

**NOMINATION OF VICE ADMIRAL
KARL L. SCHULTZ, TO BE PROMOTED
TO ADMIRAL AND TO BE COMMANDANT,
UNITED STATES COAST GUARD**

HEARING

BEFORE THE

**COMMITTEE ON COMMERCE,
SCIENCE, AND TRANSPORTATION
UNITED STATES SENATE**

ONE HUNDRED FIFTEENTH CONGRESS

SECOND SESSION

APRIL 17, 2018

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SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

ONE HUNDRED FIFTEENTH CONGRESS

SECOND SESSION

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**NOMINATION OF VICE ADMIRAL
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TUESDAY, APRIL 17, 2018

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

The Committee met, pursuant to notice, at 10 a.m. in room SR-253, Russell Senate Office Building, Hon. Roger Wicker, presiding.

Present: Senators Wicker [presiding], Thune, Lee, Heller, Cruz, Moore Capito, Sullivan, Nelson, Cantwell, Klobuchar, Blumenthal, Baldwin, Peters, Hassan, and Cortez Masto.

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

Senator WICKER. Good morning, one and all. Thank you for your attendance and interest today. Today we will consider the nomination of Vice Admiral Karl Schultz to be promoted to Admiral and to become the 26th Commandant of the U.S. Coast Guard.

The Coast Guard has had a tremendous year by all accounts. As our Nation's smallest armed service, it has repeatedly shown its value to the American people. The Coast Guard yielded record results last year in its mission to combat the flow of illegal narcotics by transnational criminal organizations. In total, the Coast Guard interdicted more than \$6.6 billion worth of cocaine and other drugs before they could reach our shores, while apprehending more than 600 smugglers for prosecution.

This past fall, we experienced one of the most catastrophic hurricane seasons on record. Hurricane Harvey in Texas, Hurricane Irma in the Caribbean and Southeast United States, Hurricane Maria in Puerto Rico, and Hurricane Nate along the Gulf Coast caused an unprecedented \$200 billion in damages. This eclipsed the previous record of \$159 billion, which we experienced in 2005 from Hurricane Katrina.

And yet for every storm that battered our shores, the Coast Guard answered the call, surging personnel from all over the country to provide relief to affected communities. The Coast Guard estimates that the heroic actions of their men and women saved more than 11,000 lives.

Despite these noteworthy results, there are numerous challenges ahead for the service as it continues to take on more and more responsibility. We are seeing significant increases in vessel traffic in

the Arctic as opening waterways offer new commercial opportunities for the maritime industry. The Coast Guard will be relied upon for search and rescue, fisheries management, and environmental enforcement in these hazardous waters.

Currently, the Coast Guard is performing its missions with antiquated equipment and aging ships that are in constant danger of breaking down. The Coast Guard's sole heavy icebreaker, the POLAR STAR, was commissioned in 1967 and is a single point of failure for the U.S. presence in the Arctic. Other legacy assets, such as the high endurance cutters and the inland river tenders are more than 40 and 50 years old.

The Coast Guard is in the midst of a major recapitalization effort. It is Congress' responsibility to assist in this effort and to provide the Coast Guard with adequate resources to meet increasing demands.

I am pleased to report that the Senate will finally be considering the Coast Guard Authorization Act during this work period. Members from both sides of the aisle worked to pass this bill through the Committee last June. After more than 10 months, it is well past time that we move forward with this important piece of legislation. This bill would provide the Coast Guard with the programmatic authorities necessary to address future challenges.

Vice Admiral Karl Schultz is well qualified to lead the Coast Guard during this critical and challenging time. Throughout his 35 years of service, he has proven to be a trustworthy and capable leader. As the Atlantic Area Commander, Vice Admiral Schultz oversees all Coast Guard operations from the Rocky Mountains to the Arabian Gulf. He also serves as Commander, Defense Force East, where he is responsible for providing Coast Guard mission support to the Department of Defense and the combatant commanders. His personal awards include the Defense Superior Service Medal, four Legions of Merit, four Meritorious Service Medals, three Coast Guard Commendation Medals, two Coast Guard Achievement Medals, and numerous others.

So, Admiral Schultz, we thank you for testifying today and look forward to you continuing to serve our country.

With that, I turn to our distinguished Ranking Member, Senator Nelson, for his opening statement.

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

Senator NELSON. Thank you, Mr. Chairman.

Admiral Schultz will lead the branch of our Armed Forces charged with protecting and saving lives at sea, securing our ports, and conducting numerous other missions critical to our safety and security. It's not only an Armed Force, as given military responsibilities, but it uniquely combines with the law enforcement function as well. We need to look no further than the last hurricane season to see the exceptional work that 56,000 Active Duty Reserve and civilians, and 31,000 Auxiliary volunteers did when the Nation needed them.

As you have stated, Mr. Chairman, the Admiral serves as the Atlantic Area Commander. He led the Coast Guard's response to Hurricanes Harvey, Irma, Maria, and Nate.

And I want to thank you, Admiral, and all of your fellow servicemembers for all that you did as we went around after a couple of those hurricanes throughout Florida, and then as I have been down visiting with your troops in Puerto Rico.

In addition, the Coast Guard had an incredibly successful year in preventing drugs from coming into the country, a success attributed to your specially-trained personnel, including the Helicopter Interdiction Tactical Squadron and the Joint Interagency Task Force South, which both reside in the State of Florida. And, Admiral, as you well know, this Friday marks the 8th anniversary of the *Deepwater Horizon* oil spill, which took the lives of 11 people. The incident also polluted over 1,100 miles of coastline, impacted the marine environment and the livelihood and personnel across the Gulf States, and it serves as a reminder of the need to protect our waters from oil spills. The Coast Guard served as the Federal on-scene coordinator for that disaster and is well aware of the cost of that mess and the ongoing consequences.

A lot of people don't realize all that the Coast Guard does; this Committee does. When the administration proposed a significant budget cut for the Coast Guard's Fiscal Year 2018 budget, many on this Committee took exception. Ultimately, your budget, Admiral, included a \$1.7 billion increase over the Fiscal Year 2017 enacted level, and that ensures the continuation of operations and timely recapitalization of your assets. This appropriations level includes funding for the first offshore patrol cutter and long lead-time materials for the second of 25 planned cutters. And as you know, this cutter, which surprisingly is being built in Panama City, Florida—they were not expected to be the winning bidder but they won—will be the cornerstone of your service's fleet and comprise 70 percent of the Coast Guard's offshore presence. These cutters are replacing cutters that are 25 to 50 years old. We do our best here to make sure the Coast Guard is properly resourced and has the tools that it needs to do of all the many, many things that we ask of it, and this includes the expeditious passing of the Coast Guard Authorization Act.

The OMB won't let you tell us what resources you really need, Admiral, but we're usually able to figure out and provide them to you anyway. You've got a big job, and I believe you're going to handle it very well.

Admiral, good luck, and we're looking forward to having you as our next Commandant.

Senator WICKER. Thank you, Senator Nelson, for that very insightful opening statement.

Admiral Schultz, we're delighted to have you. Please proceed with your verbal statement, and feel free to introduce any family members you might have present in the room.

**STATEMENT OF VICE ADMIRAL KARL L. SCHULTZ,
TO BE PROMOTED TO ADMIRAL AND TO BE COMMANDANT,
UNITED STATES COAST GUARD**

Admiral SCHULTZ. Good morning, Chairman Wicker, Ranking Member Nelson, and distinguished members of the Committee and Subcommittee. I request that my written statement be submitted for the record.

I'm honored to appear before you today and humbled to have the confidence of President Trump and Secretary Nielsen with their nomination to serve as the 26th Commandant of the United States Coast Guard. I'm blessed to have my wife of almost 29 years, Dawn Marie, sitting behind me to share this important day.

I'm also grateful to our Commandant, Admiral Paul Zukunft, who served the Nation with the highest level of distinction these past 4 decades, and more specifically for these—for his steadfast, insightful leadership leading the world's best Coast Guard these past 4 years.

With a focus on being ready, relevant, and responsive, if confirmed, I will ensure that your United States Coast Guard continues to proudly serve our great Nation.

For nearly 35 years, I've dedicated my life to serving America in the Coast Guard. I have reportedly and repeatedly seen firsthand the value the Coast Guard provides to our Nation. This past fall, I witnessed the adaptability of our service and the decided bias for action of our extraordinary workforce during the Coast Guard's response to Hurricanes Harvey, Irma, Maria, and Nate. During these operations, our coastguardsmen's tireless and heroic efforts led to the rescue of 11,300 lives and restored our vital ports and waterways as key drivers of our national economy.

If confirmed, the top priority to be to focus on our service readiness. At our core, the Coast Guard's most valuable asset is our 56,000 Active Duty, Reserve, and civilian members. These adaptive and agile professional men and women stand the watch each and every day. For the service to be ready, our coastguardsmen must have the right knowledge, skills, and abilities to successfully execute our challenging missions. Equally important, our men and women must represent the American public we serve. Diversity breeds new ideas, inclusion, and a stronger team. Quite simply, it fosters service readiness.

In addition to our proficient and diverse workforce, our service requires modern, interoperable, and multimission assets ready to conduct operations. I thank the administration, Congress, and specifically this Committee for all of your support of the ongoing modernization of our capital assets, as well as the recent supplemental funding to rebuild our shore infrastructure following last fall's catastrophic hurricanes.

However, like the other Armed Forces, the Coast Guard needs to rebuild readiness with sound investments in our operation and maintenance accounts. While readiness in the other Armed Forces has been the focus of recent budgetary increases, your Coast Guard has not yet seen much relief in this budget category. For these reasons, ensuring our service readiness will be a top priority of mine.

It will also be my priority to leverage our service's unparalleled relevance to the challenges facing the Nation. As an Armed Force, coastguardsmen integrate with DoD and joint task force organizations, and we provide the Department of Homeland Security something extremely unique, its only military service. Throughout my career, it's been clear that through our broad authorities and vast network of international, Federal, State, and local, and private industry partnerships across a broad spectrum from military operations to humanitarian efforts, the Coast Guard brings unique ac-

cess and expertise to the Nation. Your Coast Guard has never been more relevant than we are today.

Finally, if confirmed, it will also be my priority to ensure our service remains responsive to the Nation's needs. The Coast Guard regularly works with the public and the maritime industry as well as with our fellow DHS components and across the broader inter-agency of government, including the national intelligence community, to support unity of effort across the government.

Your Coast Guard facilitates the safe transit of \$4.6 trillion million of commerce annually throughout the marine transportation system, a system of some 360 seaports, 3,700 marine terminals, and 25,000 miles of waterways, a system highly dependent on a complex globally networked system of automated technology always vulnerable to cyber disruption.

Throughout the Western Hemisphere, the Coast Guard is a key component of the Department of Homeland Security's comprehensive approach to border security, where we push out the borders and respond to maritime threats.

In Fiscal Year 2017, I proudly note that the Coast Guard removed a record 223 metric tons of illegal narcotics, and detained and transferred to the Department of Justice 606 smugglers for Federal prosecution.

In the Arctic, we are responsive to a region where our Nation has substantial political, national security, natural resource, and environmental interests. Through our annual Arctic Shield seasonal operations and our leadership in international Arctic forums, the Coast Guard has the Nation's only surface presence in the increasingly accessible high latitudes, will continue to secure our Nation's Arctic interests.

In Southwest Asia, a fleet of six Coast Guard patrol boats continues to provide vital support to the CENTCOM missions, just as they have since 2003. Coast Guard multimission forces continue to integrate seamlessly as part of today's joint force, supporting DoD combatant commanders across the globe.

In conclusion, if confirmed, I recognize and am humbled by the immense responsibility I will assume as the 26th Commandant of the United States Coast Guard, a ready, relevant, and responsive Coast Guard. Our inherent bias for action ensures we remain "Semper Paratus," always ready to meet the present and future challenges of the Nation.

Chairman Wicker, Ranking Member Nelson, distinguished members, I am truly privileged to appear before you today. I thank you for the opportunity to testify, and I look forward to your questions.

[The prepared statement and biographical information of Admiral Schultz follow:]

PREPARED STATEMENT OF VADM KARL L. SCHULTZ, NOMINEE TO BE COMMANDANT,
U.S. COAST GUARD

Introduction

Good afternoon, Chairman Thune, Ranking Member Nelson, and distinguished members of the Committee. It is an honor and a privilege to appear before you today. I am humbled by the opportunity and grateful for the confidence of President Trump and Secretary Nielsen in nominating me to be the 26th Commandant of the United States Coast Guard. I would also like to thank Admiral Paul Zukunft, our Commandant, for entrusting me to serve as the Atlantic Area Commander, where

I am responsible for the execution of Coast Guard missions from the Rocky Mountains to the Arabian Gulf.

In my nearly 35 years as a Coast Guardsman, I have had the privilege of serving alongside a remarkable team of dedicated public servants. This was reinforced last summer as I led the Coast Guard's response efforts to hurricanes *Harvey*, *Irma*, *Maria*, and *Nate*. I remain humbled by the dedication and devotion to duty of the exceptional Coast Guard men and women who executed our response to these disasters. Their tireless efforts and heroics during back-to-back storms led to the rescue of 11,300 people, a staggering number considering that on average the Coast Guard saves 3,600 lives a year.

My resume reflects the experiences of a leader with a clear bias for action and the keen ability to recognize and accept risk when and where warranted to accomplish the mission. I have developed strategies and Service-level policies to address critical issues; I have worked with the Administration and Congress to obtain the resources to bring these policies to fruition; and, I bring a strong understanding of how to best utilize and leverage the Coast Guard's broad authorities and robust capabilities. If confirmed, I will ensure the Coast Guard optimally supports DHS, and continues to provide exceptional value to our Nation.

Overview of the Coast Guard

America's security, prosperity, and global influence are inextricably linked to the maritime domain. Your Coast Guard's agility and adaptability in identifying and responding to emerging risks, challenges, and opportunities in this domain are essential to both National and Homeland Security, as well to the economic prosperity of our Nation. Our reputation remains strong. Our total workforce—active duty, reserve, civilian and auxiliary volunteers—highly capable. And, our Nation's demand for Coast Guard services has never been higher.

As the world's premier, multi-mission maritime service, the Coast Guard offers unique and enduring value to the Nation. We are at all times a U.S. Armed Force, to include being an integral part of the modern Joint Force¹ and a force multiplier for DoD, a Federal law enforcement agency, a member of the National Intelligence Community, a regulatory agency, and a first responder. There is no other agency with such a broad array of authorities and capabilities. Positioning the Coast Guard within DHS allows our Service to utilize these attributes to support DHS in securing borders, combating transnational criminal organizations (TCO), and safeguarding and enabling the flow of commerce on America's waterways.

We are also the Nation's "maritime first responder." Our bias for action and ability to rapidly surge resources in response to emerging threats, as most recently demonstrated during last fall's devastating hurricane season, are hallmark traits of our Service. The Coast Guard also performs a multitude of other vital maritime missions including search and rescue; safeguarding and facilitating maritime commerce; protecting against and preparing to respond to maritime acts of terrorism; interdicting drug and migrant smugglers; enforcing fisheries laws; responding to oil and hazardous material spills; maintaining aids to navigation; screening commercial ships and crews entering U.S. ports; inspecting U.S.-flagged vessels; examining cargo containers; investigating marine accidents; training international partners; credentialing merchant mariners; domestic and international ice breaking; and, supporting defense operations.

These critical functions help keep our Nation safe and secure, and strengthen the foundation of a vibrant global maritime economy. On an average day the Coast Guard conducts 44 search and rescue cases, saves 12 lives, assists 60 people in distress, seizes 1,221 pounds of cocaine, conducts 48 waterborne patrols in support of critical maritime infrastructure, interdicts seven undocumented migrants, conducts 107 marine inspections, and facilitates the maritime movement of \$12.6 billion in goods and commodities.

I commit to you that your Coast Guard will continue to fulfill these responsibilities with honor, integrity, and a commitment to excellence.

Unity of Effort

The Coast Guard enjoys the strong support of the Secretary of the Department of Homeland Security, Secretary Kirstjen Nielsen—and we extensively collaborate with other DHS components, furthering "unity of effort" within the Department against its five enduring missions:

¹In addition to the Coast Guard's status as an Armed Force (10 U.S.C. §101), see also Memorandum of Agreement Between the Department of Defense and the Department of Homeland Security on the Use of Coast Guard Capabilities and Resources in Support of the National Military Strategy, 02 May 2008, as amended 18 May 2010.

- Preventing terrorism and enhancing security;
- Securing and managing our borders;
- Enforcing and administering our immigration laws;
- Safeguarding and securing cyberspace; and,
- Ensuring resilience to disasters.

As Commandant, I will remain fully committed to these missions, as well as to the Department's focus to mature and strengthen the Nation's homeland security enterprise. While currently the Coast Guard's Atlantic Area Commander, I am also the Director of DHS Joint Task Force—East, a role which exists to enhance *unity of effort* across the Department's multiple components, and to create and optimize linkages within DoD and the broader interagency community.

I intend to continue working tirelessly in the pursuit of excellence in each of the aforementioned DHS missions, and to working hand-in-hand with the other DHS components, as well as with federal, state, and local partners.

Sustaining a *READY—RELEVANT—RESPONSIVE* 21st Century Coast Guard

The maritime operating environment is increasingly dynamic and complex. Yet under Budget Control Act (BCA) levels of funding, the Coast Guard has been consistently funded below the BCA level within our "Operations and Support" accounts. This has caused our Service to lose purchasing power—almost 10 percent—which erodes readiness. If confirmed, *Maintaining Service Readiness* will be a top priority.

At the core of *Service Readiness* is our most valuable asset, our highly professional and dedicated people. Coast Guard women and men are tirelessly standing the watch across the Nation. The Coast Guard must remain focused and committed to safeguarding and sharpening the skills of our 56,700 members (42,000 Active Duty; 6,200 Reservists; and 8,500 civilians). These great Americans, along with the Auxiliary—our volunteer arm, enable frontline success across the wide spectrum of missions we perform. Indeed, human capital requirements are critical to successful mission execution. Only Coast Guard women and men with the right knowledge, skills, and abilities can successfully execute our challenging maritime missions. Our human resources, and human capital functions, must be treated as key enablers to service readiness and mission execution.

The Coast Guard workforce has limited capacity to respond to prolonged and sequential events. While well-positioned for immediate and effective first response, with only 42,000 Active Duty and 6,200 Reservists, sustained contingency operations and the ability to hand-off responsibilities once a crisis has stabilized must remain a primary consideration for Coast Guard commanders responding to either man-made or natural disasters.

We ask a lot of our people and to keep them sharp, effective, and *READY* to lead, we owe them the requisite training and resources. And we must train and operate in a climate and culture befitting of our Nation's trust and confidence. To this end, I am fully committed to helping the Service better represent the diverse American public we serve. Diversity breeds new ideas, it breeds inclusion, and it fosters a stronger ethos critical to mission success.

Maintaining a modern and diverse workforce also requires state-of-the-art, interoperable, and multi-mission assets. The Coast Guard continues to benefit from the strong support from both the Administration and the Congress to recapitalize our major assets. While these efforts are vital to modernizing our fleet of ships and aircraft, we must also ensure we have sufficient resources to operate and maintain them. The increased sophistication and capabilities of our new platforms make them considerably more expensive to maintain and operate. And as the historic hurricane season of 2017 made clear to us, surge operations accelerate wear and tear on equipment, and erode our future readiness. Hurricane damage to many of our Coast Guard facilities also made it clear that we must continue making our facilities more storm-resilient and survivable.

I thank the Administration, this Committee, and the 115th Congress for the \$835 million in supplemental funding to address Coast Guard response costs, and to rebuild our damaged infrastructure to modern resiliency standards.

I especially thank this Committee for its personal commitment to our workforce, their families, our assets, the housing they live in, and the facilities they work aboard and operate from. I look forward to working with each of you to continuously improve the Service's Readiness.

In terms of both National and Homeland Security, as well as with enabling economic prosperity, the work of the modern Coast Guard has never been more *RELEVANT* than it is today. It has been clear throughout my years of service that the mutual benefit of the Coast Guard partnering with others, and others with the

Coast Guard, is the ability to address challenges that alone could not be overcome. When we work together, it is resoundingly evident the Coast Guard can address challenges like few others. Going forward, we must continue to hone our robust network of joint service, international, federal, state, local, tribal, and territorial partnerships, while maintaining transparency with stakeholders in the private sector to facilitate a whole-of-government approach to protect and defend our Nation.

The Coast Guard provides DHS something extremely unique—its only military service. As an Armed Force, Coast Guard women and men are frequently integrated with DoD service partners in Joint Task Force organizations. We support maritime interception operations, port security and defense operations, theater security cooperation, rotary wing air intercept operations, and maritime operational threat response options.

As the former DoD U.S. Southern Command (SOUTHCOM) Director of Operations, I understand how DoD plans and executes its missions. At Atlantic Area I leverage that knowledge frequently as I work with five of the six Combatant Commanders. I engage with SOUTHCOM against transnational criminal organizations; U.S. Central Command (CENTCOM) for maritime security in the Arabian Gulf; U.S. Africa Command (AFRICOM) and U.S. European Command (EUCOM) for Partner Nation Capacity Building; and, U.S. Northern Command (NORTHCOM) where we collaborate to protect the maritime domain.

The following examples demonstrate various types of Coast Guard support provided to the Combatant Commanders this past Fiscal Year alone:

- Coast Guard Patrol Forces Southwest Asia (PATFORSWA) provided near-continuous effective presence and maritime security support to CENTCOM's theater support cooperation mission throughout the Arabian Gulf.
- Tactical Law Enforcement Teams onboard U.S. Navy and foreign Partner Nation vessels maximized available assets to conduct intercept and interdiction operations, whether along primary narcotics transshipment routes in the Eastern Pacific and Caribbean Sea, or in support of protecting critical fish stocks off the coast of Africa or in the Western Pacific.
- National Capital Region Air Defense Facility crews maintained a 100 percent scramble rate and responded to over 175 active air defense missions, including nine launches for reported Unmanned Aircraft Systems within the Washington, D.C. Restricted Flight Zone.

Beyond our Joint Armed Service duties, the Coast Guard routinely works with DHS components and other interagency partners, including the National Intelligence Community, as well as international organizations and other regulatory authorities to be *RESPONSIVE* to the maritime needs of the Nation.

The Coast Guard leverages the Maritime Operational Threat Response (MOTR) protocols, memoranda of agreement, bilateral agreements and treaties, combined operating guidelines, and DHS policies to instill *unity of effort* in planning and execution of all of our maritime safety and security operations. Of note, we also emphasize and demonstrate proficiency in the Incident Command System (ICS), the universal language of first responders across the Nation, which is critical to unified operations during crises.

In so many ways, the Coast Guard cooperates and supports the interagency at all levels of government to integrate seamlessly during national defense, national security, and disaster response operations—the Coast Guard is *RESPONSIVE*, and I thank the Administration, the Congress, and particularly this Committee for trusting the Coast Guard to most effectively serve our Nation.

Moving Forward

The Coast Guard will continue to act with strategic intent and focus our limited resources to maximize the service we provide to the Nation.

