area contingency plans were inadequate for a spill of that volume.

So I need to do a deeper read on that, and we owe you a response after we review that material, our area contingency plans, to say how ready are we for a major spill in the Great Lakes.

Senator PETERS. Well, I appreciate that and look forward to working closely with your office on that. Because, obviously, we can't make a mistake here, because there is no going back once that happens.

Admiral ZUKUNFT. Yes, sir.

Senator PETERS. Thank you.

Senator SULLIVAN. Senator Nelson.

Senator NELSON. Thank you, Mr. Chairman.

The memories still linger, 5 years ago, *Deepwater Horizon*. What are some of the lessons, as you look back, that were learned, that we are not going to repeat?

Admiral ZUKUNFT. Number one, you know, this is a Federal response. And whether it is BP or a pipeline company or Taylor Energy, they are the responsible party. They are accountable for removing that oil.

And so, then, going beyond that, what did we learn from the BP oil spill? The capping stack that shut in that well wasn't even designed when that well blew on April 20th of 2010, had to be designed on the fly. And every day an undetermined amount of oil was being released, and it was very difficult to quantify how much oil was being released, as we are trying to remove every last drop of it.

We also recognize that this affects local communities. And so how do you integrate local communities into this response organization? Fishermen, people working the oil and gas industry that are now put out of work but be more than willing to work supporting this response activity, how do you marshal that to a good cause?

And so we learned valuable lessons when it comes to how do you build unity of command when I can't issue orders, necessarily, to a fisherman, to an offshore oil worker, but they are fully incentivized to restore this environment, to restore their way of life. And so how do you build unity of command?

And so we learned much of this. It took us several months, quite honestly, Senator, as you watched very closely, to develop those relationships with the mayors, the parish presidents, the Governors,

and the like, to build their trust and confidence. In a spill like that, we have to get this right, right from the get-go.

Senator NELSON. How do you build that unity of command when, in fact, of necessity, you are dependent upon the culpable party, in this case BP, to assist?

Admiral ZUKUNFT. Yes. So, as the Federal on-scene coordinator—so I was down there for 7 months. And when we realized we needed the world's best technology to be brought to bear to support an oil spill response, the dialogue that would take place is: We are going to need this much equipment, and on any given day it is going to cost about \$70 million to \$80 million in response activity.

I hand the contract to BP. I said, "You can either sign the contract, or the Federal Government will sign the contract and then we will resolve this through litigation." When you are in the middle of a crisis, it is not the time to be litigating. And so we were able to have those open and frank discussions of, "This is in direct response of an oil spill, and I need you to write the check to pay for this equipment."

So that was the backdoor piece that was taking place at the Federal level. "If you don't pay it, I will, and then I will litigate." But that is how we would hold BP accountable.

Senator NELSON. I remember, when I visited one of the response centers, the folks were telling me that the Coast Guard was in control—now, what I am getting to is the chain of command. They said the Coast Guard was in control 51 percent and BP was in control 49 percent. That doesn't sound like a very effective chain of command. What is your experience with that?

Admiral ZUKUNFT. Part of this is public imaging. And BP was incentivized to restore its public confidence, and so there was an extensive marketing campaign taking place in the middle of an oil spill. And so that was one of the challenges that we saw, is how do you manage perceptions and expectations.

And so, instead, you start focusing on results and what are the results offshore, in terms of the ability to shut in that well. And it was two commandants ago, Admiral Thad Allen, as the national incident commander. And there was not unanimity of whether that capping stack should stay in place as the pressures rose, and eventually Admiral Allen says, "The capping stack stays put." And that was probably about an 80, 85 percent decision on the part of the Coast Guard. Others would say, well, you know, the pressure is building; you know, let it continue to flow oil.

And the same piece is when we decide how clean is clean. BP may disagree with that, but when we say there is more work—and when you look at the amenity beaches in Pensacola, Orange Beach, Gulf Shores, that oil had penetrated down 5 feet. In every storm, that was going to resurface again, and it would ruin tourism in that area. We told BP, "You need to go down 5 feet and find that oil, sift it out, and return this to its original condition."

So, at the end of the day, it is a marketing campaign, but the requirements that we imposed on BP to establish standards of cleanliness in restoring the Gulf of Mexico to what it was, to the best of its ability, pre-April 20, that was where the Coast Guard weighed in.

Perception was probably 51–49. In reality, it was probably—the separation was much greater than that.

Senator NELSON. Thank you, Mr. Chairman.

Senator SULLIVAN. Admiral, I want to go back to some, kind of, mission analysis that the Coast Guard has been undertaking, particularly in the Gulf of Alaska.

You know, there are now seven 110-foot Island-class cutters in the Gulf, as you know, in several communities—Ketchikan, Seward, Auke Bay, Valdez, Petersburg, Homer. Each has a primary mission area, but my understanding is that the Island-class fleet is going to be phased out by 2023, to be replaced by six 154-foot fast-response cutters.

So, as you can imagine, there is some concern in Alaska that the mission coverage, as the Coast Guard looks to move into this transition phase, that there might be some gaps. So let me ask a few questions with regard to this.

First, what is the rationale for dropping from seven Island-class cutters to six FRCs? In particular, I think it is very clear that the coverage and the needs, whether it is Arctic, whether it is fishing, in Alaska are actually going to increase. We were hoping to maintain at least seven FRCs and perhaps more. There is a lot of disappointment and concern in Alaska that that number has now dropped from seven to six.

Can you explain the rationale there? And is that an issue that has been set in stone, or is that something that the Coast Guard is still evaluating?

Admiral ZUKUNFT. Hard to say where we will be 10, 15 years from now. But the 110-foot Island-class patrol boat, Chairman, they operate at 1,800 hours per year. And they are also limited in the sea state that they can operate in. The fast-response cutters are programmed for 2,500 hours per year and can operate in a more severe operating environment than the 110-foot Island-class patrol boat can.

So if you run those numbers out, 1,800 times seven versus six times 2,500, you actually end up with one and a half extra patrol boats than you have with the existing fleet of seven that can operate further from its homeport and in more inhospitable environments, as well.

Senator SULLIVAN. And do you think that that increased mission capacity meets up with the increased mission demand that we are clearly seeing off the coast of Alaska?

Admiral ZUKUNFT. And we will continue to evaluate that, Senator. We don't know what is going to happen in the far north. Is there a deepwater port in the Arctic right now that can support a fast-response cutter? The answer right now is "no"—

Senator SULLIVAN. Right.

Admiral ZUKUNFT.—but that may come to bear fruit here at some point in time in the future. It might be Nome; it might be Port Clarence. And if we see increased activity in the Arctic, then obviously the Coast Guard is going to have to reallocate its resources to address that threat.

So, once we homeport a cutter, does that mean, you know, that is going to be its permanent resting ground and being agnostic to what the world demands for resources and requirements? The an-

swer to that is “no.” We will shift as necessary, as we have done throughout the Coast Guard for the life of some of these 110-foot Island-class patrol boats.

Senator SULLIVAN. And is there any operational risk, as the mission coverage moves from the Island-class cutters to the FRCs, to have gaps in the mission coverage?

Admiral ZUKUNFT. The biggest gap that I see going forward, Chairman, is going to be further away from the ports where these FRCs would operate from. And, for me, it is going to be in the Arctic domain in the ice-free season where we are going to see a surge in human activity. At least, that is what we are looking strategically at.

If we have drilling in the Arctic, you are going to have increased human activity, increased risk. And so the Coast Guard is going to be at least seasonally present during those ice-free seasons. And the offshore patrol cutter would provide us that middleware to sustain presence in that part of the world.

Senator SULLIVAN. OK. Thank you for that.

Again, we will continue to monitor that. That is a very important issue for a number of Alaska coastal communities, where the relationship between the fleet and the homebasing of the Island-class cutters has been very positive. And, to be quite frank, I think people are concerned that they might be the community that loses that capacity, and it has raised a lot of concerns.

So we will continue to monitor that, and your continual updating on that issue for us would be very helpful.

You know, you mentioned that “if” there is going to be increased human activity in the Arctic. I actually think that it is not “if.” It is not even “when.” It is happening, right? And I think that most members of the Coast Guard would agree with that.

I have a number of questions related to that increased activity. And, again, from my perspective, this is not just an Alaska issue; this is an American issue. You talk about resource development. It is estimated that 30 percent of the undiscovered oil and gas resources in the world are in the Arctic, which is why there are so many countries—even countries that are not Arctic nations are now taking significant increased interest in the Arctic.

And, as you know, we just, a couple days ago—Admiral Papp, I think, was out there—assumed the chairmanship of the Arctic Council. So I think it highlights the opportunities but also the challenges in the Arctic.

Can you discuss, from your perspective, from the Coast Guard’s perspective, what the most pressing issue you see with regard to the Arctic and how you are trying to prioritize those given the declining resources that you have seen?

Admiral ZUKUNFT. Chairman, I would put, you know, four key priorities, and I would weigh all of them probably equally. The first is safety of life at sea—search and rescue.

Another one is environmental compliance, and that comes in two forms. One is the drilling and the response protocols that we need to have in place. And the other is, you know, is there going to be a migration of fishery stocks into the Arctic region. Which, right now, we have a decree that there would be no commercial activity, but that is a paper line.

And then another is domain awareness of what other activity is taking place in the Arctic.

And then, finally, another area of concern is—it falls in line with domain awareness—is we have mapped, the Coast Guard and working in conjunction with the National Science Foundation and NOAA and others, an area equivalent to almost twice the size of the state of California that resides beyond our traditional economic exclusive zone, what is known as our extended continental shelf. But we have not ratified the Law of the Sea Convention.

And so that is now part of the global commons. And we do see other nations, namely China, doing scientific research—

Senator SULLIVAN. Yes.

Admiral ZUKUNFT.—in what would otherwise, if we had ratified the Law of the Sea Convention, that would be sovereign U.S. waters, where we are seeing that activity, with that 30 percent natural gas, 13 percent oil, taking place as I speak.

So I would put all of these ranked number one for the Coast Guard. And a key part to addressing each and every one of those is having persistent presence, which we don't have with our capital assets today.

Senator SULLIVAN. So right now you don't believe that, despite those priorities and the importance to the country, you are resourced in any way to try to address those priorities.

Admiral ZUKUNFT. That is correct, Senator. And the high sea latitude study does bear that out, as you mentioned in your opening statement, you know, the requirement for three heavy and three medium icebreakers to provide that degree of presence—not just for the Arctic, but we also have a mission in Antarctica, as well.

Senator SULLIVAN. Right. OK. Thank you, Admiral.
Senator Cantwell.

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

Senator CANTWELL. Thank you, Admiral.

Thank you, Mr. Chairman, for holding this important hearing. I just left our colleague Senator Murkowski. We are having an Energy hearing this morning on a quadrennial energy package. She said I had her permission to come over here and talk about icebreakers. So, as the chairman knows, it is of great importance to our region.

So what about, first of all, getting OMB to recognize that this is a governmentwide need, it is not just the Coast Guard. We had a hearing in the Energy Committee about the Arctic and what we need to do to be prepared in the Arctic. And there are many aspects of our government that need to take responsibility there, not just the Coast Guard responding.

And what about the concept of having it, as I think Senator Stevens proposed at one time, you know, being part of the Navy budget to actually get it done and then actually backed to the Coast Guard, given the size and scope of the Navy's budget? What about that proposal?

Admiral ZUKUNFT. Senator, that would not be—and, again, it is good to see you, Senator. That would not be unprecedented. And,

as you look at the number of stakeholders that have equities in a heavy icebreaker—the National Science Foundation, Arctic Research Council, Department of Defense, Homeland Security, Transportation, Interior—there may be another one in there, but, you know, there is probably a committee of at least six or seven that have equities in the Arctic.

But the point you make, an icebreaker, it may say “Coast Guard,” but it is a U.S., it is an instrument of U.S. sovereignty, it is a national asset. You know, I would put this right in the same realm as a carrier strike group. We have got more than two of those at last count, but our nation has a fleet of two ocean-going icebreakers. And, quite honestly, it is probably not adequate enough, especially for a nation of this size.

Eight times the GDP of Russia, we have two icebreakers. The chairman mentioned Russia has approximately 40. And we are looking at what is happening on the Northern Sea Route—

Senator SULLIVAN. Forty, and beefing up to, I think, 15 more.

Admiral ZUKUNFT. Yes.

Senator SULLIVAN. Nuclear-powered icebreakers.

Admiral ZUKUNFT. So, clearly, there is a need going forward. And we are looking at all options, as you know. Do we reactivate—but eventually we will have to recapitalize this capability. We are going to be in this for the long haul.

Senator CANTWELL. Well, I thank you for that, because I think 4 years ago or 5 years ago, we probably wouldn’t even have gotten the Coast Guard to be that up front. And so the fact that you say that we are not adequately supplying this and it is just as important as a Navy carrier, that is a very good statement. Thank you for that.

And so I think our colleagues—I certainly want to work with the chair here, certainly want to work with my colleague Senator Murkowski, as she looks at the Arctic, and figure out a way how we can get this funded now. At least get one going, but we are obviously talking about several in need.

Can I ask you about combat-related compensation. A key part of how we care for the financial well-being of disabled retired servicemembers is the combat-related special compensation payment. And, originally, this program was created for Purple Heart recipients, and the payments are extended to offset pay loss.

So this is not something that the Coast Guard has chosen to do, but yet I think we have an example of someone who is actually performing a mission, training with a Navy pilot, who is required to go through this same training. And my understanding is that this person later was injured in a related service injury.

So what about having Coast Guard actually do the same kind of combat-related compensation as the rest of our branches?

Admiral ZUKUNFT. Senator, we have looked at approximately 280 of these cases, and we have made a determination in favor of the claimant in over 170 of those. Thirty-five are pending; 66, I believe, or so were denied.

What you are looking at, as you depict there, is a hazardous operation. So a Purple Heart recipient is combat-related. Is it hazardous? And is it hazardous in terms of readiness for a combat mission?