As a Nation, we must continue to confront the rise of adaptive TCOs because if left unchecked, these networks will quickly erode maritime governance, the rule of law, and regional stability. As a frontline sentinel of DHS's comprehensive approach to border security, the Coast Guard is a key enabler of combatting such organizations, and is best positioned to push out our maritime borders and remove large scale quantities of illicit commodities where they are most vulnerable—at sea. I am proud to note that this past Fiscal Year (2017), the Coast Guard removed over 223 metric tons of illegal narcotics and detained and transferred 606 smugglers for U.S. criminal prosecution. Through *unity of effort*, we will continue to combat TCOs, secure our borders, and safeguard commerce.

Similar to Secretary Nielsen, and Admiral Zukunft, I consider Cyber Security to be one of the most serious, and immediate, economic and national security challenges confronting our Nation. With 360 seaports and 3,700 marine terminals faci-

tating \$4.6 trillion in annual commerce, our Nation is critically dependent on a safe, secure, and efficient Marine Transportation System (MTS). Our MTS in turn is highly dependent on a complex, globally networked system of automated technology. Thus, we will continue to internally and externally defend our cyber networks, enable operations, and demonstrate leadership in the protection of critical infrastructure.

Importantly, the United States has been an Arctic Nation since 1867, when it purchased Alaska for \$7.2 million. We maintain substantial political, national security, natural resource, environmental, and other interests in the Arctic, and this remote region is rapidly becoming more accessible. Other Arctic and non-Arctic nations are laying claims and exploring its vastness. Through our annual Arctic Shield operations, and with *unity of effort*, we will continue to improve awareness, modernize governance, and broaden partnerships in the high latitudes. Ultimately, we must preserve our national sovereign rights in the Arctic through a variety of means, including the surface presence enabled by Coast Guard cutters ensuring access, security, and the ability to respond in the High Latitudes.

Conclusion

I offer my sincere appreciation and gratitude to Admiral Paul Zukunft, our 25th Commandant, who has served the Coast Guard with the highest distinction for over four decades. His inspirational leadership has set our Service on the right path for enduring success. Admiral Charles Michel, our Vice Commandant, has been an equally capable and dedicated public servant these past 33 years!

As Admiral Zukunft noted in his testimony before you in 2014, “The Coast Guard will succeed, as it has for over two centuries, because of our skilled, courageous, and dedicated workforce.” I whole-heartedly concur, and am fully committed to both the professional and personal well-being and development of this extraordinary workforce, and committed to supporting their families as well. With a focus on being *READY*, *RELEVANT*, and *RESPONSIVE*, these topnotch Coast Guard men and women will embody our Core Values of “Honor, Respect, and Devotion to Duty” while continuing to serve our great Nation with distinction.

If confirmed, I look forward to working with the Administration and the Congress, including this Committee, to meet these and the future challenges of our Service—your United States Coast Guard.

Thank you for the opportunity to testify today. I look forward to your questions.

A. BIOGRAPHICAL INFORMATION

1. Name (Include any former names or nicknames used): Karl Leo Schultz.
2. Position to which nominated: Commandant, U.S. Coast Guard—Admiral (0–10).
3. Date of Nomination: 08 March 2018.
4. Address (List current place of residence and office addresses):
 Residence: Information not released to the public.
 Office: Coast Guard Atlantic Area, 431 Crawford Street, Portsmouth, VA 23704.
5. Date and Place of Birth: 14 June 1961; Hartford, Connecticut.
6. Provide the name, position, and place of employment for your spouse (if married) and the names and ages of your children (including stepchildren and children by a previous marriage).
 Spouse: Dawn Marie Schultz; stay-at-home mother; Children: Kelsey Elisabeth Schultz, 24; Lindsey Marie Schultz, 24; Annaliese Nicole Schultz, 20; Eric Karl Schultz, 19.
7. List all college and graduate degrees. Provide year and school attended.
 1979–1983: U.S. Coast Guard Academy; Bachelor of Science—Civil Engineering.
 1991–1992: University of Connecticut; Master of Arts in Public Administration.
 2005–2006: Harvard University, Kennedy School of Gov’t; Nat’l Security Fellow.
8. List all post-undergraduate employment, and highlight all management level jobs held and any non-managerial jobs that relate to the position for which you are nominated.
 1983 to present: Commissioned Officer; United States Coast Guard.
Management Level Positions:
 1985–1987: Executive Officer, United States Coast Guard Cutter PETREL.

1989–1991: Commanding Officer, United States Coast Guard Cutter FARALLON.

1996–1999: Commanding Officer, United States Coast Guard Cutter ACACIA.

2003–2005: Commanding Officer, United States Coast Guard Cutter VENTUROUS.

2006–2008: Commander, Coast Guard Sector Miami, Florida: Captain of the Port; Federal Maritime Security Coordinator; Search and Rescue Mission Coordinator; Federal On-scene Coordinator; and Officer-in-Charge Marine Inspection.

2008–2010: Chief, Coast Guard Congressional and Governmental Affairs Division.

2010–2012: Director, Governmental and Public Affairs (CG–092).

2012–2014: Commander, Eleventh Coast Guard District.

2014–2016: Director of Operations, U.S. SOUTHERN Command.

2016 to present: Commander, Coast Guard Atlantic Area/Director DHS Joint Task Force-East.

Non-managerial Level Positions:

1987–1989: Command Center Duty Officer, Seventh Coast Guard District, Miami, FL.

1993–1996: Officer Personnel Management Division, Coast Guard Personnel Command.

1999–2000: Department of State, Coast Guard Liaison Officer to the Bureau of International Narcotics and Law Enforcement Affairs (INL).

2000–2003: Congressional Liaison Officer, United States House of Representatives.

9. Attach a copy of your resumé.

My official Coast Guard Resume is attached.

10. List any advisory, consultative, honorary, or other part-time service or positions with Federal, State, or local governments, other than those listed above, within the last five years. None.

11. List all positions held as an officer, director, trustee, partner, proprietor, agent, representative, or consultant of any corporation, company, firm, partnership, or other business, enterprise, educational, or other institution within the last five years. None.

12. Please list each membership you have had during the past ten years or currently hold with any civic, social, charitable, educational, political, professional, fraternal, benevolent or religious organization, private club, or other membership organization. Include dates of membership and any positions you have held with any organization. Please note whether any such club or organization restricts membership on the basis of sex, race, color, religion, national origin, age, or handicap.

Family membership to the West Broward County (Florida) YMCA Fitness Center/Youth Sports/Recreational (2006–2010 and 2014 to present). Family membership to the Novato (California) YMCA (2012–2014). No restrictions on membership on the basis of sex, race, color, religion, national origin, age or handicap.

13. Have you ever been a candidate for and/or held a public office (elected, non-elected, or appointed)? If so, indicate whether any campaign has any outstanding debt, the amount, and whether you are personally liable for that debt. No.

14. Itemize all political contributions to any individual, campaign organization, political party, political action committee, or similar entity of \$500 or more for the past ten years. None.

15. List all scholarships, fellowships, honorary degrees, honorary society memberships, military medals, and any other special recognition for outstanding service or achievements.

Pi Alpha Alpha, Nat'l Honor Society—Public Affairs & Administration (not-active)

16. Please list each book, article, column, or publication you have authored, individually or with others. Also list any speeches that you have given on topics relevant to the position for which you have been nominated. Do not attach copies of these publications unless otherwise instructed. None.

17. Please identify each instance in which you have testified orally or in writing before Congress in a governmental or non-governmental capacity and specify the date and subject matter of each testimony.

(a) 02 November 2017, as Commander, Atlantic Area before the Committee on Transportation and Infrastructure of the House of Representatives. Subject of

the hearing was “Emergency Response and Recovery: Central Takeaways from the Unprecedented 2017 Hurricane Season.”

- (b) 04 April 2017 as Director, Joint Task Force-East (JTF-E) before the Border and Maritime Security Subcommittee of the House Committee on Homeland Security. Subject of the hearing was “Defeating a Sophisticated and Dangerous Adversary: Are the New Border Security Task Forces the Right Approach?”
- (c) 16 June 2015) as Director of Operations U.S. SOUTHERN Command before the Coast Guard and Maritime Transportation Subcommittee of the House Transportation and Infrastructure Committee. Subject of hearing was “Western Hemisphere Drug Interdiction Efforts.”
- (d) 26 November 2007, as Commander, Coast Guard Sector Miami, Florida on Maritime Border Security” before the House of Representatives Committee on Homeland Security (CHS), Subcommittee on Border, Maritime and Global Counter-Terrorism. This was a Field Hearing held at the Miami City Hall in Coconut Grove, Florida.

18. Given the current mission, major programs, and major operational objectives of the department/agency to which you have been nominated, what in your background or employment experience do you believe affirmatively qualifies you for appointment to the position for which you have been nominated, and why do you wish to serve in that position?

For the past 35 years I have served as a commissioned Coast Guard officer in a broad range of challenging operational and staff assignments, including external liaison positions at the Department of State and on Capitol Hill, and in a DoD Joint Service billet at U.S. SOUTHERN Command in Miami, Florida where I served for two years as the Director of Operations (J-3). In my current assignment as Atlantic Area Commander for the past 20 months, I’ve been privileged to oversee all Coast Guard operations east of the Rocky Mountains to the Arabian Gulf, and lead about two-thirds of all front-line Coast Guard operators. While at Atlantic Area, I have concurrently served as the Director of the Department of Homeland Security’s (DHS) Joint Task Force—East (JTF-E), tasked to enhance the coordination and synchronization of DHS cross-component operations and investigations within our vast and predominantly maritime joint operating area.

The Service has also provided me with enriching academic opportunities such as obtaining a Master’s Degree in Public Administration, and completing a one year National Security Fellowship at Harvard University’s Kennedy School of Government. I believe the diversity of my aforementioned professional experiences, and a proven track record of performance within the Coast Guard, interagency, and the joint service environments, position me well for continued service as a senior Coast Guard leader. I have been nominated to serve as the 26th Commandant of the United States Coast Guard and I can think of no higher calling to serve the nation, the Department of Homeland Security, and the men and women that comprise the Service’s active duty, Reserve, civilian and Auxiliary (volunteer) ranks. While humbled and honored beyond words by the President’s nomination, I am confident in my readiness to serve in this demanding position and to best represent the interests of the nation, our Coast Guard, and the men women I will be entrusted to lead and have the privilege to serve alongside of.

19. What do you believe are your responsibilities, if confirmed, to ensure that the department/agency has proper management and accounting controls, and what experience do you have in managing a large organization?

As a career commissioned officer in our Nation’s Armed Services, and as a Federal Government employee, I hold myself and my organization wholly accountable for being responsible stewards of the public trust, including all fiscal resources, assets and equipment, and for the associated supervisory responsibility for my organization’s subordinates. As a former Congressional Liaison to the House of Representatives, former Chief of Coast Guard Congressional and Governmental Affairs, and the flag officer Director of the Coast Guard’s Governmental and Public Affairs programs, I am intimately familiar with the critical importance of a Federal agency such as the Coast Guard strictly adhering to the highest standards of proper management, fiduciary responsibility, accounting controls and transparent behavior. I believe my record of responsibly leading organizations from the regional, through theater level, including within the Interagency and Joint domains, demonstrates a strong and steady commitment to proper management and accounting controls.

20. What do you believe to be the top three challenges facing the department/agency, and why?

In a department dedicated to the security of our Homeland, the interdependence of the legitimate flow of commerce and security is clear. As our partners in the De-

partment of Defense address a multitude of national security challenges overseas, the Coast Guard must continue to combat the full spectrum of transnational crime in the Western Hemisphere, including the transshipment of illicit narcotics. The Coast Guard must continue to enhance our domestic and international partnerships, where possible, pushing out our borders and enabling mutual security opportunities. The Service must continue to enable economic prosperity by ensuring the security of the maritime transportation system (MTS) whereon 95 percent of our Nation's commerce occurs, facilitating \$4.6 trillion in annual economic activity.

Protecting the homeland in an environment where trans-regional terrorist organizations and violent extremists are increasingly more prevalent will remain a daunting challenge for our Nation's security forces, including the United States Coast Guard—the lead Federal agency for maritime safety and security. Under that umbrella falls the large task of combatting transnational criminal organizations whose activities threaten the stability and legitimacy of partner nation governments in the Western Hemisphere, fuel extreme violence, and seed corruption. While the illicit and violent activities that transnational criminals engage in typically occur far from our homeland, the effects and impacts of those activities manifest themselves at our borders and in our American cities and neighborhoods. More than 50,000 Americans died of drug related causes last year alone, and tens of thousands of unaccompanied children are sent by their families on the long and arduous journey to escape the violence and lack of opportunity found in their Central American home towns and cities in the Northern Triangle where the homicide rates are up to 20 times that found in America. These transnational criminals exploit highly sophisticated smuggling networks to facilitate the movement of their illicit cargoes and activities from south to north, including drug and migrant smuggling, as well as the trafficking of persons. Along these same corridors or networks, bulk cash and weapons move in the reverse direction, completing the cycle of illicit activity. Protecting the homeland from the aforementioned threats, as well as from homegrown violent extremists, will remain a top priority mission and challenge for the Department of Homeland Security and the United States Coast Guard.

Secondly, the Coast Guard is on solid footing with stable requirements for recapitalizing our aging assets into a capable force to execute our broad portfolio of homeland security and other legacy missions. Predictable/stable funding, at the appropriate levels, is essential to maintaining momentum. Near term investments must be viewed as providing continuity for essential service delivery. Sustained momentum on this front will require open and honest dialogue, and likely hard choices—this is the nature of our government. A clear focus will be required to restore the service's declining readiness and significant lost buying power, the result of multiple years of funding at/or below Budget Control Act (BCA) caps for non defense discretionary spending, by making timely and necessary investments in key assets, infrastructure, and our Coast Guard workforce. Additionally, the Coast Guard faces evolving and uncertain threats in the Cyber Space domain, as well as increasing levels of activity in an expanding Arctic region where the service has statutory responsibilities related to the safety, security and stewardship of those operating in the region and the environment itself. As the fifth Armed Service, the Coast Guard must strive to enjoin our readiness funding needs to the Administration's ongoing efforts to rebuild the Nation's Armed Forces. It is paramount that the Coast Guard remain efficient and effective fiscal stewards of taxpayer monies and continue to annually earn a clean financial audit. The increasing costs we face servicing the interest on our \$20 trillion Federal debt, and the ongoing struggle as a nation to reach any kind of an agreement or shared definition regarding the appropriate size and nature of the services and programs our government should provide, pose a not too distant existential fiscal threat to operating agencies like the Coast Guard.

Thirdly, the Coast Guard will need to be mindful of managing its human capital, of remaining an *"employer of choice"* amidst a changing American workforce at a time when a new military retirement plan—the Blended Retirement System—was introduced at the start of this calendar year, and high tech competitive industries are seeking the same talent we need in our ranks. As a service, the Coast Guard will need to continue to demonstrate the value we place on our people, value that is measured in terms of trust, opportunity, professional growth and satisfaction. We need to draw the best talent possible from across America to fill our ranks—officer, enlisted and civilian. While our workforce is remarkably capable and productive, we have the opportunity and obligation for this workforce to be more representative of the citizens we serve, and the Coast Guard must continue to raise awareness of career opportunities in our service to under represented groups and inspire inclusiveness. Lastly, we need to provide our people with the training, educational benefits, health care and family support programs that make them want to stay attached to our brand.

B. POTENTIAL CONFLICTS OF INTEREST

1. Describe all financial arrangements, deferred compensation agreements, and other continuing dealings with business associates, clients, or customers. Please include information related to retirement accounts.

Please see my PFDR.

2. Do you have any commitments or agreements, formal or informal, to maintain employment, affiliation, or practice with any business, association or other organization during your appointment? If so, please explain. None.

3. Indicate any investments, obligations, liabilities, or other relationships which could involve potential conflicts of interest in the position to which you have been nominated. None.

4. Describe any business relationship, dealing, or financial transaction which you have had during the last ten years, whether for yourself, on behalf of a client, or acting as an agent, that could in any way constitute or result in a possible conflict of interest in the position: to which you have been nominated. None.

5. Describe any activity during the past ten years in which you have been engaged for the purpose of directly or indirectly influencing the passage, defeat, or modification of any legislation or affecting the administration and execution of law or public policy.

My official Coast Guard duties have from time to time required me to make recommendations to Coast Guard officials regarding Coast Guard policy and Coast Guard related legislation.

6. Explain how you will resolve any potential conflict of interest, including any that may be disclosed by your responses to the above items.

I will obtain advice from a Coast Guard ethics official and follow that advice.

C. LEGAL MATTERS

1. Have you ever been disciplined or cited for a breach of ethics by, or been the subject of a complaint to any cement, administrative agency, professional association, disciplinary committee, or other professional group? If so, please explain. No.

2. Have you ever been investigated, arrested, charged, or held by any Federal, State, or other law enforcement authority of any Federal, State, county, or municipal entity, other than for a minor traffic offense? If so, please explain. No.

3. Have you or any business of which you are or were an officer ever been involved as a party in an administrative agency proceeding or civil litigation? If so, please explain. No.

4. Have you ever been convicted (including pleas of guilty or *nolo contendere*) of any criminal violation other than a minor traffic offense? If so, please explain. No.

5. Have you ever been accused, formally or informally, of sexual harassment or discrimination on the basis of sex, race, religion, or any other basis? If so, please explain. No.

6. Please advise the Committee of any additional information, favorable or unfavorable, which you feel should be disclosed in connection with your nomination. None.

7. If you ever served as a general court-martial convening authority involving an offense involving sexual misconduct or assault, have you ever disapproved the findings of a court-martial related to the offense(s) or reduced the sentence adjudged by a court martial, other than in connection with a pre-trial agreement? No.

D. RELATIONSHIP WITH COMMITTEE

1. Will you ensure that your department/agency complies with deadlines for information set by congressional committees? Yes.

2. Will you ensure that your department or agency does whatever it can to protect congressional witnesses and whistle blowers from reprisal for their testimony and disclosures? Yes.

3. Will you cooperate in providing the Committee with requested witnesses, including technical experts and career employees, with firsthand knowledge of matters of interest to the Committee? Yes.

4. Are you willing to appear and testify before any duly constituted committee of the Congress on such occasions as you may be reasonably requested to do so? Yes.

RESUMÉ OF VICE ADMIRAL KARL L. SCHULTZ

COMMANDER, COAST GUARD ATLANTIC AREA; COMMANDER, COAST GUARD DEFENSE FORCE EAST; DIRECTOR, DHS JOINT TASK FORCE—EAST

Vice Admiral Schultz assumed the duties of Commander, Coast Guard Atlantic Area on August 4, 2016. He serves as the operational commander for all Coast Guard missions from the Rocky Mountains to the Arabian Gulf, spanning across five Coast Guard Districts and 40 states. In addition to his duties at Atlantic Area, he serves as Commander, Coast Guard Defense Force East, which provides Coast Guard mission support to the Department of Defense and Combatant Commanders. He concurrently serves as Director, DHS Joint Task Force—East, responsible for achieving the objectives of the DHS Southern Border and Approaches Campaign Plan throughout his Joint Operating Area, which covers the Caribbean Ocean and Eastern Pacific Region and Central America.

Vice Admiral Schultz reports to the Atlantic Area having recently served as Director of Operations (J3), U.S. Southern Command in Doral, Florida, where he directed joint service military operations across the Caribbean Basin, Central and South America. Prior flag officer assignments were Commander, Eleventh Coast Guard District, where he was responsible for multi-mission operations from California to Peru, and Director of Governmental and Public Affairs at Coast Guard Headquarters in Washington, D.C., where he was responsible for external engagement with Congress, the media, and inter-governmental entities.

Previous operational assignments include Sector Command in Miami, as well as command tours aboard Cutters VENTUROUS, ACACIA and FARALLON. Staff assignments include Chief of the Office of Congressional and Governmental Affairs; Congressional Liaison Officer to the U.S. House of Representatives; Liaison Officer to the U.S. Department of State, Bureau for International Narcotics and Law Enforcement Affairs; Assignment Officer at the Coast Guard Personnel Command, and Command Duty Officer in the Seventh Coast Guard District Operations Center in Miami.

Vice Admiral Schultz is a native of East Hartford, Connecticut and a 1983 Coast Guard Academy graduate, earning a Bachelor of Science degree in Civil Engineering. In 1992, he was awarded a Master's Degree in Public Administration from the University of Connecticut, and in 2006 completed a one year National Security Fellowship at Harvard University's Kennedy School of Government.

His personal awards include the Defense Superior Service Medal, four Legions of Merit, four Meritorious Service Medals, three Coast Guard Commendation medals, two Coast Guard Achievement Medals, and various other personal and unit awards.

Current Assignment

08/2016 to present Commander, Coast Guard Atlantic Area/Director DHS Joint Task Force—East (JTF—E)

Assignment History

06/2014–07/2016	U.S. SOUTHERN COMMAND, Director of Operations (J–3)
07/2012–06/2014	Commander, Coast Guard District Eleven
01/2010–06/2012	Director, Governmental and Public Affairs (CG–092)
09/2009–12/2009	Acting Director, Governmental and Public Affairs (CG–092) and Chief: Congressional and Governmental Affairs (CG0921)
07/2008–08/2009	Chief, Congressional and Governmental Affairs (CG0921)
07/2006–06/2008	Commander, Coast Guard Sector Miami, FL
08/2005–06/2006	National Security Research Fellow, Harvard University—Kennedy School of Government
07/2003–07/2005	Commanding Officer, USCGC VENTUROUS (WMEC–625)
06/2000–06/2003	Congressional Liaison Officer, U.S. House of Representatives
07/1999–05/2000	Liaison, Department of State, Bureau for International Narcotics and Law Enforcement Affairs (INL)
07/1996–06/1999	Commanding Officer, USCGC ACACIA (WLB–406)
06/1994–06/1996	Assignment Officer, Military Personnel Command (OPM–2)
01/1993–05/1994	Evaluations Branch, Military Personnel Command (OPM–3)
08/1991–12/1992	Duty under Instruction (DUINS)—University of Connecticut
06/1989–07/1991	Commanding Officer, USCGC FARALLON (WPB–1301)
06/1987–05/1989	Rescue Coordination Center Controller/Law Enforcement Duty Officer, Seventh Coast Guard District Command Center, Miami
06/1985–05/1987	Executive Officer, USCGC PETREL (WSES–4)
06/1983–05/1985	Operations Officer, USCGC GENTIAN (WLB–290)

Educational Summary

1979–1983	U.S. Coast Guard Academy, Bachelor of Science—Civil Eng.
1991–1992	University of Connecticut, School of Urban and Public Affairs; Master of Science—Public Administration
2005–2006	1-yr Research Fellowship in National Security Studies—Harvard University, John F. Kennedy School of Government

Military Personal Awards and Significant National Recognition or Achievement

2016	Defense Superior Service Medal
2014	Legion of Merit
2012	Legion of Merit
2011	Legion of Merit
2008	Legion of Merit
2005	Meritorious Service Medal
2003	Meritorious Service Medal
2000	Coast Guard Commendation Medal
1999	Meritorious Service Medal
1996	Coast Guard Commendation Medal
1995	Coast Guard Achievement Medal
1994	Commandant's Letter of Commendation
1991	Coast Guard Commendation Medal
1989	Coast Guard Commendation Medal
1987	Coast Guard Achievement Medal

Significant Current Professional Credentials or Recent Activities: N/A

Senator WICKER. Well, thank you very much. And we certainly appreciate your testimony and we appreciate your service.