Now, I know my staff will be briefing yours, actually, a week from today, where we can provide you much more detail in terms of our combat-related special compensation for our Coast Guard members. But they are eligible. A number of them are recipients. But it would probably be helpful as we go case by case to share with you how those determinations are made.

Senator CANTWELL. But how, if both of these men are injured in that kind of exercise, which is about preparing for combat, why would one be compensated and not the other?

And so, is this something within the Coast Guard? Is it something within DOD? I mean, I have stories that the Navy and other branches actually support this kind of compensation.

Admiral ZUKUNFT. And, Senator, the Coast Guard would, as well. Without knowing the particulars of that particular given case, the Coast Guard has its review protocols, as does the Navy have theirs, but I would find it obviously inconsistent if the Navy made a determination in one case and the Coast Guard did not in another.

Senator CANTWELL. So you are open to looking at the same combat-related compensation plan.

Admiral ZUKUNFT. I am.

Senator CANTWELL. Thank you.

Thank you, Mr. Chair.

Senator SULLIVAN. Senator Blumenthal.

**STATEMENT OF HON. RICHARD BLUMENTHAL,
U.S. SENATOR FROM CONNECTICUT**

Senator BLUMENTHAL. Thank you, Mr. Chairman, and thank you, Senator Sullivan, for conducting this hearing.

And thanks, Admiral, for your service to our Nation and for being a citizen of Connecticut, not a resident necessarily right now, but proud to have you as being from Connecticut, and your family, as well.

Senator SULLIVAN. I thought the Admiral was from Alaska.

[Laughter.]

Admiral ZUKUNFT. The Lady Huskies won me over.

[Laughter.]

Senator BLUMENTHAL. And speaking of Connecticut, I want to ask a question about the Coast Guard museum, the national Coast Guard museum, which is very important to Connecticut, to New London, but even more so to our Nation. The Coast Guard is the only service in our country that has no such museum.

And I wonder if you would join me in believing that we remove the impediment to the location of that museum in Connecticut, which is the result of a 2004 law that prohibits the use of DHS funds for the construction of a national Coast Guard museum—prohibits the Coast Guard from spending its own money to help build a museum that honors two-centuries-plus of service.

So I assume that you join me in the belief that that impediment, the legal impediment, should be removed.

Admiral ZUKUNFT. Senator, I will have to demur on that particular piece, only because my budget has been under considerable strain. As I shared earlier in the opening, our acquisition budget alone, you know, we have seen a \$1.5-billion acquisition budget

that now hovers around about a billion, as I am trying to reconstitute aircraft, my fleet, and other areas.

So I would need some help in that regard to be able to leverage our Coast Guard account to be able to support that in the budget environment that we find ourselves in right now.

Now, that does not diminish the value that I place on this national museum, because, quite honestly, most people that I talk to don't realize what the Coast Guard does today or what we did yesterday, because we don't have this hallmark where we can tell our Coast Guard story. And this is where that story needs to be told.

Senator BLUMENTHAL. Well, the impediment is not only as to Coast Guard funds but as to Federal funds generally. So, assuming for the purposes of your testimony today that it wouldn't come out of your budget, it wouldn't detract from the ships and the helicopters and personnel funds that you need, would you support removing that impediment?

Admiral ZUKUNFT. Certainly, if it is not coming from our Coast Guard account, absolutely.

Senator BLUMENTHAL. Let me turn to another topic that I think is very important to your budget, which is the role that the Coast Guard plays in assisting cruise lines in safety, which you do, as the Coast Guard does also for folks who are out on Long Island Sound and run into trouble, folks who may not prepare adequately for the challenges and dangers of the sound or sea. The Coast Guard is out there for them. We think of the Coast Guard as interdicting criminals who are drug-running and so forth, but they also perform these basic safety measures.

And specifically as to the man-overboard technology that exists now, a lot of cruise lines haven't installed it, and yet they call on you, at expense to the Coast Guard, to come rescue or save someone who has fallen or jumped overboard.

Search and rescue operations are an enormous expense for the Coast Guard. And so my question is, what more can the Coast Guard do to increase the success rate in its search and rescue operations? And what should be our expectations of the cruise lines in installing this man-overboard technology that many of them have failed to adopt?

Admiral ZUKUNFT. We are seeing more of these closed-circuit cameras on the open decks being installed, and we do spot checks. And so the cruise-line industry has taken it upon themselves to do that, to build public trust with its customer base, quite honestly.

It is still a challenge for us. I don't have the exact numbers of people that fall off of cruise ships in a given year, but when they fall in the open ocean, oftentimes from the equivalent of 8 to 10 stories high, that makes for a very difficult search and rescue case, one being it is very difficult to find a person in the water without a beacon or any type of a locating device. And if they are unconscious, then it becomes even more difficult. And if it is at night, it approaches, quite honestly, almost impossible. So those are just some of the challenges.

But we are seeing more and more cruise ships employ closed-circuit cameras. It would probably be helpful if we provide you, you know, what is the status of the fleet in terms of its man-overboard

technology, if it is being self-imposed by the industry itself, who we engage with quite frequently.

Senator BLUMENTHAL. I would appreciate that information, because I do think that the industry perhaps has lagged, many of the lines have lagged, in using the technology that is available, and thereby avoiding the cost to the Coast Guard and to others who would be involved in search and rescue efforts.

So I appreciate it. My time has expired. I thank you very much—

Admiral ZUKUNFT. Thank you, Senator.

Senator BLUMENTHAL.—for your service. Thanks, Admiral.

Admiral ZUKUNFT. Thank you.

Senator SULLIVAN. Admiral, I had just a few additional questions. I wanted to follow up on Senator Cantwell's comments about the need for additional icebreaking capabilities.

And, you know, one of the things that I have seen in the last few months is this kind of dichotomy of the recognition of the need, how important it is. And you see senators from both sides of the aisle, different regions of the country—you saw Senator Peters here talking about the importance in the Great Lakes.

Also, what is happening with regard to the Russians, their fleet, and other fleets. We don't have the second-largest fleet. I think it is number three or four or five, but it is way down there. And, you know, clearly, the Russians in this area are eating our lunch, despite what you mentioned, as a country whose size in terms of the economy is well below that of the United States.

So it is this frustration where everybody seems to recognize the issue but that there is almost a political football of responsibility on who or what or how we are going to pay for this. So Senator Cantwell talked about OMB or the Navy or the Coast Guard or, you know, where this responsibility lies.

And, as you mention, there is a precedent with regard to the Navy. I think it was in the 1970s where, I believe—and correct me if I am wrong—the cutters that were being used by the Coast Guard were actually initially funded in the Navy's budget.

What do you think the solution to this is? Because it is a problem that seems to persist. People recognize it; they recognize the national implications, that this is a national security issue, but, as you mention, it is a sovereign asset that could be used for many different important activities for our country. And yet there is this kind of political football with regard to how you actually make it happen, in terms of funding.

Do you have any suggestions in that regard?

Admiral ZUKUNFT. Senator, there are a number of mechanisms. When I look back at TARP funding or other initiatives that have been, you know—whether it is any aspect of our infrastructure. But this is part of our national infrastructure, if you will, in terms of our ability to exert influence and sovereignty in the Arctic domain.

And so I would approach this as we would any other infrastructure requirement for our nation, to provide the funding and the means to be able to bring this infrastructure up to 21st-century standards, because we are just not there right now.

Senator SULLIVAN. And are there areas that we are not, you know—I know there are a lot of smart men and women serving in

the Coast Guard. Are there things that we are not thinking about, from the congressional perspective, of how to make this happen?

Is there a more creative solution than a billion-dollar piece of the Coast Guard's budget, which would be, you know, as I mentioned in my opening statement, eating up essentially the entire budget that you have proposed with regard to maintenance and construction issues?

Admiral ZUKUNFT. Senator, first it begins with, you know, what are the requirements for an icebreaker in the 21st century. And so, rather than just a Coast Guard-generated aspect of requirements, who else has equity? And, as you mentioned earlier, National Science Foundation—

Senator SULLIVAN. Oh, I think a lot of people have equities.

Admiral ZUKUNFT.—and to support scientific missions. Department of Commerce, NOAA—can it do offshore mapping? Arctic Research Council, Department of Interior, Transportation, and then, obviously, DHS and DOD.

And so you need an icebreaker that, one, it probably needs to be environmentally compliant. If we are going to have rigid environmental standards under MARPOL regs that will probably come into effect in 2017, the United States better be a role model in the Arctic.

But if the initial threat is the science, then we need to be able to support scientific research. If it is an oil spill, then you probably don't have the shore infrastructure. You need that ship to support a command and control response organization.

And if there is a law enforcement threat or a military threat, perhaps a module that then would allow that icebreaker to be somewhat of a warship or at least a law enforcement platform, as well. Because our platforms in the past have been somewhat one-trick ponies.

Senator SULLIVAN. Yes.

Admiral ZUKUNFT. But this is going to have to be able to meet a multitude of requirements for several agencies, as we look at what the challenges are going to be in the Arctic well into the 21st century. This is going to be a 50-year investment.

Senator SULLIVAN. Right. Thank you for that.

Let me—kind of, longer-term vision. Again, we are talking a lot about the Arctic, as we have assumed the chairmanship of the Arctic Council. I know, again, that the Coast Guard is focused on its immediate missions and its immediate budget requirements, but I also know that you have a very proud tradition of kind of thinking about the future.

And with regard to the Arctic, as we are seeing dramatic increase in shipping activities through the Northwest Passage, where some believe that this could be a very, very critically important waterway for the nation, for the world, you know, in the decades to come, have you been laying out any kind of ideas in terms of what we envision the future might look like up there in terms of, as you mentioned, deepwater ports?

You know, there was an article recently that came out by the former Chair of the Arctic Research Commission, Mead Treadwell, who talked about kind of a model on the Saint Lawrence Seaway,

looking at that kind of commercial activity and how to move shipping through.

And, again, this could be for a longer discussion, but is the Coast Guard trying to think through these things? You have particular expertise on some of these issues, and it is helpful when there is a vision laid out so Americans can understand, Alaskans can understand what the vision is and how we, if we agree with it, need to start spending and investing the proper resources to achieve it.

Admiral ZUKUNFT. Senator, first, we are starting with how do we do this globally, multilaterally, when we address the Arctic, and not just from a United States perspective but all members of the Arctic Council. So we have chartered an Arctic Coast Guard forum; in fact, we met in Washington, DC, for an inaugural meeting of all eight Arctic Council nations, but their coast guards, which means, yes, we had Russia at the table. Because if I didn't have Russia at the table, it would be the United States and Canada alone.

So, as we look at what are the real threats as we see in the Arctic, think beyond Vladimir Putin. And the real threats continue to be safety of life at sea, environmental, the well-being of the indigenous tribes that have lived up in the Arctic region for the millennium.

And then how can we collectively work together among the Arctic Council nations, recognizing that we may not all have the resources, but can we at least come up with protocols where we can work with one another, know who is out in the Arctic domain on any given day so if the vector, an asset to a search and rescue case—maybe I am vectoring a Russian icebreaker, or maybe it is coming from Iceland via Denmark perhaps.

But we need to think a little bit more globally and not just, you know, within the United States, because the United States alone will not be able to address all of the emerging contingencies that I foresee in the Arctic.

Senator SULLIVAN. Right. Thank you for that.

Let me ask a final question. This relates to the issue of sometimes unintended consequences. And perhaps they are unintended, perhaps they are not. But I have heard a number of concerns from the fishing community in Alaska that in 2010 there was a Coast Guard bill that required survey and classification of fishing vessels greater than 50 feet in length, for those vessels to remain in class.

And this requirement has, I think in many people's view, significantly increased the cost of vessel construction and has, in terms of the unintended consequences, caused some vessel owners to postpone vessel replacements or, in some cases, to build smaller, less robust vessels—the perfectly opposite example of what I believe the 2010 law and regulations were meant to do.

So can you respond to that? Have you seen that? Because I certainly am hearing about it. And it is an area where, if this was an enactment of Congress in conjunction with the Coast Guard bill 6 years ago that we now think is undermining safety and increasing costs, is that something that we need to be taking another look at? Obviously, if it was in the law, that is something we would have to fix.

But I am wondering about what you are hearing, because certainly there have been concerns raised.

And it is particularly troubling for me when—I think, a lot of times, people say, well, we need to do a cost-benefit. The costs, the regulations, the construction is going to go up, but it is going to have a corresponding benefit in terms of safety for the fleet, which of course is a huge focus of the Coast Guard and all of us. But if the costs go up and the safety and the survivability and strength of the vessels actually decreases, well, that is a lose-lose, not a win-win.

What are your thoughts on that?

Admiral ZUKUNFT. Probably, first, for the regulation itself, there was extensive outreach with the Commercial Fishing Vessel Safety Advisory Committee as they worked with us. And, yes, there was some—

Senator SULLIVAN. I think they were not supportive of this requirement, though, that committee.

Admiral ZUKUNFT. From a cost perspective. We were looking at from a mishap perspective and from the investigations that we have done in the past where vessels would be retrofitted and adjustments would be made to the vessel where it does alter its capability, culminating in loss of life.

And so our objective in all of this was to minimize loss of life for vessels that may have been reconfigured and sometimes reconfigured vessels operating in the Gulf of Mexico not operating in the Gulf of Alaska or in the Bering Sea.

This is an unintended consequence. And how far that has gone, I will have to back-brief you on that, because I was not aware that, as now moving people out of that industry, smaller vessels, but still operating in the same harsh environment. Obviously, that is a concern for me, as well, Senator. Thank you for bringing that up.

Senator SULLIVAN. OK. It would be good to hear, because, again, I have heard concerns about that. And your views on how we address that problem, if it indeed is a significant problem, is something that I think is important.

And you know this, but I think a lot of Americans don't: It is also very important to recognize that our fishing fleet, whether they are in Alaska or in the Gulf of Mexico, they are the epitome of the small American businessman or businesswoman. They take risks. They work hard. They produce a world-class product. They often-times pass their family business down from one generation to another. And they are being crushed in many ways by Federal regulations.

We all want safety, certainly, for the fleet, but we also want to make sure the fleet is viable. And one of the things that I hear in Alaska that I think the Coast Guard needs to keep an eye on is: The regulatory burden can be so significant, all well-intended, but it can be so significant that it can really undermine the operational ability for a family business, which is what many fishing vessels represent, to operate and to continue to go.

So we want to work with you on those kind of things to make sure there is a good cost-benefit, a balance between regulations that are mandated by the Congress that help our fishing community keep safe, but also are not so burdensome that they undermine their ability to actually make a living. And I think that is

something that we are all focused on, and I want to make sure the Coast Guard continues to be focused on that.

Admiral ZUKUNFT. Senator, I will just—and I respect those comments, having boarded many of these fishing vessels, and I fully appreciate their livelihoods. The Coast Guard is fully integrated with our regional fishery councils, and that is where these issues would, you know, region by region, where some of these, if they are anomalies or concerns would also be borne out as well. Or are we seeing, you know, a removal of the fleet, where now there are just fewer vessels.

But we have other ways of reaching into this industry besides being on the water, but probably the best place is through our regional fishery councils.

Senator SULLIVAN. Great.

Well, Admiral, I want to thank you again, you and all the members of your staff and all the men and women in the Coast Guard, for your testimony today, for what they do. Your testimony and forthright answers, I think, are very refreshing and very informative for this committee.

I ask unanimous consent that Chairman Rubio's statement be included for the record.

[The prepared statement of the Chairman follows:]

PREPARED STATEMENT OF HON. MARCO RUBIO, U.S. SENATOR FROM FLORIDA

I thank the Commandant of the Coast Guard Admiral Zukunft for appearing before this Subcommittee today to discuss the resources and priorities for the United States Coast Guard, and commend his service to our country.

The Coast Guard is quite unique in that it is the only U.S. military service not within the Department of Defense. Its 40,000 active-duty members, 7,500 reservists, 8,000 civilian employees and 30,000 volunteer Auxiliaries are responsible for the world's largest system of seas, ports and waterways. The Coast Guard's mission is one of utmost importance, with maritime security, law enforcement and prevention and response activities at its core. With a peninsular state like Florida, this is no small task. Miami is home to the Seventh District and with its location near many Caribbean countries, the Coast Guard is an integral piece to the Homeland Security puzzle. Human smuggling, mass migration and trafficking of narcotics and arms are just a few high-risk but integral missions carried out by the men and women of the Coast Guard.

In order to achieve its mission, the Coast Guard faces fiscal challenges. An aging fleet with some ships approaching 50 years old plagues the service and demands continue to increase and evolve. For this reason, I, along with fifteen of my colleagues, sent a letter to the Senate Appropriations Committee voicing support for funding the much needed tools requested by the Coast Guard. An already stretched agency, which has seen a declining budget over the last five years, faces increased demands around the Nation including in the Gulf of Mexico and Caribbean. We need to ensure that the Commandant's shipbuilding plan is funded and well executed to deliver newer assets to the fleet as more demands are placed on the service. We also need to take care of our facilities ashore including sites like Naval Station Guantanamo Bay, which serves as a logistical hub for interdicted narcotics, human smuggling, and is also a likely site for a potential mass migration crisis from Cuba or Hispaniola. An American presence in the Caribbean advances our interests in the region, and assures our neighbors we are willing and able to help in times of natural disasters and instability. In January, I wrote to Admiral Zukunft on the significant role of Naval Station Guantanamo's support of Coast Guard operations in the Caribbean. I was pleased to receive the Admiral's response stating, "[t]he Coast Guard will continue to use Naval Station GTMO as a vital forward operating base and logistical hub . . . Naval Station GTMO facilitates a persistent, necessary Coast Guard presence in the region that is essential for executing our many missions and enhancing regional security and cooperation now and in the future."

For Floridians who enjoy a day on the Atlantic, Gulf of Mexico or near my hometown on Biscayne Bay, the Coast Guard is a lifeline when things go awry. Just this

past Sunday, two people were rescued in the Gulf of Mexico after their boat capsized. We also send our prayers to the friends and families of those affected by the powerful storm this past weekend, which capsized several sailboats competing in a regatta near Mobile Bay, Alabama. Indeed the Coast Guard crews were on scene, performing vital search and rescue operations in the aftermath of this sudden storm. This is a testament to the dangers of weather, and the importance of this vital agency.

As this Subcommittee moves forward with a Coast Guard reauthorization, I look forward to continuing this important dialogue to ensure we provide the proper oversight of the Coast Guard's budget but also the appropriate funding authorization which will allow the Coast Guard to better safeguard our Nation and its people. Thank you.

Senator SULLIVAN. And I want to now conclude that this hearing is now adjourned. Appreciate the outstanding testimony of the main witness.

Thank you, Admiral.

Admiral ZUKUNFT. Thank you, Chairman.

[Whereupon, at 11:17 a.m., the hearing was adjourned.]

A P P E N D I X

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. JOHN THUNE TO
ADMIRAL PAUL F. ZUKUNFT

Question 1. Given the reality of flat or declining budgets for acquisitions, what is the Coast Guard's most important acquisition project and how does it align with your mission priorities?

Answer. The Offshore Patrol Cutter (OPC) is the Coast Guard's highest acquisition priority. Our OPC acquisition strategy will deliver capable and affordable cutters to the fleet. The OPC program will facilitate recapitalization of up to 28 existing in-service legacy Medium-Endurance cutters intended for 30-years of service to the Nation but which currently range in age from 24 to 51 years. The planned OPC will provide capabilities critical to maintaining presence in the offshore zones and establishing an effective layered security posture to ensure national preparedness and resilience in the maritime domain. The OPC will perform missions directly impacting the DHS Southern Border & Approaches campaign and enhance the effectiveness of efforts to combat Transnational Organized Crime networks. The planned OPC will perform Coast Guard missions in the Bering Sea and Gulf of Alaska, supporting United States interests and ensuring persistent presence in these regions. Finally, the OPC will be a work-horse of the Coast Guard fleet, filling the capability gap between the National Security Cutters and Fast Response Cutters and establishing the interoperable system of assets.

Question 2. The Coast Guard's program of record calls for eight National Security Cutters (NSC), but there has been some discussion of a ninth NSC. What impact would a ninth NSC have on the Coast Guard's other high priority projects like the Offshore Patrol Cutter or a Polar icebreaker?

Answer. An additional National Security Cutter (NSC) will exceed the program of record and consume resources needed to fill the capability gap between the NSC and Fast Response Cutter (FRC). The Offshore Patrol Cutter (OPC) requirements were developed to fill this gap and the OPC acquisition remains the Coast Guard's top recapitalization priority.

Question 3. As we look ahead to the next Coast Guard authorization, are there new authorities or clarifications of existing authorities that may be needed by the service to successfully execute its Western Hemisphere Strategy?

Answer. The Coast Guard is in the process of determining whether any new authority or clarifications are needed. In March, the Coast Guard submitted an extensive authorization proposal to the Committee, and looks forward to working with the Committee as the Coast Guard Authorization Act for 2015 moves through Congress.

Question 4. Given persistent challenges with the issuance of a true Transportation Worker Identification Card (TWIC) Reader Rule, would the Coast Guard prefer to allow card holders to further extend the \$60 Extended Expiration Date TWIC card until the reader rule can be feasibly implemented?

Answer. No, the Coast Guard does not prefer to extend the \$60 Extended Expiration Date (EED) TWIC program. The EED Program has no impact or advantage related to completion or issuance of the TWIC Reader.

Question 5. The 2014 Coast Guard and Maritime Transportation (CGMT) Act contained a one-year provision that prohibited the Coast Guard from closing an air facility that was in operation on November 30, 2014, or retiring, transferring, relocating, or deploying an aviation asset from such a facility. What impact, if any, has this prohibition had on existing Coast Guard mission priorities?

Answer. The prohibition on closing AIRFACs contained within the 2014 Coast Guard and Maritime Transportation Act has caused immediate impacts to Coast Guard operations. If the prohibition continues with the Air Facilities remaining unfunded, there will also be additional long-term detrimental impacts to the logistics support system for the entire MH-65 fleet of aircraft. This provision required the Coast Guard to continue to operate the same fleet of aircraft as allocated on November 30, 2014, but with 4.5 percent fewer program flight hours and funding across

the entire fleet. Excluding Search and Rescue, every mission set has been reduced in order to compensate for this decrement. Further, the funding gap created by this prohibition reduced the MH-65 maintenance, sustainment, and logistics support system. Simply put, there are fewer funds to purchase the requisite consumables and spare parts inventory required to sustain MH-65 operations.

By not closing the AIRFACs, Air Station Traverse City will continue to be gapped over 240 annual cutter deployment days. Additionally, the inability to move the AIRFAC helicopters means that the Coast Guard will be short of airframes for the pending MH-65D to MH-65E transition; negatively impacting both student through-put at the Aviation Training Center and the MH-65 product line at the Aviation Logistics Center. To mitigate these impacts and carry-out the D-E transition, the Coast Guard will have to pull airframes from other operational Air Stations. Currently, Air Station Barbers Point has been identified as one of the donor units and is scheduled to be gapped an airframe for 48 months to support the transition. This will result in lower mission hours and deployment days, including reduced flexibility to meet Rotary Wing Air Intercept support missions. The Coast Guard is in the process of evaluating where to find the remaining airframes needed to support the transition, while mitigating operational impacts.

Question 6. I am aware of the role the Coast Guard plays in helping to defend the air space that surrounds the National Capital Region. What, if any changes does the Coast Guard intend to make to its procedures following the recent landing of a gyrocopter on the grounds of the U.S. Capitol complex?

Answer. If detected by the Integrated Air Defense surveillance network, the Coast Guard's current procedures are appropriate for intercepting a gyrocopter-type track of interest. The Coast Guard utilizes its Title 10 authorities while conducting Operation Noble Eagle air defense operations in the National Capitol Region, under the tactical control of NORAD Eastern Air Defense Sector.

Question 7. With the finalization of USCG Policy Letters 01-15[1] and 02-15[2] the Coast Guard has provided much needed regulatory guidance for liquefied natural gas (LNG) fueling/bunkering procedures. Given the recent launch of the Harvey Energy, an LNG-powered offshore supply vessel, and TOTE's LNG powered container ship, which will soon be in operation, interest in using LNG as fuel is growing in the maritime space. However, simultaneous operations (SIMOPS) and vessel design, primarily LNG fuel tank placement, have not yet been addressed by the Coast Guard. The maritime industry is looking to USCG for guidance on SIMOPS and vessel design/specifications. Is the Coast Guard examining these issues, and will the agency be publishing policy letters on these issues to address LNG's future as a propulsion fuel in the maritime industry?

Answer. The Coast Guard is actively examining issues concerning SIMOPS and vessel design/specifications. Initial guidance concerning SIMOPS was published on February 19, 2015 after receiving public input through a public comment period. CG-OES Policy Letter 01-15, enclosure (1), paragraph e, under the discussion of transfer operations addresses SIMOPS. As discussed in that section, we recommend that a formal operational risk assessment be conducted to address the added hazards and evaluate the potential risks involved in conducting SIMOPS. The Coast Guard pointed to the best industry guidance available for conducting risk assessments involving SIMOPS and is currently working internally and with industry through Federal advisory committees to further develop guidance related to evaluating SIMOPS risk. Once that work is complete, the Coast Guard will work to make the information publicly available to the industry as quickly as possible. Vessel design/specifications, primarily LNG fuel tank placement is addressed in CG-ENG Policy Letter Equivalency Determination—Design Criteria for Natural Gas Fuel Systems 01-12, enclosure (1), paragraph 2.3.

Question 8. Is anything preventing or complicating the Coast Guard's efforts to move forward on regulatory guidance that would enable U.S. flagged vessels to operate on cleaner burning alternative fuels such as LNG? Can or should Congress help to alleviate these burdens so that the U.S. Flag Fleet can take advantage of clean burning natural gas fuel?

Answer. The boom in the U.S. Oil and Gas industry, particularly LNG, has resulted in a complex, dynamic, and rapidly evolving environment and the complexity of this issue has presented challenges to the Coast Guard. The Coast Guard has begun the initial steps toward developing a framework for vessels using LNG as fuel in order to establish the minimum industry safety requirements. Uninspected vessels using LNG as fuel presents unique challenges. Also, the continued growth in LNG and other energy sectors continues to challenge the Coast Guard's ability to efficiently meet statutory requirements and respond to industry requests.

References related to QFR:

- [1] United States Coast Guard, Guidelines for Liquefied Natural Gas Fuel Transfer Operations and Training of Personnel on Vessels Using Natural Gas as Fuel, CG-OES Policy Letter No. 01-15, February 19, 2015.
- [2] United States Coast Guard, Guidance Related to Vessels and Waterfront Facilities Conducting Liquefied Natural Gas (LNG) Marine Fuel Transfer (Bunkering) Operations, CG-OES Policy Letter No. 02-15, February 19, 2015.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. DAN SULLIVAN TO
ADMIRAL PAUL F. ZUKUNFT

Question 1. Tugboats and barges are the lifeblood of many remote Alaskan communities. I understand that the International Maritime Organization's Polar Code could impose additional regulations on this industry. What is the Coast Guard doing at an international level to ensure that these tugboat and barge operations can continue to provide safe and reliable freight service to these communities without undue or unnecessary regulatory constraints from the IMO Polar Code?

Answer. The International Maritime Organization's (IMO) Polar Code contains two parts, safety-related provisions and environment related provisions. The safety provisions of the Polar Code are an international standard intended to regulate international shipping. As such this part applies to vessels on domestic routes only if they also engage in international trade. Additionally, these safety-related provisions are part of a risk-based code; vessel operations with a higher risk profile are subject to more stringent standards. This methodology is intended to apply maritime safety standards appropriate for the unique and broad spectrum of vessel operations in Polar Regions.

The environment-related provisions of the Polar Code apply to a broader range of vessels including some domestic vessels that operate on coastal voyages. These provisions are in addition to the current standards set by the international convention for maritime pollution. These provisions are operational in nature and are intended to reduce intentional pollution by further restricting the overboard discharge of oil, chemical and garbage wastes, something that both tug operators and coastal communities serviced by those tugs generally see as a valuable benefit to minimize impact to the environment and food supply in Arctic waters.