Let's talk about national security cutters first, Admiral. A 2014 Inspector General report found that the declining readiness of the Coast Guard's high endurance cutters continues to pose significant challenges to mission performance. During his "State of the Coast Guard" address last year, Admiral Zukunft stated that there were 580 events, drug or migrant movements, last year that we were aware of but could not target. This is an issue of capacity according to Admiral Zukunft. There are seven national security cutters in operation today.

I understand that the national security cutters already in service have yielded record results in drug interdiction numbers. What capabilities does the national security cutter bring to the mission that other assets are not able to meet? And understanding that there are other legacy assets that need to be modernized as well, what effects would additional national security cutters have on your ability to combat drug and migrant smuggling threats?

Admiral SCHULTZ. Mr. Chairman, thank you for the question. The national security cutters built at Huntington shipyard are truly proving to be incredibly capable assets. They are contributors and end users of national security, national intelligence. They have had record successes on the front lines of the campaign of drugs, illicit drug transshipments out of the Indian Ridge into Central America. The National Security Cutter JAMES, homeported at our Charleston, South Carolina, showed its flexibility and adaptability during this past fall's hurricane season, first in the eastern Pacific when we pulled back a large number, almost just about all the ships that were doing counterdrug patrols to support the Nation's hurricane responses. The JAMES remained in the eastern Pacific and essentially took over the role of Joint Interagency Task Force South, obviously not at the same level of fidelity that JITF South could do, but they were able to manage the counterdrug mission

from the sophisticated capabilities that the JAMES, a national cutter, national security cutter, brings to the table.

Furthermore, the JAMES came through the Panama Canal, and we sent her into Puerto Rico following the passage of Maria, and the sector command there, that's our command and control node, in San Juan, essentially suffered catastrophic damages. It took all the capabilities down to zero. The national security cutter sailed into the harbor, sat on the anchor in San Juan Harbor, and essentially took over the command and control capabilities and allowed us to respond to the needs of the Commonwealth of Puerto Rico, sir.

Senator WICKER. I assume you subscribe to the statement of the Inspector General about the declining readiness of the Coast Guard's high endurance cutters continuing to pose significant challenges.

Admiral SCHULTZ. Senator, the HECs, the high endurance cutters—and we have just a couple left—they were declining in readiness. Those ships were built in the 1960s, early 1970s. The national security cutters are a fantastic replacement for that. We appreciate the support of the Congress in the 2018 Omnibus that provided funding for the tenth and an eleventh national security cutter, sir, and we look forward to welcoming those ships to the fleet.

Senator WICKER. Thank you for pointing that out. It must be frustrating, Admiral, for the Coast Guard to be aware of as many as 580 events going on out there that you're simply not able to respond to.

Admiral SCHULTZ. Well, Senator, down in the Joint Interagency Task Force joint operating area, on average, we have awareness of about three-quarters of the drug events that transpire on a day-to-day basis. We have the capacity to action target about a third of those, 25 to 33 percent of those. Of those cases that we have the resources to go after, we have a very high success rate, somewhere north of 80 percent.

Is it frustrating? It's a choice. Capacity is always a choice for the Nation, sir. With more capacity, we're able to take a bigger bite out of that threat. But our men and women are fully engaged, sir, and welcome the challenge of that mission. And I think we've proven our success on that front.

Senator WICKER. I'm going to take a second round since I have to preside, and I'm going to yield back my time right now and let other members ask questions, sir.

Admiral SCHULTZ. Thank you, Chairman.

Senator WICKER. Senator Nelson.

Senator NELSON. And, likewise, Mr. Chairman. I'll just ask one question so we can get the rest of the Committee in it.

Admiral Zukunft's "State of the Coast Guard" address said that the Coast Guard needs at least a 5 percent annualized increase in its budget for maintenance, and at least \$2 billion additional to make necessary purchases to modernize the fleet. In your testimony, you stated that increased sophistication and capabilities of the Coast Guard's new platforms are considerably more expensive to maintain and operate. Does the administration's budget for 2019, does that provide the Coast Guard with the funding it needs to do its job?

Admiral SCHULTZ. Ranking Member Nelson, thank you for the question, sir. Sir, the 2019 budget for the Coast Guard under the revised or elevated caps provides the Coast Guard a tremendous level of support. It maintains momentum on our PC&I, our acquisitions and recapitalization funding. That includes \$750 million for the first heavy icebreaker replacement. There is money in there for the second offshore patrol cutter built down at Eastern Shipbuilding, sir, as well as long lead-time material for the third OPC.

On the operating and support side, sir, that's the location of the budget where, since the enactment of the Budget Control Act of 2011, we've been funded at or below that budget control level, and that's—with all the tremendous capability and assets of Congress to support us, that is a part, as I talked about readiness, where I think we're going to have to pay our—you know, pay keen attention in the coming years.

Senator NELSON. OK.

Admiral SCHULTZ. So I don't think we're in a dire situation, but that is the part of the budget that you'll probably hear my voice of advocacy.

Senator NELSON. Right.

Admiral SCHULTZ. The Commandant has talked about 5 percent increase each year, and I think that would be a pretty good target, sir.

Senator NELSON. That readiness includes the maintenance and operational costs of your newest assets, which you're concerned about.

Admiral SCHULTZ. Yes, sir.

Senator NELSON. All right. So what additional resources do you need?

Admiral SCHULTZ. Well, sir, Commandant Zukunft has talked about that 5 percent operations and support. That's the ops and management side of the budget. I think that's a good number. What we saw here in the 2018 Omnibus gives us about a 4 percent increase on the operating side of the equation, a big increase, as you know, on the acquisition side. If we could propel that type of growth forward, I think that would keep us on a good trajectory, sir, to sort of deal with some of our readiness challenges we've had and put us on a trajectory for success on that front in the future.

Senator NELSON. Do you want to comment on what continuing resolutions, instead of a full year of appropriations, does to you?

Admiral SCHULTZ. Senator, continuing resolutions are problematic from any Federal agency. First and foremost, you know, we have about 7,000-plus civilian employees who deal in a great degree of uncertainty. Many of those frontline civilians work in our command centers in other locations. Sir, major acquisition projects, new starts, as we call them, have to put on hold when we have a continuing resolution. So there are challenges. Our pay accounts get stressed given the uncertainty.

So I would say, sir, a predictable normal order on the appropriations front is much easier for a Federal agency to deal with.

Senator NELSON. Thank you, Mr. Chairman.

Senator WICKER. Thank you, Senator Nelson.

Senator Klobuchar.

**STATEMENT OF HON. AMY KLOBUCHAR,
U.S. SENATOR FROM MINNESOTA**

Senator KLOBUCHAR. Thank you very much, Mr. Chairman.

And thank you. Congratulations. I think you know that the Coast Guard has operations in Minnesota from Baudette to Duluth to Minneapolis, and these offices play a really important role in keeping shipping channels on the Great Lakes open and securing our northern border. And you're also active on inland waterways, like the Mississippi. So we're the "Land of 10,000 Lakes," and you're probably not on every one of them, but you're certainly on our biggest ones, so thank you for that.

So my first question is about the Great Lakes, Vice Admiral. As the number one tonnage port on the Great Lakes, the Port of Duluth help ensure commodities like iron ore and grains make it to and from market. Keeping waterways on the Great Lakes open for commerce is critical. I think you know about the harsh winters that we've seen. If you just turned on the news this weekend, you could have seen the 2 feet of snow we suddenly had in Minnesota in April. And that's why the Coast Guard's icebreaker operations are so important. Does the U.S. Coast Guard have the necessary resources to maintain shipping and navigation channels in more severe winter seasons?

Admiral SCHULTZ. Senator, thank you for the question. The short answer to the question is I believe yes. We did have an early onset in heavy ice into this winter season. I'm a Great Lakes sailor previously in my career, having sailed in and out Duluth Harbor before. The Great Lakes are obviously a national treasure, ma'am, on many, many fronts.

We have 640-foot WTGB icebreaking tugs. We are going through a service life extension for those ships that will propel us forward to get another decade-plus of service out of them. The Coast Guard Cutter MACKINAW is a tremendously capable ship. We have a very vibrant, well-functioning, well-oiled arrangement with the Canadian Coast Guard on breaking ice, ma'am.

So I think that I can confidently tell you I think we're in solid shape on our capacity on the Great Lakes to enable that critical vital commerce you speak to, ma'am.

Senator KLOBUCHAR. Thank you. I mentioned the inland waterways as well. There's a fleet of 35 inland river tenders that help facilitate the transit over 4.5 trillion in commerce that goes annually through inland waters like the Mississippi. We certainly have a lot of business in Minnesota, big companies like Cargill, all our ag business that we have.

The average age of these vessels is 52 years old, nearly twice their planned operation of life. How would you plan to ensure that the fleet of inland vessels stays safe, efficient, and possibly gets updated?

Admiral SCHULTZ. Well, Senator, I am truly appreciative of that question. One of my priorities here in my last 2 years at Atlantic Area was to sort of propel the recapitalization of these western river cutters, tenders, forward, and the 25 million on top of the 1 point million budget request here recently in the 2018 appropriation I think is a terrific catalyst to keep us moving forward on that. The old—

Senator KLOBUCHAR. So as you look at your total budget, the inland ships will continue to be a priority then.

Admiral SCHULTZ. Ma'am, that is a priority, and I think this 25 million is accelerating our ability to deliver that ship. We are working with the Army Corps, who has a platform out there that can maybe allow us to draw some best—best learning from, and put that on a trajectory to start fielding those ships in the not too distant future.

Senator KLOBUCHAR. OK. As I mentioned, we have a long history with our lakes of recreational boating. And ensuring operators know how to safely maintain and operate their boats is important. I know that's one of your goals. Do you see any opportunities to improve the reach of the Coast Guard's boater safety educational resources?

Admiral SCHULTZ. Senator, boating safety obviously is important to the Coast Guard. A lot of our boating safety work has been delegated to our Coast Guard Auxiliary, the 24,000-plus volunteers that assists us on the waterfront, that assists us in many, many different traditional and non-traditional missions.

Boating safety, as a former district commander, a sector commander, is something that we will continue to serve as a priority. Increasingly sophisticated technology drives down the risk to the mariner, but that is a place where, you know, we save thousands, tens of thousands, of lives on an annual basis, and how we prevent those accidents on the front side is important to how many cases we respond to on the back side.

Senator KLOBUCHAR. And this really isn't in your—this is an Army Corps issue, and maybe Senator Peters would be more well versed on it than me, but I was just meeting with some of our steel people and some of the locks on the Great Lakes. There are issues that we want to see some upgrading there, and they were talking to me about how important that is. Do you have any views on that?

Admiral SCHULTZ. Senator, my only view would be there is a lot aging infrastructure, particularly in the heartland states. And I think that, you know, accessing the Navigation Harbor Fund and things is important. I would probably defer to my Army Corps colleagues on that, ma'am.

Senator KLOBUCHAR. Of course. Well, we may be working with you in the future because I was surprised as they talked about some—we've gotten some TIGER grants and other ways that we've upgraded, like the Port of Duluth and other things, but I know that if we have issues with shipping, it affects everyone, and I would assume it would affect your fleet as well.

Admiral SCHULTZ. Senator, we work on a daily basis with the Army Corps, other State partners, local partners, high water, low water, fast-moving water on the western rivers. That is a true partnership. We work through our sector commanders, our 35 field commanders, that are the pointy end of the spear for that interface. And we have a terrific working relationship, ma'am. So I think if you have interest there, we can certainly circle back and would be partnered on enabling that 4.6 trillion of commerce that you speak to.

Senator KLOBUCHAR. Very good.

Admiral SCHULTZ. Thank you, Senator.

Senator KLOBUCHAR. Thank you. I like that you remembered the number. Thanks.

Senator WICKER. Senator Klobuchar, thank you, and congratulations on getting in a lot of topics in a very short amount of time.

[Laughter.]

Senator WICKER. I'm impressed.

Senator KLOBUCHAR. When you have 10,000 lakes, you really get it, you reach.

[Laughter.]

Senator WICKER. Senator Hassan.

**STATEMENT OF HON. MAGGIE HASSAN,
U.S. SENATOR FROM NEW HAMPSHIRE**

Senator HASSAN. Thank you very much, Mr. Chair.

And good morning and congratulations, Admiral Schultz, and congratulations to your wife and family, too. Service like this is a family affair, and we are very, very grateful to you. And I want to thank you as well for meeting with me in my office last week.

I'll kind of add to what you're hearing from a number of the members. When we met last week, I raised the need for increased funding for our facility in New Castle, New Hampshire. We discussed what to me was a very startling fact, that until recently, the Coast Guard had a \$1.6 billion backlog in shore facility construction and maintenance. A small portion of that backlog was addressed thanks to funding in an emergency supplemental appropriations bill, but the Coast Guard's backlog, as I understand it, is still sizable and grows every year.

This shortfall in funding is alarming especially when the Coast Guard's sister services in the Department of Defense have a dedicated military construction bill that funds military construction in the range of \$8 billion to \$10 billion every year. Obviously, Congress plays a central role in funding this backlog, and this Committee should take up that cause.

However, can you detail for us what steps you will take as Commandant to try to address this backlog? Also, if Congress doesn't address the backlog, what impact will it have on the Coast Guard over the long term?

Admiral SCHULTZ. Senator Hassan, thank you for the question, ma'am, and the opportunity to meet with you. We do, in fact, have about a \$1.6 billion backlog, and the supplemental funds, there's about a 100 million bite taken out of that. So there's plenty of opportunity to get after that. Healthy organizations generally recapitalize at the rate of about 2 to 3 percent a year. We're less than 1 percent, so we have some challenges there.

Your facility is in New Castle. I go up to the Great Lakes, Station St. Ignace. They're borrowing some DOT space for their boat-house to actually do repairs on their boat. So there's a backlog of projects.

My commitment, ma'am, would be to press into that. We have an unfunded priorities list that we provide to the Congress each and every year. That list provides a rich listing of opportunities if Congress had the propensity and the interest to help the Coast Guard get after some of that backlog, that list will show us ideas.

The omnibus had \$34.2 million. That was our highest priority, housing issue up in Alaska. That will allow us to site the offshore patrol cutters or fast response cutters. So the Congress has been very supportive, ma'am. It is very difficult to make up a \$1.6 billion backlog quickly. Admiral Zukunft has talked about that 5 percent that Senator Nelson alluded to. He has talked about a \$2 billion capital investment program or acquisitions account. He's talking about \$300 million on an annual basis, sustained basis, to support shore infrastructure. That \$300 million would really get after some of that \$1.6 billion, ma'am.

Senator HASSAN. Well, thank you for that very complete answer. And I look forward to working with you on that. At the end of the day, deferred maintenance doesn't help any of us.

Admiral SCHULTZ. Senator, we appreciate your interest and support, ma'am.

Senator HASSAN. Well, thank you. You'll also recall from our discussion that New Hampshire is dealing with a deadly opioid epidemic resulting, particularly in our state, from overdoses of fentanyl. According to the most recent public reporting, illegal fentanyl is coming into the United States via the mail system and through smuggling efforts across our land borders.

However, as I'm sure you know, drug trafficking organizations have increasingly adapted their tactics in order to evade narcotics detection and interdiction efforts. Therefore, while relatively little fentanyl appears to be trafficked across our maritime borders right now, I worry that as we strengthen the security of our land borders and crack down on opioid shipments in the mail system, drug traffickers will increasingly take to the seas to smuggle fentanyl into the United States.

In anticipation of this, can you share how you will ensure that the Coast Guard is ready to adapt and evolve its counternarcotics detection and interdiction efforts to protect against maritime fentanyl trafficking?

Admiral SCHULTZ. Yes, Senator. Thank you for the question. The opioid crisis I think is exactly that, an epidemic, a crisis. The number of fatalities every year are growing, it's north of 10,000, and it's very troubling.

Currently, as you noted, we don't see much movement of fentanyl in the maritime because it is so easy, I think, to ship it through the mail.

Senator HASSAN. Right.

Admiral SCHULTZ. An individual sitting in his or her basement with a laptop essentially is a cartel of sorts.

Senator HASSAN. Yes.

Admiral SCHULTZ. One small Equal-size package is hundreds of hits of fentanyl. So large bulk quantities like we deal with, with yesteryear on the marijuana transshipment, now on the cocaine, is very different when you're talking about the fentanyl and the opioids, ma'am. We understand the Dominican Republic is a bit of a node for the same transnational criminal organizations that have moved cocaine and marijuana in recent years, they're shipping through there. So we're keenly interested in that.

We work—one of my hats I wear as the Atlantic Area Commander for the Secretary is the DHS Joint Task Force East.

Senator HASSAN. Right.

Admiral SCHULTZ. So I think what I can commit to, ma'am, is the Coast Guard will be part of that whole-of-the-Department, whole-of-government solution to the evolving opioid response.

Senator HASSAN. Yes.

Admiral SCHULTZ. We need to have a whole-of-government effort from treatment to interdiction and all points in between. And I think it's going to take the best and brightest minds. I'm going to participate in an event on Capitol Hill tomorrow, ma'am, focused on opioids. So you have my commitment that we will push the Coast Guard into the space to the extent we can be effective—

Senator HASSAN. Well, I thank you for that. And I just will note that part of the evolution that we're seeing with fentanyl is also that other drugs are being laced with it, like cocaine, which obviously has historically been one of the things that has been trafficked over maritime borders. So I continue to look forward to working with you on that. Thank you.

Admiral SCHULTZ. Thank you.

Senator HASSAN. And thank you, Mr. Chair.

Senator WICKER. Thank you, Senator Hassan.

Senator Sullivan.

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

Senator SULLIVAN. Thank you, Mr. Chairman.

And, Admiral, congratulations. Thanks for your wonderful service, to you and your family.

A couple quick questions. You talk about readiness. How important is it that we pass the Coast Guard bill that it looks like we're going to be bringing up to the floor this week?

Admiral SCHULTZ. Senator, the Coast Guard authorization bill, I assume that's the bill you're speaking about, sir.

Senator SULLIVAN. Yes.

Admiral SCHULTZ. There is generally, there's—not generally, there are always provisions in there that are important to the Coast Guard. I know the Coast Guard authorization bill often becomes a vehicle for some broader maritime issues that are often very difficult.

One of the issues I understand has been around is the ballast water, you know, the Vessel Incidental Discharge Act provisions. And, you know, clearly leadership guidance from Congress on how the Nation should proceed there is helpful. We remain—

Senator SULLIVAN. I'm talking about your troops. How important is it to pass the Coast Guard bill this week? Do you want to have the Coast Guard bill passed this week?

Admiral SCHULTZ. Senator, the Coast Guard bill being passed this week would be helpful.

Senator SULLIVAN. Does it help on readiness? You talk about readiness. Does it help on readiness?

Admiral SCHULTZ. Sir, yes, it helps on readiness.

Senator SULLIVAN. OK. It's good that you're advocating for the passage of the Coast Guard bill.

Admiral SCHULTZ. Senator, I didn't mean to imply that I wasn't advocating for that, it's just that we've gone many years in the past

sometimes with a 4- to 7-year gap without an authorization bill, and while that's not ideal, the work of the Coast Guard does go forward. But the enabling legislation, sir, is always appreciated and helpful.

Senator SULLIVAN. Let me ask, as the Chair of the Subcommittee on the Coast Guard, you and I talked about kind of the recapitalization. And do you commit, if you're confirmed, to work with this Committee, not just on the recap, but the laydown of the forces that are part of that recapitalization in terms of our oversight responsibilities?

Admiral SCHULTZ. Senator, we—you have my personal commitment to always work with our oversight committees on those issues that are important to the U.S. Senate and the U.S. House of Representatives. We would welcome a dialogue that allows us to understand your requirements, your political interests, and we would offer you where we think the best utilization of those assets provided by the Congress are. And I think there's a space in there where we can hopefully do the best by the Nation.

Senator SULLIVAN. OK. It's something we do on the Armed Services Committee, on all the committees, right? It's an important role. So we are going to be very involved in that, and hopefully the Coast Guard, if you're confirmed, will be receptive. That's a big part of our job.

I'd like to talk about my state. You know, Senator Klobuchar talked about 10,000 lakes. My state has more coastline than the rest of the country combined.

Admiral SCHULTZ. Yes, sir.

Senator SULLIVAN. We certainly view the Coast Guard in light of what you do for Alaskans every day, which is heroic efforts, remarkable.

I have—and you and I have talked about it—I've been a little concerned about some of the future planning operations giving that whether it's the Arctic, whether it's receding ice, whether it's opening transportation, surface transportation, whether it's fishing—you know, almost 60 percent of all seafood harvested in America comes from my state's waters.

When you and I met earlier, you expressed the importance of a maximum patrol boat coverage for Alaska. Can you commit to me to the 2112 homeporting model for the fast response cutters?

Admiral SCHULTZ. Senator, yes, I can.

Senator SULLIVAN. And I think you and I have also talked about the community of Petersburg, Alaska, and it's losing a 110-foot Island-class patrol boat. I'm concerned about the Coast Guard's ability to meet the needs of southeast Alaskans, especially in the near-shore and inside passage areas, where you know there's an enormous amount of cruise ship traffic. Can I get your commitment to work with me and my team on my concerns that I've raised with you with regard to what's going on in Petersburg, Alaska, as well?

Admiral SCHULTZ. Senator, you have my commitment. We talked potentially about some 87-foot coastal patrol boats to possibly fill some of those localities that you're keenly and other members of the Alaska delegation are interested in. So the fast response cutters are programmed for 2,500 hours, replacing an aging 110-foot

Island-class patrol boat that's currently programmed at 1,800 hours, and we're not getting close to that across the numbers.

I think you'll see about a 20 percent increase in capacity with the fast response cutters, sir, but the door is open for that conversation about those 87 coastal patrol boats rounding out the Alaska patrol boat laydown.

Senator SULLIVAN. OK. I would like to again get your commitment to—my view is what's going on in Alaska with the Arctic, with the fishing, with the rescues, is there is a dramatic increase in the need—

Admiral SCHULTZ. Yes, sir.

Senator SULLIVAN.—for coverage, and as part of the recapitalization effort, I think it's imperative that at the end of the day we have more assets up in the great state of Alaska, which covers an entire strategic area for the country, the Arctic and other areas in the northern Pacific.

Let me ask one final question. I know my time is very limited here. But you mentioned to me the Coast Guard has recently committed to support the Navy's 7th Fleet in the South China Sea. I'm on the Armed Services Committee, a number of Members here are on the Armed Services Committee. I couldn't agree more with the importance of the South China Sea and the Navy. We're trying to build a 355-ship Navy. I do get concerned, though, to be perfectly blunt, about combatant commanders looking at more platforms saying, "Hey, I need a Coast Guard cutter here," in CENTCOM or in AFRICOM or somewhere else. Can I have your commitment to work with us? And this is both Members—there are a lot of Members who are on this Committee and the Armed Services Committee.

I get a little worried about we have a lot of needs for the Coast Guard. My state has enormous needs for the Coast Guard. The Great Lakes has enormous needs for the Coast Guard. And I just get a little concerned when I hear, you know, that PACOM now wants some cutters to do patrols in the South China Sea. I'm worried about that. And, look, we need more assets. That's why we're building a big Navy, but I'm not so sure that's the best use of the Coast Guard. Do you have any thoughts on that right now?

But, hey, can we get your commitment to work on a bipartisan way to make sure we're not sending the men and women of the Coast Guard, who do great work, we love them, but out to places where I'm not sure I would call that primary mission running patrols in the South China Sea. Do you have any thoughts on that?