USCG hosted multiple public meetings and interactive public workshops to solicit input from stakeholders and consulted with experts from the Alaskan legislature's Arctic Policy Commission and American Waterways Operators who served on the U.S. Delegation negotiating the IMO Polar Code. These experts provided key insight toward stakeholder needs and helped identify requirements which balanced increasing protection with associated costs.

Question 2. In Alaska, we rely on tugboats and barge vessels to supply our state, but we also need them to operate in the safest manner possible. I understand that over 10 years ago the Coast Guard was required to bring towing vessels under inspection by the Coast Guard and Maritime Transportation Act of 2004. The Coast Guard issued a Notice of Proposed Rulemaking in 2011, and my understanding is that the rule is currently under review at DHS. What steps is the Coast Guard taking to ensure that this rule is finalized as expediently as possible?

Answer. The Coast Guard undertook a thorough review of the public comments received on the Notice of Proposed Rulemaking, and is working diligently to publish the final rule as quickly as possible. The Department also understands the importance of publishing the final rule as quickly as possible.

Question 3. Last year, the National Science Foundation (NSF) testified before Congress, "As the Coast Guard's heavy icebreakers—POLAR STAR and POLAR SEA—approached the end of their design lifetimes, NSF found it necessary to contract for icebreaker support from other countries." Instead of being used to construct new U.S. icebreakers, U.S. taxpayer dollars are apparently being used to lease Russian, German, Canadian, and Swedish icebreakers. To the Coast Guard's knowledge, how prolific are these foreign leasing practices, and beyond NSF, do you know of other Federal agencies that are leasing foreign icebreakers?

Answer. Beyond NSF, the Coast Guard does not know of any other U.S. Federal agencies which lease foreign icebreakers. NSF has not leased a foreign icebreaker since the POLAR STAR was reactivated in 2013.

Question 4. What will be the Coast Guard's process and selection criteria for determining where to homeport the new Fast Response Cutters?

Answer. The process for determining a cutter's homeport typically begins with the completion of a homeport feasibility study to identify and analyze locations that can

accommodate a cutter's operational, logistical, maintenance, and personnel requirements. The Coast Guard evaluates viable site locations based on several factors, including proximity to cutter's primary operating area, availability of appropriate pier space, shore infrastructure considerations, environmental impacts, availability of local services, and cost analysis. The Coast Guard uses the study data, along with operational, maintenance/support, quality of life, environmental, and cost factors, to make a final homeporting decision.

Question 5. Does the Coast Guard have plans to engage in outreach with the communities currently homeporting the Island Class cutters?

Answer. The Coast Guard continues to evaluate potential FRC homeports including Island Class Cutter locations which meet the Integrated Logistics Support Plan and operational requirements. Communities which cannot support the FRC requirements and may lose their Island Class Cutter without a similar replacement will be engaged.

Question 6. In 2011, Admiral Papp told the Senate Commerce Committee that the Coast Guard needs to establish a series of air stations and deploy small boats across the Alaskan Arctic. Specifically, he said, "If an accident happens, how do we respond? And, right now, we've got zero capability to respond in the Arctic right now. And we've got to do better than that. That—when people ask me what keeps me awake at night—an oil spill, a collision, a ship sinking in the Arctic keeps me awake at night because we have nothing to respond or, if we respond, it's going to take us weeks to get there." Does the Coast Guard still maintain this concern, and what steps has the Coast Guard taken since this time to increase its Arctic infrastructure?

Answer. The Coast Guard surges assets into the Arctic region using a mobile and seasonal approach to operations. When the human activity increases in the open water season (summer months), the Coast Guard forward deploys air and surface assets in the region. To support these activities, the Coast Guard leases hangar space and establishes a seasonal Forward Operating Location on the North Slope to ensure air response capabilities. This strategy is generally sufficient for the current level of human activity in the Arctic. As part of the annual operations, the Coast Guard evaluates requirements and drivers for potential permanent infrastructure in the Arctic. Much of the Coast Guard footprint is dependent on where future human activity and volume will be. Future development of infrastructure in the Arctic must incorporate the needs of all federal, local, state, and tribal stakeholders. The *National Strategy for the Arctic Region* and its Implementation Plan provides a roadmap on the Federal Government's approach to the region.

To continue to meet its missions in the Arctic, the Coast Guard needs both icebreaking and mobile command and control capabilities. The Coast Guard's National Security Cutters—and the future Offshore Patrol Cutter—are critical to maintaining sovereign presence in the region during the summer months; ensuring American interests are protected during the height of human activity, shipping, and drilling in the region, and providing extended presence in the Gulf of Alaska and Bering Sea. Likewise, icebreaking capability is critical to providing needed icebreaker support in the high latitudes. Currently, the Coast Guard utilizes U.S. Coast Guard Cutters HEALY and POLAR STAR (one medium and one heavy icebreaker) for icebreaking needs in the Antarctic and Arctic, respectively. The Coast Guard is also actively engaged in pre-acquisition activities for a new Polar Icebreaker, and is collaborating with stakeholders to study operational requirements and the feasibility of alternatives for this National asset.

Question 7. What is the Coast Guard doing to increase search and rescue capabilities in the Arctic?

Answer. As outlined in the Coast Guard's Arctic Strategy, improving Search and Rescue capabilities will require leveraging international, state, local, and industry partnerships. Commander, Coast Guard District 17, is the SAR Coordinator for the Juneau Search and Rescue Region (SRR), which includes the Arctic Ocean. Coast Guard District 17 coordinates these SAR operations with support from other countries, as well as with other Federal, State, local, and Tribal SAR and emergency response authorities. To enhance capabilities, D17 has led regional mass rescue exercises and workshops focused on local capabilities, and conducted training with state and international partners. The Coast Guard also deploys assets to the Arctic region in the summer months, when human activity peaks.

In October 2015, the U.S. Government will host a Search and Rescue Table Top Exercise in Anchorage, Alaska. Led by the Coast Guard, Department of State, and Northern Command, this whole-of-government exercise will support both the U.S. Chairmanship of the Arctic Council and the National Strategy for the Arctic Region Implementation.

Question 8. What does the Coast Guard envision the Arctic Coast Guard Forum accomplishing over the next two years of the United States' chairmanship of the Arctic Council?

Answer. The Coast Guard looks to complete the process of formally establishing the Arctic Coast Guard Forum (ACGF) during the ACGF Summit meeting in October 2015. This will include the signing of a Joint Statement and agreement on the Terms of Reference as the foundational documents of the forum. Over the next two years, the Coast Guard plans to ensure the forum remains operationally focused, and looks to advance cooperation and information sharing among the arctic nations through the development of common operating protocols.

Question 9. How many exercises will be conducted in the Arctic, where will these exercises take place, and how can local governments be active participants?

Answer. There are several Coast Guard Arctic related exercises being planned for 2015 and 2016. These include:

- Kotzebue Oil Spill Response Exercise, June 2015
- 2013 Agreement on Cooperation of Marine Oil Pollution Preparedness Response in the Arctic Operational Guidelines Workshop, Washington, DC, September 2015
- Search and Rescue TTX, Anchorage, AK, October 2015
- Search and Rescue FTX, North Slope, AK August 2016
- 2013 Agreement on Cooperation of Marine Oil Pollution Preparedness Response in the Arctic Operational Guidelines TTX, Anchorage and Washington, D.C., 2016
- Arctic Security (MTSA-AMSC) exercise, Anchorage, AK 2016
- Sector Anchorage Northwest Arctic SCP Workshop—Nome, AK, 2016

It is Coast Guard policy to invite all relevant stakeholders to participate in the planning and execution of Coast Guard-sponsored exercises, including local level governments.

Question 10. What sort of technology could be employed to enhance monitoring activities in the Arctic region regarding increased vessel and shipping activity and offshore development in all weather conditions?

Answer. There are several types of technologies that can be used to enhance awareness of vessel and offshore activities including unmanned aircraft systems and use of satellites. Development of these technologies would benefit both public and private users of the Arctic waterways and are being pursued by both sectors. The Coast Guard is working with NORAD/NORTHCOM, Department of Defense, and Canada in order to study better satellite support for communications and weather observation. The Coast Guard is continuing to look for opportunities to partner with commercial providers offering both terrestrial and satellite Automated Identification Systems (AIS), Synthetic Aperture Radar (SAR), and Electro Optical Infrared (EO/IR) Systems. In addition, the Coast Guard is involved in international discussions to study and evaluate potential special Arctic requirements for carriage of tracking systems. Expanding Long Range Identification and Tracking (LRIT) system carriage requirements for non-commercial class ships and small vessels operating in the Arctic is also being considered.

Question 11. Development of and further commercialization of the Arctic is coming. Indigenous peoples stand to benefit. Along with that, thousands of miles of coast and U.S. Arctic waters must be protected. What capabilities does the Coast Guard need to facilitate safe commercial operations in Alaska's Arctic?

Answer. The *National Strategy for the Arctic Region* and its Implementation Plan provide a roadmap on the Federal Government's approach to assessing required capabilities in the region.

The Coast Guard is committed to ensuring safe, secure, and environmentally responsible maritime activity in the Arctic, and Coast Guard response capabilities alone will not eliminate the risks associated with commercial operations in the region. As such, the Coast Guard is pursuing three major initiatives to increase safety and stewardship of the Arctic maritime domain: Polar Code, Port Access Route Study (PARS), and Arctic Waterways Safety Committee (AWSC). Collectively, they will better affect the manner in which vessels are constructed, operate, and how their crews are trained; the routes they will take; and finally, creation of a venue to better gain partner consensus on best management of the Arctic's "transportation system".

Question 12. The 2010 Coast Guard bill required survey and classification of new fishing vessels greater than 50 feet in length, and for these vessels to remain "in

class.” The Coast Guard is developing guidelines for Alternative Compliance Programs for some vessels currently on the water. Does the Coast Guard have the budget and manpower to have this Program in place by 2017 and fully implemented by 2020?

Answer. Section 604 (f) of the Coast Guard Authorization Act of 2010 states that “No later than January 1, 2017, the Secretary of the department in which the Coast Guard is operating shall prescribe an alternative safety compliance program referred to in section 4503(d)(1) of the title 46, United States Code, as amended by this section.” The Coast Guard does not anticipate a need for additional budget or manpower to finish developing alternative safety compliance programs by 2017. An analysis is being conducted to determine the number of currently active vessels that will have to comply with an alternate safety compliance program, and how many separate programs may be needed based on region and/or fishery. This will be used to determine future budget and manpower needs related to the alternate safety compliance programs.

Question 13. Further, this requirement has been law for five years, why is the Coast Guard only now conducting industry outreach?

Answer. The Coast Guard has been conducting outreach and education efforts with industry since 2011. The first such effort was with the Commercial Fishing Safety Advisory Committee at their public meeting in Seattle in November of 2011. And, in conjunction with that meeting, the Coast Guard presented an overview of the 2010 Act requirements, which included alternate safety compliance programs, at the Pacific Marine Exposition in Seattle. During meetings in August 2013 (Washington, D.C.) and September 2014 (Providence, RI), the Advisory Committee helped the Coast Guard develop the requirements for alternate compliance programs. These meetings are always open to the public and held in fishing port areas, but generally result in limited industry attendance. Information on alternate compliance programs was again provided at the Marine Exposition in 2013, and a special presentation and question and answer session was dedicated to the requirements being considered for the programs; attendance by the industry was very limited. Also, presentations have been made at conferences such as the ComFish in Kodiak, Alaska; Massachusetts Lobstermen’s Association; Maine Fisherman’s Forum; Bering Sea Conference, Seattle; and with industry groups such as Alaska Tenderman’s Association; Alaska Trollers Association; and Southern Shrimp Alliance. Over the past year, the Coast Guard has reached out to certain specific industry fleets and fisheries in the Pacific Northwest, Alaska, and Gulf of Mexico to field test/validate reasonableness of draft requirements with volunteer owners and operators who are modifying or undergoing yard periods with their vessels. This has been extremely helpful in validating the criteria the Coast Guard believes should be in the programs. The Coast Guard is currently determining the best method to get the alternate compliance proposed requirements out to the public for comment before finalizing them in 2017.

Question 14. The Coast Guard has published a Port Access Route Study for the Bering Sea, which is currently out for public comment. How does the Coast Guard plan to incorporate concerns over congestion in the fishing grounds in its decision making process?

Answer. The Coast Guard has sought input through multiple public comment periods in order to maintain transparency and learn if there are any concerns with a proposed action. The Coast Guard has heard some concerns from the fishing community and is determining if the proposed recommended route can be altered to address those concerns.

Question 15. Major cutter days and HC-130 flight hours for fisheries monitoring and law enforcement are on a downward trend, particularly in the Bering Sea. In 2004, there were 788 major cutter days, but last year there was only 316-the lowest level in a decade. Please provide comments on asset deployment in the Aleutian Islands and Gulf of Alaska and to what extent coverage in these areas will be reduced, and will the Coast Guard’s expanding role in the Arctic cause more resources to be diverted from the Bering Sea?

Answer. The Coast Guard intends to maintain the same level of major cutter coverage in the Bering Sea as it has over the last several years. In FY13, there were 416 days of major cutter coverage for the Bering Sea and 30 for the Arctic. In FY14, there were 401 days of major cutter coverage for the Bering Sea and 41 for the Arctic. For FY15, there are 397 days scheduled for the Bering and 67 for the Arctic. It is anticipated that these levels will remain consistent in the near future. USCG operations in the Chukchi Sea and Beaufort Sea (north of the Bering Strait) are not expected to impact major cutter coverage of the Bering Sea.

Question 16. Successful fisheries management relies on Coast Guard enforcement. Will you consider increasing major cutter days and HC-130 resources hours in the Bering Sea?

Answer. There is no plan to increase the allocation of major cutter days and HC-130 resources hours in the Bering Sea. Coast Guard will continue its standard protocol to deploy its resources and alter allocations as needed to address the greatest maritime risks.