Admiral SCHULTZ. Yes, Senator. Thank you for the question. If I can go back just briefly on the last question about the patrol boats. One aspect there, sir, would be, I think as you know and as we discussed, siting any platform in Alaska is challenging. We are committed. The housing money is helpful. Getting that right so it enables our men and women on the frontlines to do the missions, getting the right support facilities, we just welcome the continued support of the Alaska delegation there. Sir—

Senator SULLIVAN. We would have that, but I want to remind you it's challenging, but I get frustrated when I, you know, meet with Coast Guard officials who say, "Well, it's too costly." It's too

costly? No, it's not. You've got a job to do to cover this part of America, right?

Admiral SCHULTZ. Yes, sir.

Senator SULLIVAN. And put it in your budget what you're going to need, and we will support it. But, I mean, the notion that the bean counters are constantly saying, "Oh, it's too costly. We can't do—," you can do maintenance there. I was just in a Vigor shipyard in Ketchikan. You can do plenty of maintenance there.

Admiral SCHULTZ. Yes, sir.

Senator SULLIVAN. So we need to kind of change this mindset a little bit here where if you need to cover a part of America, which is my state, then that's what you should be requesting, not bean counters are saying, "No, we've got to keep everybody in the lower 48 because it's too costly." It's not too costly. It's part of the mission. And I've been hearing that too much from the Coast Guard, Admiral, and to be honest, you know, I'm going to need strong commitments from you on this where that kind of thinking is frustrating to me.

Admiral SCHULTZ. Sir, I appreciate your frustration. You have my commitment to work with you in that space, to go on budget for our asks.

Sir, if I can, I'll pivot to your question about the national security cutters. There is a demand for Coast Guard services across the globe, sir, and a large proportion of our day-to-day force laydown, about 40 percent of our major cutters, our maritime patrol aircraft, our helicopters, particularly our Airborne Use of Force helicopters, support the combatant commanders, whether it's on the front line on drugs, other niche capabilities.

Sir, we bring some unique authorities, unique capabilities. For 2019, the Commandant has pushed into the global force management process the availability of the national security cutter. I recognize your concerns. It's a zero-sum game. There are competing national security interests. We have—my colleague, the new PACOM Commander, is having a hearing today. I will certainly engage Admiral Davidson, pending his successful confirmation, about how he views the Coast Guard roles there, sir, and we will have that appropriate conversation about national homeland security and the appropriate niche role for the Coast Guard in that.

Senator SULLIVAN. Thank you, Mr. Chairman.

Senator WICKER. Thank you, Senator Sullivan.

Senator Peters.

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

Senator PETERS. Thank you, Mr. Chairman.

And, Vice Admiral Schultz, it's wonderful to have you here before us today. Thank you for your service and your willingness to take on this added responsibility. It's always good to follow my friend Senator Sullivan, who I know reminded you of the coastline of Alaska. So I'm going to certainly remind you that second to Alaska is the state of Michigan in terms of the amount of coastline we have. So the Coast Guard provides incredibly valuable services to my state, and I want to thank you for your service and all the men

and women who serve in the Coast Guard, the great work they do in Michigan.

You and I have spent some time in my office. And if I could also say publicly, I appreciate your statements about how much you enjoyed your service in Michigan earlier in your career, and the fact that your wife loved Michigan as well. So I appreciate those comments.

I also appreciated our follow up yesterday regarding the investigation into an incident that has just recently occurred in the Straits of Mackinac. You know, as we discussed, the incident involves an anchor strike on an electric transmission line leading to the spill of about 600 gallons of mineral oil. And I know the Coast Guard is leading the unified command response to that spill.

We've also learned that potentially the same vehicle that struck the transmission lines may have struck the Line 5 oil pipeline, which has experienced some denting. And as you know, and we discussed, the prospect of an oil spill in the Straits of Mackinac would be absolutely catastrophic. And given the weather event that we just had this past weekend with seas in excess of 12 feet and approaching higher ones, it also could cause a situation where it is very difficult, if not impossible, to clean up a spill. In fact, in a briefing that I had with the Coast Guard prior to this weekend, I was informed that the skimmers in the Straits of Mackinac would be ineffective in seas greater than 3 feet.

So we definitely had a situation with a damaged pipeline where we didn't have eyes on that pipeline, even though it's been a couple weeks that we weren't sure if something happened, we could actually clean it up. The company shut down the pipeline temporarily, but has now reopened it.

My question to you, though, Are we still on track for underwater visual inspections to be conducted today?

Admiral SCHULTZ. Senator, my understanding as of an update this morning is that the remote-operated vehicle and side-scanning sonar operations may be delayed a couple days during weather. My understanding is as soon as they have the appropriate weather, we're going to put—you know, deploy those capabilities, and that will be done. So, again, this was about a 9:30 update, they told me we may be sliding a couple days to the right. But we ensure your commitment to get eyes onto the pipeline, the cables down there, to fully understand what's going on, sir.

Senator PETERS. So because of weather, another couple days?

Admiral SCHULTZ. Sir, potentially a couple days. I think they will put the capability in the water as soon as the weather window allows that to occur.

Senator PETERS. But the ROVs are onsite.

Admiral SCHULTZ. Yes, sir.

Senator PETERS. They finally arrived. My understanding—well, we know it has taken at least 2 weeks for that to get up there. That seems to me unacceptable to get the equipment up there. Obviously, weather delays it further, but they could have been in the water sooner.

How can we get these assets to a critical place like the Straits of Mackinac a whole lot quicker?

Admiral SCHULTZ. Well, Senator, these remote-operated vehicles, there's a finite number, they're an expensive piece of gear. They are sited, you know, many times in the Gulf of Mexico supporting the offshore industry down there in different locations, research locations. I know you have some interest in some type of center up there, oil spill type center. That could be a venue potentially for that.

Again, I won't commit to—you know, most of those ROVs are owned in the private sector, so how they're allocated, what their business cost share models are, I'm not expert on that, sir, but, you know, the center, as you advocate, could be a place.

Obviously, a center like that, we'd want to tie the work of that center to an R&D center which is doing work on oil spill and specifically some tar sands-like oil spill research. We're doing some work in Kalamazoo in the river, we're doing some work in Lake Huron, and a third site later this summer. We've got a report due out probably summer of 2019 here that will talk about our findings on that oil spill research that our R&D center is doing, sir.

Senator PETERS. Well, as you mentioned, we have language for a National Center of Expertise for freshwater oil spill cleanup in the Coast Guard reauthorization bill. And I certainly appreciate it and I hope I have your commitment to work with the creation of that center so that we learn more about freshwater cleanup. We know a lot about saltwater cleanup with oil spills. My understanding is we don't know anywhere near the same amount when it comes to fresh water, and having a center that brings the Coast Guard expertise as well as our academic institutions and private sector could bridge that gap and also have pre-positioned equipment in a critical area. Would you agree?

Admiral SCHULTZ. Senator, I think that is a space that we can continue to look at mutually and understand your views on that and where you see that going, and bring our expertise to that, sir.

Senator PETERS. It is—is it still the case of the transmission lines and the Line 5 are being handled as two separate incidents with the unified command working to deploy one ROV to inspect the transmission lines, and Enbridge, the company that operates Line 5, they are going to send their own rented ROV craft to inspect the line? Is that correct?

Admiral SCHULTZ. Sir, I don't have that level of fidelity on the multiple ROVs. I think the pipeline falls under the Pipeline Hazardous Safety Management Agency as a peer Federal agency. We are on-scene as the Federal on-scene coordinator for the spillage from the cables, worst case scenario, up to 800 gallons. We've been responding to that. We're part of the RP with the state of Michigan, with ATC, the responsible party there, sir.

So there is a little bit of a splitting of functionalities across the two Federal agencies involved, sir. If they're specifically using a different ROV on the cables versus the pipeline, I don't have that fidelity, sir, on the details. I apologize for that.

Senator WICKER. Thank you, Senator Peters.
Senator Lee.

**STATEMENT OF HON. MIKE LEE,
U.S. SENATOR FROM UTAH**

Senator LEE. Thank you, Mr. Chairman.

Thanks for being with us, Admiral Schultz, and for all you do. I want to talk to you for a moment about the Coast Guard's work in the Arctic. As you know, our territorial sovereignty extends 200 nautical miles offshore. And I just wanted to talk to you a little bit about the Arctic and what the U.S. interests are in the Arctic and what threats there might be to our sovereignty in the Arctic.

Admiral SCHULTZ. Senator, thank you for the question. The Arctic, sir, is a fascinating location, sir. We have national security interest in the Arctic, science interest in the Arctic. There is increasing human presence in the Arctic, expeditionary cruises. A couple of years back, Shell had invested billions of dollars up there to potentially extract oil from relatively shallow water locations. The energy situation in the Nation has changed a little bit, and that's been pushed to the right there. But, sir, there are many interests. There are rich minerals below in the seabed there. And all that rolls up into importance for the Nation.

Russia, China, are increasingly asserting their presence in the Arctic here. And from a national security standpoint, sir, I think the Arctic is a place we absolutely have to be represented. The Coast Guard has been an appropriate de facto lead agency for what's going on in the Arctic, sir.

Senator LEE. Commercial shipping in the Arctic, is it changing a lot?

Admiral SCHULTZ. Sir, I think the prognosis for commercial shipping through the Arctic is going to be interesting to see. That will obviously be driven by how they view the economy there, sir, the economics of that. I think you will anticipate further shipping across the Arctic. Exactly how much, I think north of Russia, northern sea routes, Russia sees that as an income generator for their society here in the Arctic, the U.S. portion of the Arctic, sir. I think TBD a little bit in terms of how much shipping we'll actually see there, sir. But there is clearly more expeditionary type cruise vessels up there, which brings hundreds of people to the Arctic, and there's not much in terms of capacity where there is need for some rescue. We're up there seasonally in our Arctic Shield operations from summer to about mid-fall, late fall, on an annual basis.

Senator LEE. One of the things that always comes up when we talk about the Arctic involves icebreakers. Questions arise with regard to how big our fleet needs to be, what the mix should be in terms of heavy versus light icebreakers, how we should acquire the ship, whether it should be leased or bought outright.

And, of course, one of the main challenges that we have to face involves U.S. law. Federal law generally restricts the Coast Guard from acquiring vessels from foreign shipyards, either the vessels themselves or major components thereof. There are some suggestions that we could reduce the costs of these vessels if we were to ease some of the restrictions imposed by U.S. law. So do you think there is any truth to the suggestion that we ought to at least consider utilizing foreign shipyards at least among our NATO allies in order to save money?

Admiral SCHULTZ. Sir, I would tell you first and foremost we appreciate the support of the administration and the Congress on moving forward with the recapitalization for our POLAR STAR, a 1970s been—1970s version, 1970s built icebreaker. That's the one heavy icebreaker in the U.S. inventory. We have a medium icebreaker in the 1970s—or the 1980s rather—the Coast Guard Cutter Healy.

Sir, I think building that ship domestically, if we look back to the High Latitude Study, it talks about the need for three heavies, three mediums, as maybe a baseline. There are other views on that. The National Academy of Science has talked about four heavies and maybe a little different mix there at the end of the day. I think if American shipbuilding sees the opportunity to build more than one, maybe buildup to three, four, potentially more icebreakers, you know, then there's a different conversation about costs and economies of scale potentially block-buy contracting opportunities.

Sir, I'm going to sort of shy away from whether we want to look to foreign shipbuilders or not. We will inform the design of our heavy icebreaker with the best that industry has, and that's in from the international community, not just domestic. We have not built an icebreaker here in this country, a heavy icebreaker, since the POLAR STAR and the POLAR SEA in the 1970s.

Senator LEE. I want to thank you for all of the help that you provided hurricane victims in the last few months. As you know, the Trump administration has recently waived the Jones Act in order to help some of the relief efforts in Puerto Rico. In your experience, does the Jones Act increase the price of shipping goods between U.S. ports?

Admiral SCHULTZ. Senator, thank you for that question. Sir, the Jones Act has been on the books for more than 100 years. Specifically, if you look at the waiver of the Jones Act, I think it's for about 10 days during the hurricane response period. I think a lot of folks were pushing into this space saying the Jones Act was inhibiting the movement of cargos to Puerto Rico to provide relief to the citizens of the Commonwealth of Puerto Rico.

My sense on the ground and from looking at this from my vantage point at Atlantic Area was that was not the case. There were available ships, Jones Act-certified ships. The problem was once the cargo reached Puerto Rico, it was jammed up in the shipment down there, whether that was related to the roads or it was related to the port infrastructure.

So I think the Jones Act is subject to the judgments of the Congress. Customs and Border Protection is the primary agency that oversees the implementation of the Jones Act. I would tell you, Senator, during the hurricane fall response, I don't think the Jones Act was an inhibiting function to our ability to respond to the citizens of Puerto Rico.

Senator LEE. Fair point. My time is expired. Thank you.

Senator WICKER. Thank you, Senator Lee.

Admiral, you have two icebreakers, is that right?

Admiral SCHULTZ. We have one medium and one heavy; yes, sir.

Senator WICKER. How many do you need?

Admiral SCHULTZ. Senator, I would defer to the High Latitude Study. The Commandants—the last three Commandants have talked about the need to recapitalize. I think the conversation right now is——

Senator WICKER. And so what does that say?

Admiral SCHULTZ. Three heavies, three mediums, is probably a good place to perpetuate the conversation forward, sir.

Senator WICKER. OK. Thank you.

Senator Blumenthal.

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

Senator BLUMENTHAL. Good morning. Congratulations to you and thank you to you for your service, and to your family—Dawn Marie, thank you—and to your mom, if she is watching, and if not, I hope you'll give her a call after we're done here. She ought to be very proud of you, as should the Coast Guard, for your service. And I'm proud that you're a native of East Hartford and hope that you will visit often at the Coast Guard Academy and at the site of the soon to be built Coast Guard Museum. I feel that I probably don't even need to ask you, but I hope that you will sustain and enhance the commitment of the Coast Guard to the museum. And I can pledge to you that for myself and for I think all of us in the delegation, we are strongly committed to do anything and everything to make that museum a reality.

Admiral SCHULTZ. Senator, as you know, we're the only armed service without a national museum. I think there is a need to tell the Coast Guard's story, sir. And we will certainly work for—look for opportunities, continue to work with the congressional delegation, the State of Connecticut, on the ability to field and get that museum open in the coming—coming year, sir.

Senator BLUMENTHAL. It is an awe-inspiring story, and it needs to be told, and it will be an extraordinary contribution to all of our armed services to have that museum. And there is good news in Connecticut, the Bond Commission has approved, in fact just this last week, on Friday, \$19.5 million to complete a pedestrian bridge and link with the National Coast Guard Museum plan for downtown New London. That's an essential commitment from the State of Connecticut. We worked for it and advocated it. And I hope that the private sector, as well as the Federal Government, will hold true to that commitment.

Admiral SCHULTZ. Yes, sir.

Senator BLUMENTHAL. I want to follow up on the question of icebreakers because I just came from a confirmation hearing for General O'Shaughnessy for NORTHCOM, and made the point to him, and I'm going to reiterate it to you, that compared to the Russians, we are at a severe disadvantage in the Arctic. We have two icebreakers there. They have 40, with another 11 in development.

Maybe you can explain to the American public, I think you and I know, why icebreakers are so important in that part of the world, particularly with climate change reducing the ice cover.

Admiral SCHULTZ. Well, Senator, as I mentioned earlier here to Senator Lee and Senator Sullivan, the Arctic is an important region, and the Coast Guard has clear statutory responsibilities

there. It's an important region from a national security and maritime security needs, sir. It's important from increasing human presence up there and ties to our statutory roles, sir.

The science is important there. I think—I am not a scientist. I think it's hard to argue that—you know, and Admiral Allen, one of our former Commandants, used to say he was agnostic to the science, but there's water where there didn't used to be water.

I think, sir, the U.S. needs to pay attention to what's going on in the Arctic. And we're very excited that our 2019 budget provides a \$750 million line item to move forward with potentially a second icebreaker. We've been working in an Integrated Product Office with the United States Navy, the SCN office here, on the first icebreaker. With the support of Congress, we've had some incremental funding. The 2018 budget included another \$150 million funding.

So I think we're on a good trajectory to close that gap, but as the previous questions talked about, you know, there is a need for multiple icebreakers to maintain a year-round presence in the high latitudes.

Senator BLUMENTHAL. Focusing on the Coast Guard Academy for the moment, there have been recent allegations about racial discrimination. There have been some incidents that perhaps merit investigation. Probably every incident and every allegation deserves investigation. Will you commit to scrutinize and make sure that there are no credible claims of discrimination at the Coast Guard Academy?

Admiral SCHULTZ. Senator, absolutely. I just spent a few days at the Coast Guard Academy last week for their Eclipse Week activities, which is about diversity and inclusiveness, and my sense is the superintendent, Admiral Rendon, is wholly committed, sir, to investigating each and every situation there to set a tone here where hopefully there is not a need for further investigations. But we will take them seriously, sir.

You have my commitment that we will support Admiral Rendon. And we want to have an environment at the Coast Guard Academy that is totally inclusive. We've done very well with female cadets. The corps—the population of the corps that is female is about 39, 40 percent. Underrepresented minorities are a much smaller number, sir. I think at some point, when we can continue to grow those numbers, there's a greater sense of belonging, involvement. And you have my commitment, sir, to continue to make our Coast Guard Academy and our service look more like the Nation we represent.

Senator BLUMENTHAL. I think that's a very, very important commitment, as is the commitment which I hope that you share to investigating and stopping all sexual assault that may occur either at the Coast Guard Academy or within your service, and obviously that issue is not limited to your service, it's one that we've raised in our Armed Forces generally and in college campuses—

Admiral SCHULTZ. Sir, you have my 100 percent commitment. Until we have eradicated all sexual assault from the services, we have much work to do.

Senator BLUMENTHAL. Thank you.

Thanks, Mr. Chairman.

Senator WICKER. The Coast Guard Academy is one of the finest institutions of higher learning in the country, in the world, and we certainly want to support them. I just wanted to add that.

Let me just ask, are we comparing apples to oranges when we say the Russians have 40 icebreakers and we only have 2?

Admiral SCHULTZ. Senator, I think clearly if you just have a conversation about numbers, it's—you know, it's a dire conversation. I think the Russian interest, the geography, is slightly different, the Russians' ties to where they're extracting resource from the Arctic. But there is a takeaway there, sir, that we have had very little commitment to the Arctic in the past. If you look at a non-Arctic nation like China, who is working on a second icebreaker and pushing their sovereign interests into the Arctic domain, sir, I think that's something we need to sit up and pay attention to.

So I would caution the conversation is not wholly about the numbers, but it's the fact that we have one heavy breaker that can go to both of the high latitudes. We have a science ship that can operate in certain times of the year in the Arctic. That is insufficient, sir, to tend to the Nation's needs here in that part of the world.

Senator WICKER. Those 40 Russian icebreakers, how many of them are what you would call heavy?

Admiral SCHULTZ. Sir, I would have to get back to you on the exact number. I think the number of heavies is a number 6 to 10 there. But let me circle back, sir, for the record, with your staff to make sure I give you the well-informed numbers there, sir.

Senator WICKER. I think Senator Blumenthal would agree. We know you're constrained by what you hear from the Budget Office, and we appreciate their concerns, but do tell us what you need.

Admiral SCHULTZ. Absolutely, sir.

Senator WICKER. Thank you very much.

Senator Baldwin, you are going to be recognized next. By rule, Senator Thune would be next, but he is graciously understanding that you have waited patiently, and so you are now recognized.

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

Senator BALDWIN. Thank you, Mr. Chairman and Mr. Chairman, for that courtesy.

Admiral Schultz, again congratulations and thank you for your service. I appreciate your recognition of the importance of Great Lakes icebreaking operations; however, I think we may have a difference of opinion on whether the Coast Guard has all the assets it needs to effectively meet its icebreaking mission in the Great Lakes. I believe that we need a second heavy icebreaker on the Great Lakes and that the current fleet, as well as our reliance on Canadian Coast Guard assets, isn't enough.

A few years ago, we saw more than \$1 billion in lost economic activity and an estimated 6,000 lost jobs due to ice coverage. These costs far outstrip the cost of a new icebreaker. And I understand your budget constraints, which have been mentioned several times, which is why, as a member of the Homeland Security Appropriations Subcommittee, I've helped secure additional funding above the budget request for initial survey and design work for the ves-

sel. In other words, this is not an unfunded mandate for the Coast Guard.

Do you agree that the Coast Guard's icebreaking capacity on the Great Lakes could be improved by the procurement of a second heavy icebreaker like the MACKINAW? And, second, what is the status of survey and design work on this icebreaker? Congress provided \$2 million in Fiscal Year 2017 and another \$3 million in Fiscal Year 2018 for these acquisition activities, and I am concerned that the Coast Guard is slow-walking this project contrary to congressional intent.

Admiral SCHULTZ. Well, Senator, thank you for the question. And your interest and the Congress' interest in additional icebreaking capacity I think is clearly signaled through the incremental 2 and then additional 3 million here in the 2018 omnibus. And you have my commitment, ma'am, to work with the oversight committee on talking about those needs. We clearly—there is always a finite amount of budget, and we're trying to—you know, we're lifting national security cutters, offshore patrol cutters, fast response cutters, aviation needs there. I guess the conversation is really not, "Would additional capacity be helpful?" the conversation sometimes comes down to, "Where would an additional icebreaker for the Great Lakes fit in the sequencing?" because the pie is always going to be of a certain size. And the Coast Guard is an element of the Homeland Security appropriations, and given your position there, ma'am, I don't need to—you know that better than I do. So I would certainly commit to working with you, ma'am, and the oversight committee regarding the interest on the additional capacity on the Great Lakes.

Regarding the status of the survey and design and the initial 2 million that came in previous years, I need to circle back with your staff on that, ma'am, to make sure we give you the latest situation with that. And your concerns that we're dragging our heels, I hope that's not the case. But I will ensure we circle back with your staff and give you a full update on where we are with that. And you have my commitment to pull that forward and make sure we are responsive to the congressional interest to deeper dive into that.

Senator BALDWIN. Thank you. I appreciate that commitment and will look forward to that follow up.

I am very concerned about our security with regard to both procurement and the assets that you have, but also the industrial base domestically capable of providing those. I was here for the exchange with my colleague on "Buy America," provisions.

By way of an example, I was disappointed to recently learn that of the more than 700 Coast Guard boats that have outboard motors, only 91 use U.S. motors, like those made in Wisconsin by Mercury Marine or Evinrude. In other words, 87 percent of U.S. Coast Guard small watercraft use foreign-made outboard motors or engines.

Later this week, I'm going to be introducing a measure called "Made In America Shipbuilding," which strengthens "Buy America" requirements for the Federal Government's purchase of ships. It does so by expanding current law to cover all Federal agencies, including the Coast Guard, all classes of ships, and substantially more shipboard components, including outboard motors.

To protect against contract disruption and unintended consequences, there are waivers for legitimate reasons of cost, schedule, competition, and national security, but this bill would help strengthen our domestic shipbuilding industrial base, and it's very much aligned with the President's stated "Buy American, Hire American" policy.

So, Admiral Schultz, while I know that the Coast Guard will always comply with applicable domestic content laws and regulations, I'd like to know your views on "Buy America" requirements for ships and shipboard components. Do you believe that ships and their components should be made in America?

Admiral SCHULTZ. Senator, thank you for the question. And as we spoke when we met here a couple weeks back in your office, we will fully comply with the law and "Buy American" provisions of the law. You started the conversation and the question about the outboard motors on the backs of many of our small boats, hundreds of our small boats. We are in compliance with the law there, ma'am, in terms of the intent and the spirit of the law. And as we field—first, those are on the backs of safe boats built up in Washington State and Metal Shark built down in the Gulf region.

As we try to maintain, you know, centralize supportability for that platform, sticking with the outboards we started with sort of makes sense for the life of those ships. But I understand your concern, ma'am, when we have American-made outboard motor manufacturers. And if the law changes and tightens up that, we will certainly continue to comply with that.

Ma'am, in terms of American shipbuilding, I think you heard my response to Senator Lee, and you referred to that, that obviously we have an industrial base here. To the extent the industrial base can meet the needs of services like the Coast Guard and the Navy and the other Department of Defense entities, I think that's a good news story for America. It's consistent with the administration. But ultimately, ma'am, we will defer to the law. And Fairbanks Morse will be providing the engines for those offshore patrol cutters that we're extremely excited to build with the support of this Committee and the Senate and the Congress writ large.

So I am committed to the "Buy American" law, ma'am, to compliance with that for the agency. And if those laws get modified, you know, further tightened up, we will certainly make sure that we're in dialogue and compliance.

Senator BALDWIN. Thank you.

Senator WICKER. Thank you, Senator Baldwin.

Senator Thune.

**STATEMENT OF HON. JOHN THUNE,
U.S. SENATOR FROM SOUTH DAKOTA**

The CHAIRMAN. Thank you, Mr. Chairman.

Good morning and welcome, Vice Admiral Schultz. And again congratulations on your nomination to be the Commandant of the Coast Guard. I, like many others that you've heard from today, appreciate your many years of service to our Nation and your willingness to accept this new responsibility. And as you well know, the Coast Guard is vital to both the physical and economic safety of

our Nation, and it isn't just those who live on our coasts that benefit.

We need a Coast Guard that is able to protect our borders, project U.S. interests, and ensure the free flow of international commerce. And I take our Committee's role in ensuring the Coast Guard has strong leadership seriously. And looking at your qualifications and past performance, I'm confident the Coast Guard is going to be in good hands.

I do have a couple of quick questions. Coast Guard helicopters have repeatedly proven their worth in every disaster, including last year's three devastating hurricanes. The current fleet of helicopters is decades old, well past the design life of these aircraft, and yet there is not a clear plan to replace them.

What is the recapitalization strategy for the Coast Guard's rotary-wing assets and when should we expect to receive a copy of the strategy?

Admiral SCHULTZ. Senator, first and foremost, we are overdue with that report. That was due here in February. That report has been routed through the administration. It has left the Department. It is with OMB. Hopefully, that will be up here on the Hill here shortly.

In terms of what the contents of that report, I think what we're looking at is a service life extension for our smaller Dolphin HH-65 helicopters as well as our Jayhawk or H-60 helicopters, probably pushing the service life of those helicopters into the mid-2030s. We are very much working in lockstep with DoD on the Future Vertical Lift program, and that will best inform that.

We're confident that we can squeeze those additional hours safely out of those helicopters. We have a tremendously robust capability down in Elizabeth City, North Carolina, where we can essentially rework those helicopters, take them down to a bare carcass, rewire, re-engine. We have engine labs down there. And we're pretty confident that we'll be in good shape moving forward into the mid-'30s with the 65 and the 60 and then informing that conversation with Future Vertical Lift working collaboratively with DoD.

The CHAIRMAN. OK. Thanks. As you may know, Burlington Northern Santa Fe railroad has sought approval for a new railroad bridge across the Pend Oreille River in Sandpoint, Idaho. This new bridge would run beside an already existing railroad bridge and just slightly apart from an existing highway bridge, seemingly making the environmental impact of this new bridge minimal.

As you may also know, this track is an important line for goods moving between the West Coast and the Heartland, including for South Dakota grain and other agricultural products.

I understand that we want to make sure the environmental assessments are completed, but this bridge will be placed alongside two existing bridges. It will not add any additional traffic that's not already flowing, albeit currently more slowly. When will the Coast Guard provide approval for this bridge?

Admiral SCHULTZ. Well, Senator, we are—and thank you, Mr. Chairman, for the question. We are in that space for 51 years now with oversight of bridges over navigable waters. There are environmental considerations there, putting those additional rails alongside existing bridges, and potentially that may lead to Environ-

mental Impact Statement. I need, sir, to circle back with our bridge administration folks, and I would offer a chance to come up here and brief your staff on the details of that. I am not intimately familiar with the timeline there, but we can certainly circle back and get your team that information as soon as possible.

The CHAIRMAN. I would really appreciate that. It's an important transit line for an awful lot of freight that originates in the middle of the country, including my state.

Admiral SCHULTZ. Yes, sir.

The CHAIRMAN. I have a letter here, Mr. Chairman, from the Governor of South Dakota that I would like to insert for the record.

Senator WICKER. Without objection.

[The information referred to follows:]

STATE OF SOUTH DAKOTA
Pierre, SD, April 10, 2018

Admiral PAUL F. ZUKUNFT,
Commandant of the U.S. Coast Guard,
U.S. Coast Guard,
Washington, DC.

Dear Mr. Zukunft,

I am writing to express support for the Sandpoint Junction Connector project. The project will provide the capacity needed for current traffic volumes and accommodate future growth on movements along BNSF's northern transcontinental main line, a nationally significant freight corridor. Of the over 130,000 carloads of agriculture BNSF hauled out of South Dakota, over half of those products traveled the northern transcontinental route, making it a critical transportation route for South Dakota's farmers and agriculture industry.

South Dakota always has been and will continue to be an agricultural state. It remains the common thread linking citizens, businesses, and communities of our state. South Dakota's agriculture industry has a \$25.6 billion economic impact each year and generates 20 percent of our state's economic activity. In 2017, BNSF shipped over 130,000 carloads of wheat, soybeans, corn, sweet beans, beans, and other agricultural products from South Dakota to plants around the country for domestic use and to ports for export abroad.

BNSF has invested nearly \$2 billion to expand capacity on the northern transcontinental route since 2013. The one-lane bridge at Sandpoint remains a critical chokepoint in the network. The proposed Sandpoint Junction Connector project adds capacity and alleviates that chokepoint to allow enhanced movement of freight, including South Dakota's agricultural products.

I am concerned incorrect information about this project and the type of rail traffic it supports could cause a delay in the project. Agriculture products and consumer goods are the largest commodity groups delivered through the Sandpoint project area, both critical to South Dakota's economy.

This project is in the interest of all communities and shippers that depend on a robust rail transportation corridor. I am confident your agency will conduct a thorough review and analysis of the proposal in a timely fashion.

Sincerely,

DENNIS DAUGAARD,
Governor.

DD:rg
CC:

U.S. Army Corps of Engineers Chief of Engineers:
Lt Gen Todd T Semonite
Headquarters
U.S. Army Corps of Engineers
Washington, DC.

U.S. Coast Guard
District 13 Bridge Administration Office
Seattle, WA.

U.S. Army Corps of Engineers
Walla Walla District
Coeur d'Alene Regulatory Office
Coeur d'Alene, ID.

The CHAIRMAN. And, Mr. Chairman, I yield back my time, and I look forward to processing the admiral's nomination as quickly as possible.

Admiral SCHULTZ. Thank you, Mr. Chairman.

Senator WICKER. Thank you, Chairman Thune.

Senator Cortez Masto.

**STATEMENT OF HON. CATHERINE CORTEZ MASTO,
U.S. SENATOR FROM NEVADA**

Senator CORTEZ MASTO. Thank you.

Admiral, it's good to see you again. Congratulations. I apologize for not being here for the first part of your testimony. That's why your written testimony is so important. I had two other hearings going on, so that's why you see us bumping in and out of here.

But thank you again for your commitment and everything you've done on behalf of the country. And I so appreciate you taking the time to meet with me. That's why it was so important.

I understand that previously from Senator Blumenthal's questioning, you made a commitment to address sexual assault at the Coast Guard Academy as well as racial discrimination. Is that correct?

Admiral SCHULTZ. Senator, I made a commitment that sexual assault and racial discrimination is intolerable anywhere in our service, whether that's at our Academy or anywhere amongst our rank-and-file units all over the country and all over the world. We want to drive that down to zero incidents because it's completely inconsistent with our core values of honor, respect, and devotion to duty. You have my full and 100 percent commitment, ma'am.

Senator CORTEZ MASTO. Thank you. And during—I understand during the conversation that you had with Senator Blumenthal, you identified the percentage of women at the Coast Guard Academy being at its highest amongst the service academies, at 38 percent.

Admiral SCHULTZ. Ma'am, I am not sure if it's the highest. We are at about 38 to 40 percent right now.

Senator CORTEZ MASTO. OK.

Admiral SCHULTZ. That's I think the high-water mark for us, and I think the women feel completely integrated with the Corps of Cadets. I'm not sure how that compares with the other service academies, Senator.

Senator CORTEZ MASTO. OK. Let me ask you this, the representation of women in the Coast Guard's Officer Corps, though, is still lower—right?—other than the Marine Corps. So let me ask you this, what steps would you take as Commandant to address that disparity and ensure women are represented at all levels of leadership in the Coast Guard?

Admiral SCHULTZ. Well, Senator, we are currently underway with a Women's Retention Study under the contract arrangement with RAND, and we are hoping that will help us inform why women may not be staying with the service as long as their male counterparts. You have my commitment to understand the causative factors that shape that. You have my commitment to understand—you know, to work on those places where we can shape organizational and cultural behaviors that possibly are impediments

to women feeling that the Coast Guard can be a viable career of, you know, whatever duration they so choose that's compatible with their other life choices.

Senator CORTEZ MASTO. Thank you.

Senator WICKER. When is that study due, Admiral?

Admiral SCHULTZ. Sir, I have to circle back on the actual due date. We are doing the listening groups all over the Coast Guard right now, Senator. So I will circle back with your staff on the timeline there.

Senator WICKER. And Senator Cortez Masto's staff.

Admiral SCHULTZ. Absolutely, Mr. Chairman.

Senator CORTEZ MASTO. Thank you. I know the Coast Guard has been working closely with Colombia and Mexico on drug interdiction efforts, which you yourself have had a key role during your time at SOUTHCOM. What is your assessment of those partnerships? And can they be expanded, or should they be expanded?

Admiral SCHULTZ. Senator, we are, in fact, working with SEMAR, the Mexican Navy, and other elements of the Mexican government, and with the Colombians. The Colombians are terrific partners, maybe the bright spot partnership in Latin and South America among—on a host of issues.

Can we expand on that? Absolutely. We're currently involved in an ongoing operation working with SEMAR and the Colombian Navy, and that we've had success to date on that. You have my commitment. Admiral Durán, who is now the CNO of the Colombian Navy, I've known him for many years, Admiral Soberón will be turning over this summer. But I'm sure we will continue to enjoy a terrific level of respect and mutual cooperation with the Mexican Navy.

So I think there are opportunities to build on success and include their contributions from a trilateral, multilateral framework to get after this scourge that ends up on American streets. And it's also destabilizing to their countries.

Senator Cortez Masto: Right. Thank you very much.

Admiral SCHULTZ. Thank you, Senator.

Senator CORTEZ MASTO. I understand the Coast Guard is planning to acquire an unmanned intelligence platform for its national security cutters. How will a drone capability support the Coast Guard in carrying out its various missions?

Admiral SCHULTZ. Senator, we have been involved with some testing of small unmanned aerial systems on the back of our national security cutters. They have proven incredibly capable. I was talking to one of the skippers, the captains of that ship, and they don't want to go downrange without that additional capability. It's that strong and that much of a game-changer. Hopefully, this fall here we'll actually be awarding a contract in response to proposals from industry to actually field that capability on the backs of all our national security cutters.

Senator CORTEZ MASTO. That's great to hear, particularly since Nevada is one of the testing sites for these unmanned vehicles and drones that we see.

So thank you again for your commitment. And congratulations. And I look forward to working with you once you are appointed.

Admiral SCHULTZ. Thank you, Senator. We look forward to working with you as well, ma'am.

Senator CORTEZ MASTO. Thank you.

Senator WICKER. Thank you, Senator Cortez Masto.

Senator Cantwell.

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

Senator CANTWELL. Thank you, Mr. Chairman.

And, Admiral, congratulations on your nomination.

Specifically, the National Defense Authorization Act of 2017 included a provision to expand military family leave policies. Has the Coast Guard implemented this yet?

Admiral SCHULTZ. Senator, we are working on the policy aspects of that. We are matching steps with DoD, specifically the Navy. The NDA language is very favorable for our families, for our members, and we're very appreciative of the support of Congress on that front. That will include maternity leave, paternity leave, adoption leave. It increases the accessibility of that to our members. And I think at the end of the day, our members will be well served by that. And I appreciate your personal commitment there.

Senator CANTWELL. So what can we do to make sure that the Coast Guard leads on this, given the number of mid-career women officers that you're losing? What can we do not just to wait for other branches to lead?

Admiral SCHULTZ. Well, ma'am, the wait I think is we're talking months. We're not talking a long wait here. We are looking to implement this—anything that regards entitlements being one of the five armed services, we generally try to do that in lockstep with the other services because it just makes sense. We always talk, "Look what the Navy did or what DoD did. We're funded below their levels of readiness." It's sort of a parallel construct, ma'am. I don't think we're talking more than a couple months to get our policy on the street and start to benefit these Coast Guard families.

Senator CANTWELL. But you do probably—do you have more women than the other branches?

Admiral SCHULTZ. Senator, I don't have those numbers to answer that.

Senator CANTWELL. OK.

Admiral SCHULTZ. We have about—our percentage of women in the ranks is in the high teens. We have opportunity to increase those numbers, ma'am.

Senator CANTWELL. OK. That's overall Coast Guard number or are the officer—

Admiral SCHULTZ. That is out in our listed ranks, ma'am. Our officer corps, I've got to circle back with you on that.

Senator CANTWELL. OK.

Admiral SCHULTZ. I cited a number before. I think that came into our Academy were about 40 percent female cadets. Yes, ma'am.

Senator CANTWELL. That's the number I wanted to get at, 40 percent—

Admiral SCHULTZ. Close to that. Yes, ma'am. Just shy of that.

Senator CANTWELL.—which I think is great. That's why we want to retain it.

Admiral SCHULTZ. Absolutely. And we are doing that, that retention study, and we want those women to come into the service and we want them to stay in the service.

Senator CANTWELL. I'm pretty sure that's—yes.

Admiral SCHULTZ. We want the service to be compatible with, you know, with other lifestyle choices they make and families and things like that.

Senator CANTWELL. Yes.

Admiral SCHULTZ. We've got some work to do there, ma'am.

Senator CANTWELL. Thank you. Thank you. I also wanted to ask you about the POLAR STAR, which returned last month following its deployment to Antarctica. The vessel experienced engine failure and two major flooding incidents. So a new icebreaker will not be commissioned and operational until 2023. Do you agree the Coast Guard needs to keep the POLAR STAR in service until the new icebreaker is operational?

Admiral SCHULTZ. Senator, absolutely. I think we're looking at about a \$75 million investment of increments of about 50 million a year over the coming 5 years to keep the POLAR STAR in the game. I anticipate POLAR STAR will probably be heading to the high latitudes in the Antarctic to break out McMurdo on an annual basis. But we are absolutely committed to that bridging strategy until we can field new icebreakers.

Senator CANTWELL. So what is that plan for extension? What does that look like?

Admiral SCHULTZ. Well, ma'am, the ship is in Mare Island Shipyard today, got there a couple weeks ago. She's getting ready to—it will be a long projected—protracted maintenance period. And we're looking at potentially a multiyear vehicle so it's a little more predictability, we can negotiate, you know, better stuff there.

There's obviously Federal acquisitions contracting law that we have to stay in compliance with, but we're working that. But I think I can report back to you probably in the coming months here that we will probably have a plan that looks like a multiyear contract to keep POLAR STAR in service and bridge that gap until the heavy icebreaker is on the waterfront in 2023.

Senator CANTWELL. Great. Thank you.

Thank you, Mr. Chairman.

Senator WICKER. Thank you, Senator Cantwell.

Senator Capito.

**STATEMENT OF HON. SHELLEY MOORE CAPITO,
U.S. SENATOR FROM WEST VIRGINIA**

Senator CAPITO. Thank you, Admiral, for coming. Thank you for the visit to my office. And I would like to start off by thanking you for serving and your long years of service. It's very much appreciated by many of us.

We discussed in West Virginia, you know, there are a lot of core functions of the Coast Guard that we all think about when we think about the Coast Guard. Of course, it's mostly being on ships protecting the waterways and our waters, but you also have underpinning functions that a lot of which are performed in the State of West Virginia. So we have our Operations Systems Center of the Coast Guard, we have the National Vessel Documentation Center

in Falling Waters, and I think you have one other facility there as well. Could you speak to the importance of those functions as an overall part of the Coast Guard mission?

Admiral SCHULTZ. Well, Senator, thanks for the question and the opportunity to meet with you a couple weeks back. Obviously, the Ops Systems Center underpins our computer capabilities, so that's a critical space for us. Its location in West Virginia suits our needs very well. And that National Vessel Documentation Center, we are in that, from our regulatory roles here, providing mariner credentials at the National Maritime Center and the National Vessel Documentation Center for documented vessels. Those are essential roles enabling functionalities for the maritime nation that we are.

Senator CAPITO. On the Documentation Center, do you coordinate with Homeland Security on that? I know it's not a shared function, but is that something where you're working together on because obviously that has a lot to do with our own homeland security.

Admiral SCHULTZ. You know, Senator, being one of the 22 components within the Department of Homeland Security, I'm not sure of that interface there, but I will certainly delve into that and circle back with you on that, ma'am.

Senator CAPITO. I know that you talked about drug interdiction as a function of the Coast Guard's responsibilities. This is important to many of us. Obviously, it's important to our Nation. I think when we talked in my office, you talked about getting a couple new vessels that would help with interdiction. Could you talk about that a little bit? And I think in response to Senator Hassan, you might have mentioned that fentanyl probably is not coming over in ships because it would be smaller portions, is that correct? Could you kind of reiterate that response?

Admiral SCHULTZ. Yes, ma'am. First off, Senator, with the support of the Congress and the administration, we have been fielding new assets. We're on a fairly healthy trajectory for recapitalizing, you know, in some cases, ships that are more than a half century old here.

The national security cutters, Senator Wicker asked me a question earlier about their suitability, their capability. They're fantastic ships. The omnibus here for 2018 included funding for the tenth and eleventh national security cutters. That was a program of record of eight ships. So that will enhance our capacity at the end of the day to get after the illicit trafficking of narcotics and other commodities at sea.

Regarding the fentanyl, we are not seeing much movement of fentanyl in the maritime spaces today, ma'am. It's—you know, the quantities are much smaller. Bulk cocaine, you know, obviously is moved by—predominantly moved by a small Panga, it's a go-fast vessel, sometimes through a very small percentage of fishing vessels, sometimes these semi-submersible submarines. Fentanyl, you know, a cartel is essentially an individual in their house with their laptop computer using the U.S. mail system to deliver very small quantities. I mentioned earlier, you know, a sugar- or Equal-sized packet is hundreds of hits of fentanyl.

So to date, we have not seen that in the maritime spaces. Could it be moved at sea? Possibly. It's so small, we have not encountered

that at sea yet, ma'am. But we are committed to supporting the Federal Government, the whole-of-government's response to the opioid crisis. I think we're sort of putting the brushstrokes on what the Coast Guard's appropriate role in that mission space would be, ma'am.

Senator CAPITO. I think you also mentioned that you're interested in and have room for growth. How are you seeing your recruitment efforts just in general? Are you planning an accelerated rate of recruitment to get your numbers up? How are you looking? Are people joining or are you having to really beat the bushes to find people that are interested? They don't maybe understand the future and current mission of the Coast Guard? How are you all approaching that?

Admiral SCHULTZ. Senator, I would say the relevance of the United States Coast Guard to the safety and security of the Nation has never been higher. Regarding recruiting, we're probably bringing in the brightest young men and women that the service has seen. So it's terrific men and women coming to the Coast Guard.

Back a short 5, 6 years ago, our enrollment at our single source of recruiting enlisted members at Cape May was throttled back to about 1,500 or 1,800 candidates a year, recruits a year. We're trying to steady the ship at about 4,000 Active Duty recruits a year, 400 Reserve recruits. We've been meeting those targets.

We had to—we had made some reductions here in past years. I talked earlier about the operational side of the budget, and sometimes you're forced to make choices. We had cut back recruiting. We have brought recruiters back. We're looking to get those recruiters back on budget. We are sort of carrying them as support allowance billets here, but we're going back on budget for I think it was an approximate number, around 50 recruiters.

So I think our recruitment is at a healthy pace. We are finding great kids on the streets of America. But if you look across all the services, if you look at the population, it's about 25 to 30 percent of the kids are eligible for service when you look at, you know, weight requirements, mental health requirements, the level of academic preparation, it's not a huge number to recruit from, but we are hitting our numbers, we're bringing great kids into the Coast Guard, and I think we're in pretty solid shape there, ma'am.

Senator CAPITO. Thank you. Thank you very much.

Admiral SCHULTZ. Yes, ma'am.

Senator WICKER. Thank you, Senator Capito.

Senator Cruz.

**STATEMENT OF HON. TED CRUZ,
U.S. SENATOR FROM TEXAS**

Senator CRUZ. Thank you, Mr. Chairman.

Admiral, welcome.

Admiral SCHULTZ. Senator, good to see you again.

Senator CRUZ. Good to see you. Thank you for being here. Congratulations on your nomination.

Let me just take a minute just to thank you, thank you personally, and thank the incredible heroes, the men and women of the Coast Guard. You're called upon to do an incredibly difficult job each and every day, but it was never more difficult or more impor-

tant than during the ravages of Hurricane Harvey. And the job that the Coast Guard did Texans saw firsthand. In Texas, over 11,000 people were rescued. Over 1,300 pets were rescued. And not only that, there are over 2,500 coastguardsmen who live in areas of Texas impacted by the storm. Of them, at least 51 of them suffered catastrophic damage to their own homes, and 124 others reported property damage, and yet over and over again we had heroes who their own home was underwater, and yet I met with one young Coast Guard pilot who hiked out through waist-high water to a parking lot to go be picked up by a chopper to go rescue others even though his own home was underwater.

I've really been blessed to spend significant time with the Coast Guard swimmers and pilots. And just on behalf of the people of Texas, I want to say thank you for the extraordinary job the Coast Guard did during our time of need.

Admiral SCHULTZ. Senator, thank you for that. And it was good to see you on the ground. We saw too much of each other, but I think it meant a lot to our men and women that you were at our facilities, you were on the hangar decks shaking hands with those, you know, rescue swimmers, those wrench-turners, the people in the command centers. It was an unprecedented level of challenge down there. And I'm very proud of the men and women of the Coast Guard, but it's very reassuring here that you sort of recognized what a unique set of circumstances there were. So thank you for your continued support there.

Senator CRUZ. It was extraordinary bravery, and the entire state is grateful for it.