Question 17. How does the Coast Guard plan to monitor the large commercial fisheries in the Bering Sea and Arctic region to guard against illegal fishing and protect our national economic interest?

Answer. In 2009, the National Marine Fisheries Service (NMFS) issued the Arctic Fisheries Management Plan (FMP) which includes a ban on commercial fishing in the U.S. Exclusive Economic Zone (EEZ) off the coast of Alaska in the Bering, Chukchi, and Beaufort Seas. The FMP will continue the ban until there is enough information available to determine the effects of increasing human activity on the newly exposed and fragile maritime ecosystem. This is a precautionary plan created by NOAA/NMFS and enforced by USCG. The Coast Guard will monitor the large commercial fisheries in the Bering Sea and Arctic region to guard against illegal fishing and protect our national economic interest through execution of Ocean Guardian, the U.S. Coast Guard's Fisheries Enforcement Strategic Plan.

Question 18. How does the Government plan to address and monitor territorial disputes?

Answer. The Department of State is the lead agency for monitoring territorial disputes between the United States and a foreign country. The Coast Guard will coordinate with the State Department on any maritime boundary disputes.

Question 19. How does the Government propose to monitor the security of our national borders in the Arctic region, an emerging security issue?

Answer. Monitoring the security of our national borders in the Arctic is a whole-of-government issue. The President's strategy and objectives are outlined in the *National Strategy for the Arctic Region* and its Implementation Plan. The Coast Guard has undertaken efforts to ensure safe, secure, and environmentally responsible maritime activity in U.S. Arctic waters. The Coast Guard monitors and assesses risks posed by increasing maritime activity, and allocates an adaptable mix of cutters, boats, aircraft and shore infrastructure to enable effective seasonal operations commensurate with prevailing activity levels and risk.

Question 20. I note that the Coast Guard has been working with Greenpeace to ensure their waterborne first amendment activities at the Port of Seattle do not cause themselves danger or interfere with ship traffic. What operational challenges for the Coast Guard are posed by the activities of Greenpeace, whose members recently conducted an unauthorized boarding of a ship? Are these activities a distraction from your core missions?

Answer. The Coast Guard's primary (core) missions include ensuring the safety of the maritime transportation system and the people that operate within it. As such, Coast Guard members are poised to protect commerce without interfering with Greenpeace's legitimate First Amendment activities. The Coast Guard has policy as well as tactics, techniques, and procedures (TTP) to guide operations involving maritime protest activities. With this, Operational Commanders work with protest groups, like Greenpeace, to identify a safe area where they can freely exercise their First Amendment activities while maintaining the integrity of safety and security zones as part of normal ports, waterways, and coastal security operations. Finally, Coast Guard TTP provides situation-dependent measured responses for protestors who choose to place themselves in danger or interfere with maritime traffic. In regard to the Port of Seattle First Amendment activities, Greenpeace has been cooperative and transparent in their plans, respecting the established safety zones, and communicating their intentions to the Coast Guard.

Question 21. The Coast Guard recently proposed regulations to implement the Cruise Vessel Security and Safety Act of 2010 and the public comment period is now closed. What is the timeline for the Coast Guard to complete a review of the NPRM comments, hold any public hearings if necessary, and ultimately issue a final rule?

Answer. The Coast Guard is considering all the comments from the NPRM and will respond to them in any Final Rule when it is issued. The Coast Guard does not have a timeline for when a Final Rule will be issued.

Question 22. Given the current reductions in operational capabilities, what is the Coast Guard doing to engage with industry to aid the Coast Guard with maritime domain awareness?

Answer. The Coast Guard has aggressively pursued partnerships with other U.S. agencies, allied nations, and industry to keep a current picture of maritime activity. Industry plays a vital role because of their cutting edge hardware, software, and sensors, as well as their interest in maintaining an efficient flow of goods and services. Initiatives such as sharing commercial satellite vessel locating data such as Automated Information System (AIS) reports are a good example of how Coast Guard capitalizes on commercial capabilities. Specifically, the Coast Guard has used AIS data from ORBCOMM, synthetic aperture radar data from RADARSAT and Terra SAR X and other vendors to assist in remote sensing of the maritime domain. The Coast Guard also uses other commercial services to access maritime data on cargo and vessel movement, port arrivals/departures, and to maintain awareness of current trends in trade on the world oceans.

Question 23. To what extent does the Coast Guard rely on satellite surveillance for monitoring activities for Maritime Domain Awareness?

Answer. Satellite surveillance capabilities are a key part of Coast Guard's multifaceted maritime activity monitoring. The Coast Guard uses a wide variety of data to monitor the maritime domain and the maritime approaches to the United States. Together with other agencies in the United States, allied partners, and commercial providers of data, Coast Guard operations and intelligence personnel analyze vessel locations and activity. Satellite and terrestrial source data are fused to create a comprehensive picture of maritime events such as vessel movements, presence in sensitive or closed areas, and compliance with fisheries and pollution regulations. Satellite derived information, such as data from vessel Automatic Identification System (AIS), Long Range Identification and Tracking (LRIT) reports, Electro-optical and synthetic aperture radar (SAR) imagery, and intelligence community reporting from national technical means are a major source of information used to enhance maritime domain awareness. This is complemented by a host of source information from terrestrial sensors and observations of the maritime domain from partner agencies, allies, and the maritime industry.

Question 24. The Coast Guard is only able to stop about 20 percent of the drug shipments that it knows about. What will it take to improve the Coast Guard's success against the illegal drug shipments?

Answer. Continued recapitalization of the Coast Guard's aging Major Cutter fleet and 110 Patrol Boats with the National Security Cutter/Offshore Patrol Cutter (OPC) and Fast Response Cutter (FRC), respectively, will significantly improve Coast Guard's capabilities to perform its Drug Interdiction mission. Like the major cutters before them, the NSC and OPC will provide the off-shore presence in the transit zone vital to combating Transnational Organized Crime (TOC) networks. Coast Guard presence in the Transit Zone, targeting the primary flow of illicit drugs in pure and bulk quantities, has the most direct and damaging impact on TOC drug smuggling networks.

Question 25. How does satellite surveillance compare to aircraft patrols used in the International Ice Patrol mission for accuracy, reliability, environmental constraints, and cost?

Answer. Satellite surveillance provides a capability similar to that of fixed-wing Maritime Patrol Aircraft (MPA) in most cases. Unlike aircraft, satellites can provide near continuous coverage of ice fields over a wider area than aircraft surveillance can provide, thus obviating the need to utilize aircraft to search for and report on iceberg locations. Additionally, satellites are generally immune to situations where unfavorable flight conditions are present. However, in cases where there is persistent cloud cover or significant ocean currents that affect iceberg movements, depending on the sensor, it may be more difficult to rely on information provided by satellites. Currently it takes over two weeks for satellites to make enough passes over the North Atlantic to frame together enough satellite imagery to completely saturate the iceberg limit area. While the comparative analysis is still in its early phases, timeliness and reliability of satellite data compared to flight patrols is the primary observed gap at this time. Costs of satellite use and aircraft activity vary and are dependent upon the amount of satellite imagery requested and collected during an ice season versus the number of reconnaissance missions. It is known, however, that multiple dedicated satellites would be cost prohibitive.

The Coast Guard is continuously pursuing ways to improve maritime domain awareness to make operations more efficient, however, at this time it's too early to say whether satellite imagery can take the place of International Ice Patrol aircraft.

Question 26. If satellite surveillance is used for the International Ice Patrol, are there other mission needs that the aircraft now used for those patrols could be freed up to be used for?

Answer. Historically, the Coast Guard allocates approximately 500 Maritime Patrol Aircraft (MPA) flight hours for International Ice Patrol operations each year. There is no plan at present to curtail or eliminate MPA flights that support the International Ice Patrol. However, if satellite surveillance were to become a reliable alternative to MPA flights, a portion of the aforementioned MPA hours could potentially be used for other priority Coast Guard activities.

Question 27. With current international guidelines for ships operating in Arctic waters being updated, has the Coast Guard considered the use of satellite-based technology to monitor the increased commercial shipping on two trans-Arctic sea routes—the Northern Sea Route and the Northwest Passage?

Answer. The Coast Guard already uses the National Technical Means (NTM) for MDA monitoring in the Arctic region.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. BILL NELSON TO
ADMIRAL PAUL F. ZUKUNFT

Question 1. Admiral Zukunft, a few weeks ago we were underway on the Coast Guard Cutter Vigorous as it patrolled off the coast of Key West, Florida. A lot has changed since that ship was built in 1967. I am concerned about the reliability of these older ships. How much time is spent maintaining and repairing these cutters?

Answer. The Coast Guard's maintenance policy is to dedicate 143 days of depot maintenance per year for 210-ft medium endurance cutters, which supports the execution of one dry-dock availability every four years (8–10 weeks in duration), two dockside availabilities every four years (8 weeks in duration), and other routine maintenance during normal in-port periods. In the past two years, the Coast Guard has performed emergency dry-docks for four of the fourteen 210-ft medium endurance cutters due to deteriorating steel structure.

The Coast Guard can report that significant strides in efforts to recapitalize the fleet have recently been made. In FY 2014 the Coast Guard awarded contracts for preliminary and contract design of the Offshore Patrol Cutter (OPC). Preliminary Design Review has been conducted and the program remains on schedule. The OPC will serve as the backbone of the Coast Guard's strategy to project and maintain offshore presence in concert with the extended range and capability of the National Security Cutter (NSC) and the enhanced coastal patrol capability of the Fast Response Cutter (FRC). In addition to the recent production award for the eighth NSC, the Coast Guard commissioned the fourth NSC into service last year, christened the fifth, began fabrication of the sixth and initiated pre-fabrication activities for the seventh NSC. NSCs are proving very successful at providing the Coast Guard the requisite capabilities to perform the full range of missions in the offshore environment. The twelfth FRC has been commissioned in Key West, completing the fleet of six cutters there and in Miami, where FRCs are already proving invaluable to counter-drug and counter-migration efforts in the Straits of Florida and maritime approaches to the southeastern United States.

Question 2. Admiral Zukunft, the Associated Press released a report a few weeks ago stating that a drilling platform that had been toppled due to Hurricane Ivan is leaking oil at a higher rate than previously estimated. Based on a report submitted by a Taylor Energy contractor in March of 2013, Federal officials estimated the site to be discharging approximately 12 gallons per day. One year later, in March of 2014, those estimates were lowered to about 4 gallons of oil a day leaking from the site. Again, the estimates were revised just a few months later in August of 2014 and these estimates were significantly larger, roughly 84 gallons per day of oil leaking. The Coast Guard said in 2008 that the Taylor Energy leak posed a "significant threat" to the environment. In the 7 years since this statement and having the responsibility of Federal On Scene Coordinator, what tangible or physical action has been directed by the Coast Guard to Taylor Energy to either reduce or stop the leak flow or identify and quantify the severity of the leak at the subsurface level?

Answer. In 2008, the Coast Guard, as the Federal-On-Scene Coordinator (FOSC), issued Taylor Energy an Administrative Order that required Taylor Energy to, among other things, install a subsea containment dome system to recover product released from the wells and to conduct daily overflights of the MC-20A well site to visually monitor the oil discharges.

Since then, Taylor has contracted daily overflights of the area that, include Coast Guard and BSEE observers, to monitor the discharge and report findings regarding

the presence and estimated volume of oil on the ocean surface to the National Response Center. In the event that recoverable product is identified, Taylor Energy is responsible for performing the recovery and has responded, at the direction of the FOSC, to recover product on four occasions.

In 2009, a subsea containment system (domes placed over projected leaking well sites) was installed on the seafloor at the MC-20A site. In March 2012, an incident action plan (IAP) was approved by the Unified Command (UC) that established standard procedures for monitoring the site and responding to discharges. In 2012, due to problems with the original containment system, the FOSC issued an Administrative Order requiring the design, construction, and installation of a new containment dome that will more effectively capture the ongoing discharge from the site. Along with the design specifications, the Administrative Order directed Taylor Energy to submit a written plan including a projected timeline for fabrication and installation (as of May 1, 2015, the final engineering design of the new dome is not complete, and the dome has not been installed). In 2013, the last remaining operational containment dome was decommissioned due to damaged components and lack of efficiency/recovery of oil. In August 2014, the UC led a joint aerial observation workshop that included the Coast Guard, BSEE, NOAA, and Taylor Energy's representatives and contractors. At that workshop, the aerial observation methodology used to estimate quantity and rate of discharge was reviewed and revised.

The Coast Guard and NOAA have placed observers on the Taylor Energy-contracted flights to verify the new approach is being followed. The Coast Guard believes that the consistency of sheen size and rate of discharge estimates from reporting parties has improved since this workshop. Since 2008, the Coast Guard FOSC has led monthly UC meetings with representatives from BSEE, NOAA, and Taylor Energy.

Question 3. Based on this direction, has Taylor Energy satisfied the expectations of the Federal On Scene Coordinator?

Answer. The Coast Guard, working with the UC members, is committed to exploring all options to control and contain the oil that is discharging from the well site and to ensure Taylor Energy works to permanently stop the ongoing oil spill. The Coast Guard remains committed to Responsible Party oversight and coordination to contain and recover as much discharge product as possible, mitigate environmental impacts, and pursue all available response options. Taylor Energy will only have met its obligations under the Oil Pollution Act of 1990 and as directed by the Federal-On-Scene Coordinator when the source of the discharge has been secured.

Question 4. Admiral Zukunft, the Offshore Patrol Cutter is the Coast Guard's top priority in the continuance of the Coast Guard fleet recapitalization efforts. The Fiscal Year 2016 budget allots \$18.5 million for the program. You have testified that the OPC program needs actually much more than that to move into the next phase. Tell me about consequences if the Coast Guard does not receive the funding needed to advance the OPC?

Answer. The 2016 request is consistent with the support required for the planned activities in 2016. The Coast Guard's 5-year Capital Investment Plan (CIP) shows the estimated level of funding (e.g., ~\$100M in 2017) that would be needed to keep the OPC acquisition on its planned schedule. Significant deviation from the CIP that delays the planned schedule could adversely affect the OPC acquisition strategy resulting in higher costs. Additionally, OPC schedule delays exacerbate Medium Endurance Cutter reliability issues described in Q1.