You know, I would ask, looking back now, now that hurricane is in the past, from your perspective, what were the lessons learned from Harvey and Irma and Maria? We had a hurricane season that I hope we don't repeat anytime soon. What lessons do you think the Coast Guard has learned in terms of how to handle those challenges even better?

Admiral SCHULTZ. Senator, I appreciate that question. It's a great question. I think what we realized, we were about 7 weeks in the thick of those four major hurricanes, and that challenged the organization. We deployed about 3,000 people, about 2,000 of which are Active Duty Coast Guard men and women from other locations. In New England, where we normally have a three-helicopter station, a three-fixed-wing station, and an air station at Cape Cod, we drew that down to one aircraft. We took risks there. We closed down seasonal facilities in the Great Lakes to draw Coast Guard men and women in from that region. We brought folks from as far away as Alaska and Hawaii to support the efforts down there.

So we took tremendous risks in other parts of the Coast Guard. You know, negotiated, thoughtful risks, I was never uncomfortable, I don't think we put my PACAREA colleague in a place of discomfort, but had that been a Super Sandy type series of events that went on—and it has gone on. I don't want to diminish the Commonwealth of Puerto Rico is still struggling. People don't have power. Our Coast Guard men and women have challenges. But had that been more Sandy-like versus an intense 7-week period, I think our 6,200 number Reserve force would prove inadequate. We're trying to plus those numbers up.

Our Commandant has talked about needing to grow the Reservists about 1,100 in the coming years. I absolutely share that commitment. I think we're at a critical low point. Back when I used to do legislative affairs work, we were trying to get to a 10,000 level of reservists. We're at about 8,100. This was about, you know, 13, 14 years ago. Right now we're authorized about 7,000. We need to get above that 7,000 level to be the ready, relevant, responsive force that America needs, sir.

In terms of social media, you know, we found as the 9/11 system collapsed in use and in the outlying areas, folks were going to social media to call the Coast Guard, we were able to adapt and improvise and meet those demands, but we've got to look at that and what our approach is, you know, not just in the Coast Guard, but in the emergency support functions writ large, sort of whole-of-government. We don't have the staffing, the manpower, all over the country to respond to social media cries for help. We did there. So we're working on that. We're working on our internal policies.

So a lot of lessons learned, sir, from that, but it's ongoing. We're trying to be sure we're ready for this upcoming hurricane season, which is right around the corner.

Senator CRUZ. Well, and I would also point to IT infrastructure. I know the T-1 line went down—

Admiral SCHULTZ. Yes, sir.

Senator CRUZ.—in the headquarters in the midst of that, and you guys innovated and dealt with it anyway, but it obviously raises a question going forward of having a backup to prevent it from going down.

Admiral SCHULTZ. And, Senator, if I could, you were at Houston. That is a new facility that came from previous years' supplemental fundings from other hurricane damage, Rita and—I think it was Wilma and Rita that was the genesis of the funds there. That's as good as it gets for us. Many of our facilities would not have endured as well or had the resilience that we had in Houston to support that level of operation. So that continued support from the administration and Congress to beef up our resilience and get after some of these facilities that are very aged would be very beneficial to our readiness for the Nation.

Senator CRUZ. And, Mr. Chairman, if I could ask one more question—

Senator WICKER. Certainly.

Senator CRUZ.—which is it has been an ongoing concern of mine, the lack of a reliable backup for GPS. We rely on GPS for an enormous amount both to defend our Nation and on the commercial side. How big a concern is the lack of a backup for GPS? And what do you think Congress should do about it?

Admiral SCHULTZ. Well, Senator, I think the reliance of where we are today in 2018 on GPS, I don't think any of us envisioned that. The Coast Guard is one of many stakeholders working within our Department. DOT, DoD, I think there's an assessment of the various segments that are reliant on that. There's ongoing work. There's a National Executive Committee that's focused on that. We're a contributor to that. I think we were awarded about \$500,000 from the Congress to look at jamming capabilities that are out there to shut down GPS in the maritime domain, sir.

So I would say I share your concern. We are an involved participant and stakeholder to a broader whole-of-government, that EXCOM, solutions set here that will hopefully figure out a way forward. And I think the Congress is absolutely in the thick of that, Senator.

Senator CRUZ. Well, I look forward to continuing to work with you.

Admiral SCHULTZ. Thank you, sir. We're committed to working with you on that.

Senator CRUZ. Thank you.

Thank you, Mr. Chairman.

Senator WICKER. Thank you, Senator Cruz.

Senator Cortez Masto, you don't have any follow-up questions, do you?

[No audible response.]

Senator WICKER. I can report that Chairman Thune hopes to place Admiral Schultz on our next markup. That being the case, we need to modify our normal procedure about leaving the record open. So we'll only leave the record open through Thursday of this week, April 19. During this time, Senators are asked to submit any questions for the record.

And, Admiral, do you think you could get the answers to these written questions back to the Committee no later than Monday, April 23?

Admiral SCHULTZ. Chairman, you have mine and Admiral Zukunft's full commitment to be responsive to that request.

Senator WICKER. Thank you. Very good. And I think it's safe to say that the prospects of your confirmation are pretty darn good.

So thank you for your appearance today. I appreciate the cooperation of so many members of the full Committee. This hearing is now adjourned. Thank you.

Admiral SCHULTZ. Thank you, Senator.

[Whereupon, at 11:38 a.m., the hearing was adjourned.]

A P P E N D I X

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. ROGER WICKER TO VICE ADMIRAL KARL L. SCHULTZ

Question 1. Admiral Schultz, The Coast Guard's counter drug mission is becoming much more complex than even just a few years ago. Transnational criminal organizations are utilizing much more advanced semi-submersible vessels, as well as remotely operated vessels, that are able to enter U.S. waters, as well as our largest ports, undetected.

What disruptive autonomous underwater, surface, or hybrid solar, wind and electric vessels are you exploring to combat this assault (TCO drug trade) on our shores and in our ports?

Answer. The FY 2018 appropriation included funding to conduct a pilot program studying new technologies, such as autonomous vessels, to improve our maritime domain awareness across our mission sets.

Question 2. Does the Coast Guard currently have the resources to test, evaluate and integrate disruptive technologies like autonomous vessels to support the Coast Guard's counter drug mission at the Mona Passage, off the coast of San Diego and the Gulf of Mexico?

Answer. Given the vast maritime domain and broad mission sets for which the Coast Guard is responsible, autonomous aviation, surface, and subsurface assets may be part of a comprehensive solution to combatting smuggling activity conducted by Transnational Criminal Organizations.

The FY 2018 appropriation included funding to conduct a pilot program to study some of these technologies.

Question 3. If given adequate resources and funding, would the Coast Guard benefit from adopting these new technologies to combat the flow of illegal narcotics across our maritime borders?

Answer. We are currently exploring how new technology can best be applied to improve our performance across all missions.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. DAN SULLIVAN TO VICE ADMIRAL KARL L. SCHULTZ

Question 1. Have Coast Guard vessel deployments increased to the Arctic, or are they scheduled to increase? And if not, why not?

Answer. The Coast Guard has increased cutter deployments to the Arctic for the annual Operation Arctic Shield, focused on promoting national interests and sovereignty throughout the Arctic. The increased level of human activity in the Arctic continues to increase the probability of a maritime incident and requires a heightened Coast Guard presence to monitor activity, respond to incidents, enforce regulations and support national interests. The Coast Guard Heavy Polar Icebreaker acquisition program is the first crucial step to providing year-round assured access to the Arctic.

Question 2. The closest Coast Guard homeport to the Arctic Circle is over 1,500 miles away from the operating area. The Coast Guard is on record expressing a need for a strategic Arctic port. How beneficial would such a port be for the Coast Guard? And what have your communications been with the Army Corps of Engineers and others in transmitting this demand signal?

Answer. A strategic Arctic port would help assure our Nation's ability to maintain U.S. access throughout the Arctic region to more quickly respond to current and future national security demands in the Arctic, to preserve its economic interests, and to exercise U.S. sovereignty.

Specifically, a strategic Arctic port capable of accommodating USCG and DoD surface assets would reduce the distance U.S. vessels currently travel for logistical support; it would increase the time these assets can perform missions in the Arctic re-

gion; and it could serve as a forward staging base and a hub for missions to advance U.S. national security interests.

For the development of the Coast Guard's February 11, 2014 Report to Congress on the Feasibility of Establishing an Arctic Deep-Draft Seaport, the Coast Guard consulted with the U.S. Army Corps of Engineers (USACE) as well as the U.S. Navy and the U.S. Maritime Administration. This report addressed the feasibility of establishing a deepwater seaport in the Arctic to protect and advance strategic United States interests within the Arctic region. Subsequent to that collaboration, Section 1202(c) of the Water Infrastructure Improvements for the Nation (WINN) Act directed the Army Corps to ". . . consult with the Secretary of the department in which the Coast Guard is operating to identify benefits in carrying out the missions specified in section 888 of the Homeland Security Act of 2002 (6 U.S.C. 468) associated with an Arctic deep draft port." The Coast Guard has had numerous exchanges with the USACE regarding this study under the WINN Act, to include the exchange of information related to vessel transits and automatic identification system data.

Question 3. For a number of years there has been a military housing shortage in Kodiak. The recently passed Ominbus had funding for Coast Guard housing. What is the current situation in Kodiak?

Answer. Currently, Coast Guard housing in Kodiak maintains full occupancy.

Question 4. Where does Alaska writ large stand in line for additional Coast Guard infrastructure funding?

Answer. Infrastructure funding priorities are based on numerous factors to include service location need as well as privately owned options. Future projection shows a possible deficit in Alaska housing. Currently, my staff is exploring ways to decrease this deficit, including a phased approach to address both current and future needs as additional assets are homeported in Alaska.

Question 5. In 2016 the Coast Guard finalized a rule that requires the use of biometric readers to verify TWIC (Transportation Worker Identification Credential) cards. It is my understanding that both industry and Coast Guard have acknowledged this difference and Coast Guard has indicated to industry and the regulated community that there would be a delay.

The compliance deadline of August 23, 2018 is fast approaching. And these facilities, having relied on assurances from Coast Guard itself, will not be able to comply.

Did the rule that was finalized in 2016 differ from the proposal put forth in 2013?

Answer. The language in the Final Rule was slightly different than what was in the Notice of Proposed Rulemaking, and that difference created some uncertainty in the applicability of the rule.

Question 6. What is the status of the rule implementation? Will there be a delay? And will industry be consulted before a new compliance date is made?

Answer. In consultation with DHS, the Coast Guard diligently considered a host of options regarding the TWIC Reader Rule. We evaluated all options and ultimately initiated a rulemaking project to provide clarity to the affected population. The Office of Management and Budget is currently reviewing the Notice of Proposed Rulemaking. Once published in the Federal Register, the public will have the opportunity to comment on the Notice of Proposed Rulemaking.

Question 7. Is there a training shortfall within the Coast Guard to provide Coast Guardsmen the needed authorities to conduct maritime interdiction operations?

Answer. There are no known training shortfalls that would limit our authorities to conduct maritime interdictions.

Question 8. What are the Coast Guard's approval authorities for escalation of force?

Answer. Collectively, 14 U.S.C. § 89(a), 14 U.S.C. § 637, and 14 U.S.C. § 2237 provide a triad of authority, indemnification, and criminal offense designed to support USCG efforts to stop non-compliant vessel when conducting interdiction.

Question 9. Does the Coast Guard have a training, rank, and/or experience level problem that would prevent vessel commanders from making escalation of force decisions on the spot (not including self-defense)? How can this be addressed?

Answer. No. The Coast Guard does execute many bi-lateral and multi-lateral agreements that sometimes require legal review and senior level approval to ensure interdictions are conducted according to those agreements when operating on the high seas.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. JIM INHOFE TO
VICE ADMIRAL KARL L. SCHULTZ

Question 1. As Chairman of the Readiness Subcommittee of the Senate Armed Services Committee, I know that our military was gutted under President Obama. Under sequestration, Defense accounted for 50 percent of the cuts, but only 16 percent of spending. As a result, our military equipment is aging and our base infrastructure requires critical maintenance and upgrades. We have seen impacts on personnel, pilots are leaving the military because they are not getting flight hours to maintain their skills. Today, we are fixing these problems—in large part because our Senior Military leaders have finally acknowledged there is a problem. We finally have an Administration that will support the necessary funding to rebuild our military—and Congress went above and beyond the President’s request in the funding bill to give our men and women in uniform the resources required to answer the call quickly and effectively. Now, because the Military will always make it work, it took a long time before we saw the impact to readiness that I just described. As you well know, the Coast Guard has a unique responsibility for both Homeland Security and non-Homeland Security—in fact it has 11 statutory missions.

How would you characterize the state of readiness for the United States Coast Guard today?

Answer. The Coast Guard appreciates Congress’s support to rebuild the readiness of our Service. The CG, like the other Armed Forces, has faced significant challenges under the Budget Control Act caps and faces challenges associated with degraded readiness. Unfortunately, persistent underfunding has eroded readiness and forced the CG to prioritize the most critical near-term operations and direct support activities at the expense of modernizing, advancing capabilities, and building capacity to keep pace with the proliferating threats we face as a Nation. Specifically, we face:

- Aging assets with significantly increasing maintenance costs;
- Lost purchasing power due to the lack of non-pay inflation;
- Deferred maintenance across all asset portfolios and shore infrastructure;
- Strained and undersized workforce;
- Emerging requirements (*e.g.*, cyber-security, marine safety capacity).

Question 2. When your predecessor testified before this Committee, I asked him about the condition of the Coast Guard’s Inland River Tenders. These vessels maintaining navigation aids and buoys marking water channels. These channels must be marked for river barges to safely move grain, fertilizer, steel, and refined petroleum along 600 miles of river from the Port of Catoosa in Tulsa to New Orleans and beyond. These vessels are old, the Coast Guard vessel responsible for navigation aids in the Arkansas River was built in 1965. Coast Guard Reauthorization Act that passed this Committee included my provision asking the Coast Guard for a report on an acquisition strategy for new river tenders.

Can you discuss the current acquisition plan and whether there’s any opportunity to accelerate the acquisition of these sorely needed replacement ships?

Answer. We are incredibly thankful to Congress for the additional funding in FY18 to accelerate the recapitalization of our inland fleet. The program entered the “Analyze/Select” phase (ADE–1) in December 2017 and is planning to engage with industry and other stakeholders to find efficiencies that can further accelerate the program. Based on the additional funding provided in FY18, we are working to accelerate via the following initiatives:

- Accelerating design studies and leveraging existing work with external agencies (*i.e.*, Army Corps, etc.),
- Advancing the completion of critical acquisition milestones and Alternative Analysis studies,
- Hiring necessary personnel to work toward an accelerated acquisition timeline, and
- Engaging with industry to leverage their collective knowledge and support.

Question 3. Are you working with other agencies, like the Army Corps of Engineers, to determine if you can incorporate existing vessel designs to make recapitalization less expensive and time-consuming?

Answer. Yes. The Coast Guard is working with the Army Corps of Engineers and industry to develop “indicative” designs that will meet the government’s operational requirements. These designs will leverage existing state of the market technology that will provide an affordable and highly capable material solution to meet the Nation’s needs within the Marine Transportation System.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. TODD YOUNG TO
VICE ADMIRAL KARL L. SCHULTZ

Question 1. Vice Admiral, on February 15, 2018, Admiral Tidd, Commander, United States Southern Command, testified before the Senate Armed Services Committee. During the course of the hearing, Ranking Member Reed asked Admiral Tidd to confirm what percentage of shipments thought to be containing illicit material were able to be interdicted using currently available resources. Admiral Tidd testified that they were only able to interdict about 25 percent of the vessels transporting illicit materials.

First, do you agree with Admiral Tidd's assessment?

Answer. Yes. The Coast Guard has significantly increased our cutter presence in the transit zone since 2014, however, in that same time, the TCO shipment of illicit material, specifically cocaine, has increased dramatically.

While we have available intelligence that allows us to know when many of these movements take place, we do not have the number of assets available to achieve the interdiction rates directed by national policy.

Question 2. Second, what role does the Coast Guard specifically play in the interdiction of these shipments?

Answer. We are the primary agency responsible for interdicting vessels on the high seas. We are uniquely equipped with Airborne Use of Force Packages onboard cutters deploying to the Eastern Pacific where the majority of cocaine is shipped via go fast and low-profile vessels. Our National Security Cutters (NSCs) are also equipped with organic intelligence collection capability which further facilitates our efforts to combat TCOs.

Question 3. Third, what specific assets does the Coast Guard need to interdict more illicit shipments? (For each additional asset, please describe how this additional asset would specifically change the percentage of illicit shipments we could interdict.)

Answer. The Coast Guard's aging Medium Endurance Cutters are an average of 35 years old, but conduct 40 percent of the interdiction in the offshore areas. I am committed to the continuing the recapitalization of the ships with the Offshore Patrol Cutter (OPC), in order to make sure we are able to continue targeting TCOs where they are most vulnerable—at sea—in the years to come. The FY18 appropriation includes funding for construction of the 1st OPC and long lead time material for the 2nd OPC.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. BILL NELSON TO
VICE ADMIRAL KARL L. SCHULTZ

Question. Combined Fiscal Year 2018 and the proposed Fiscal Year 2019 budgets will fund the first two offshore patrol cutters and long-lead-time materials for a third. These new vessels will replace aging cutters. How will these new vessels, which are being built in Florida, allow you to better serve the American people?

Answer. The Offshore Patrol Cutter (OPC) will be the workhorse of the Coast Guard's offshore fleet for decades to come; bridge the capability between the National Security Cutter (NSC) and the Fast Response Cutter (FRC), and replace the aging Medium Endurance Cutter (MEC) fleet. OPCs will support the Coast Guard's Western Hemisphere Strategy and help protect the southern border from dangerous criminal activity carried out by transnational criminal organizations (TCOs) in the form of illegal narcotics trafficking, human smuggling and illegal immigration. OPCs will serve as Mobile Command & Control platforms for surge operations, including hurricane response, events of national significance and mass migration. Finally, OPCs will support domestic and foreign policy objectives through defense operations, security, economic, and humanitarian efforts.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MARIA CANTWELL TO
VICE ADMIRAL KARL L. SCHULTZ

Question 1. The National Defense Authorization Act for 2017 (P.L. 114-328) was signed into law on December 23, 2016. This legislation included authorities to expand military family leave policies for the birth or adoption of a child. Specifically, the NDAA authorizes:

- An increase of secondary caregiver (same sex spouses, fathers) family leave, for the birth of a child from 10 days to 21 days.

- An increase in primary caregiver family leave for the adoption of a child from 21 days to 6 weeks.
- Elimination of provisions allowing only one member of the armed forces family leave when two members of the armed forces are pursuing adoption of a child.
- Authorization of 21 days of family leave for secondary caregivers for the adoption of a child.

In March 2017, I sent the Coast Guard a letter requesting these expanded benefits be swiftly implemented. More than a year has lapsed since I sent this letter and the Coast Guard and there has been no implementation or plan to expand these policies.

What is your timeline and plan to implement these expanded family leave policies?

Answer. The Coast Guard is preparing to implement the new caregiver leave policies of the 2017 NDAA. We are in direct coordination with the Department of Defense—specifically the Navy—to ensure that this implementation provides parity across the Services and is in alignment with Title 10 and Title 14 requirements. We anticipate promulgating our new policy simultaneous to the Navy’s.

Question 2. Does the Coast Guard have the authority to implement these expanded family leave policies on their own or does the Coast Guard have to wait for DoD implementation before moving forward?

Answer. In accordance with 10 USC 701 and 14 USC 431, the CG will wait for DoD implementation before moving forward.

Question 3. The Coast Guard operates 52-foot Special Purpose Heavy Weather boats on the large coastal bars of Washington and Oregon. These boats were purpose built for the Pacific Northwest, and are all over 60 years old. The 47-foot motor life boat does not have nearly the operational capabilities of the 52-foot Special Purpose Heavy Weather boats.

Do you agree that the 47-foot motor life boat is not a suitable replacement vessel for the 52-foot Special Purpose Heavy Weather boat?

Answer. The 52-foot MLB is a reliable vessel that has served us well for over 50 years, and it has specialized capabilities, especially as it relates to towing capacity and seakeeping. There is currently no plan to take them out of service. When the time comes to replace the 52-foot MLBs, the assets replacing them will meet all of the units’ mission requirements.

Question 4. Does the Coast Guard have a service life extension and recapitalization plan for the 52-foot Special Purpose Heavy weather boat?

Answer. The Coast Guard is currently focused on executing a Service Life Extension Program (SLEP) for the 47-foot Motor Lifeboat (47 MLB) fleet. The 47 MLBs conduct the vast majority of SAR in surf and heavy weather conditions throughout the nation, and are approaching the end of their projected service lives. The 47 MLB SLEP will replace the engines and other major components, and is expected to extend the 47 MLB fleet’s service life by an additional 20 years.

Question 5. If no, when will the Coast Guard develop a service life extension and recapitalization plan for the 52-foot Special Purpose Heavy Weather boat?

Answer. We continue to operate and maintain the 52-foot MLBs, and there is currently no plan to take them out of service. If a determination is made that a replacement boat is required for the 52-foot MLB, the Coast Guard would ensure the assets meet all of the mission requirements for the units.

Question 6. In terms of surface recapitalization priorities, where is the 52-foot Special Purpose Heavy Weather boat on this list?

Answer. We continue to maintain and operate the 52-foot MLBs, and there is currently no plan to take them out of service.

Question 7. Maintaining the four 60 year old 52s is becoming a serious engineering and financial challenge. If you are confirmed, will you work with Congress to accelerate the acquisition timeline for replacement vessels for the 52-foot motor lifeboats?

Answer. I understand the importance of providing an asset that is capable of operating in the extreme conditions of the Pacific Northwest. When the time comes to replace the 52-foot MLBs, I assure you that the assets replacing them will meet all of the units’ mission requirements.

Question 8. There are approximately only 200 surfmen in the entire Coast Guard and only an estimated 50 of those members are certified to operate the 52-foot motor lifeboat. The Coast Guard Motor Lifeboat School at Cape Disappointment, Washington does not have a 52-foot motor lifeboat to use as a training platform. How can the Coast Guard increase the number surfmen trained and proficient to

safely operate and handle the 52-foot motor lifeboat? What other training resource gaps would you work to address as Commandant?

Answer. The Coast Guard Motor Lifeboat School provides instruction pertaining to the skills and knowledge needed to operate a heavy weather and/or surf capable boat in those conditions. The Coast Guard Motor Lifeboat School does not qualify or certify students on the 47-foot or 52-foot MLBs. Specific boat type training, qualification, and certification on the Coast Guard's surf-capable boats occur at the individual stations. The Coast Guard is in the process of reviewing its Prospective Surfman Program to ensure that it adequately supports the needs of the service.

Question 9. Following the November 2017 Ocean, Atmosphere, Fisheries, and Coast Guard Subcommittee oversight hearing I submitted questions for the record to Admiral Zukunft what resources and funding the Coast Guard needed to support research and technology development to be better prepared to prevent and more effectively respond to a tar sands oil spill. The answer I was provided detailed what the Coast Guard is currently doing but, did not articulate the resources or funding needed for continued investment.

What specific funding does the Coast Guard need to adequately invest in technologies to more effectively respond to a tar sands oil spill?

Answer. Oil pollution research is conducted by various Federal agencies, including the U.S. Coast Guard, as well as industry, international, state and academic institutions. The Coast Guard coordinates Federal research through the Interagency Coordinating Committee on Oil Pollution Research (ICOPR) and leverages the multiple partners in order to advance the collective body of knowledge to increase marine environmental response knowledge and capabilities across all stakeholders. Neither the Coast Guard nor ICOPR has conducted an exhaustive analysis to determine what would constitute an adequate level of investment in technology specific to tar sands response. Such an investment could encompass a broad spectrum or technologies and capabilities, many of which the Coast Guard likely would not own or operate.

The Coast Guard Research and Development Center is currently undertaking a project that directly contributes to improvements in understanding "new oils" for the purpose of improving prevention and response capabilities. The overall objective of this project is to identify best practices to assist Federal On Scene Coordinators' responses to Oil Sands spills. This project began in August of 2014 and is expected to continue through February of 2020, and is funded through an allocation from the Oil Spill Liability Trust Fund and the Great Lakes Research Initiative.

Question 10. It is my understanding that the Coast Guard is the chair of the Interagency Coordinating Committee on Oil Pollution Research (ICOPR). I am concerned that the ICOPR lacks necessary funding to support projects to increase marine environmental response capabilities and address known research gaps. How can the Coast Guard improve funding to the ICOPR? Would you consider entering into agreements with member agencies on ICOPR to improve funding?

Answer. ICOPR itself is not funded, and does not undertake research projects. ICOPR serves as the coordinating body for each of its 15 member agencies to routinely share information, coordinate on strategic direction, and provide opportunities for member agencies to collaborate at the project level. Individual project efforts are funded through each agency's own budget processes, and some member agencies have entered into interagency agreements. ICOPR encourages that such agreements maximize efforts by all member agencies.

Question 11. More than half the time has lapsed for the Fiscal Year 2015–2021 Oil Pollution Research and Technology Plan. What principal objectives have been completed and priorities been addressed since the inception of the plan?

Answer. In September 2015, ICOPR released its FY 2015–2021 Oil Pollution Research and Technology Plan (OPRTP), which established a research framework grouped into four broad classes: Prevention, Preparedness, Response, and Injury Assessment and Restoration. The six year OPRTP further classified and prioritized research within the classes into 25 standing research areas (SRAs), representing the most common research themes encountered for oil spills. Research priorities were established for each SRA, for a total of 150 priorities. The Interagency Committee's 2016–2017 focus was to encourage the alignment of member agency research programs to address identified research gaps based on these common set of categories. During this period, the first two years of performance under the current OPRTP, member agencies are conducting research in 92 percent of the 25 Standing Research Areas. Further, current member research projects address some aspect of 61 percent of the 150 research priorities identified in the OPRTP. In FY 2018–2019, ICOPR will analyze any gaps in addressing priorities in 2016–2017, and determine best ways to address the gaps.

Question 12. Will ICCOPR meet all pollution research needs, priorities, and goals in the Fiscal Year 2015–2021 Oil Pollution Research and Technology Plan by the end of Fiscal Year 2021?

Answer. ICCOPR does not directly fund research projects, but rather coordinates research by the member organizations. ICCOPR does not undertake projects nor meet any research needs, priorities, or goals. The member agencies of ICCOPR use the oil pollution research and technology plan (R&T Plan) to provide strategic direction for their own programs. ICCOPR encourages all entities (*e.g.*, government, industry, academia, and others) within the oil spill prevention, preparedness, response, and injury assessment and restoration communities to capitalize on the strategic direction provided by the R&T Plan (2015–2021) to shape projects to assist in filling these gaps. ICCOPR strives to continue to identify emerging research areas in light of the changing landscape, and publish strategic direction to inform R&D research agendas.

Question 13. What funding does ICCOPR or the Coast Guard need to meet all the research goals articulated in the Fiscal Year 2015–2021 Oil Pollution Research and Technology Plan by the end of Fiscal Year 2021?

Answer. ICCOPR is not funded, but provides a coordination mechanism for joint research and sets strategic direction for the member agencies. Each member agency funds their research through their own appropriation process. No ICCOPR member agency has singular responsibility for all the research goals identified in the plan.

Question 14. Is ICCOPR leveraging research and partnership opportunities with our National Labs?

Answer. ICCOPR routinely hosts members of National Labs to speak at quarterly meetings, which has resulted in partnerships on new-start projects with the member agencies of ICCOPR.

Question 15. If yes, what specific ongoing research projects does ICCOPR have with our National Labs?

Answer. ICCOPR does not have any ongoing projects as it is an information sharing body only. Individual member agencies of ICCOPR have partnered on projects with National Labs. For example, the Coast Guard just completed a project with Argonne National Lab on development of material to absorb oil in the water column.

Question 16. In March 2017, there were only two Oil Spill Response Organizations (OSROs) in Washington state classified by the Coast Guard as capable of responding to a non-floating tar sands oil spill. What is the Coast Guard doing to ensure there are enough classified OSROs and resources capable of responding to a non-floating tar sands oil spill in Washington?

Answer. The Coast Guard is committed to ensuring that adequate response capabilities exist to respond to oil spills in the coastal zone. The physical capabilities brought to bear during a spill response are primarily from industry sources, whether through the Responsible Party or under contract to the Coast Guard under a basic ordering agreement. While tar sands (diluted bitumen) may initially float, weathering or sedimentation may eventually cause it to sink. The Coast Guard has classification programs for both floating and nonfloating oils. Currently, the Coast Guard has approved six nonfloating oil spill response organizations (OSROs) in Washington. Moreover, eleven classified oil spill response organizations (OSROs) are capable of responding to floating tar sands oil in the state of Washington.

Question 17. I secured language in the Coast Guard Authorization Act of 2015 to extend the high volume port area in Puget Sound to include Port Angeles and Cape Flattery, Washington to minimize oil spill response and equipment deployment times. Since this change in designation has the Coast Guard verified that previously approved Vessel Response Plans are still sufficient in meeting the new faster response equipment deployment standards?

Answer. The Coast Guard has verified that approved vessel response plans meet the new requirements in the high volume port area.

Question 18. If yes, what was the result of this verification? Were any of the response plans determined inadequate for meeting the new oil spill response standards?

Answer. In September 2016, the Coast Guard conducted a preparedness assessment visit in the State of Washington, and evaluated the Marine Spill Response Corporation (MSRC) and the National Response Corporation (NRC). These OSROs, and in particular their response resources listed in the Response Resource Inventory (RRI), were found to be compliant with the response requirements in the high volume port area.

Question 19. If no, what is the Coast Guard's plan and timeline for carrying out this verification?

Answer. N/A

Question 20. If a vessel has a Coast Guard approved Vessel Response Plan that only lists OSROs capable of responding to floating oil spills and the vessel begins carrying non-floating oils, how does the Coast Guard retain oversight over the vessel to ensure the current response plan is updated to incorporate resources and OSROs classified to respond to a non-floating oil spill?

Answer. When a vessel owner or operator wants to revise or amend an approved response plan, they must submit it to the Coast Guard for approval. This includes changes in the types of oil carried onboard (oil group) that may affect the required response resources.

Question 21. Access to childcare places an unnecessary burden on Coast Guard families living and serving in these communities.

What specific steps can be taken to address access to childcare challenges for Coast Guard families? What additional specific steps could be taken to improve access to childcare for families stationed at remote Coast Guard stations, such as Coast Guard Station Neah Bay?

Answer. Ensuring the Coast Guard workforce has adequate access to programs to provide family support is a high priority for me.

Since not all locations offer the same childcare options, Coast Guard families are encouraged to explore all available childcare options prior to finalizing a decision.

Question 22. Has the Coast Guard conducted a nationwide assessment of childcare needs for members? Why or why not?

Answer. The last national assessment of childcare was conducted in Fiscal Year 2004.

Question 23. What would the Coast Guard need from Congress to conduct such an assessment?

Answer. The President has recently signed the Fiscal Year 2018 Omnibus Appropriations Act which directs the Coast Guard to conduct and report on the results of a survey regarding cost and availability of child care. Approximately \$500K would enable the survey execution to be expedited.

Question 24. What funding does the Coast Guard need to expand its childcare services it provides to members?

Answer. Upon completion of the directed survey, the Coast Guard will be better suited to determine what level of additional funding may be needed to increase access to childcare services.

Question 25. The Coast Guard received \$150 million in the Fiscal Year 2018 Omnibus under the Navy's ship construction budget, to be used for detail design and construction of a new polar icebreaker, and an additional \$19 million in Coast Guard's Fiscal Year 2018 budget to be used for setting up the Coast Guard acquisition program of record. Additionally, the Administration requested \$750 million in Fiscal Year 2019 for accelerated acquisition and delivery of a new heavy polar icebreaker. However, the new icebreaker will not be commissioned and operational until 2023.

Do you agree that the Coast Guard needs to keep the POLAR STAR in service until the new icebreaker is operational?

Answer. Absolutely. The availability of only one operational heavy polar icebreaker does not allow for guaranteed year round access to the Polar Regions or offer redundancy in the event of a catastrophic casualty in ice-laden waters. To ensure we can protect our national interests, assert our national sovereignty, and meet international commitments the Coast Guard is planning to keep POLAR STAR in active service until delivery of the second new heavy polar icebreaker.

Question 26. What is the Coast Guard's specific plan for continued service life extension of the POLAR STAR?

Answer. The Coast Guard is committed to keeping POLAR STAR operational until at least delivery of the second new heavy polar icebreaker. We conducted a comprehensive engineering analysis on POLAR STAR, which identified critical systems that must be recapitalized to ensure continued operations until delivery of the second heavy polar icebreaker. With this information, we will be conducting a phased Service Life Extension Project (SLEP) (executed between annual deployments) to replace these systems, which will ensure we continue to meet the Nation's needs in the remote Polar Regions while our new icebreakers are under construction.

Question 27. What is the Coast Guard's plan for ensuring there is no gap in polar icebreaker mission support?

Answer. The Coast Guard is committed to sustaining current levels of heavy polar icebreaking activities until new heavy polar icebreakers are delivered. To ensure we continue to meet our statutory mission requirements in the Polar Regions we are planning a phased Service Life Extension Project (SLEP) on POLAR STAR to recapitalize critical engineering systems, which will keep POLAR STAR operational until delivery of the second new heavy polar icebreaker.

Question 28. There is a lot of congressional and administration support to fund a new heavy polar icebreaker for the Coast Guard. I want to ensure this momentum continues as we continue to recapitalize the United States polar icebreaker fleet. What is your plan for securing a fleet of icebreakers?

Answer. We are fully committed to recapitalizing the Nation's heavy polar icebreaker fleet. To accomplish this in the most cost efficient and expeditious manner, we have joined forces with the U.S. Navy via a highly collaborative Integrated Program Office (IPO) where we are leveraging the best of industry, DoD, and Coast Guard shipbuilding practices to acquire new heavy polar icebreakers. On 2 March 2018, we released the Detail Design and Construction (DD&C) Request for Proposal (RFP)—nearly one month early—which will allow for the award of a DD&C contract in FY19 and pave the way for delivery of the first new heavy polar icebreaker in 2023 and follow-on hulls in 2025 and 2026. We are as close as we have been in over 40 years to recapitalizing our icebreaker fleet and continued support and investment will ensure we can meet the Nation's growing needs in the rapidly evolving and dynamic Polar Regions.

Question 29. How many vessels does the Coast Guard need in a polar icebreaker fleet to adequately carry out its statutory missions, protect sovereignty in the Arctic, and support scientific research?

Answer. To ensure continued performance of our vital missions in the Polar Regions (*e.g.*, assertion of national sovereignty, defense readiness, etc.) multiple independent studies have indicated the need is six new polar icebreakers.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. BRIAN SCHATZ TO
VICE ADMIRAL KARL L. SCHULTZ

Question 1. I continue to have reservations about the efficacy of using limited Coast Guard resources to halt the flow of drugs into the United States given the low percentage of successful interdictions over water, and the high percentage of drugs entering the United States over land.

How do you measure success in the Coast Guard's efforts to disrupt cartels and other traffickers in Central and South America?

Answer. We continue to measure both cocaine interdiction rate compared to known flow. In FY 2017, we removed a record 223.8 MT of cocaine from the maritime environment, approximately 8.2 percent of the known flow in that year. Additionally, we improved our record number of 708 suspects detained for further prosecution in FY 2017, and increased by 28 percent the number of cases referred for U.S. prosecution over the prior year.

Question 2. Could you please discuss how the Coast Guard's efforts would be strengthened by a better resourced and staffed State Department, including its country teams across Central and South America?

Answer. The Coast Guard works directly with our partners in the State Department, to facilitate engagements with our Partner Nations in the Eastern Pacific and Caribbean to develop, enact, and enforce bi-lateral and multi-lateral agreements. The State Department is integral to the identification of opportunities for maritime law enforcement training teams to improve partner nations' maritime governance. In addition, the State Department is a key partner in facilitating logistics for our own assets when operating in foreign ports.

Question 3. Can you please explain your view of how the Coast Guard's counter drug mission should evolve over time, including how new Coast Guard platforms (*e.g.*, cutters and UAVs) might be able to shrink the number of resources dedicated to the counter drug mission and give the Coast Guard more flexibility to meet its missions elsewhere?

Answer. The Coast Guard will continue to explore all the tools available to conduct efficient, comprehensive, interdiction activity. The pilot program of the small Unmanned Aerial Vehicle on board the USCGC STRATTON demonstrated that new technology can provide the potential to increase our ability to monitor the maritime domain.

Question 4. I understand the Coast Guard is looking at ways to increase its presence in the Western Pacific.

What types of missions does the Coast Guard assess it might be best positioned to support in the East and South China Seas? And how might it collaborate with others in the Joint community, such as the Navy, to support broader national security objectives?

Answer. The U.S. Coast Guard's unique authorities, capabilities, competencies, and partnerships enable us to meaningfully engage with our coast guard and navy counterparts in the Asia-Pacific region. We currently deploy teams, subject matter experts, and liaison officers throughout the region, including Vietnam, Indonesia, Malaysia, and the Philippines, to facilitate U.S. Coast Guard operations, improve the operational readiness of our international partners, and bolster regional maritime security. Our unique authorities and partnerships enable engagement with other maritime agencies to shape maritime governance, promote regional stability, and ensure national security.

Question 5. What information can you provide about the Coast Guard's assessment of the costs and benefits of a 1.0 National Security Cutter presence in the Western Pacific?

Answer. Using standard deployment models common to the Coast Guard and Navy, it takes approximately three National Security Cutters to provide a sustained 365 day per year (1.0) presence in our typical operating locations within the Western Hemisphere, and potentially more resources for an out-of-hemisphere deployment. National Security Cutters have conducted single deployments alongside DoD combatants in the Western Pacific during Cooperation Afloat Readiness and Training (CARaT) exercises. Conducting more joint operations in the Western Pacific will improve the operational readiness of the partner nations.

Question 6. How is the Coast Guard evaluating opportunities to increase its presence in the West Pacific through joint patrols, ship rider agreements, and other collaborations with partners and allies?

Answer. The Coast Guard works continually with our DoD partners to evaluate opportunities to increase presence in the Western Pacific. Additionally, the Coast Guard deploys teams, subject matter experts, and liaison officers throughout the region, including Vietnam, Indonesia, Malaysia, and the Philippines, to facilitate U.S. Coast Guard operations, improve the operational readiness of our international partners, and bolster regional maritime security. Our unique authorities and partnerships enable engagement with other maritime agencies to shape maritime governance, promote regional stability, and ensure national security.

Question 7. At this time, what additional resources has the Coast Guard identified it needs to support a greater forward presence in the West Pacific? Which of these resources are programmed in the Coast Guard's budget and which are not?

Answer. Measurable Coast Guard forward presence in the Western Pacific will be provided by major cutter deployments. Whether the U.S. Coast Guard deploys a ship to the region depends on U.S. foreign policy objectives and the operational availability of our largest ships—the National Security Cutters. This year the Coast Guard will take delivery of our 7th National Security Cutter, homeported in Honolulu, HI. Additionally the Fiscal Year 2018 Omnibus Appropriation provided funding for the construction of the 10th and 11th National Security Cutters. Personnel and Operations & Maintenance funding for these ships will be programmed in future budget requests.

Question 8. The Coast Guard has a plan to bring C-130Js to Hawaii in the mid-2020s, but Air Station Barbers Point needs a new hangar to maintain them there. When is Air Station Barbers Point expected to take delivery of its first C-130J?

Answer. With the support of Congress, the Coast Guard was able to appropriate the 15th C-130J as a part of the Fiscal Year 2018 Omnibus Appropriation. A 16th C-130J aircraft is required to transition Air Station Barbers Point from the legacy C-130H to the C-130J. Facility upgrades at Air Station Barbers Point have been requested in the Fiscal Year 2019 Presidents Budget and the construction period is expected to be complete in Fiscal Year 2022. Upon delivery of the 16th C-130J and completion of these necessary upgrades, the Coast Guard plans to transition to C-130J operations at Air Station Barbers Point.

Question 9. How is the Coast Guard working with DHS, OMB, and others in the interagency to ensure that the currently unfunded C-130J hangar is on track to be constructed so the Coast Guard keeps to the planned delivery schedule?

Answer. The Coast Guard conducts formal internal reviews to prioritize major acquisition system infrastructure and will look for future opportunities to fund a hangar construction project at Air Station Barbers Point. In the interim, to ensure there is no delay to the planned C-130J delivery schedule, the Coast Guard has re-

quested facility upgrades necessary to operate at Air Station Barbers Point in the Fiscal Year 2019 Presidents Budget.

Question 10. Given the C-130J's mission support to the Joint community, what, if any, opportunities has the Coast Guard assessed and/or explored to fund the new hangar requirement from non-DHS sources?

Answer. As a part of the alternatives analysis for any major systems acquisition the Coast Guard considers many alternatives including re-locating to other government properties, alternative funding sources, or leasing facilities. At this time, the Coast Guard believes the best location to base C-130Js remains at our pre-existing air station.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. GARY PETERS TO
VICE ADMIRAL KARL L. SCHULTZ

Question 1. Vice Admiral Schultz, I understand that Unified Commands are established when the role of the incident commander is shared by two or more individuals, each already having authority in a different responding agency,—in this case Coast Guard and PHMSA—and that they are supposed to help gather information regarding a response and make decisions on future operations.

When is the “After Action Report” from the Unified Command for the April 2018 ATC incident in Mackinac Straits expected to be available, and may I have a copy of the report when it is available.

Answer. I will have my staff provide you with the results of the casualty investigation, once it is complete.

Question 2. In November 2017, I sent a QFR asking to see the report from the Mar/Apr 2017 Coast Guard's R&D Center's Diluted Bitumen Study conducted at Ohmsett Lab in New Jersey, to which the answer was that report was not yet completed.

It has now been a year since that test; please provide an update on the status of the test and a timeline for the report.

Answer. The report for the bitumen research conducted at Ohmsett Lab was published on April 2, 2018. The study is attached.

Question 3. During the hearing, there was mention of oil spill methods and prototypes being tested in Michigan freshwater in April and May 2018. Vice Admiral Schultz mentioned that reports from those tests would not be complete until summer of 2019. Why will this report take more than a year to complete?

Answer. These tests are part of a larger oil sands products spill response research and development project. Additional research and testing is planned as part of this effort, and the results from all of the tests will be analyzed and included in a final report at the conclusion of the project. The Coast Guard expects to complete this project and its report by the summer of 2019.

Question 4. Vice Admiral Schultz, I understand the Coast Guard is looking at buying more light short-range drones for its cutters, as well as larger drones. The outgoing Commandant has been quoted saying “we are grossly underutilizing DHS drones, because DHS just doesn't have enough people to operate them for the prolonged” and offered the suggestion that Coast Guard members could aid DHS and CBP in operating the drones they already have. What do you recommend in order to get DHS and Coast Guard UAS program up to par with DODs?

Answer. The USCG and CBP established a DHS Joint Program Office (JPO) to manage the training, operations, and employment of the MQ-9 UAS and associated crews. USCG pilots and sensor operators work side by side with CBP to conduct joint land and maritime border operations to prevent the flow of illegal narcotics and illegal immigration. The JPO is largely modeled after DoD joint operations and is considered a huge success in DHS joint operations.

In FY18 DoD requested \$6.97B for drone-related procurement, research and development, and system-specific construction. By comparison, the Coast Guard requested \$7.21B to operate the entire Coast Guard and \$6.4M for UAS activities.

Although the Coast Guard UAS program is small in comparison to the overall DoD footprint, we recently conducted a successful prototype of a small UAS (sUAS) system aboard CGC STRATTON on three different patrols.

The sUAS provided surveillance, situational awareness, and tactical Intelligence, Surveillance & Reconnaissance (ISR) over a total of 20+ law enforcement cases; assisting the STRATTON with the interdiction of illicit contraband in international waters. The Coast Guard recently released a request for proposals (RFP) to outfit the entire fleet of National Security Cutters with this significant advancement in


technology/situational awareness. Continued support for this program will ensure the Coast Guard maximizes use of UAS technology in the future.

Question 5. How do you see the Coast Guard utilizing autonomy as part of its missions and operations in the future?

Answer. The Coast Guard is continuously exploring ways to leverage emerging technology to improve mission performance. Autonomous vehicles may present opportunities to enhance performance across several mission areas, particularly with regards to maritime domain awareness.

The Coast Guard is grateful to Congress for the FY 2018 appropriation, which included \$5 million to perform a full assessment of available autonomous systems that can be utilized to improve our maritime domain awareness, particularly in the Pacific theater.

ATTACHMENT




Acquisition Directorate
Research & Development Center

**Testing of Oil Sands Products
Recovery in Fresh Water:
White Paper Study**

Authors: Alexander Balsley and Kurt Hansen

Distribution Statement A: Approved for public release; distribution is unlimited.

April 2018



**Homeland
Security**

Testing of Oil Sands Products Recovery in Fresh Water: White Paper Study

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RDC is grateful for the cooperation of Enbridge Pipeline who worked with the Canadian Association of Petroleum Producers (CAPP) to provide oil for testing. In addition, RDC wishes to acknowledge the assistance of the Coast Guard ATON/MER Asset Line for providing the DESMI Helix skimmer and finally the Bureau of Safety and Environmental Enforcement's National Oil Spill Response Research & Renewable Energy Test Facility (Ohmsett) for lending the ELASTECH drum skimmer.

EXECUTIVE SUMMARY

The U.S. Coast Guard (CG) Research and Development Center (RDC) drafted this white paper to document a test that evaluated the recovery of weathered diluted bitumen in fresh water. In the past, limited recovery tests have been performed for response to diluted bitumen in salt water, but none have been performed in fresh water to ensure that this environment does not cause unique problems.

RDC collaborated with Enbridge to provide the appropriate oil and identified a drum skimmer and a brush skimmer that represent two classes of skimmer commonly found in responders' inventories. The Bureau of Safety and Environmental Enforcement's National Oil Spill Response Research & Renewable Energy Test Facility (Ohmsett) installed a separate test tank adjacent to the main Ohmsett test tank and filled it with fresh water. Ohmsett conducted the test using the ASTM F2709, Standard Test Method for Determining Nameplate Recovery Rate of Stationary Oil Skimmer Systems. The oil was weathered to simulate a spill lasting over 8 days. The recovery efficiency was never below 70 percent for either skimmer, although the recovery rates varied somewhat due to the skimmer configuration. The data collected during this evaluation indicates that with care, standard skimmers do not need special modifications to recover diluted bitumen in fresh water, especially in the early stages of a spill while the oil is on the surface. These typical skimmers need to be monitored closely for rotational speed during the early stages to ensure efficiency. A lower recovery rate may be acceptable for increased efficiency. More powerful pumps may be needed during the later stages of a spill involving this type of product as the viscosity increases.