Question 5. Admiral Zukunft, I'm concerned about drug interdiction in the drug transit zones of the Eastern Pacific and Western Caribbean. Will the Navy's focus on the Pacific impact the drug interdiction mission, "other law enforcement" missions, and other statutory missions of the Coast Guard?

Answer. The Navy's focus in the Asia-Pacific region, and the decommissioning of the Perry-class frigates, has impacted the Coast Guard's drug interdiction and other law enforcement (protection of the U.S. EEZ from foreign fishing vessel incursions) missions, as fewer Navy assets in the drug transit zone are available. We continue to conduct and witness significant interdictions in the region. This is primarily as a result of increased intelligence sharing and mission coordination with our international partners resulting in over 91,497 kilos of cocaine interdicted in FY 2014. As part of the U.S. Strategy for Engagement with Central America, we envision even more successes as we focus on aiding partner nations in disrupting transnational criminal organizations in the maritime domain. The most effective detection and monitoring (D&M) and interdiction and apprehension (I&A) package in the drug transit zone is a combination of maritime patrol aircraft, a ship with an embarked helicopter, and multiple over-the-horizon pursuit boats with USCG law enforcement boarding teams, guided by a command cadre with mission-specific

knowledge and experience. The Navy's rebalance can still assist the Coast Guard's law enforcement mission through initiatives such as the Oceania Maritime Security Initiative (OMSI), embarking LEDETs and shipriders for maritime surveillance and boardings within the EEZs of Pacific Island Nations, and monitoring activities during transits through remote National Marine Sanctuaries and Monuments.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. CORY BOOKER TO
ADMIRAL PAUL F. ZUKUNFT

Question 1. Admiral Zukunft, I'm aware that the Coast Guard is constructing a new pier in Cape May. What is the status of the project?

Answer. The project is expected to be complete in the summer of 2016. In-water work will begin on 1 July 2015 in accordance with approved environmental permits.

Question 2. Admiral Zukunft, destabilization in Central America, particularly in the countries of El Salvador, Honduras, and Guatemala, is readily apparent through the influx of unaccompanied children from those countries we've seen across our borders recently. Please discuss the Coast Guard's strategy in the Western Hemisphere to support stability in the region?

Answer. The Coast Guard's Western Hemisphere Strategy identifies three strategic priorities to help achieve regional stability: combating networks, securing borders, and safeguarding commerce. This three-pronged strategy aims to improve Western Hemisphere stability by addressing major regional issues, such as the rise of Transnational Organized Crime (TOC) networks, the impacts of climate change, and the challenges of globalization and technological advances. The strategy emphasizes the importance of offshore vessel and aircraft presence. Specific priorities in this strategy also link to broader strategic concepts including capable governance, unity of effort, as well as effective international engagement and contingency response.

Question 3. How does the Coast Guard's acquisition of the Offshore Patrol Cutter and the National Security Cutter nest inside this strategy?

Answer. Coast Guard offshore capability provides persistent presence across the high-risk areas of the Western Hemisphere. Sustaining this presence is essential to meeting our performance goals. Major cutters and patrol boats provide this capability by engaging TOC networks at sea, where they are most vulnerable. Successful at-sea drug interdictions and subsequent prosecutions lead to actionable intelligence on future events, which produce follow-on seizures and additional intelligence, thus feeding a cycle of success. Targeting the primary flow of illicit drugs, in pure and bulk quantities has a direct and damaging impact on TOC networks.

Question 4. Admiral Zukunft, the Coast Guard is often referred to as "the nation's first responders" because it is typically the first on the scene in a crisis. Your rapid response to disasters like Hurricane Sandy and the Deepwater Horizon oil spill are no coincidence—it's the product of training. Coast Guard members are trained to carefully assess the risks and benefits when there's an emergency, so they know whether and how to react without having to wait for orders. With proposed cuts in the Coast Guard's budget and growing operational demands, what steps will you take to guarantee that we preserve this critical capability?

Answer. The Coast Guard's commitment to maintaining the Nation's preparedness to confront myriad crises remains undiminished. Using updated and new crisis response doctrine and policy, we emphasize the importance of contingency exercises and training to position our responders to continue to be ready in an all hazards, all threat environment. The recent release of our new Incident Management Handbook (IMH), as well as the publication of our Incident Management and Crisis Response doctrine, is indicative of our commitment to serve and respond.

In 2013, the Coast Guard created the Coast Guard Incident Management Assistance Team (CG-IMAT) to provide advanced Incident Command System (ICS) surge support to our Operational Commanders in the field during nationally and regionally significant incidents. This 33-person deployable team has advanced ICS training and deploys experienced personnel to augment our Sectors. The National Strike Force also provides highly trained professionals for oil spill and hazardous material responses. In addition, both Coast Guard Atlantic Area and Pacific Area Commands maintain collateral duty IMATs which provide further additional surge capacity.

The Coast Guard continues recapitalization of its surface, air and shore assets to ensure that we remain ready to confront all threats and hazards in the maritime domain. The Coast Guard is delivering National Security Cutters, Fast Response Cutters, Response Boats-Medium, Response Boats-Small Generation II, cutter boats, HC-144A Ocean Sentry Maritime Patrol Aircraft (MPA), HC-130J Long Range Sur-

veillance Aircraft, and command and control systems—equipping our men and women with the appropriate tools to execute the Coast Guard’s many missions, including response to contingency operations. The Coast Guard is also in the preliminary and contract design phase for the Offshore Patrol Cutter (OPC), which will replace the legacy medium endurance cutter fleet.

Question 5. Admiral Zukunft, the melting polar ice is leading to a significant increase in commercial and noncommercial activity in Arctic waters. The United States is at risk of being unable to support national interests in the region and our sovereignty weakened. The Coast Guard only has two operational ice breakers in its fleet. And of those two icebreakers, one is over 30 years old and one has limited icebreaking capabilities. A new heavy duty icebreaker is estimated to cost \$1 billion and may take up to a decade to enter service. Do you have enough assets to support the polar operations mission?

Answer. With the recent reactivation of CGC POLAR STAR in 2012, the Coast Guard has one heavy and one medium icebreaker. Coast Guard Cutters HEALY and POLAR STAR provide the capacity necessary to address the service’s near-term icebreaking needs. The Coast Guard expects to complete the requirements for the new polar icebreaker in 2015 so that preliminary design studies may be initiated in 2016.

Question 6. How many icebreakers do we need to have adequate presence in the Arctic?

Answer. The Coast Guard maintains presence in the Arctic through deployment of surface and air assets (including icebreakers). Icebreakers also provide presence through continued support of the science community as part of the Federal research fleet. The Coast Guard has successfully met user demand through a mobile and seasonal Arctic presence with CGC HEALY’s annual summer deployments and distribution of other surface, air and ashore assets to the Arctic region under the auspices of Coast Guard District Seventeen’s Operation Arctic Shield. In the future, the number of U.S.-owned icebreakers needed in the Arctic will depend on the requirements to perform inherently governmental missions in and around ice-covered waters.

Question 7. How important is it to recapitalize the icebreaking fleet?

Answer. The Coast Guard’s heavy icebreaker capability is outdated, and the only active ship (POLAR STAR) is operating with unreliable systems. CGC HEALY is a medium icebreaker that will reach the end of its planned service life in 2030. Given the long lead time required to build a polar icebreaker, it is critical to maintain planned progress on Coast Guard’s new icebreaker acquisition if we are to maintain an organic icebreaking capability.

Question 8. At what point do you take action and recapitalize, rather than wait for a ‘whole of government’ funding stream?

Answer. The Coast Guard is proceeding on schedule with acquisition of a new polar icebreaker that was initiated in 2013. In the short-term, the Coast Guard also has requested \$6 million in the FY16 budget to conduct a Material Condition Assessment and Alternatives Analysis on the potential reactivation of POLAR SEA. Following these assessments, the Coast Guard will have a better understanding of the feasibility and associated cost of reactivating POLAR SEA.

Question 9. How much Coast Guard presence should be in the Arctic?

Answer. The Coast Guard is committed to ensuring safe, secure, and environmentally responsible activity in the Arctic. As outlined in the Coast Guard’s Arctic Strategy, the Coast Guard plans to utilize a “mobile and seasonal” approach to operations over the coming decade. The Coast Guard will closely monitor evolving Arctic activities, reallocate assets, and make new investments, as resources allow, addressing emerging operational requirements.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MARIA CANTWELL TO
ADMIRAL PAUL F. ZUKUNFT

Question 1. Admiral Zukunft, Arctic countries signed an Arctic Search and Rescue Agreement in 2011. The Arctic Council conducted its first Search and Rescue exercise in 2012. SAR capabilities are becoming more important as tourism, transportation and oil and gas development increase in the Arctic. Please outline what steps the Coast Guard has taken to prepare and respond to a maritime casualty incident in the Arctic.

Answer. As outlined in the Coast Guard’s Arctic Strategy, increasing Search and Rescue (SAR) capability requires leveraging partnerships, including international, state, local and industry. The Commander, Coast Guard District 17, is the SAR Co-

ordinator for the Juneau Search and Rescue Region (SRR), which includes the Arctic Ocean. Coast Guard District 17 coordinates SAR operations with support from other countries, as well as with other Federal, State, local, and Tribal SAR and emergency response authorities. To enhance capabilities, the district has led regional mass rescue exercises and workshops focusing on local capabilities and conducted training with state and international partners. The Coast Guard also deploys assets to the Arctic in the summer months, when human activity in the region peaks.

In October 2015, the U.S. Government will host a Search and Rescue Tabletop Exercise in Anchorage, Alaska. Led by the Coast Guard, Department of State, and NORTHCOM, this whole-of-government exercise will support both the U.S. Chairmanship of the Arctic Council and the National Strategy for the Arctic Region Implementation Plan, and it is designed to test elements of the 2011 Arctic SAR Agreement.

To prepare for potential future operations, the Coast Guard also tests the multi-mission capabilities of technologies and assets during the annual operation Arctic Shield.

Question 2. What are the Coast Guard's limitations to responding to a Search and Rescue incident in the Arctic?

Answer. Search and rescue by the Coast Guard is conducted by deployable assets in the region which, like all SAR assets, are limited by prescribed range and endurance parameters. Lack of permanent infrastructure also reduces the Coast Guard's ability to obtain fuel and provisions or conduct repairs and maintenance on assets in theater, if required.

Question 3. How does the U.S. contribute to the international Search and Rescue Agreement?

Answer. As detailed in the International Maritime Organization's (IMO) *International Convention on Maritime Search and Rescue, 1979* ("SAR Convention"), nations establish national SAR systems to provide SAR services to meet national and international humanitarian and legal obligations. Under the SAR Convention, the world is divided into Search and Rescue Regions (SRRs); these SRRs are formally established by agreement between nations. The United States is an integral component of the global SAR system; the Coast Guard, as the designated SAR Coordinator for the U.S. maritime SAR regions, is responsible for coordinating SAR operations within these SRRs.

To fulfill the SAR Convention's requirements, in 2011 the eight Arctic Council nations negotiated and concluded the Arctic SAR Agreement. This agreement serves as the basis for international cooperation and coordination of Arctic SAR operations. The Commander, Coast Guard District 17, is the SAR Coordinator for the Juneau SRR, which includes the Arctic Ocean. Coast Guard District 17 coordinates SAR operations with support from other countries, as well as with other Federal, State, local, and Tribal SAR and emergency response authorities.

Question 4. In what ways does the U.S. rely on other countries for search and rescue capabilities and assistance?

Answer. The international SAR system is based on the premise that all available resources should be utilized to conduct lifesaving operations. The United States coordinates with other countries' Rescue Coordination Centers (RCCs) to determine what resources are available and can be employed to conduct a SAR mission. In the Arctic, for example, the U.S. Coast Guard works with other countries, primarily Canada and the Russian Federation, to respond to persons in distress within the U.S. maritime SAR Region (SRR) in the Arctic Ocean. The U.S., in turn, supports Canadian and Russian Federation SAR operations within their respective SRRs, as applicable.

Question 5. In addition to investments in vessels and aircraft, what other tools does the United States need to improve safe maritime transportation in the Arctic?

Answer. Industry and other maritime transportation stakeholders play a significant role in both demand and allocation of resources for safeguarding maritime transportation. The *National Strategy for the Arctic Region* provides a roadmap on the Federal Government's approach to the region.

Question 6. Admiral Zukunft, the Coast Guard is in need of recapitalizing its legacy cutter fleets. There are 1 Coast Guard cutters that are nearly 35 years old and some cutters that are nearly 50 years old. I am very pleased to see four of the eight approved and funded National Security Cutters in service, and twelve of the 58 Fast Response Cutters listed in the Coast Guard's program of record, also in service. With so many vessels required in the Coast Guard's program of record-91 total—I would like to better understand the Coast Guard's procurement authority with respect to the Offshore Patrol Cutter. Has the Coast Guard considered multiyear pro-

curement for the Offshore Patrol Cutter, or any other vessel class or aircraft? Why or why not?

Answer. The OPC acquisition strategy could support a multi-year procurement (MYP) strategy if it meets the statutory criteria (*e.g.*, substantial savings over annual buys, stable funding and stable design).

Question 7. What, if any, are the risks to the Coast Guard by utilizing multiyear procurement if approved by Congress?

Answer. If multi-year procurement (MYP) is used, and if subsequent years funding were not available, the Coast Guard would be required to renegotiate or cancel the contract. Cancelling the contract could require the Government to pay a cancellation fee to the contractor. Renegotiating the contract would also have a financial impact.

Question 8. What are the potential cost savings to the Coast Guard if multiyear procurement was employed for the Offshore Patrol cutter?

Answer. Multi-year procurement (MYP) can be beneficial for shipyard material and labor cost management. Optimally-phased and stable production schedules establish the best scenario for shipyard learning, leading to reduced labor costs. In addition, multiple ship sets of supplies and materials may be procured at reduced cost due to purchasing in quantity.

Question 9. What type of Coast Guard infrastructure and response planning efforts are being done to address the risks of transporting crude by rail in, on, or adjacent to a navigable waterway?