We recommend that the Coast Guard make this information available to oil spill responders through training, conferences and Federal On Scene Commander's guidance documents.

1 INTRODUCTION

There has been an increase in the movement of products from the Canadian Oil Sands in Alberta into the United States. This includes shipment by rail and pipeline of diluted bitumen (dilbit), which is a crude oil that is composed of bitumen and added diluents. Although the characteristics of dilbit are similar to other crude oils, the combination of heavy components with a lighter crude or condensate raises questions about its behavior when spilled and the best methods to use in response to a spill. Earlier research has been done to address some of these questions. In the United States, the National Academy of Science (NAS) has done some assessment to identify issues that need to be addressed during a pipeline spill (NAS 2016). The USCG Research & Development Center (RDC) performed an initial assessment and identified some outstanding issues for behavior and response (Hansen et. al., 2015). Some work on behavior and response to dilbit spills has been done by multiple Canadian organizations including Environment and Climate Change Canada, Natural Resources Canada and researcher Merv Fingas. (Fingas, 2015; Fieldhouse et. al. 2016; Zhou, 2015).

Kinder-Morgan contracted Witt O'Briens and Polaris to determine behavior and perform initial evaluation for the response options of mechanical recovery, dispersants, and in-situ burning for dilbit spills in salt water. (Taylor et. al., 2014 and Witt/O'Briens et. al., 2013). The two samples tested did not sink during a two-week test in artificial salt water. Other results from this test indicate that dilbit may be dispersible shortly after the oil is spilled, and standard mechanical cleanup equipment can be used in the initial stages of a spill. In-situ burning may also be useful during the early stages of a spill of this type as well. However, this work involving response methods did not address specific issues of spills in fresh water.

All of the efforts described above, occurred after 2010 when a large amount of diluted bitumen escaped from a pipeline into the Kalamazoo River (EPA, 2016). Following that spill, there were concerns about what worked and what did not for response, as well as questions about where the oil ended up.

1.1 Objective

The primary objective of this effort was to investigate the ability to recover dilbit spilled in fresh water using two different oleophilic recovery systems while controlling and monitoring the weathering of the dilbit. The RDC contracted with the Bureau of Safety and Environmental Enforcement's (BSEE) National Oil Spill Response Research & Renewable Energy Test Facility (Ohmsett) to conduct these skimmer tests. The two skimmers used in the tests were the USCG Helix Dual-DOP skimmer and an ELASTEC American Marine TDS-118G drum skimmer. Through a Cooperative Research and Development Agreement (CRADA) with the RDC, Enbridge Pipeline arranged to get some Cold Lake Winter Blend (CLWB) for the Ohmsett tests. Before the test, the RDC believed that the oil properties, at a currently unknown degree of weathering, may become too viscous and/or cohesive to recover and transport using mechanical recovery.

1.2 Background

Previous to this RDC effort, limited data was collected for recovery options of oil sand products. Table 1, below, summarizes the data collected in Canadian tests for three different brush skimmers during temperate summer weather in Gainsford, Alberta, Canada (Taylor *et al.*, 2014). The participants conducted recovery tests on six of the ten days that the oil was in the salt water test tanks. There was a wide range of data for the water content, rate of oil recovery and percent (%) of oil content in the collection cube after decanting.

There was not adequate discussion to determine the cause for such a wide range of data. The conclusions in that report were:

- No performance shortcomings were observed in the current inventory of recovery equipment available to Trans Mountain Pipeline ULC (TMPL) and its contractors;
- The more viscous oil encountered on three of the days caused no skimmer malfunctions including stalls, seizures, or poor recovery;
- Operational adjustments to compensate for increased dilbit viscosity were no different than field adjustments made to equipment during actual spill events for most types of oils;
- This particular dilbit behaved similarly to any other crude oil that the participating spill response professionals had experienced in the past.

The Coast Guard's interest was in determining if any issues related to dilbit recovery were different when fresh water was involved.

Table 1. Results from Gainsford, Alberta, Canada.

Date of Test	Approx. Elapsed Time from Oil Release that Test was Conducted (Hrs.)	Duration of Peak Test	Density of Oil Sample (lab result; Absolute; kg/m ³ @ 15 °C)	Viscosity of Oil Sample (lab result; cSt extrapolated to 15 °C)*	Number of Skimmers Tested	Range of Water Content in Oil Sample from Cal. Cubes (lab result; %)		Range in Rate of Oil Recovery (liters/sec.)		Range of % of Oil Content in Cal. Cube	
						High	Low	High	Low	High	Low
13-May	4	2 min	925.2 [^]	220	3	22.0	5.7	0.86	0.21	33	19
15-May	46	4 min	952.4 [^]	1252	3	11.8 [#]	8.2	0.59	0.58	95	81
17-May	96	4 min	970.1 - 985.1	6603 - 15523	3	50.4	24.1	0.70	0.31	98	79
19-May	144	4 min	982.5 - 989.9	7982 - 17234 [*]	3	47.5	20.0	0.71	0.40	94	28
21-May	192	4 min	986.2 - 993.0	15903 - 30304	3	49.0	26.2	0.82	0.25	95	79
22-May	216	4 min	975.1 ^{^^}	9642	2	17.0	13.2	0.26	0.12	97	73

Notes

– Values were for the oil at the beginning of the test and the oil came from the common discharge tank. After the modification of the test, such that the skimmers were discharging to their own tanks, there was a high and low value from the three tanks.

– – Value is from one tank which had been left for 10 days undisturbed.

• One tank extrapolated values for May 18 not included in range as curve was outlier.

Following laboratory analysis, the initial sample jar returned an anomalous 91.1 percent water content. The results from a second jar are presented here with confidence that this alternate is more representative of the product recovered in the test.

2 TESTING SETUP AND RESULTS

2.1 Testing*2.1.1 Testing Configuration*

The Ohmsett staff set up a temporary tank in a location called Lake Zelman, a secondary containment area adjacent to the main Ohmsett test tank. The configuration included a 4-foot deep, 16-foot diameter tank (Figure 1, left). Multiple 330-gallon metal blue totes were used for recovering the oil collected during the tests. The arrangement included a three-way valve and manifold with a 4-inch Cam-lock inlet to permit flow to be directed into a “slop” tote for initial oil collection while the system was stabilized and a “collect” tote for oil collected during the timed test (Figure 1, right). As mentioned earlier, two skimmers were used for these tests, an ELASTEC TDC-118G drum skimmer and a Desmi Ro-clean Helix brush skimmer. They were powered by two respective hydraulic power packs. These skimmers represent two general types normally available in the field during a response.



Figure 1. Test area configuration.

2.1.2 Test Oil

Ohmsett received two deliveries of Cold Lake Winter Blend (CLWB). The first delivery was a 5-gallon batch to conduct some preliminary weathering trials. The second was a 2,000-gallon batch for the actual testing. The initial 5-gallon batch was weathered by placing it into a metal tray just below the deck of the Ohmsett test basin to avoid direct sunlight. Oil samples were collected on 2 hour intervals during the first day, at 4-hours intervals the second day, and then every 24 hours after 2 days as the rate of evaporation changed. The Ohmsett staff measured the density and viscosity of the samples and these values were used to set up a schedule for weathering the large batch. The staff placed the full amount of test oil (2,000 gallons) into a large tank (Figure 2) and a horizontal air sparging system consisting of a 10-foot pipe with 20 air holes sized at 1/8 inch. Only two of the four 20-inch manholes were opened at the top of this tank. Air was initially introduced at 75 pounds per square inch (psi) and 4 cubic feet per minute (CFM) and later increased to 100 psi and 7 CFM. Almost immediately from the start, the density/weathering data did not match the data collected from the preliminary 5-gallons sample. As seen in Figure 3, the values for the oil in the large tank (pre-test) were lower than that of the small batch in the pan (preliminary). The staff installed a second air sparging system with 150 holes sized at 1/16 inch, however, the weathering data again did not match. The data is not reported because there was no change in the viscosity values. Multiple weathering attempts using small batches of the oil on trays and in totes were also unsuccessfully matched.

Finally, Ohmsett staff placed small batches in several of the totes and installed air sparging systems specifically designed for the totes. They were run for several weeks before the higher viscosity levels were attained that matched the values for the small batch that weathered normally. It appears that the lower temperature in the outdoor tank and the limited air exchange with the manholes, reduced the efficiency in the forced weathering effort. Values of over 40,000 centipoises (cP) were eventually reached.



Figure 2. Large tank for large batch of oil (2,000 gallons).

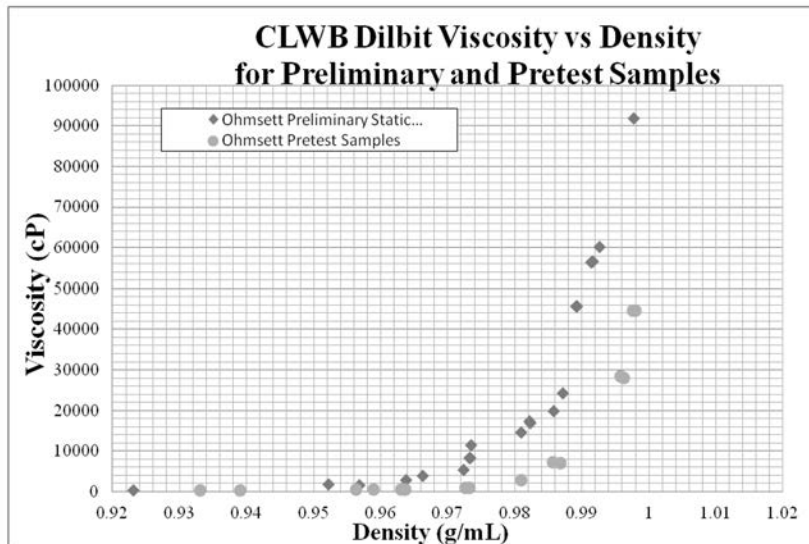


Figure 3. Data for preliminary (small batch in pan) and pre-test (from larger test batch).

2.2 Test Process

The testers followed the ASTM Standard F2709, Standard Test Method for Determining Nameplate Recovery Rate of Stationary Oil Skimmer Systems. This standard recommends a test area at least three times the dimensions of the skimmer. This area was slightly reduced for the Desmi skimmer, but for the objectives of this test, the area was adequate. The general steps followed were:

- (1) Collect initial data (temperature and oil samples for density, viscosity, etc.).
- (2) Set rotational speed of skimmer.
- (3) Place skimmer into test area, preload oil into test area (Figure 4, left).

- (4) Start skimmer and divert first amount into “slop” tote. Switch discharge to “collect” tote and continue until 1 inch of slick is recovered (Figure 4, right). Record time and move tote out for decanting and oil sampling.
- (5) Perform final sampling and data collection.
- (6) Switch out skimmers and repeat.



Figure 4. Helix skimmer during oil preload and testing.

2.3 Test Results

A summary of the test data is shown in Table 2 for each skimmer. The last two columns for efficiency and oil recovery rate are plotted in Figure 5. The results indicate that efficiency for the first six tests were close to 100 percent. This shows that these skimmers performed well when the oil was fresh. The Ohmsett staff noted that some of the lower numbers for efficiency rate and recovery rate in the data suggests that the skimmer parameters may not have been set correctly. The ELASTEC skimmer can be adjusted for the rotational speed of the drum, and the Helix brushes' rotation can also be adjusted. It proved difficult to count the rotations and adjust exactly after the drum and brushes were coated with oil. Adjustments could also be made for the pumps that move the oil from the collection site into the storage container for both skimmers. Getting the recovered oil to flow to the pump in both skimmers was problematic starting at viscosities of about 14,000 cP, especially for the drum skimmer. In addition, at the higher viscosities, a large amount of oil attached on the drum and brush during the first few revolutions and the scrapping mechanisms had difficulty in clearing the oil for additional oil to attach. At higher rotational speeds, this was more visually apparent.

Table 2. Results from Ohmsett dilbit tests.

Test #	Skimmer	Slick Thickness (inches)	Viscosity at Test Temp (cP)	Collection Time (min)	Drum Disc Spd (rpm)	Recovery Tank (Initial) (inches)	Recovery Tank (Final) (inches)	Total Fluid Volume (Gross) (gpm)	Fluid Collect Rate (gpm)	% IR&W Initial (%)	% IR&W Recovered (%)	Volume of Oil Collected (gal)	RE Oil Recovery Efficiency (%)	RIR Oil Recovery Rate (gpm)
3	Desmi	3	325	0.93	20.0	13.50	13.50	116.8	125.6	1.8	3.0	115.3	98.8	124.0
4	Elastec	3	236	2.99	30.0	13.25	13.25	114.6	38.3	1.5	2.0	114.0	99.5	38.1
9	Desmi	3	1119	0.589	20.0	14.63	14.50	126.5	214.8	6.0	8.5	122.3	96.7	207.6
10	Elastec	3	1379	1.66	30.0	15.75	15.38	136.2	82.1	6.0	6.5	132.3	97.1	79.7
13	Desmi	3	1860	0.81	20.0	14.75	14.75	127.6	157.5	9.0	11.0	125.0	98.0	154.4
14	Elastec	3	1757	2.08	30.0	14.63	14.63	126.5	60.8	12.0	14.0	124.0	98.0	59.6
19	Elastec	2	5720	1.22	30.0	5.00	4.88	43.3	35.5	15.0	33.5	34.4	79.5	28.2
20	Desmi	2	3857	0.833	30.5	14.75	12.75	127.6	153.3	14.0	34.0	88.2	69.2	106.0
21	Elastec	2	14160	6.18	19.0	5.00	5.00	43.3	7.0	20.0	40.0	34.6	80.0	5.6
22	Desmi	2	14820	1.76	30.0	15.75	15.75	136.2	77.4	19.0	36.0	113.1	83.0	64.2
23	Desmi	2	44610	1.25	33.0	14.75	14.75	127.6	102.1	18.0	27.0	116.1	91.0	92.9
24	Elastec	2	40520	3.13	15.0	4.00	4.00	34.6	11.1	20.0	25.5	32.7	94.5	10.4

Note: Only full skimmer test results were recorded.

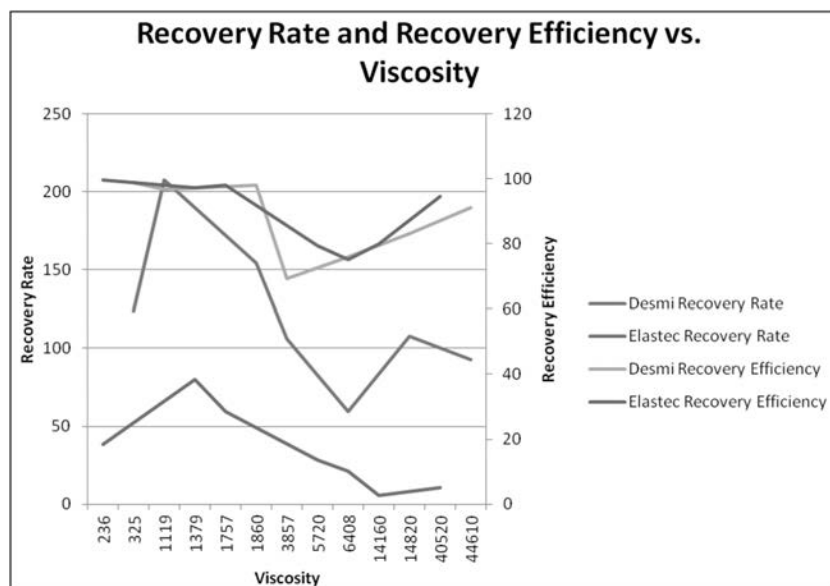


Figure 5. Skimmer recovery rates and efficiency data from tests.

3 CONCLUSIONS

This Ohmsett skimmer test added to the limited data on actual efficiencies of various skimmers. The results increase the body of knowledge from the previous tests in Canada and Ohmsett. When this test is compared to the skimmer tests at Ohmsett during “Ice Month” (SL Ross and MAR 2013), it must be noted that test used a refined product called Hydrocal with a viscosity of approximately 1,000 cP. The Ice Month tests were conducted with approximately 30 percent ice. The Helix skimmer was about 70 percent efficient with recovery rates of 27–42 gallons per minute (GPM) and the drum skimmer was over 65 percent efficient with recovery rates of over 21 GPM, both lower than the dilbit tests.

When the dilbit test is compared to the tests in Canada (Table 1), the viscosities were lower due to the higher temperatures. Unfortunately, the Canada tests grouped the skimmer performances, so it is not possible to pull out specific skimmer performance for comparison from the Canadian data.

The data collected during this skimmer test indicates that with care, standard skimmers do not need special modifications to recover diluted bitumen in fresh water, particularly in the early stages of a spill while the oil is on the surface. While there is a large variability, the skimmer performance can be refined for increased recovery rate by adjusting the rotation rate of the collection device and the collection pump. These types of skimmers need to be monitored closely for rotational speed during the early stages of operation. A lower recovery rate may be acceptable when traded off for increased efficiency. Pumps that are more powerful may be needed during the later stages of a spill of this type of material.

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RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. TAMMY BALDWIN TO
VICE ADMIRAL KARL L. SCHULTZ

Question 1. Congress provided the Coast Guard \$2 million in FY17 and another \$3 million in FY18 for survey and design work for the heavy Great Lakes Icebreaker, and I'm concerned that the Coast Guard has been slow-walking this project, contrary to congressional intent.

What is the status of survey and design work for the heavy Great Lakes Icebreaker, including the spend plan for funding appropriated in FY17 and FY18?

Answer. The Coast Guard is reviewing existing analyses and exploring initiatives to effectively utilize the survey and design funding for additional Great Lakes capacity to ensure a balanced and informative strategy going forward.

This includes working towards the development of operational requirements to best meet our future icebreaking needs on the Great Lakes, as well as evaluating current icebreaking capability, to include detailed survey and analysis of existing hull, mechanical, auxiliary, and electrical systems on CGC MACKINAW to identify gaps and inform possible future hull and system designs

Question 2. Do you believe that existing Buy American laws and domestic content requirements, as they apply to the Coast Guard, are beneficial to: (a) U.S. economic and national security; (b) the domestic industrial base; and (c) the Coast Guard? If yes, how? If no, why not? Please provide answers for each of these three subparts. In your view, what is the relationship among these three subparts?

Answer. Under Federal law, the Coast Guard is required to construct and repair all vessels in U.S. shipyards and to ensure that all delivered end products include at least 50 percent of domestically sourced components and materials.

Congress has enacted several laws to provide preference for domestically sourced end items. The Coast Guard is committed to applying these principles under Federal law via our acquisition and procurement efforts.

The Coast Guard complies with all requirements of the Buy American Act and all other laws as implemented under the Federal Acquisition Regulation.

The Coast Guard is committed to delivering assets and capabilities that best meet mission demands and represent the best value to the service and the American people. The Coast Guard will continue to apply all tools available under Federal law to accomplish these objectives.

Question 3. VADM Schultz, based on the Coast Guard's experience and your own experience as the commander of the Coast Guard Atlantic Area, are you aware of any disciplinary or unit cohesion issues resulting from the opening of service to transgender individuals on June 30, 2016? If so, can you tell me how they have been handled by unit leadership?

Answer. I am not aware of any disciplinary or unit cohesion issues resulting from the opening of the CG to transgender individuals.

Question 4. Admiral Zukunft told the House Appropriations Subcommittee on Homeland Security on April 17, 2018, that the Coast Guard is committed to the con-

tinued service of the 17 transitioned Coast Guardsmen. Do you make that same commitment?

Answer. I will continue to treat Coast Guard personnel with the respect and dignity that they deserve. The CG is complying with Presidential directions and court orders and I will remain engaged with Department of Defense with regard to this issue.

Question 5. Have you met with any transgender Coast Guardsmen to speak with them about their experiences? If not, do I have your commitment to do so?

Answer. I have not had specific meetings with transgender members to discuss their experiences.

Question 6. To the maximum extent practicable, the Coast Guard is directed to utilize components that are manufactured in the United States when contracting for new vessels. Such components include: auxiliary equipment, such as pumps for shipboard services; propulsion equipment including engines, reduction gears, and propellers; shipboard cranes; and spreaders for shipboard cranes.

As Commandant, how will you interpret and comply with the below language (from the Homeland Security Explanatory Statement to accompany the Consolidated Appropriations Act, 2018) regarding congressional intent for the Coast Guard to utilize, to the maximum extent practicable, U.S. manufactured vessel components?

Answer. The Coast Guard will continue to incorporate contract clauses that mandate compliance with the Buy American Act and the Trade Agreements Act, including requirements that end products are:

manufactured in the United States (or a designated country); and,
the cost of domestic end products exceeds 50 percent of the cost of all components.

Question 7. Does the Coast Guard intend to require U.S. manufactured components, including those listed in the language, as part of future vessel acquisitions, including the Polar and Great Lakes icebreakers?

Answer. In the case of future shipbuilding programs, the Coast Guard will continue to incorporate contract clauses that mandate compliance with the Buy America Act and the Trade Agreements Act. To that end, at least 50 percent of the cost of all components of the end product are required to be domestically sourced.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. CATHERINE CORTEZ MASTO
TO VICE ADMIRAL KARL L. SCHULTZ

Question 1. During your confirmation hearing you mention how spending caps under the Budget Control Act of 2011 resulted in under resourcing of recruiting efforts, negatively impacting your ability to recruit and retain top talent for the Coast Guard. What does the Coast Guard require from Congress, including funding, to meet its man-power needs?

Answer. The men and women of the Coast Guard are our Service's most valuable asset. The FY19 President's Budget request modestly grows the Coast Guard workforce by providing critical crews and support personnel to operate and sustain new assets delivered via our acquisition programs. However, the budget does not provide the capacity to address workforce gaps created by personnel reductions under Budget Control Act caps or invest in workforce capabilities, such as cyber security.

Question 2. Are the requirements referenced in Question 1 reflected in the President's 2019 Budget Request?

Answer. The FY19 President's Budget grows the Coast Guard by 109 positions.

Question 3. During your confirmation hearing you told the Committee that the Coast Guard, in collaboration with the RAND Corporation, is conducting a women's retention study. Per Senator Wicker's request during hearing, please provide the deadline for the completion of the study, and also provide a copy of any final output to my office.

Answer. The Coast Guard (CG) partnered with RAND Corporation to identify career and progression barriers possibly unique to CG active duty women. The study includes a combination of data gathering, cohort interviews, and comparative analysis (e.g., Department of Defense (DoD), private industry, & CG men).

To date, RAND has undertaken the following initiatives:

- Literature review to examine previous studies conducted by the CG and other sources.
- Trend validation of CG workforce data to begin forecasting and analysis.
- Benchmarking CG data against the DoD and/or the private sector workforce.

- Exploratory focus groups that interview active duty men and women.

In the coming months RAND will also conduct the following:

- Statistical analysis of the gathered data.
- Consolidate recommendations to address identified retention barriers.

The CG anticipates a final written product from RAND Corporation early in calendar year 2019.



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