Answer. For the last three fiscal years, the Coast Guard has provided strategic planning direction to field units to assess new oil sources, including rail, and to incorporate these risks in Area Contingency Plans. Through our sustained engagements in Harbor Safety Committees, Area Maritime Security Committees, and Area Committee meetings, we have conducted several Bakken and shale oil awareness training seminars, a national crude by rail webinar and have coordinated outreach efforts with interagency partners like the Department of Transportation and the Environmental Protection Agency (EPA) to establish and disseminate vital first response training programs, including an online orientation for On-Scene Coordinators assembled by the National Response Team.

The Coast Guard is conducting the first Consensus Ecological Risk Assessment involving rail as a source this summer, a tool previously used to compare tradeoff impacts of offshore response countermeasures. Moreover, our National Strike Force has responded to several Bakken and shale oil related rail incidents, and working with NOAA's Scientific Support Coordinators, has recorded critical information on the characteristics and fate of Bakken and shale oil discharges in the inland and coastal environments.

The Coast Guard is supporting the Department of Transportation, in coordination with the EPA, the Federal Emergency Management Agency (FEMA), the U.S. Fire Association, the Association of American Railroads, and the American Petroleum Institute to create an in-depth training program with videos and scenario animations for local, state, and Federal response personnel. This training program covers the relationship between local and state emergency response plans and the National Oil and Hazardous Material Contingency Plan. The training program further addresses the types of response infrastructure available to first responders and crisis management resources provided by the railroad industry and applicable Federal special teams from the National Response Team.

Based partially on the emergence of this issue relative to new oil-by-rail corridors, the Coast Guard initiated and is leading an interagency subcommittee of the National Response Team to improve the process of meeting environmental consultation and compliance requirements of Federal statutes, such as the Endangered Species Act, as they apply to oil and hazardous substance response and preparedness activities.

Question 10. What is being done at the Federal level to address spill risks and calculations by region?

Answer. Coordinated by the National Security Council staff, an interagency team identified threats within each EPA and FEMA Region, Federal resources available to help the whole community prepare for crude by rail transportation incidents, and classification of states based on the volume of crude-by-rail as identified under a Department of Transportation Emergency Order. The interagency team conducted conference calls with the 48 states in the lower continental United States and the District of Columbia. State participants included directors and deputies from state emergency management and homeland security agencies, environmental agencies, transportation agencies, state fusion centers, and local police and fire departments. Upon conclusion of their analysis, the interagency team developed a coordinated

communications strategy for the multiple Federal agencies involved with public outreach related to the shipment of shale crude oil by rail tank car. The strategy included significant rollout activity schedules, key messages, talking points, and frequently asked questions.

The material from this effort included summary information on shale oil spill risks and calculations by region, including identifications of railroads carrying high volumes that are proximal to navigable waterways. These documents were disseminated to Coast Guard operational field units, briefed during a special national webinar, and posted on a secure portal site for Coast Guard prevention and response personnel to incorporate into their Area Contingency Plans.

Question 11. What type of oil spill response and coordination exercises are taking place to address marine oil spills by rail?

Answer. The Coast Guard is working with the EPA in the development of a series of discussion-based exercises involving an Inland Spill of National Significance (SONS) due to a rail incident. The current scenario involves the derailment of a train carrying Bakken crude oil in the Columbia River Gorge area; the ensuing oil spill will begin in EPA jurisdiction and flow into USCG jurisdiction. There are currently three seminars planned using this scenario as the basis of discussion: Regional Response Team 10s regional-level seminar (September 2015), a National Response Team seminar (October 2015), and an Executive Seminar with agency Principals (January 2016). There are also plans to incorporate national issues arising from the FEMA 2015 Operation Safe Delivery exercise series into the Executive Seminar. The Coast Guard was a participant in the Jersey City pilot of the FEMA Operation Safe Delivery exercise, and presented on our involvement in the environmental response to the West Virginia oil train derailment.

Coast Guard has conducted or been a participant in a number of exercises and responses involving tank car derailment and a subsequent release of oil or hazardous materials. Each of these events provides an opportunity to enhance the Coast Guard's preparedness to respond to these situations. Recent examples include:

- (1) June 4, 2014, Marine Safety Unit (MSU) Toledo: workshop to gather information regarding the transportation of Bakken Crude Oil through the MSU Toledo Area of Responsibility (AOR).
- (2) January 21, 2014, Sector Delaware Bay: real-world event, actual derailment of tank cars, none leaked, but provided opportunity to learn more on rail transport of Bakken crude through the Sector Delaware Bay AOR.
- (3) August 23, 2014, Sector Delaware Bay: full scale exercise with New Castle County Local Emergency Planning Committee (LEPC) simulating a fire from a leaking tank car containing Bakken crude.
- (4) November 12, 2014, Sector Buffalo: Spill Management Team (SMT) table top exercise to discuss additional boom deployment locations along Cattaraugus Creek in the vicinity of Irving, NY to improve the ability to respond to a potential Bakken crude oil discharge from a rail car accident.
- (5) August 26, 2014, Sector Buffalo: boom deployment drill along Cattaraugus Creek in the vicinity of Irving, NY to improve the ability to respond to a potential Bakken crude oil discharge from a rail car accident.
- (6) June 11, 2014, MSU Duluth: table top exercise to improve preparedness by simulating a major oil spill of approximately 30,000 gallons of Bakken Light Crude Oil from a derailed train's tank car on the Grassy Point Swing Bridge.
- (7) April 11, 2014, Sector Buffalo: quarterly notification drill, to ensure proper notifications are accomplished in the event of a derailment and spill of Bakken crude into a waterway of the Sector Buffalo AOR.
- (8) July 10, 2013, MSU Toledo: table top exercise, provided a venue to learn how a major U.S. railroad responds to a derailment, how their contractors/equipment are mobilized, timelines for mobilization, how they use ICS to coordinate on-scene operations, how their ICS is set up, how they would blend into a Unified Command, and how they would work with local/Federal first responders (USCG, USEPA, OH EPA, various fire & rescue departments, police and sheriff departments, county emergency management agencies, etc.).
- (9) August 12, 2014, Sector Delaware Bay: table top exercise at Gloucester County (NJ) Fire Academy, simulated crude oil train derailment to validate procedures and develop a planning guide that municipalities can use to promote successful mitigation of a bulk flammable liquid event.
- (10) March 15, 2015, Sector Buffalo: quarterly notification drill, to ensure proper notifications are accomplished in the event of a derailment and spill of Bakken crude into a waterway of the Sector Buffalo AOR.

- (11) August 25, 2014, Sector Lake Michigan: full scale exercise, oil spill response exercise involving a simulated derailment and release of diluted bitumen (DILBIT), a heavy oil, into Sauk Creek, Port Washington, WI.
- (12) March 27, 2014, Sector New York: table top exercise, exploring response to derailment and spill of tank cars into the Hudson River near West Point, NY.
- (13) September 6, 2013, Sector Tampa-St Petersburg: real world event, derailment and spill of tank cars leaking ethanol.
- (14) November 30, 2012, Sector Delaware Bay: real-world event, derailment and hazardous substance release at Paulsboro, NJ.

Question 12. Admiral Zukunft, NOAA installed specialized high frequency radar stations along much of the United States coastline. Unlike Doppler radar which measures weather in the atmosphere, high frequency radar or "H.F.R." measures fine scale sea surface currents. Sea surface current data has important applications for Coast Guard search and rescue, harmful algal bloom mapping and oil spill response. There is only one high frequency radar station installed in Washington State-at the southernmost corner-leaving much of Washington State without coverage. How has H.F.R. data improved search and rescue modeling in the mid-Atlantic?

Answer. The surface current fields, measured by High Frequency Radar (HFR) and derived by the associated Short-Term Prediction System (STPS), are used directly by the Coast Guard's Search and Rescue Optimal Planning System (SAROPS) for search object drift predictions. These drift predictions result in more accurate search object probability distributions. Search efforts based on these distributions lead to more efficient and effective searching.

Question 13. How is Washington State at a disadvantage without this system?

Answer. In maritime regions with no High Frequency Radar (HFR) data, SAROPS utilizes currents from regional and global models in its search object drift predictions. These models are highly sophisticated and provide the best water current information available when actual data, such as that provided by HFR, are not available. Search object probability distributions under these circumstances may be less accurate than those that utilize HFR data.

Question 14. Admiral Zukunft, The International Maritime Organization (IMO) adopted the Polar Code amendments into the International Convention for the Safety of Life at Sea. These amendments created mandatory safety requirements for ships operating in the Arctic and Antarctic waters on shipboard training, mariner certification, navigation and operational assessments. Without seasonal ports (operating bases) to conduct inspections and evaluations of vessels transiting the Arctic, how will the United States hold the vessels traveling to the Arctic accountable?

Answer.

- The Polar Code is expected to come into force on January 1, 2017. It will apply to new vessels after that date. Vessels built before that date will be required to meet the relevant requirements by the first intermediate or renewal survey after January 1, 2018. The Coast Guard is currently evaluating its compliance programs to incorporate Polar Code compliance requirements.
- Domestic inspected vessels must undergo periodic inspection for certification and mid-period inspections. The Coast Guard verifies compliance of these vessels with the applicable domestic and international standards during these inspections. Most inspections are expected to occur outside of the Arctic region, in homeports or ports of call. The vast majority of inspections are not expected at remote Arctic locations.
- Foreign vessels subject to the Polar Code will be subject to oversight from their Flag State. These vessels may also be subject to Port State Control examinations by the Coast Guard should they call in a U.S. port.
- Enforcement of the Polar Code will consist of both periodic inspections and employment of Maritime Domain Awareness information such as Notice of Arrival and Automatic Identification System (AIS) information. The seasonal deployment of personnel, aircraft, and surface vessels as part of Operation Arctic Shield provides law enforcement capability during months where decreased ice coverage permits vessel traffic.

Question 15. Furthermore, there are new international environmental regulations for operating vessels in the Arctic; including restrictions for waste disposal and discharge of other toxic vessel waste. With no ports for vessels to discharge waste in the United States high Arctic, how will vessels be able to comply with these requirements?

Answer. The International Convention for the Prevention of Pollution from Ships MARPOL requires port states to ensure that facilities provide the disposal of garbage and other environmental wastes such as oily water, noxious substances and sewage. The United States has implemented regulations requiring reception facilities for wastes in Title 33, CFR Part 158. For U.S. Arctic ports and destinations, there simply is no port infrastructure to support reception facilities for these wastes, so vessels must take responsible action to minimize such wastes and retain onboard such wastes until they return to a port where such reception facilities exist.

Question 16. Admiral Zukunft, the 2010 Coast Guard Authorization Act directed the Coast Guard to develop Alternate Safety Compliance Plans (ASCP) by 2017 with the intent to implement those ASCPs by 2020. Feedback from the fishing industry across the board is that there is a concerning lack of information and understanding for what fishing vessel owners should be doing to prepare their vessels and crews to be in compliance with ASCP by 2020. In my region there has been little, if any, outreach. Admiral Zukunft, Arctic countries signed an Arctic Search and Rescue Agreement in 2011. The Arctic Council conducted its first Search and Rescue exercise in 2012. SAR capabilities are becoming more important as tourism, transportation and oil and gas development increase in the Arctic. How is the Coast Guard soliciting and implementing feedback from the industry (fishing, shipbuilding, etc) as the Coast Guard develops the ASCP program?

Answer. The Coast Guard has been presenting information about the ASCP development process since 2011 at: industry conferences and expositions; industry association meetings and forums; and informally with individual owner/operators who have a vessel undergoing repairs or modifications in the Pacific Northwest, Alaska, and Gulf of Mexico.

Question 17. How can the Coast Guard increase their outreach to the fishing and shipbuilding industries to increase stakeholder involvement in the development of the ASCP program criteria?

Answer. The Coast Guard intends to formally announce and publish for public comment a draft ASCP requirements matrix that will enhance the seaworthiness of older vessels and the safety of their crews. The Coast Guard is determining the best means to accomplish making this information available to the industry and the public. Subsequent to the public availability of the draft ASCP requirements, the Coast Guard will continue to provide presentations on the ASCP to industry groups and associations and individual owner/operators as may be requested, and may also conduct public meetings to solicit feedback, both oral and written. After announcement of the draft ASCP requirements, the document will be posted on the Coast Guard's www.fishsafe.info and other websites. The Coast Guard will encourage industry groups to re-post the ASCP information on their websites to facilitate further awareness for their members.

Question 18. Please provide a list of the high or medium risk fisheries that the Coast Guard is using to model the ASCP program.

Answer. The Coast Guard has been working with the Pacific Regional Office (Anchorage, AK) of the National Institute for Occupational Safety and Health (NIOSH) in sharing casualty data and developing interventions to improve safety in the commercial fishing industry. Joint efforts have helped reduce the number of fatalities and vessel losses in the industry. NIOSH has identified fleets and fisheries with high casualty rates that are considered high risk based on operations and geographic areas. Coast Guard Districts may identify other local fleets or fisheries that should be included. Groups may be added or deleted based on feedback from industry and public comment. The high risk groups identified with NIOSH that may have to meet additional safety requirements in an ASCP include the following:

- Pacific Purse Seine—Distant Water Tuna Fleet
- Pacific Long Line Tuna Fleet
- Bering Sea/Aleutian Island Crab Fleet
- Alaska Groundfish Trawlers
- Alaska Salmon Seiners and Trollers
- Alaska Pot Cod
- West Coast Crabbers
- West Coast Groundfish Trawlers
- Gulf of Mexico and South Atlantic Shrimpers
- Gulf of Mexico and Atlantic Menhaden
- Atlantic Scallopers
- Atlantic Clam and Quahog

- Northeast Multi-species Groundfish
- Northeast Lobster, Herring, and Pelagic fisheries

Question 19. What formal role will the Commercial Fishing Safety Advisory Committee play in the development of the ASCP program? What has the Committee accomplished to date? How will they continue to play a role in the development, implementation and oversight of the ASCP program?

Answer. The Commercial Fishing Safety Advisory Committee has been engaged with the Coast Guard on ASCP development since 2011. During that year's meeting, the Committee was briefed on the 2010 Act's mandate and discussion ensued regarding what requirements should be included in such a program. During the Committee's meetings in August 2013 (Washington, D.C.) and September 2014 (Providence, RI), the Committee was tasked to help the Coast Guard develop requirements for ASCPs. As a direct result of their efforts and recommendations, the Coast Guard has a draft requirements matrix which may be applicable to all vessels and those vessels identified as high risk based on fishery or operating area. The Committee will continue to be engaged in making recommendations to refine the ASCP requirements and how best to implement and manage the program(s).

Question 20. On what date will the Coast Guard publish ASCP draft for public comment?

Answer. No date has been established for publishing a draft of the ASCP requirements for public comment. The Coast Guard is currently determining the best method to get the proposed ASCP requirements out to the public for comment, but intends to publish it by the end of 2015.

Question 21. How many vessels does the Coast Guard anticipate will be impacted by ASCP?

Answer. The Coast Guard's Marine Information for Safety and Law Enforcement database shows the current number of fishing vessels that are 50 feet or greater in length and 25 years of age or older to be approximately 3,500. If all of those vessels also operate beyond three nautical miles of the Baseline, this number would represent how many vessels potentially would have to comply with an ASCP if in effect today. By the year 2020, when ASCP compliance is to be implemented, over 1,000 additional vessels will be over 25 years of age.

Question 22. Explain what additional resources the Coast Guard will need to develop and implement the new ASCP program.

Answer. The Coast Guard does not anticipate a need for additional budget or manpower to finish developing ASCPs by 2017. An analysis is being conducted to determine the number of currently active vessels that will have to comply with an ASCP, and how many separate programs may be needed based on region and/or fishery. This will be used to inform future budget and manpower needs related to the alternate safety compliance programs.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. RICHARD BLUMENTHAL TO ADMIRAL PAUL F. ZUKUNFT

Question 1. Admiral Zukunft, as you know, the Coast Guard Authorization Act of 1998 (P.L. 105-383) spells out how the Coast Guard may convey 29.4 acres of Coast Guard property in Nantucket, Massachusetts to the Town of Nantucket. Specifically, section 417 of the legislation authorizes the Coast Guard to convey Coast Guard Long Range Navigation (LORAN) Station Nantucket to the town "unless" the Coast Guard "determines that the conveyance would not provide a public benefit." While it has been years since Congress passed this measure and the president signed it into law, it appears a determination has not yet been finalized. As a member of the panel with jurisdiction over the Coast Guard, I am committed to ensuring that Federal agencies like the Coast Guard move swiftly to implement directives laid out by Congress. This is one such example. I understand the LORAN station was decommissioned in 2010 and the LORAN technology was removed in 2013, as the Coast Guard has begun relying on more modern, up-to-date equipment to carry out the navigational aid functions the LORAN once provided. It is critical that assets like these not be allowed to languish, especially if they can be put to better use serving the public good. Does the Coast Guard deem the conveyance of the land to be a public benefit?

Answer. The Loran Station Nantucket property identified at section 417 (a) (1) of the Coast Guard Authorization Act of 1998, consisting of 29.4 acres of land, is not the same LORAN-C property that was decommissioned in 2010. Yes, the Coast Guard deemed the conveyance of this land to the Town of Nantucket as a qualifying public benefit use to meet law enforcement requirements.

Question 2. If so, can you provide a timetable for when the conveyance will be finalized?

Answer. The Coast Guard is in the process of reviewing the survey map and re-drafting the deed. Upon a Coast Guard legal review and approval, the deed will be forwarded to the Town for acceptance and execution. Barring any unforeseen circumstances, the Coast Guard anticipates the conveyance to occur in 2015.

Question 3. If, on the other hand, the Coast Guard concludes that the conveyance will not provide a public benefit, can you provide the information the Coast Guard relies on to make that determination?

Answer. As previously stated, the Coast Guard deemed the conveyance of this land to the Town of Nantucket as a qualifying public benefit use to meet law enforcement requirements.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. BRIAN SCHATZ TO
ADMIRAL PAUL F. ZUKUNFT

Question 1. Admiral Zukunft, I understand you are looking at unmanned air and maritime systems as a way to build capacity at low cost to help you meet your eleven statutory missions. What is the potential for using unmanned systems not only to support Coast Guard intelligence gathering needs, but also other missions such as first response and disaster relief?

Answer. Unmanned Aircraft Systems (UAS) are expected to augment manned Coast Guard assets in all maritime security and law enforcement missions as technology and policy develop to allow for those types of operations.

Question 2. How far along are we in developing that technology for that specific use?

Answer. The Coast Guard is not engaged in the active development of UAS technologies to meet mission requirements. However, the Service is messaging to industry the nature of our requirements (all-weather, anti-ice capability, sense and avoid for example), and is working with government agency working groups to advance UAS policy and facilitate UAS inclusion in the national airspace.

Question 3. Are you coordinating with DOD and others in the interagency to take advantage of their lessons learned about unmanned platform and payload capacity so that you are not reinventing the wheel?

Answer. Yes. The Coast Guard is actively engaged with Department of Defense and other U.S. Government agencies to employ their lessons learned in the advancement of our own UAS programs. As directed by the Department of Homeland Security Acquisition Decision Memorandum of 2009, the Coast Guard seeks to leverage the developments and capabilities of other government agencies wherever possible.

Question 4. Admiral Zukunft, in January, at a forum hosted by the Center for Strategic and International Studies, you said that, "As the Navy repositions to the Pacific, I'm repositioning to the Western Hemisphere." I know that you have to make hard choices in this budget environment. The Pentagon's Oceania Maritime Security Initiative is supposed to help bridge Coast Guard gaps by using transiting naval assets to bolster the Coast Guard's maritime domain awareness and accomplish other missions in the region. But there is only so much the Navy can help with because it does not have the expertise to do things like fisheries enforcement, environmental stewardship, and some of the other core Coast Guard missions that our partners and allies are really looking to the United States to support. The expansion of the Pacific Remote Islands Marine National Monument alone is enough to keep District Fourteen's hands full. The Monument will now be nearly 490,000 square miles, about three times the size of California and six times larger than its previous size. What new assets can the Coast Guard commit to the Pacific Area so that we can provide a Coast Guard presence to protect those living marine resources, manage the fisheries, and ensure environmental stewardship of the Monument?

Answer. In Fiscal Year 2017, the Coast Guard will begin homeporting Fast Response Cutters (FRCs) in Honolulu, Hawaii. The FRC will provide 2,500 operational hours versus 1,800 hours per Island Class cutter. Additionally, in Fiscal Year 2018, the Coast Guard will homeport the first of two National Security Cutters (NSCs) in Honolulu. The NSC combines advanced technology for communications, intelligence, surveillance and reconnaissance equipment with modern aviation support facilities (including unmanned aerial systems capability), stern launch cutter boat operations and long-endurance station keeping. These new cutters will provide key capabilities to meet growing demand for Coast Guard presence in the region.

Question 5. Admiral Zukunft, one region where capacity constrains the Coast Guard is the Arctic, where we are seeing increasing activity as a result of climate

change. Currently, we have two heavy icebreakers, Coast Guard Cutters POLAR STAR and POLAR SEA, and one medium icebreaker, Coast Guard Cutter HEALY, in our entire fleet. The Coast Guard's FY 2016 budget includes a request for \$4 million to continue initial work towards acquisition of a new polar icebreaker. But even when we finally have that new polar icebreaker, I worry we are not going to be adequately resourced to support our needs in the Arctic because that icebreaker is intended to replace the POLAR STAR. In my view, when you look at our resources and the pace of change in the region, we are not, as an Arctic nation, investing wisely and will be assuming risk in this part of the world. I know you know this and I know the Coast Guard is continuing to assess the operational demands of the region through its mobile and seasonal operations, including the summer deployment of assets during Operation Arctic Shield. In your view, are we under-investing in the Arctic, and if so, how much risk are we assuming as a Nation?

Answer. Private investments play a significant role in informing where and how the government should invest their resources. The *National Strategy for the Arctic Region* and its implementation plan provide a roadmap on the Federal Government's approach to identifying and mitigating risks in the region.

Question 6. Admiral Zukunft, I would like to discuss the UN Convention on the Law of the Sea. Today, 166 nations and the European Union have ratified the convention, with the United States remaining one of the few holdouts, despite our key role in the negotiations. I know our maritime services operate based on customary international law. But in my view, the Coast Guard's legitimacy in the areas of counter-piracy, counter narcotics and other law enforcement would be strengthened if we were party to the treaty. It would improve our ability to protect our global maritime interests by providing a stronger legal foundation for our own maritime activities and allow us to shape and enforce international norms and legal authorities. I wonder if you could please comment on how ratifying the Law of the Sea Convention would add legitimacy to what the Coast Guard does every day, particularly in areas like the Western Pacific?

Answer. The Coast Guard needs a comprehensive legal framework that addresses activities on, over, and under the world's oceans to further its statutory maritime missions. Customary international law is uncertain, and the Law of the Sea Convention (LOS Convention) provides the solid legal framework the Coast Guard needs.

For the Coast Guard's military and law enforcement efforts, the LOS Convention locks in important freedoms of navigation, including high seas freedoms, innocent passage, transit passage, and archipelagic sea lanes passage, which allow the Coast Guard to project at-sea presence and arrive on-scene quickly.

- The LOS Convention's stabilization of territorial sea claims to 12 nautical miles helps the Coast Guard's counterdrug and migrant interdiction missions. Locking in these freedoms of navigation and certainty in coastal state maritime territorial claims would bolster U.S. maritime military activities in the Western Pacific.
- The LOS Convention also secures mission critical rights of boarding, approach, and visit, which the Coast Guard needs for law enforcement activities.
- The United States acceding to the LOS Convention would also help with the Coast Guard's negotiation of bilateral and multilateral agreements covering drug trafficking, migrant smuggling, safety of life at sea, pollution, and the proliferation of weapons of mass destruction, especially at international venues, such as the International Maritime Organization, by providing a firm legal basis to interpret and seek adherence to LOS Convention provisions.

The LOS Convention is also important for the Coast Guard's maritime safety, security, and environmental protection missions by providing the internationally-agreed framework under which international conventions on vessel standards are negotiated and enforced.

The Western Pacific region is home to approximately 1.8 billion people, more than one-fourth of the world's population. It stretches over a vast area, from China in the north and west, to New Zealand in the south, and French Polynesia in the east. One of the world's most diverse regions, the Western Pacific includes some of the world's least developed countries as well as the most rapidly emerging economies. It includes highly developed countries such as Australia, Japan, New Zealand, the Republic of Korea and Singapore; and fast growing economies such as China and Vietnam. The entire region is dependent on maritime resources and the ability to transport goods and people by vessel. Becoming party to the LOS Convention would improve the Coast Guard's standing and credibility in this maritime international community.

The Coast Guard, through the tenure of the past seven Commandants, is firmly convinced that U.S. accession to the LOS Convention would strengthen our mission execution.

Question 7. As the Arctic continues to open, to what extent does not being party to the treaty leave us hamstrung when it comes to securing our claim to maritime resources and to cooperating with other countries in the region?

Answer. The Arctic maritime region is governed by the legal framework contained in the LOS Convention, as are all maritime activities conducted in the Arctic. As the Arctic opens to further navigation and the technology for seabed activities on the extended continental shelf continues to develop, the certainty provided by the LOS Convention's legal framework is becoming more important.

The United States is the only Arctic nation not party to the LOS Convention. By joining the LOS Convention, the United States is guaranteed the use of the process set up in the Convention to obtain legal certainty and international recognition over the extended continental shelf and its vast resources beyond 200 nautical miles from the U.S. coastline in the Arctic. Because non-accession to the LOS Convention inhibits the ability of the United States to most effectively assert its claims to the U.S. extended continental shelf in the Arctic, commercial demand and prospects for investment in the area remain uncertain.

Additionally, the LOS Convention provides the legal framework for Arctic bilateral and regional agreements, such as those concerning maritime search and rescue and marine environmental response. Accession to the LOS Convention would strengthen our negotiation position in these discussions.

Without the LOS Convention, we are operating without a tool that every other Arctic nation has. Beginning in April 2015 and for the next two years, the United States will chair the Arctic Council. Our leadership is weakened by our failure to ratify the LOS Convention.

Question 8. Admiral Zukunft, I would like to ask you about credentialing of our Coast Guard sailors. I have been looking at this issue for some time and I think there are ways that we can improve how we help our sailors prepare for when they eventually separate so that they can put the strongest foot forward, particularly those sailors who have the option of a second career in the domestic maritime trade as a merchant marine. This includes ensuring that Coast Guard courses and sea-going members of the Coast Guard meet the licensing, credentialing, and assessment requirements set by the National Maritime Center and Standards of Training, Certification, and Watchkeeping. Would you support an effort to ensure that the Coast Guard's courses and Boot Camp meet STCW Basic Standards and that all sea-going members meet STCW Basic standards as well?

Answer. The Coast Guard is actively engaged both internally and externally in an effort to support military members as they transition from active duty to potential employment with the merchant marine. The Coast Guard participated in a number of meetings with industry, DOD and MARAD in an effort to align the duties and qualifications of active duty personnel with potential counterparts in the merchant marine. The Coast Guard is currently revising sections of the Marine Safety Manual to incorporate much of this data. We have recently approved several Navy and Coast Guard training courses and competencies that fulfill the standards of qualification for various merchant mariner credential requirements. Of note, cadets in the 2016 graduating class of the Coast Guard Academy will receive a 100-ton Master credential and are eligible to sit for higher level credentials after gaining a certain level of experience. Currently the Army, Navy, and Coast Guard have approved training courses which can be used to demonstrate qualification or partial qualification for certain merchant mariner credentials. The Coast Guard's National Maritime Center routinely evaluates the experience and training of military members applying for merchant mariner credentials. We will continue to explore opportunities, such as Coast Guard Basic Training, to determine where the training and qualifications received meet the qualifications and experience required for merchant mariner credentials.